

The background of the cover features a dark gray map of Silicon Valley in the upper left corner. Below the map, a white line graph with circular markers trends upwards from left to right across the lower half of the page. The main title is centered in the middle of the page.

2025 SILICON VALLEY

INDEX



JOINT VENTURE
SILICON VALLEY
INSTITUTE for
REGIONAL STUDIES

JOINT VENTURE SILICON VALLEY BOARD OF DIRECTORS

OFFICERS

HON. SUSAN ELLENBERG – *Co-Chair, County of Santa Clara*
RUSSELL HANCOCK – *President & CEO, Joint Venture Silicon Valley*

DIRECTORS

- | | |
|---|--|
| TERESA ALVARADO
<i>Pacific Gas & Electric Company</i> | MICHELE LEW
<i>Stanford Medicine Children's Health</i> |
| CHARLES ATKINS
<i>McKinsey & Company</i> | HON. MATT MAHAN
<i>City of San José</i> |
| DAVID BINI
<i>Building Trades Council</i> | TONY MESTRES
<i>The Sobrato Organization</i> |
| LISA BOWMAN
<i>Orrick</i> | DELINDA MROWKA
<i>KQED</i> |
| DR. RAKESH CHAUDHARY
<i>Kaiser Permanente</i> | MAIRTINI NIÐHOMHNAILL
<i>County</i> |
| DOUGLAS CLARK
<i>Wilson Sonsini Goodrich & Rosati</i> | MOOKIE PATEL
<i>San José Mineta International Airport</i> |
| JONATHAN COWAN
<i>El Camino Health</i> | DAVID SACARELOS
<i>Seiler, LLP</i> |
| ROBERT DAVIS
<i>San Jose Earthquakes</i> | KARENA SHACKELFORD
<i>City of Fremont</i> |
| DAVID ENTWISTLE
<i>Stanford Health Care</i> | ED SHIKADA
<i>City of Palo Alto</i> |
| KATIE FERRICK
<i>Applied Materials</i> | JULIE SULLIVAN
<i>Santa Clara University</i> |
| JAVIER GONZÁLEZ
<i>Google</i> | CYNTHIA TENIENTE-MATSON
<i>San José State University</i> |
| RAQUEL GONZÁLEZ
<i>Bank of America</i> | NEERAJ VADHAN
<i>Accenture</i> |
| BRENT HARRIS
<i>Meta</i> | JOHN VARELA
<i>Santa Clara Valley Water District</i> |
| ERIC HOUSER
<i>Wells Fargo</i> | JESSICA WEARE
<i>Silicon Valley Community Foundation</i> |
| KELLY KLINE
<i>Stanford University</i> | STEVE WEINER
<i>Menlo College</i> |
| LEE LAMBERT
<i>Foothill-De Anza Community College District</i> | |

SENIOR ADVISORY COUNCIL

- MARK BAUHAUS
Bauhaus Productions Consulting
- ERIC BENHAMOU
Benhamou Global Ventures
- JULIÁN CASTRO
16th United States Secretary of Housing & Urban Development
- CHRISTOPHER DIGIORGIO
Accenture (Ret.)
- BEN FOSTER
Fosterra Clean Energy Consulting
- HARRY KELLOGG, JR.
SVB Financial Group
- KIM POLESE
CrowdSmart
- JONATHAN STOCK
U.S. Geological Survey

INSTITUTE FOR REGIONAL STUDIES

INSTITUTE:

- RUSSELL HANCOCK
President
- RACHEL MASSARO
Director of Research
- HEIDI YOUNG
Senior Researcher
- DANNY WESSLER
Senior Researcher
- MARGARET O'MARA
Distinguished Fellow
- DREW STARBIRD
Senior Fellow
- KAREN TRAPENBERG FRICK
Distinguished Fellow
- ANNETTE NELLEN
Institute Fellow
- KELSI CAYWOOD
Affiliated Researcher
- KELLY COSTA
Affiliated Researcher
- ISABELLE FOSTER
Community Research Partner
- JON HAVEMAN
Affiliated Researcher
- STEPHEN LEVY
Affiliated Researcher
- LUKAS LOPEZ-JENSEN
Research Associate
- TRENTON MARLAR
Affiliated Researcher
- DEREK OUYANG
Affiliated Researcher
- ISSI ROMEM
Affiliated Researcher
- STEVEN ROSS
Affiliated Researcher
- JOSH WILLIAMS
Affiliated Researcher
- RYAN YOUNG
Affiliated Researcher

PREPARED BY:

- | | | |
|---|---|---|
| RACHEL MASSARO
<i>Director of Research</i> | HEIDI YOUNG
<i>Senior Researcher</i> | DANNY WESSLER
<i>Senior Researcher</i> |
|---|---|---|

DESIGNED BY:

- JILL MINNICK JENNINGS
Creative Director

SUGGESTED CITATION:

Joint Venture Silicon Valley, Institute for Regional Studies. 2025 *Silicon Valley Index* (www.jointventure.org/siliconvalleyindex).

ABOUT THE 2025 SILICON VALLEY INDEX

Dear Friends:

Silicon Valley has entered a state of flux and uncertainty.

It happens. In fact, it has happened repeatedly throughout our long history. There are often external forces at play, and in the present case they include political upheaval, market instability, and a tightening regulatory grip. Not surprisingly, the tech sector has shifted out of high gear, ending a twelve-year run of aggressive expansion and focusing instead on efficiency and profitability. That strategy is working and handsomely, but it spells a new period of low or no growth in the Valley.

Similarly, venture capital has left the stratosphere and returned to low earth orbit. We still easily command the highest shares of all the venture dollars out there, but start-ups face new scrutiny over revenue models and fiscal discipline. Gone are the days of rapid scaling and the race to unicorn status. It's not a death knell, by any means. In fact, to old-timers it feels more like a return to fundamentals that should ultimately strengthen the Valley's ecosystem.

But in these periods of slowdown there are also internal factors at play. They matter more than the external ones because they are within our control and thus reveal our true character. That's why it's gratifying to report out, for example, some encouraging education gains, and the progress we're making to combat our racial disparities.

Sadly, good news on other fronts is more difficult to find. All but the highfliers are slammed by soaring costs and stagnant wages, and there is scant progress on our most pressing issue, housing. The market remains out of reach for all but a few, creating deep social divides, ballooning our wealth gaps, and factoring heavily into the continuing growth of homelessness. We've long lamented this but in truth we've also shrugged it off, observing that somehow the region defies gravity and remains an economic superpower.

Perhaps those days are ending. This report shows mounting evidence that our housing woes are driving away our labor force. This new development opens up a strange new world, one that was unimaginable back in the days when location and proximity truly mattered. The trend traces to the considerable departure of techies during the pandemic, enabled by the tools we invented for remote work; it is further manifest by the increasing median age of our workforce (and the corresponding loss of young people who comprise that crucial "creative class"). Most recently, we see it in the hiring patterns of our tech firms: Yes, they're hiring here, but they are also growing their offices elsewhere and doing it at higher rates. It signals a tectonic shift where Silicon Valley becomes one node in a more dispersed innovation ecosystem.

During times of uncertainty and upheaval, it is crucial to have the facts at hand. We're pleased to provide them, and to facilitate the ensuing dialogue.

Yours,



Russell Hancock
President & Chief Executive Officer

WHAT IS THE INDEX?



The Silicon Valley Index has been telling the Silicon Valley story since 1995. Released early every year, the Index is a comprehensive report based on indicators that measure the strength of our economy and the health of our community—highlighting challenges and providing an analytical foundation for leadership and decision-making.

WHAT IS AN INDICATOR?

An Indicator is a quantitative measure of relevance to Silicon Valley's economy and community health, that can be examined either over a period of time, or at a given point in time.

Good Indicators are bellwethers that reflect the fundamentals of long-term regional health, and represent the interests of the community. They are measurable, attainable, and outcome-oriented.

Appendix A provides detail on data sources and methodologies for each indicator.

THE SILICON VALLEY INDEX ONLINE

Data and charts from the Silicon Valley Index are available on a dynamic and interactive website that allows users to further explore the Silicon Valley story.

For all this and more, please visit the Silicon Valley Indicators website at www.siliconvalleyindicators.org.

TABLE OF CONTENTS

PROFILE OF SILICON VALLEY **6**

THE REGION'S SHARE OF CALIFORNIA'S ECONOMIC DRIVERS **7**

INDEX HIGHLIGHTS **8**

SNAPSHOT OF KEY TRENDS **12**

PEOPLE

Talent Flows and Diversity **14**

ECONOMY

Employment **36**

Income & Wealth **54**

Innovation & Entrepreneurship **74**

Commercial Space **94**

SOCIETY

Preparing for Economic Success **104**

Early Education & Care **114**

Arts & Culture **122**

Quality of Health **128**

Safety **140**

Philanthropy **148**

PLACE

Housing **154**

Transportation **174**

Land Use **186**

Environment **190**

GOVERNANCE

Local Government Administration **204**

Civic Engagement **208**

Representation **212**

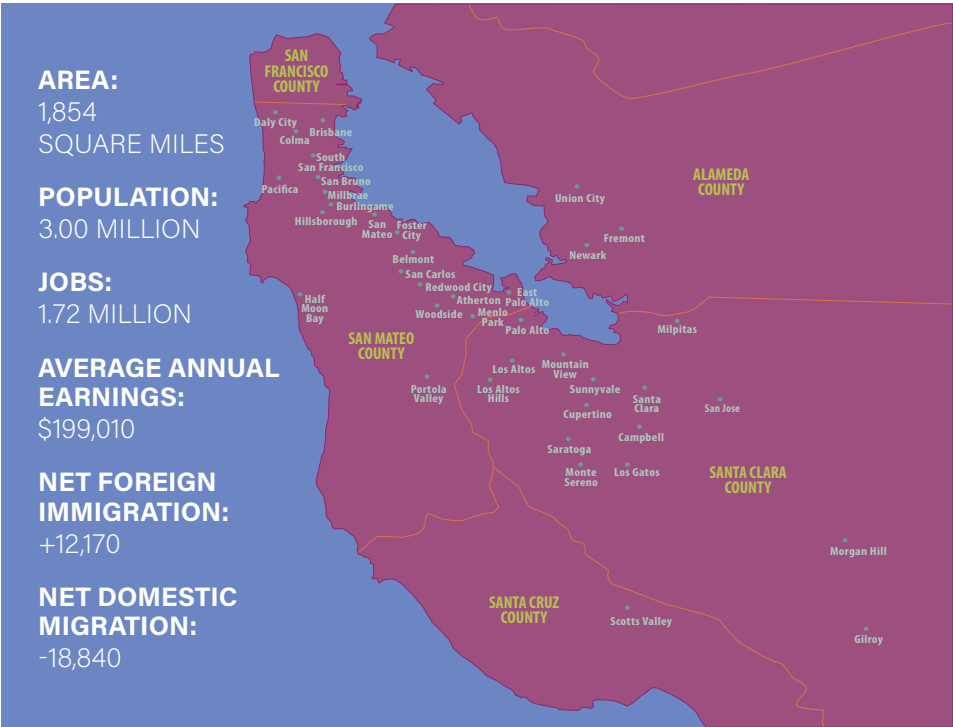
APPENDIX A **216**

ENDNOTES **226**

APPENDIX B **230**

ACKNOWLEDGMENTS **232**

PROFILE OF SILICON VALLEY



SILICON VALLEY IS DEFINED AS THE FOLLOWING CITIES:

SANTA CLARA COUNTY (ALL)
Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Palo Alto, San Jose, Santa Clara, Saratoga, Sunnyvale

SAN MATEO COUNTY (ALL)
Atherton, Belmont, Brisbane, Burlingame, Colma, Daly City, East Palo Alto, Foster City, Half Moon Bay, Hillsborough, Menlo Park, Millbrae, Pacifica, Portola Valley, Redwood City, San Bruno, San Carlos, San Mateo, South San Francisco, Woodside

ALAMEDA COUNTY
Fremont, Newark, Union City

SANTA CRUZ COUNTY
Scotts Valley

Note: The cities contained in the Index comprise present-day jurisdictions, based on artificial boundaries that did not inherently exist. The region was originally and continues to be home to the Chochoyeno, Tamien, Ramaytush, and Awaswas peoples.

SOURCE DATA & TERMINOLOGY NOTE

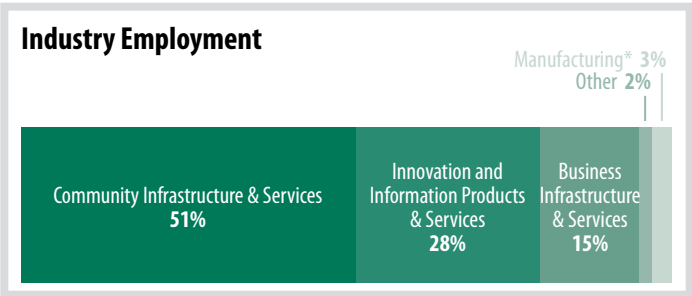
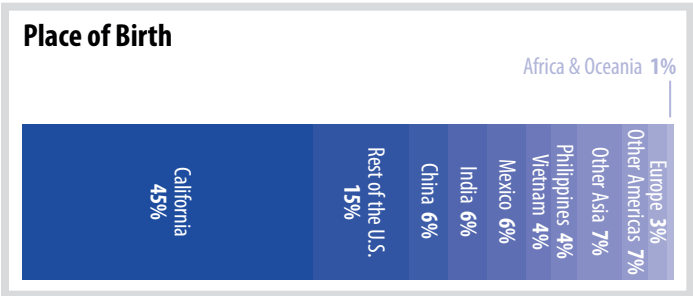
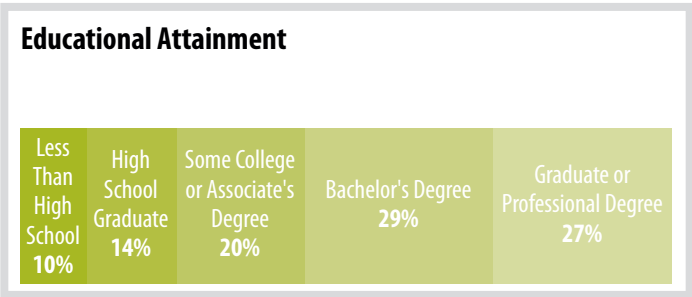
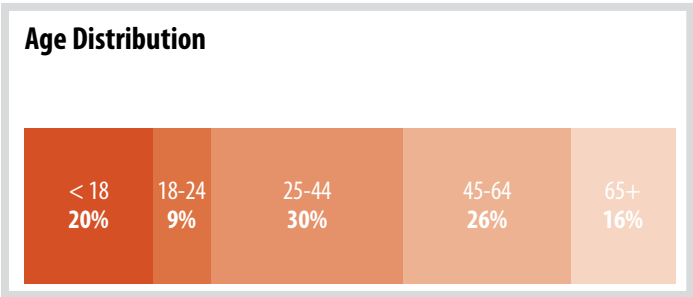
The Institute compiles the Silicon Valley Index using primary data in combination with datasets obtained from a variety of reliable and reputable secondary sources. The categorizations and terminologies used across these datasets vary, as do the underlying purposes and values that guide their data collection and analysis methodologies.

This is particularly important when considering the representation of various groups of people within the datasets, the assumptions underlying estimated values (such as survey weightings), and the grouping of people into socially-constructed categorizations that may mask disparities or nuances unique to Silicon Valley.

Terms utilized in the Silicon Valley Index are taken directly from the data sources and are thus inconsistent throughout (e.g., the use of “Black” in some places and “Black or African American” in others).

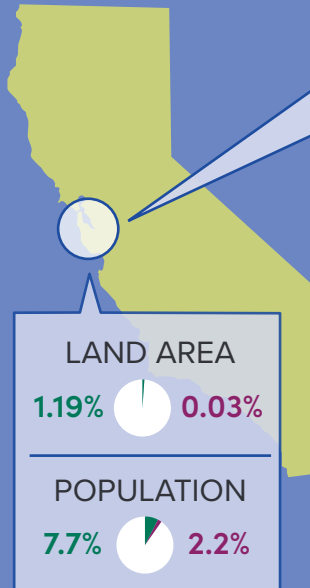
Readers are encouraged to review the methodological notes in Appendix A and explore the original data sources to come to a more thorough understanding.

Readers may also contact the Institute with any questions or feedback regarding the data and its presentation (institute@jointventure.org).



*Excludes Computer Hardware, Semiconductors & Related Equipment, and Instruments (Navigation, Measuring & Electromedical). | Notes: Data for age distribution (2023), educational attainment (2023), net migration (2024), and place of birth (2023) include Santa Clara & San Mateo counties. United States includes those born abroad of American parents. Jobs and Industry Employment are estimates as of Q2 2024 and includes the entire city-defined Silicon Valley region.

The Region's Share of Various California Metrics



	SILICON VALLEY		SAN FRANCISCO
Economic Drivers			
VENTURE CAPITAL	41.4%		39.5%
STARTUPS	28.5%		46.7%
PATENT REGISTRATIONS	50.1%		8.1%
UNICORN & DECACORN COMPANIES	31.7%		24.1%
IPOs	39.1%		4.3%
M&A ACTIVITY	14.9%		15.5%
GDP*	12.4%		5.6%
JOBS	9.4%		3.9%
HOTEL DEVELOPMENT	8.2%		0.0%
Additional Insights			
SOFTWARE DEVELOPERS*	31.9%		7.9%
ARTS & CULTURE ORGANIZATIONS	9.4%		8.0%
COLLEGE-EDUCATED ADULTS*	9.5%		3.5%
MILLIONAIRE HOUSEHOLDS*	9.7%		3.0%
FOREIGN IMMIGRANTS*	9.9%		2.7%
ELIGIBLE VOTERS*	6.6%		2.5%
BIRTHS*	6.4%		1.7%

*Silicon Valley share of California GDP, births, net foreign immigrants, college-educated adults, millionaire households, arts & culture organizations, eligible voters, and software developers include San Mateo and Santa Clara counties only. | Note: The individual share of California M&A deals involving at least one Silicon Valley company and the share involving at least one San Francisco company are not additive — they do not add up to the share of California deals involving either a Silicon Valley or San Francisco company.

Data Sources: Land Area (U.S. Census Bureau, 2010); Population & Births (California Department of Finance, E-4 and E-2 Estimates, 2024); GDP (Moody's Economy.com, 2024); Venture Capital is by total dollar amount (CB Insights, 2024); Patent Registrations (U.S. Patent and Trademark Office, 2024 estimate based on data through December 13); Initial Public Offerings (Renaissance Capital, 2024); Jobs (U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages; JobsEQ, Q2 2024); Mergers & Acquisitions by total number of deals (Factset Research Systems, 2024); Unicorns and Decacorns include private companies with valuations of \$1 billion+ and \$10 billion+, respectively (CB Insights, 2024); Startups by number of newly-funded startup companies (CB Insights, 2024); Hotel Development is the share of hotel rooms completed (Atlas Hospitality Group, 2023-2024); College-Educated Adults include those ages 25+ with an associate's, bachelor's, master's, and/or doctorate degree (U.S. Census Bureau, American Community Survey 1-Year Estimates, 2023); Software Developers (U.S. Census Bureau, 2023 American Community Survey 1-Year Estimates PUMS); Eligible Voters (California Secretary of State Elections Division, September 2024); Arts & Culture Organizations (U.S. Internal Revenue Service, Exempt Organizations Business Master File Extract as of February 2025).

2025 INDEX HIGHLIGHTS

PEOPLE

Silicon Valley's population holds steady; the demographics are shifting

- After six years of decline, Silicon Valley's population grew (by an infinitesimal 0.2 percent).
- The region is aging, with a 28 percent increase in residents 65+ since 2013, while the number of children under 18 has dropped 14 percent. There has been a 9 percent decline in public school enrollment since 2020.
- Forty-one percent of Silicon Valley's population is foreign-born (a historic high); among employed residents, 48 percent are foreign-born. This figure jumps to 66 percent in tech, where 70 percent of tech workers are Indian or Chinese and 73 percent of female tech workers are foreign-born.
- The region is well educated and linguistically diverse: 56 percent of adults hold a bachelor's degree or higher; 53 percent speak a language other than English at home.
- Asians now comprise 37 percent of the population (the highest share); White residents comprise 30 percent (down from 60 percent in 1990).

EMPLOYMENT

We're not booming, but we're not shrinking either

- Silicon Valley employment saw a minuscule decline over the previous year (0.1 percent, amounting to 1,200 jobs), and remains just slightly above 2019 levels (before the pandemic set in). San Francisco, by contrast, remains 8 percent below its 2019 mark.
- Employment at startup companies has grown 9.3 percent, with software and biotechnology seeing the largest increases. Software developers represent the largest occupational group in Silicon Valley, followed by engineers.
- Despite a 2024 slowdown, the region's community infrastructure and services sector has added 155,000 jobs since 2020, becoming 51 percent of the workforce.
- Remote work is more prevalent in the Bay Area than elsewhere, with workers spending, on average, 37 percent of their workdays at home.
- We're becoming more concentrated: the six largest tech companies account for 20 percent of the tech workforce, and 6 percent of workers across other industries.



THE INNOVATION ECOSYSTEM

Less frenzied, but the engine is still running hot

- Silicon Valley and San Francisco generated a combined \$69 billion in venture capital, doubling the previous year, and falling just \$15 billion short of the all-time high. A record share (76 percent) of these investments went into megadeals (\$100 million or more).
- The region accounts for more than 50 percent of the nation's venture capital, a record high. We generated 37 percent of the nation's angel investments (\$1.5 billion).
- Patents awarded to Silicon Valley inventors reached an all-time high (23,600).
- Between them, Silicon Valley and San Francisco host 277 unicorn companies and 19 decacorns.
- There were 9 IPOs in Silicon Valley in 2024, and one in San Francisco, raising a combined \$2.5 billion.
- Artificial intelligence startups — particularly those doing generative AI — claimed the largest share of venture dollars in 2024 (\$22 billion), a 90 percent increase since 2020.

COMMERCIAL SPACE

Vacancy is high as employers adjust to new workplace dynamics

- Commercial development reached a Silicon Valley peak in 2020 and has declined by 60 percent since then. Only 8 million square feet are in development as of the new year.
- Office vacancy rates have reached 20 percent in Silicon Valley, reflecting a transitioning economy and new workplace dynamics. Vacancy rates are higher in San Francisco (34 percent). Average vacancy rates across all space types have reached their highest level since 2006.
- A corresponding adjustment in rental rates has yet to set in, declining a mere 4 percent in Silicon Valley since 2019.
- The commercial space occupied by six of the largest tech companies (Google, Apple, Meta, Amazon, LinkedIn, and Netflix) has reached a plateau, after quadrupling in the eight years leading up to the pandemic.

HIGHLIGHTS CONTINUED

INCOME AND WEALTH

Silicon Valley has the nation's largest gaps, and they are increasing

- Per capita income reached an all-time high (\$157,000), more than double the national average. The region hosts 56 billionaires and 145,000 millionaires.
- Most racial and ethnic groups saw increases in per capita income, but Hispanic or Latino residents' income is one-third that of White residents. The year-over-year gains didn't keep pace with inflation.
- The top 10 percent of earners hold 71 percent of the collective wealth. If Silicon Valley's liquid wealth were evenly distributed, it would amount to \$1 million per household.
- Silicon Valley's income divide has grown twice as quickly as that of the state and nation since the end of the Great Recession (2012). The gap between residents of varying educational attainment levels is also wider here than elsewhere.
- Silicon Valley has a significant gender wage gap: Women earn 77 cents for every dollar that men earn.
- Thirty percent of Silicon Valley households are not self-sufficient. More than a third (37 percent) of children live in households at risk for food insecurity.

HOUSING

Despite slowdown, Silicon Valley still has the nation's highest housing prices

- In 2024 the median home price hit \$1.92 million, making home ownership out of reach for most. Fewer than 26 percent of first-time home buyers can afford a median-priced home.
- Despite our persistent housing shortage, 2024 marked the fewest units permitted in twelve years (4,900 units, 2,900 of them categorized as "affordable").
- The average rent for a multi-family unit is \$3,210, and nearly half of Silicon Valley renters spend more than 30 percent of their income to make the rent.
- The cost of building affordable housing has increased 83 percent since 2019, reaching \$765,600 per unit.
- More than 12,520 individuals are homeless, a 17% increase over the previous year. Sixty-eight percent of the unhoused are unsheltered. Youth homelessness is on the rise, with more than 700 unaccompanied minors living without shelter.
- The number of unlawful detainer evictions in Santa Clara and San Mateo counties increased by 132 percent in the 2022-23 fiscal year due to the end of the statewide moratorium on evictions.

EQUITY AND ACCESS

Disparities between racial and ethnic groups persist

- Deep disparities in housing attainability exist across racial and ethnic groups: White residents are more likely to own (60 percent) than Black or African American and Hispanic or Latino residents (34 percent).
- The income gap between residents is much wider in Silicon Valley than elsewhere, and decades-long gains in per capita income were distributed unevenly across racial/ethnic groups. White residents command per capita incomes (\$157,000) that are three times those of Hispanic or Latino residents (\$37,000).
- Asian students graduated high school at a rate (96 percent) that is 16 percentage points higher than Hispanic or Latino students (80 percent).
- Education alone does not explain the income disparities: White residents with a bachelor's degree have a per capita income that is 60 percent greater than equally educated Black or African American residents.

SUSTAINABILITY

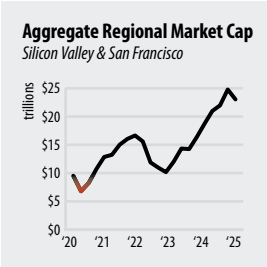
Genuine progress, but not yet at the pace prescribed by science

- Annual carbon dioxide emissions from retail electricity customers have declined by an estimated 87 percent since 2016, when the region began shifting to Community Choice Aggregation programs.
- Among available electricity power plans (for residential and commercial customers), the average share from renewable sources (74 percent) is double that of the nation (34 percent).
- Silicon Valley's greenhouse gas emissions declined by 690,000 metric tons over the past five years — an amount equivalent to 206 wind turbines running for a year.
- The total capacity of solar photovoltaic (PV) systems installed in Silicon Valley has increased exponentially since 2004, reaching a cumulative total of 1,100 MW in 2024.
- Daily Caltrain ridership is recovering (28,000, up from 4,100 in 2021), but has a long way to go before it returns to 2019 levels (67,000).
- The amount of surplus food recovered in Silicon Valley is on the rise: 94 million pounds have been diverted from the waste stream and repurposed for human consumption.

SNAPSHOT OF KEY TRENDS

Silicon Valley's economic and community health are both influenced by a wide variety of factors and trends spanning the five sections (and 18 sub-sections) of the Silicon Valley Index. While these many indicators and the story they tell cannot be whittled down to a mere handful of charts, these two pages contain key trends, relevant topics, strengths, and long-time disparities.

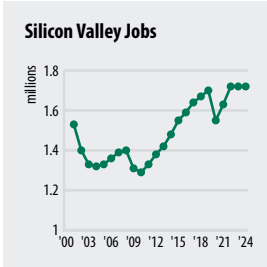
MARKET CAP



Note: Includes all public companies on major U.S. markets with locations in the city-defined Silicon Valley region and/or San Francisco.
Data Source: Polygon.io

The region's public companies, in aggregate, are valued at more than \$23 trillion — an amount 2.4x higher than pre-pandemic (February 2020), representing a growth rate (+142%) nearly double that of the S&P 500 (+76%) and nearly triple that of the NYSE Composite (+42%).

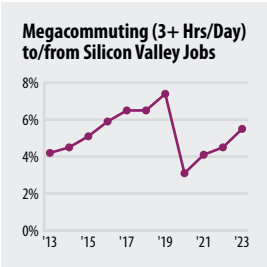
JOBS



Data Source: U.S. Department of Labor Quarterly Census of Employment and Wages

Silicon Valley employment growth has stagnated after two years of gains (2020-2022) following the early pandemic low.

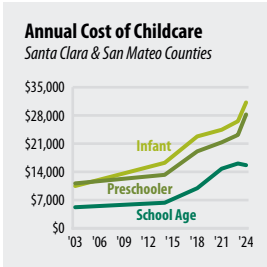
COMMUTING



Note: Silicon Valley jobs include those located in Santa Clara or San Mateo counties. Megacommuters include those commuting 3+ hours daily to and from work.
Data Source: U.S. Census Bureau, 2023 American Community Survey 1-Year Estimates

In 2023, 5% (71,300) of Silicon Valley's workers traveled 3+ hours daily to/from work. Among occupations with the highest propensity to megacommute were Firefighters (44%), Roofers (38%), and Plumbers, Pipefitters, and Steamfitters (29%).

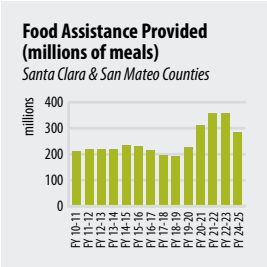
CHILDCARE COSTS



Note: Childcare costs represent the annual costs of childcare at licensed care facilities, and are in nominal dollars.
Data Source: Self-Sufficiency Standard for California counties (University of Washington, Center for Women's Welfare)

Childcare costs have doubled over the past decade and tripled since 2003. The cost of full-time infant care at licensed facilities rose to \$31,200 in 2024.

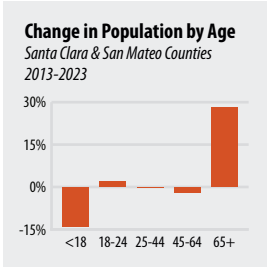
HUNGER



Data Sources: CA Dept. of Social Services, CA Dept. of Education, and Second Harvest of Silicon Valley

The need for food assistance grew rapidly in 2020 and remained elevated through the 2023-24 fiscal year (at approximately 286 million meals), despite a 2% decline in the region's population over that period.

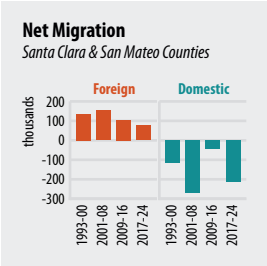
POPULATION



Data Source: U.S. Census Bureau, American Community Survey 1-Year Estimates

Silicon Valley's population continues to age: +28% in residents ages 65+ and -14% in children under age 18 since 2013.

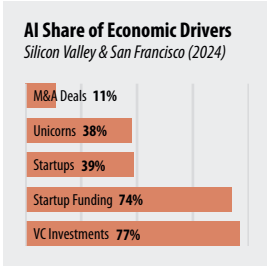
MIGRATION



Data Source: CA Dept. of Finance

The region is characterized by a net influx of foreign immigrants and a new outflow of domestic migrants; since 1993, this has amounted to a net addition of 472,000 people from abroad and a loss of 641,000 residents to other parts of the state and nation.

ARTIFICIAL INTELLIGENCE (AI)

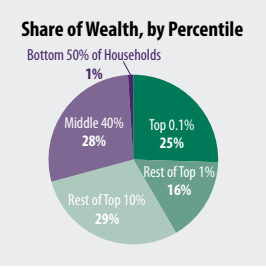


Data Sources: CB Insights; FactSet Research Systems, Inc.

Artificial Intelligence (AI) companies represented significant shares of regional M&A activity, the roster of unicorn companies and startups, as well as staggering shares of startup funding and venture capital investments.

Many of these trends have been affected, to a large degree, by the recent pandemic — whether by the public health crisis itself, by policies intended to mitigate spread of the virus, or by the economic and political climate of the past several years.

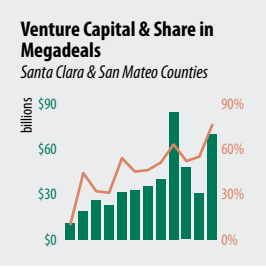
WEALTH INEQUALITY



Data Sources: Claritas (data: Federal Reserve); Altrata; Forbes; Phoenix Global Wealth Monitor; U.S. Census Bureau, Survey of Income and Program Participation

Aggregate household (liquid) wealth in Silicon Valley was approximately \$1.01 trillion in 2024 — an amount that evenly distributed among the region’s households would equal more than \$1 million each.

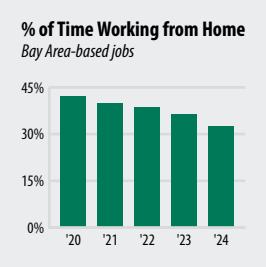
VENTURE CAPITAL



Data Sources: PricewaterhouseCoopers/National Venture Capital Association MoneyTree™ Report, Data: CB Insights (Q4 2015–2016), Thomson Reuters (prior to Q4 2015); CB Insights (2017+)

VC investments in the region’s companies more than doubled in 2024 (+125% year-over-year after inflation adjustment); this compares to a 43% gain nationally.

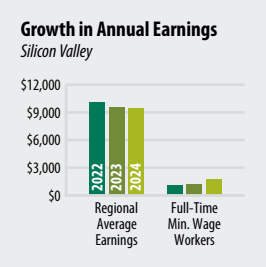
REMOTE WORK



Data Sources: U.S. Survey of Working Arrangements and Attitudes (SWAA); Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis, 2021. “Why working from home will stick,” National Bureau of Economic Research Working Paper 28731.

Bay Area employees worked from home an average of 33% of their time in 2024 — amounting to approximately 13 hours for full-time workers.

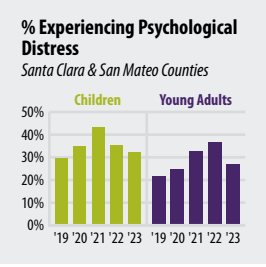
INCOME GROWTH



Note: Average minimum wage based on the statewide minimum wages (19 cities) and local minimum wage ordinances (20 cities).
Data Sources: U.C. Berkeley Labor Center; CA Employment Development Dept; JobsEQ

While the region’s average earnings and minimum wage rose by similar rates (5% and 4%, respectively, from 2022–2024), the dollar amounts had a 7x differential (+\$29,100 compared to +\$4,100).

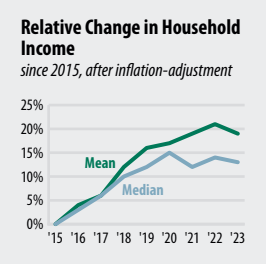
MENTAL HEALTH



Data Source: UCLA Center for Health Policy Research, California Health Interview Survey

Children, young adults (ages 18–34), and females experience disproportionately high rates of psychological distress; these rates were particularly high in 2021–2022.

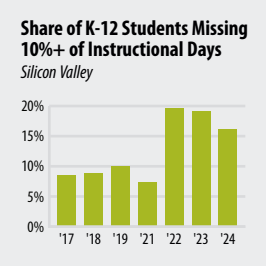
INCOME GAP



Data Sources: U.S. Census Bureau, American Community Survey 1-Year Estimates

Average household income is rising more quickly than the median, indicating further skewing of the region’s income distribution (with larger shares of higher-earners).

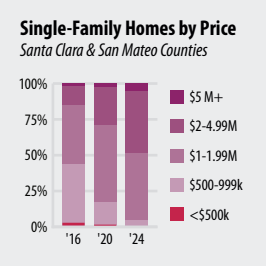
CHRONIC ABSENTEEISM



Data Source: CA Dept. of Education

One in six Silicon Valley students was chronically absent last year, missing 10% or more of expected attendance days.

HOME SALES



Data Source: California Association of REALTORS®

The median sale price for a single-family home was \$1.92 million in 2024, representing 71% of all homes sold; nearly half were at or above \$2 million, and 5% were \$5 million or more.

WHAT ARE THE KEY FINDINGS?

Silicon Valley experienced its largest population decline on record between 2020 and 2021, with a net outmigration of 44,800 residents. This was driven primarily by a near doubling in net domestic outmigrants, a reversal in the flow of foreign immigrants, an increase in deaths, and a decline in births. These factors have resulted in a net outflow of nearly 140,000 residents since 2016, amounting to 5% of the region's 2024 population.

Demographically, the region has undergone a substantial transformation over the past several decades. The number of residents ages 65 and over grew by 28% since 2013, while the number of children declined by 14%. The White, not Hispanic

or Latino population share fell from 60% in 1990 to 30% in 2023, while the Asian population more than doubled to become the largest demographic group (at 37% in 2023). The region's largest tech companies

The region's foreign-born population reached an historic high of 41% in 2023.

remain largely White and Asian, with an underrepresentation of Hispanic or Latino and female workers.

In the technology sector, Silicon Valley continues to attract more tech talent than other U.S. tech hubs. The region's foreign-born population reached an historic high of

41% in 2023 — a much higher share than the state and nation — with 48% of all employed residents and 66% of tech workers born outside the country. This diversity is reflected in the linguistic landscape, with a majority (53%) of residents speaking a language other than English at home, including 20% speaking Chinese and 9% speaking Vietnamese.

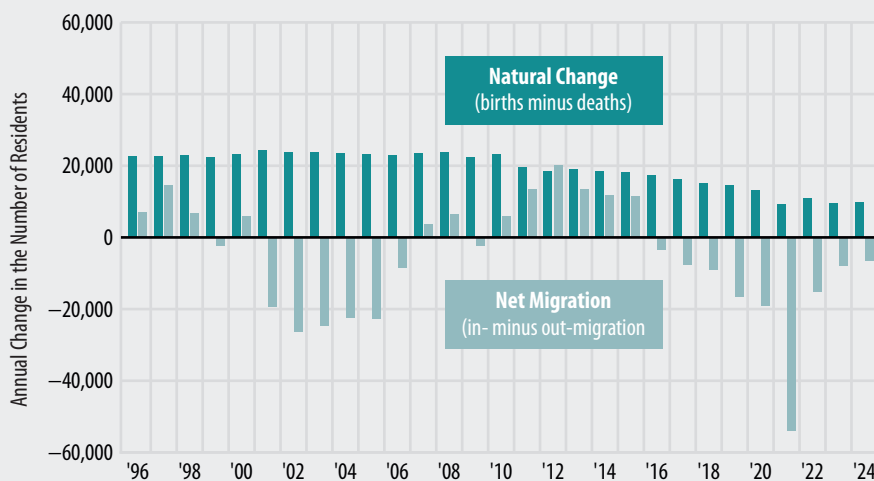
While the region's diversity has grown, it has not been evenly distributed. Neighborhood segregation has increased, with nearly three-quarters of the region's census tracts having single-race/ethnicity majorities of 75% or more (up from 65% a decade prior).

Silicon Valley has a highly educated population, with 56% of adults holding a bachelor's degree or higher — well above

POPULATION CHANGE

Components of Population Change

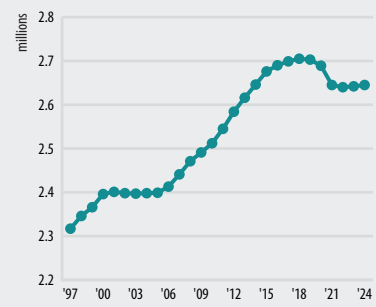
Santa Clara & San Mateo Counties



Data Source: California Department of Finance | Analysis: Silicon Valley Institute for Regional Studies

Silicon Valley Population

Santa Clara & San Mateo Counties



state and national averages. However, educational attainment disparities exist, with only 21% of Hispanic/Latino residents holding a bachelor's degree compared to 70% of Asian residents. The region also confers a large number of science and engineering degrees annually, the number of which has grown by 117% since 2002. However, the share of these degrees awarded to women has remained relatively flat, in the 37-41% range since 2000.

WHY IS THIS IMPORTANT?

Silicon Valley's most important asset is its people, who drive the economy and shape the region's quality of life. Population growth is reported as a function of migration (immigration and emigration) and natural population change (the difference

between the number of births and deaths). Delving into the diversity and makeup of the region's people — and its newcomers — helps everyone to better understand the region's assets and challenges.

The number of science and engineering degrees awarded regionally helps gauge how well Silicon Valley is preparing talent for its high-tech sector. A highly-educated local workforce is a valuable resource for generating innovative ideas, products, and services. The region also benefits significantly from the entrepreneurial spirit of people drawn to Silicon Valley from around the country and the world. Historically, immigrants have contributed considerably to innovation and job creation in the region, state, and nation,^{1,2} as well as through their taxes and spending.³

Increasing the region's diversity also enriches the fabric of the community. Diversity — the coming together of people with different backgrounds, cultures, genders, races, and ethnicities — is critical to the success of businesses and the region as a whole. These backgrounds shape the perspectives from which tasks are undertaken. Inclusive communities and workplaces enable people of all backgrounds to build, succeed, and grow together. Numerous efforts seek to create and maintain equity within the talent pool (and in educating a future workforce). Tracking this progress allows all to reflect and continue to strive for a better, more inclusive region.

Between mid-2020 and mid-2021 — the first year of the pandemic — Silicon Valley experienced the largest population decline on record (-44,800),⁴ which occurred abruptly and with more than triple the magnitude of the prior year's then-record-breaking decline of -13,500 residents.

Silicon Valley's population has only declined during six of the past seventy-seven years (2002, 2003, and 2018-2022), based on official mid-year population estimates.

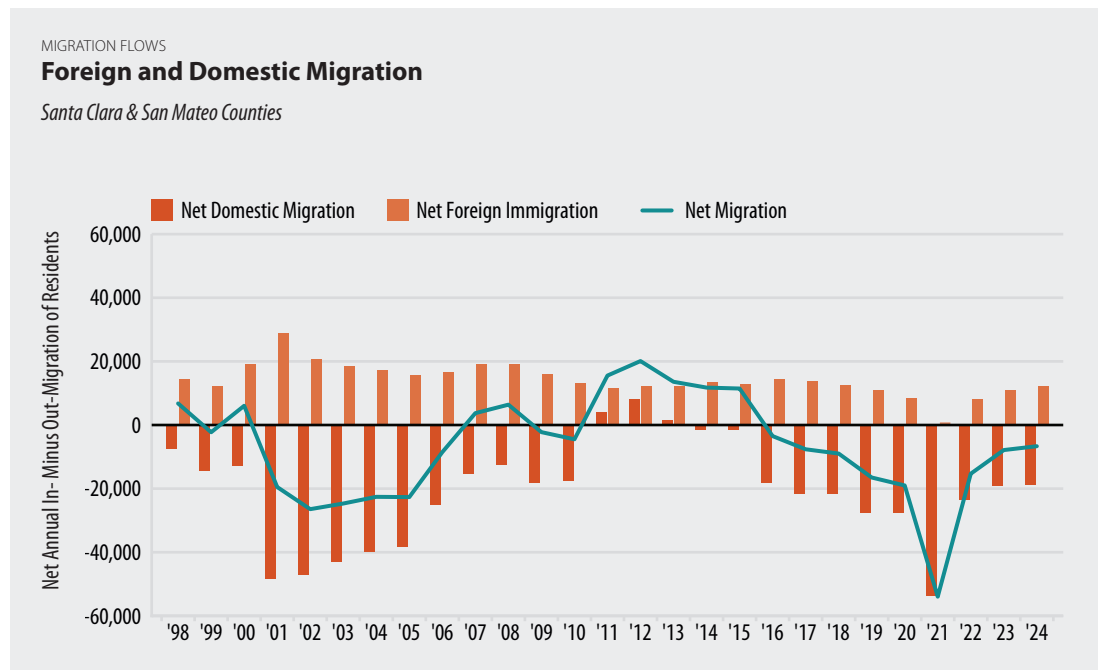
The region's record-breaking population decline that occurred between mid-2020 and mid-2021 of 44,800 residents was primarily due to a near doubling (+96%) in net domestic outmigration, a reversal of the net flow of foreign immigrants (-103%), an increase in deaths (+11%), and a decline in births (-8%).

The combined population of Santa Clara and San Mateo counties rose by 0.2% between mid-2022 and mid-2024, following a 2% decline over the four prior years; in mid-2024, the region's population (2,644,950) was approximately the same as it was in 2014-20.

In 2021, Silicon Valley experienced its largest single-year domestic outmigration on record, with a loss of 53,700 residents to other parts of the state and nation.⁵

Santa Clara and San Mateo counties' combined net domestic migration has been negative since 2014. In total, the region lost a net 233,400 people to other parts of the state and nation over that 11-year period.

2022 marked a resurgence of foreign immigration into Santa Clara and San Mateo counties, reaching moderate levels in an historical context while representing a complete flow reversal from the prior year.



Data Source: California Department of Finance | Analysis: Silicon Valley Institute for Regional Studies

Silicon Valley has only experienced a net in-migration from other parts of the state and nation during three of the past 34 years (2011-2013). Last year, domestic outmigration exceeded in-migration by more than 18,800 people.

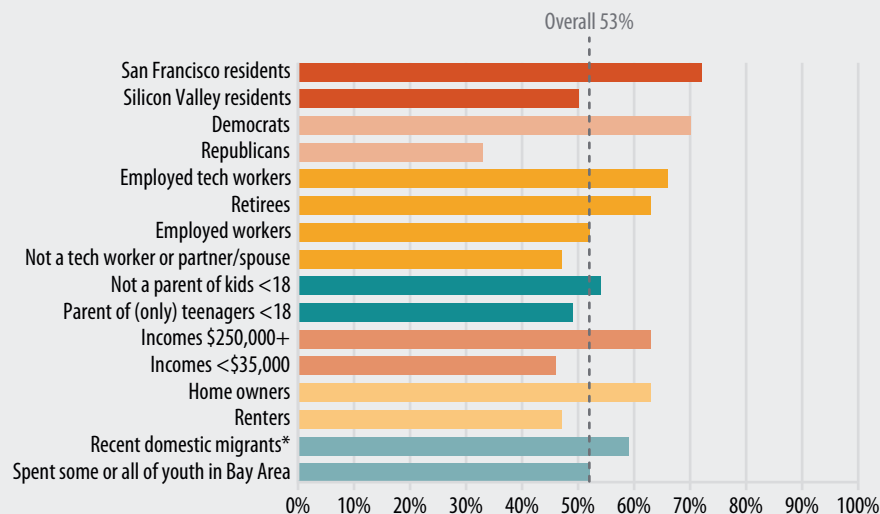
Santa Clara and San Mateo counties together have experienced negative net annual migration (outflow exceeded inflow) for the past nine years.

Silicon Valley's net outflow of residents¹ since 2016 (-139,400) amounted to 5% of the region's 2024 population — a turnover of approximately one in twenty residents; this share is comparable to the net outflow over the six years following the dot-com bust (-124,400), which amounted to approximately 5% of the region's population in 2006.

1. Migration from Santa Clara or San Mateo counties to other parts of the state, nation, and world.

Share of Residents Unlikely to Move Out

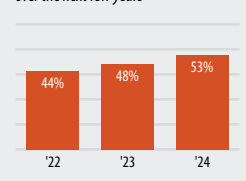
Bay Area | 2024



*Includes those who moved from another part of California or the United States within the last 10 years.
Data Source: *Silicon Valley Poll* (www.jointventure.org/svpoll) | Analysis: Silicon Valley Institute for Regional Studies

% Expecting to Stay in the Bay Area

over the next few years



Silicon Valley has only experienced a net in-migration from other parts of the state and nation during three of the past 34 years (2011-2013). Last year, domestic outmigration exceeded in-migration by more than 18,800 people.

The likelihood of Bay Area residents remaining in the region over the next few years — as self-reported through the *Silicon Valley Poll* — has been increasing steadily since 2021 (from 44% to 53% in 2024).

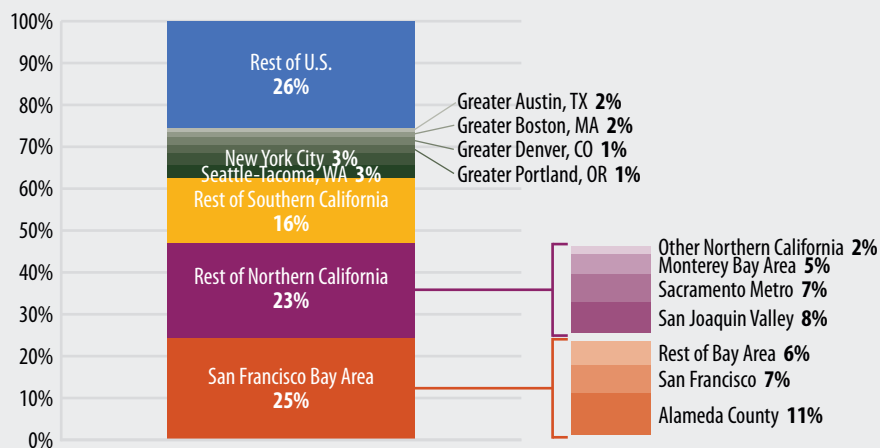
A quarter (25%) of Silicon Valley's domestic outmigrants in 2023 moved to another part of the Bay Area; the largest share moved to Alameda County.

Eight out of ten people who moved out of Silicon Valley to other parts of the state or nation in 2023 settled in one of 14 major regions (six of which are in California).

Domestic Outmigration Destinations

share of gross outmigration

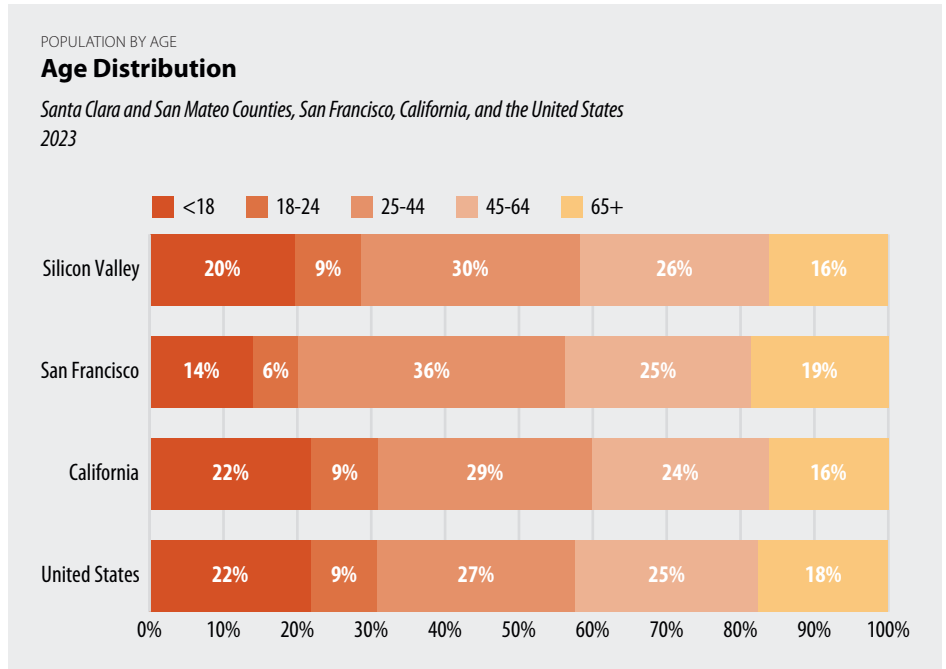
Santa Clara & San Mateo Counties | 2023



Data Source: United States Census Bureau, American Community Survey PUMS | Analysis: Silicon Valley Institute for Regional Studies

Top out-of-state destinations for Silicon Valley's outmigrants include the Seattle-Tacoma area (3%), New York City (3%), Greater Austin (2%), and Greater Boston (2%).

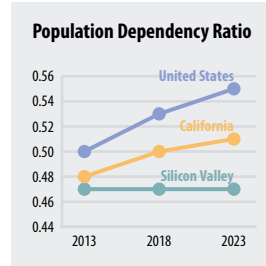
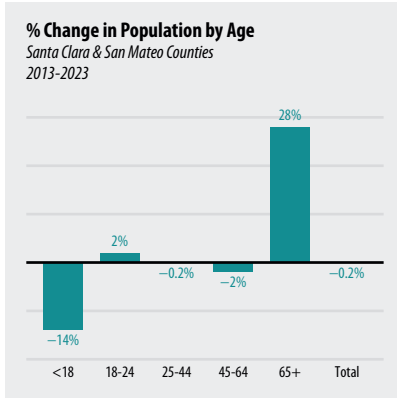
In 2023, Santa Clara and San Mateo counties together lost as many as 141,000 residents to other parts of the state and country (not subtracting counterflow).⁶ This rate of departures amounts to a residential turnover of approximately 5% of the region's population each year — down from 7% during the prior year.



Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

Growth in Silicon Valley's 65+ population share is driving an increase in the dependency ratio, a metric that measures the proportion of the non-working or economically-dependent population (<15 years and 65+) to the working-age population (ages 16 to 64). Over the past decade, Silicon Valley's dependency ratio has grown (+1%) to a lesser extent than that of California (+7%) or the nation overall (+9%); in 2023, it remained below the 0.5 threshold at which the dependent population exceeds the working population.

The core working-age group (25-44) makes up a significantly larger share of San Francisco's population (36%) than that of Silicon Valley (30%), the state (29%), and the nation (27%).



Silicon Valley's population continues to age, with an increase of 28% in the number of residents ages 65+ since 2013, while the number of children under 18 decreased by 14% over the same period.

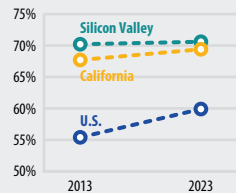
Between 2013 and 2023, the population of infants, preschool-age, and school-age children declined in Santa Clara and San Mateo counties (infants and preschool-age children by more than 36,700 or -22%, and children ages five to nine by 39,000, or -23%). **The decline in the region's youth population has contributed to a drop in public school enrollment (-9%) since the 2019/20 school year.**

Share of Census Tracts with a Majority Race or Ethnicity (>75%), Adults 18 and Over

Santa Clara & San Mateo Counties

	2000	2010	2020
Silicon Valley	80%	65%	74%

Diversity Index

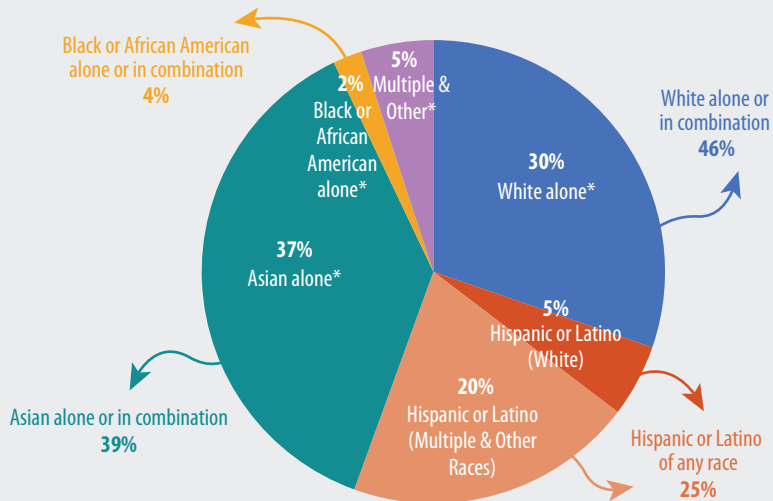


Note: The Diversity Index (DI) indicates the probability that two people chosen at random will be from different racial and/or ethnic groups; a DI of zero indicates no diversity, whereas a DI of 100% indicates complete diversity (everyone is of a different race and/or ethnicity).

RACIAL AND ETHNIC COMPOSITION

Population Share by Race & Ethnicity

Santa Clara & San Mateo Counties | 2023



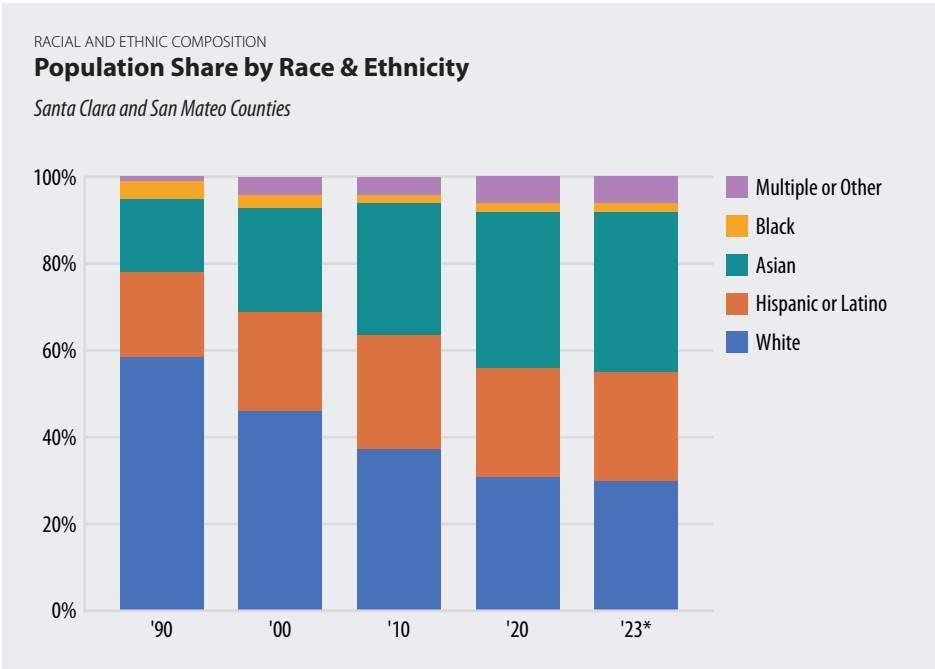
*not Hispanic or Latino | Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

Despite being diverse on a regional level, Silicon Valley has become increasingly segregated at the census tract-level over the past decade. The U.S. Census Bureau's 2020 Decennial Census indicates that 74% of census tracts have greater than 75% of adult residents of one race or ethnicity (an increase of nearly 10 percentage points since 2010).

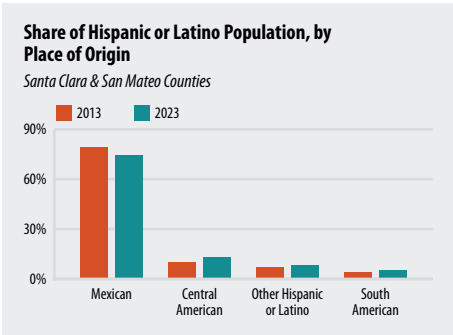
One quarter of Santa Clara and San Mateo counties' residents identify as Hispanic or Latino, with 80% of these identifying as races other than White. An overwhelming majority (70%) of Hispanic or Latino residents identify Mexico as their place of origin, followed by Central America (13%). Of those with Central American ancestry, in 2023 Salvadorans made up the largest share (48%), while over the past decade the share of Guatemalans increased by nearly 40%.⁷

The racial and ethnic composition of Silicon Valley has transformed significantly from 1990 to 2023, marked by a substantial decline in the White, not Hispanic or Latino population share from nearly 60% to 30%, while the Asian population has more than doubled. The Hispanic or Latino population share has remained relatively stable at around 25% since 2000, and the Black or African American share has remained the smallest throughout the decades, declining from 4% in 1990 to 2% in 2023. The Multiple and Other category share has increased by 5% over that same period.

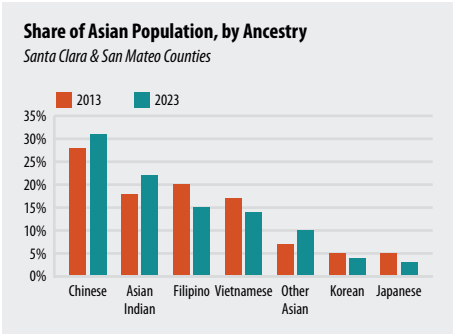
The region’s Asian population is diverse with respect to ethnicities represented, with the largest shares being Chinese (31%), Asian Indian (22%), Filipino (15%), and Vietnamese (14%).



*2023 data are from the U.S. Census Bureau, American Community Survey 5-Year Estimates. All other data are from the U.S. Census Bureau Decennial Census. | Note: All race categories are not Hispanic or Latino. The 1990 Decennial Census race categories differ from subsequent years: American Indian and Alaska Native category was called American Indian, Eskimo, or Aleut; Asian and Pacific Islander were combined; Two or More Races was not a category. Multiple and Other includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Some Other Race, and Two or More Races. | Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies



Note: Other Hispanic or Latino includes all other places of origin besides Mexico, Central America, and South America.



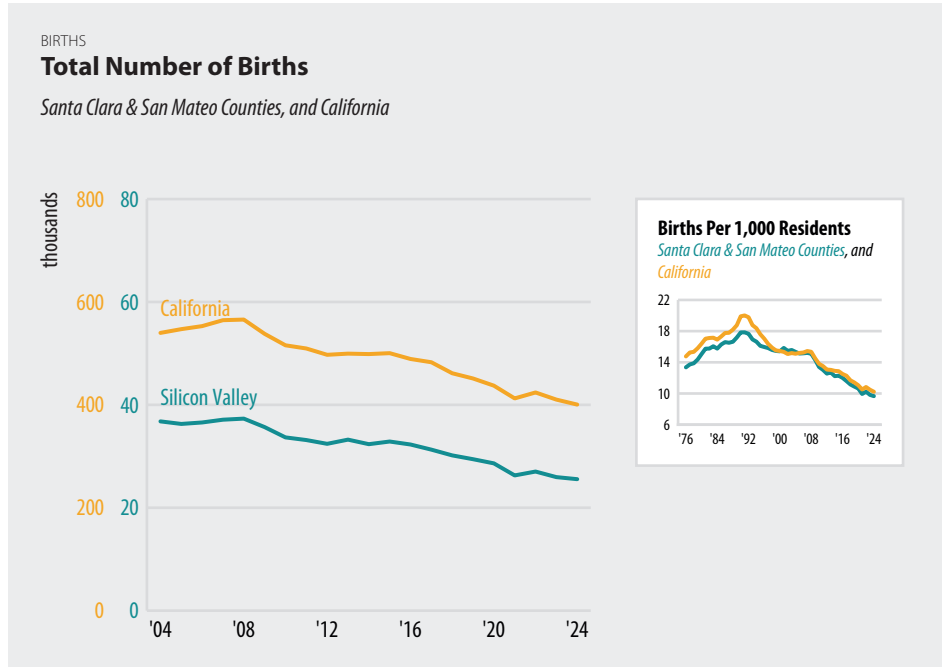
Note: Other Asian includes all other Asian except Chinese, Asian Indian, Vietnamese, Filipino, Korean, and Japanese. Chinese does not include Taiwanese. Ancestry groups are mutually exclusive.

The Black- or African American-alone population share has remained at just over 2% for the past decade; however, the share increases to 4% (accounting for an additional 30,000 residents) when including those who identify as Black or African American in combination with one or multiple other racial/ethnic group(s).

Among single racial/ethnic groupings, Asian residents have represented the largest share of Silicon Valley’s population since 2017. In 2023, 37% of the population in Santa Clara and San Mateo counties identified as Asian alone (up from 30% a decade prior); 39% identified as Asian alone or in combination with one or multiple other racial/ethnic group(s).

Silicon Valley is a relatively diverse region, with a Diversity Index of nearly 71% in 2023 — indicating that there is a 71% chance of two people chosen at random being from different racial or ethnic groups; this compares to a Diversity Index of 60% in the U.S. overall. Silicon Valley’s Diversity Index has remained constant over the past decade, while California and the U.S. have become more diverse over time. Contributing to the diversity of the region is the significant share (41% in 2023) of foreign-born residents.

Mid-2024 estimates indicate a 2% year-over-year decline in Silicon Valley's birth rate. This compares to a drop in San Francisco and California births per 100,000 residents of -1% and -2%, respectively that year.



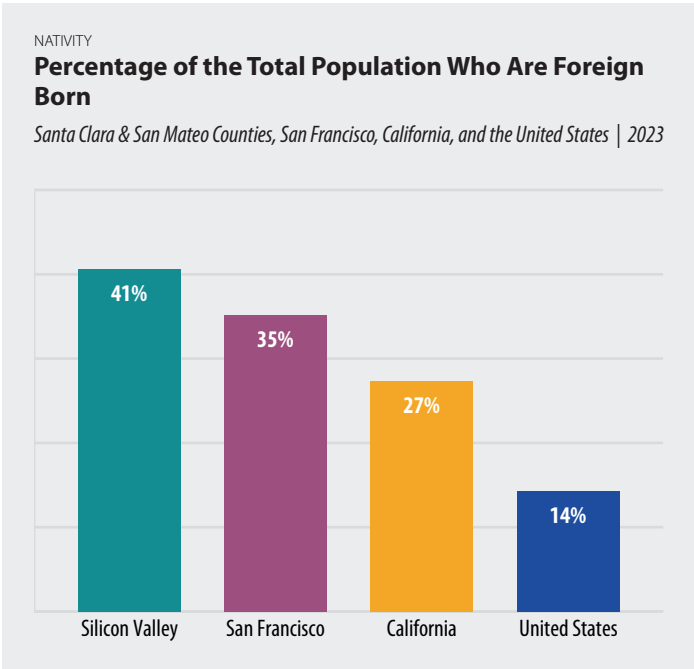
Note: Years represent July-July estimates. | Data Source: California Department of Finance | Analysis: Silicon Valley Institute for Regional Studies

The number of births each year in Santa Clara and San Mateo counties has declined steadily since the early 1990s, dropping by a total of 34% over 33 years (since the last peak birth rate in 1992).

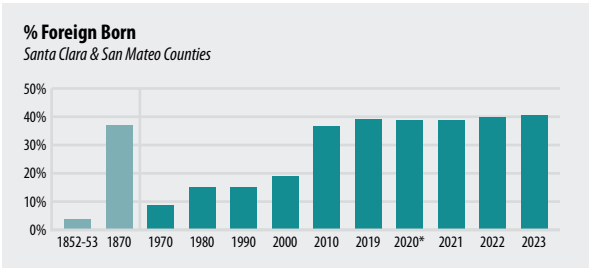
Between mid-2023 and mid-2024 there were 25,551 births recorded in Santa Clara and San Mateo counties combined — 34% fewer than the nearly 38,000 per year in the early 1990s.

Seventy babies are born in Silicon Valley each day, on average, representing approximately 6% of all babies born throughout the state.

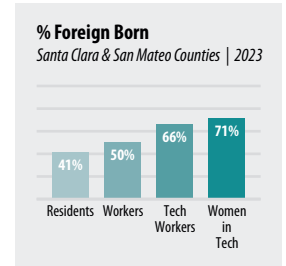
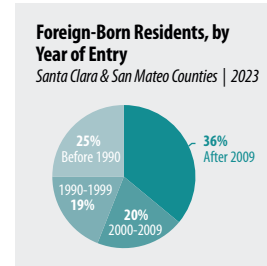
Silicon Valley's foreign-born population share was higher in 2023 (41%) than any other year on record, going back to the mid-1800s.



Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

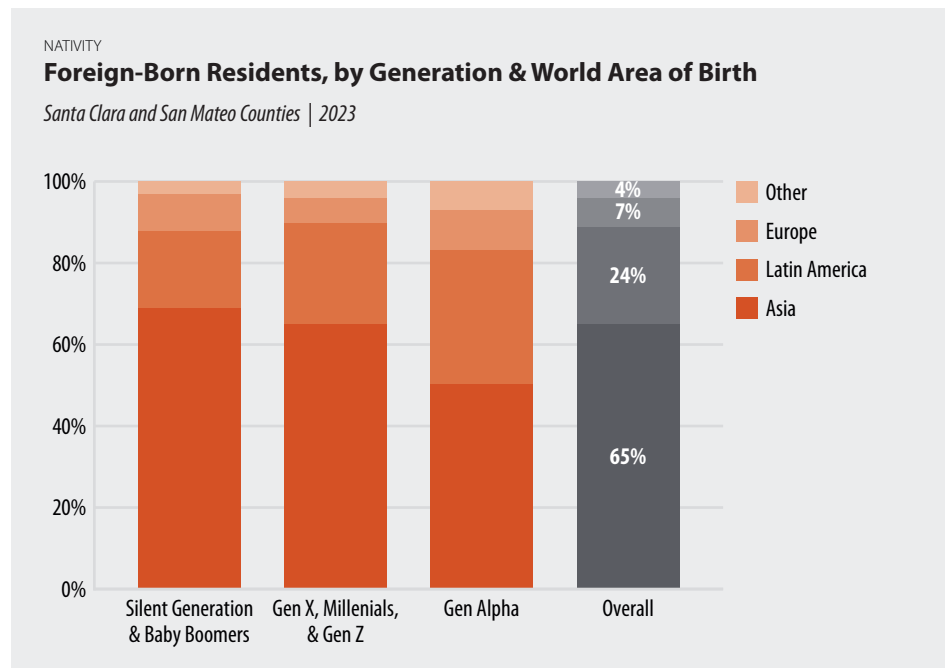


At 41%, Silicon Valley's foreign-born population represents a significantly higher share than in the state (27%) or nation as a whole (14%).



Note: Tech includes Computer & Mathematical, Architectural & Engineering occupations. Workers include those over age 16 who are employed and at-work.

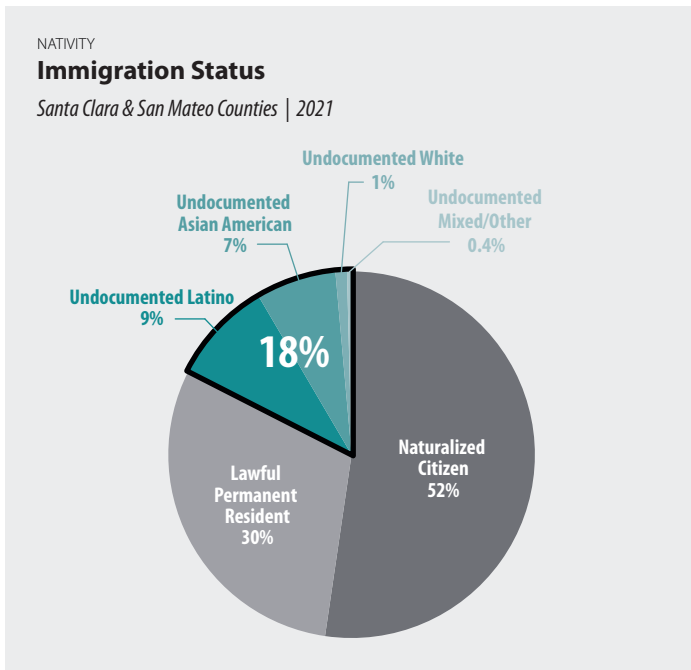
Nearly half (48%) of all Silicon Valley's employed residents and 66% of tech workers were born outside of the country; 73% of Silicon Valley's female tech workers are foreign-born.



Data Source: United States Census Bureau, American Community Survey | Analysis: University of Southern California's Equity Research Institute (ERI); Silicon Valley Institute for Regional Studies

The countries of origin for Silicon Valley's foreign-born residents differ across generations. For example, Gen Alpha (ages 12 and under in 2023) are more likely to have been born in Latin America (33%) than older generations; the Silent Generation & Baby Boomers (ages 59+) have much larger shares born in Asian countries (69%).

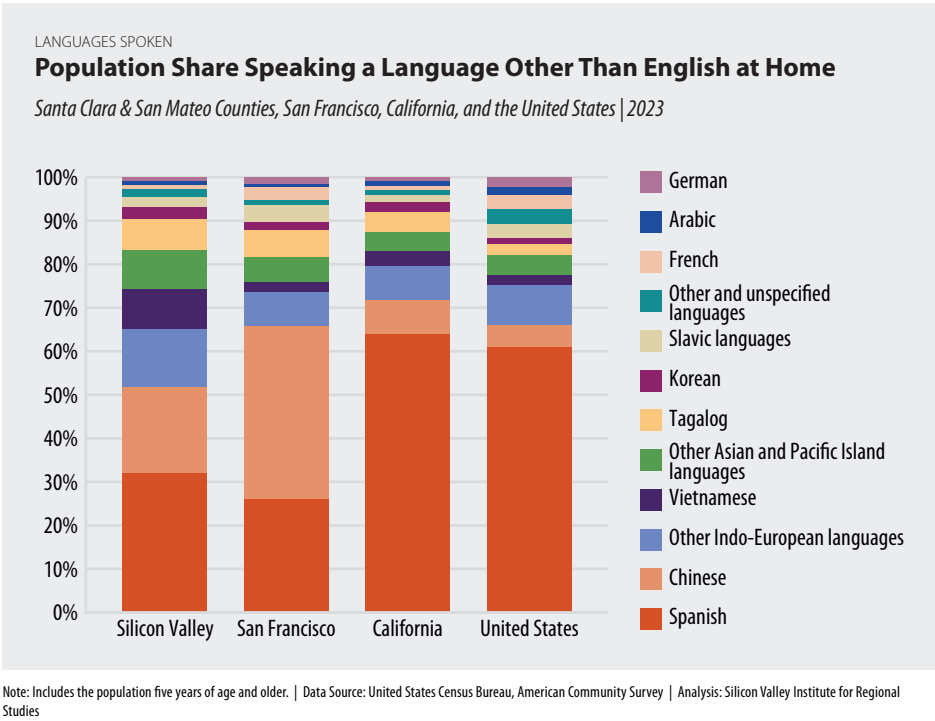
More than one-third (36%) of Silicon Valley's foreign-born residents arrived in 2010 or later; 20% arrived between 2000 and 2010.



Data Source: California Immigrant Data Portal (Data: IPUMS USA) | Analysis: University of Southern California's Equity Research Institute (ERI); Silicon Valley Institute for Regional Studies

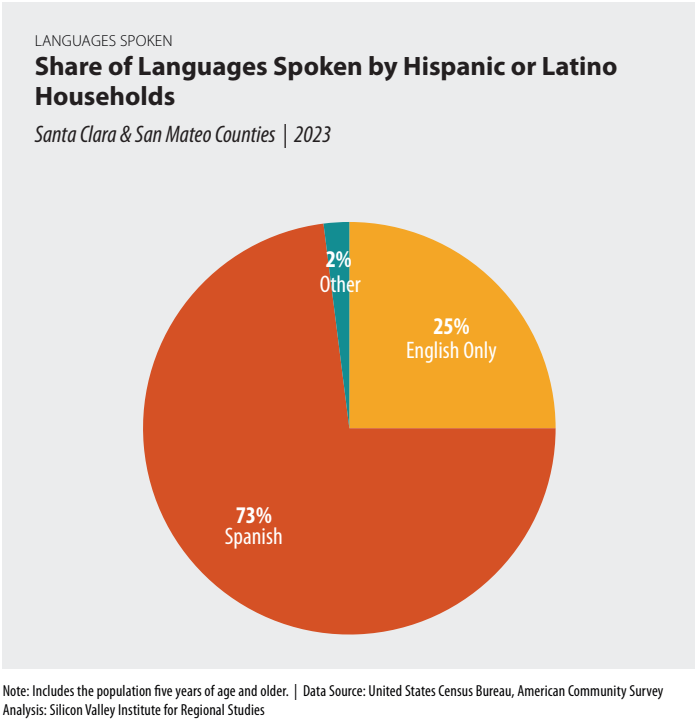
An estimated 18% of Santa Clara and San Mateo counties' foreign-born residents are undocumented; 30% are lawful permanent residents and the remaining 52% are naturalized citizens. Of the estimated 194,000 undocumented residents in the region, 51% are Latino and 41% are Asian American.

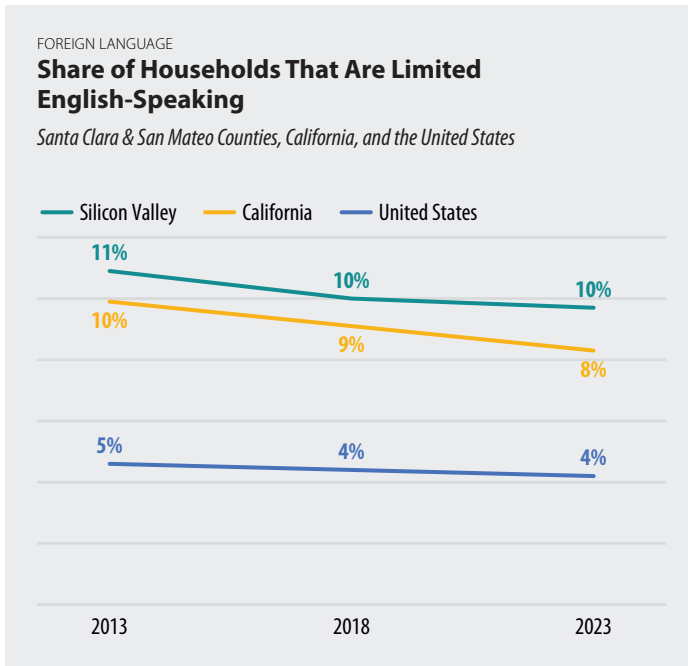
Silicon Valley has a large degree of linguistic diversity, with 53% speaking a language other than English at home. The region has a smaller share of foreign-language speakers who speak Spanish at home (32%) than California (64%), or the United States (61%), and a larger share speaking languages such as Chinese (20%), Vietnamese (9%), and Tagalog (7%).



Population Share That Speaks a Language at Home Other Than Exclusively English		
	2013	2023
Silicon Valley	50%	53%
San Francisco	44%	44%
California	44%	45%
United States	21%	22%

A quarter (25%) of Hispanic or Latino households speak only English at home, with nearly three-quarters (73%) speaking Spanish (or both).

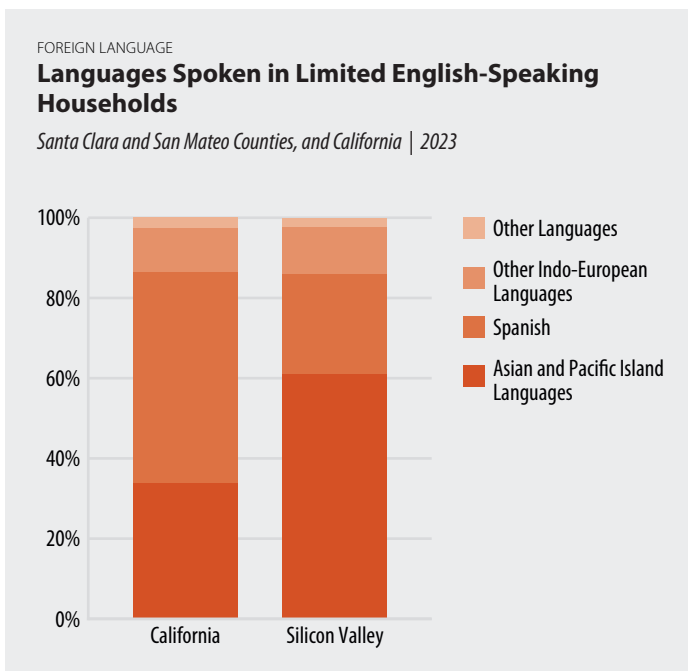




Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

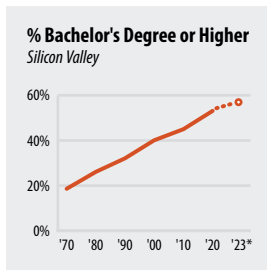
Silicon Valley has a slightly larger share of limited English-speaking households (10%) compared to California (8%) and the United States (4%).

The share of languages spoken by limited English-speaking households looks very different in Silicon Valley than in California. Among limited English-speaking households in Silicon Valley, 61% speak Asian and Pacific Island languages compared to 34% in California, while 25% speak Spanish at home in Silicon Valley compared to 52% in California.



Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

Silicon Valley and San Francisco have larger population shares with a bachelor's degree or higher (56% and 61% of adults, respectively) than California overall (38%) or the United States (36%).

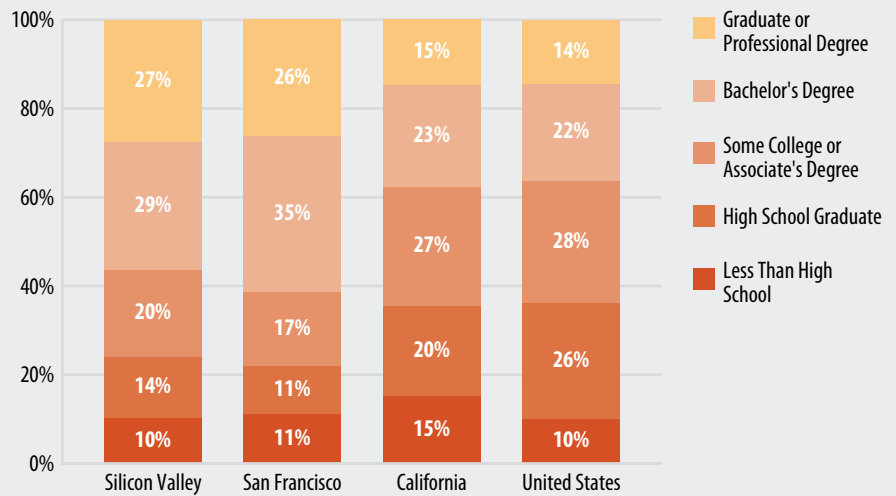


*2023 data are from the United States Census Bureau, American Community Survey 1-Year Estimates.

EDUCATIONAL ATTAINMENT

Percentage of Adults, by Educational Attainment

Santa Clara & San Mateo Counties, San Francisco, California, and the United States | 2023



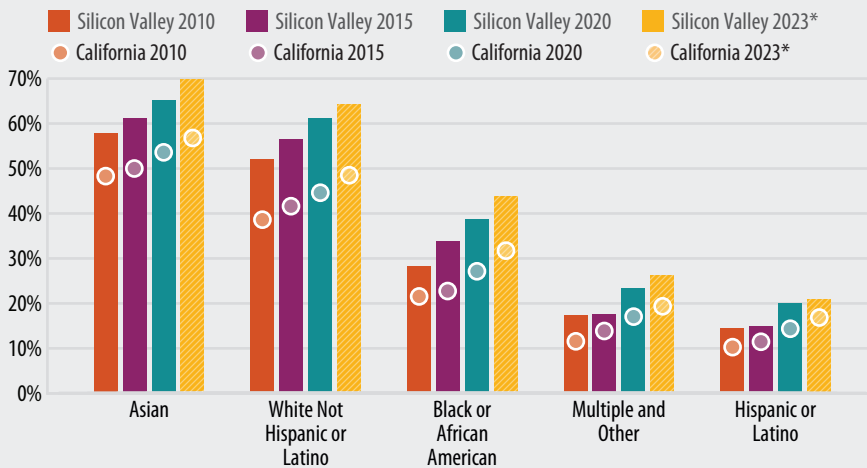
Data Source: United States Census Bureau, Decennial Census and American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

The share of Silicon Valley residents with a bachelor's degree or higher (56%) increased by more than 10 percentage points since 2010, and 37 percentage points since 1970.

EDUCATIONAL ATTAINMENT

Percentage of Adults with a Bachelor's Degree or Higher by Race & Ethnicity

Santa Clara & San Mateo Counties, and California



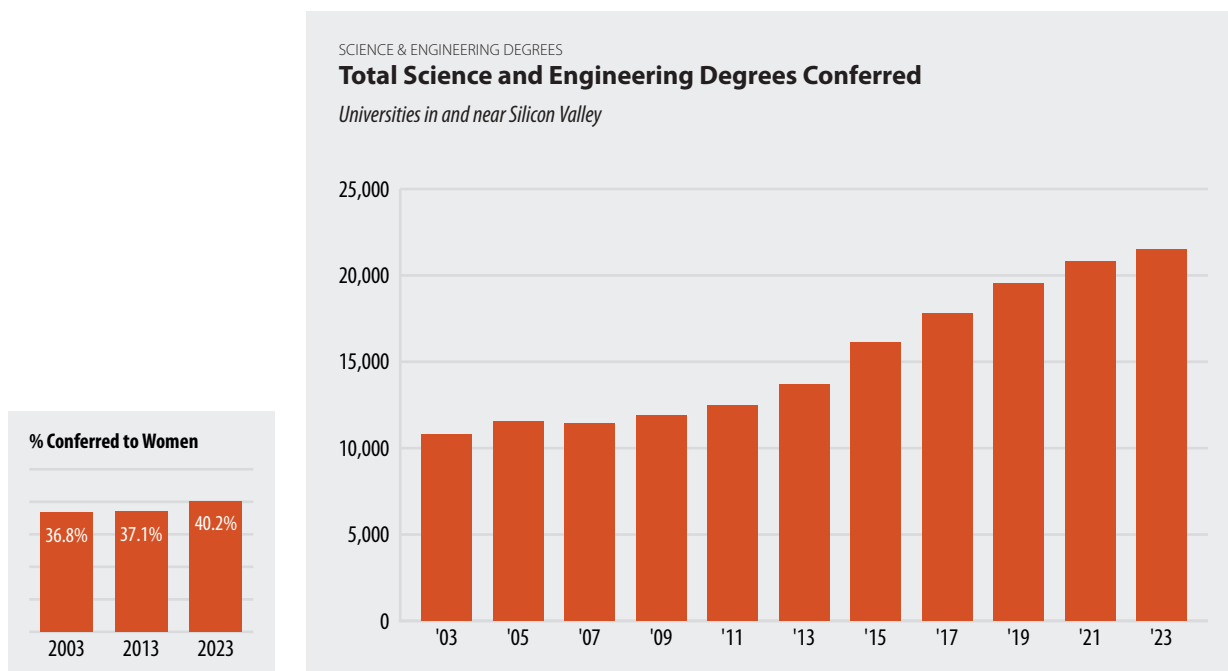
*2023 data are from the American Community Survey 1-Year Estimates. | Note: Multiple and Other includes Alaska Native and American Indian, Native Hawaiian and Other Pacific Islander, Some Other Race and Two or More Races. | Analysis: Silicon Valley Institute for Regional Studies

While educational attainment levels for Silicon Valley's Hispanic or Latino residents overall remain low relative to other racial/ethnic groups, the share with a bachelor's degree or higher rose from 14% to 21% between 2010 and 2023.

Educational attainment disparities persist among racial and ethnic groups in Silicon Valley, although education levels increased overall — across all racial and ethnic groups — over the past decade.

Less than 45% of Silicon Valley's Black or African American residents have a bachelor's degree or higher, compared to nearly 64% of White, not Hispanic or Latino residents, and 70% of Asian residents. However, from 2010 to 2023, Silicon Valley's Black or African American residents experienced the greatest gains (+16 percentage points) among racial/ethnic groups in population share with a bachelor's degree or higher.

More than 69% of the region's science and engineering degrees were conferred to students identifying as White or Asian, compared to 17% Hispanic or Latino and 3% Black or African American.



Data Source: National Center for Educational Statistics, IPEDS | Analysis: Silicon Valley Institute for Regional Studies

Over the past two decades, the number of science and engineering degrees conferred at colleges and universities in/around Silicon Valley has increased by nearly 100%. In 2023, nearly 21,500 science and engineering degrees were conferred locally.

The *number* of science and engineering degrees conferred in/around Silicon Valley to women has increased by more than 70 percent over the past decade, but the *share* of degrees has remained in the 37-41% range since the year 2000.

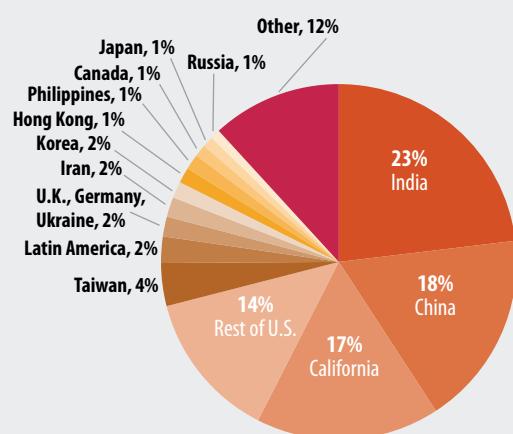
Share of Science and Engineering Degrees Conferred, by Race and Ethnicity <i>Silicon Valley</i>		
	2022	2023
Asian	45%	41%
White	28%	29%
Hispanic or Latino	16%	17%
Two or More Races	6%	7%
Other	4%	4%
Black or African American	2%	3%

Note: Other includes American Indian, Alaska Native, and Native Hawaiian or Other Pacific Islander. Percentages represent a share of degrees where race or ethnicity was reported.

TECH TALENT

Share of Residents in Technical Occupations with a Bachelor's Degree or Higher, by Place of Birth

Santa Clara & San Mateo Counties | 2023



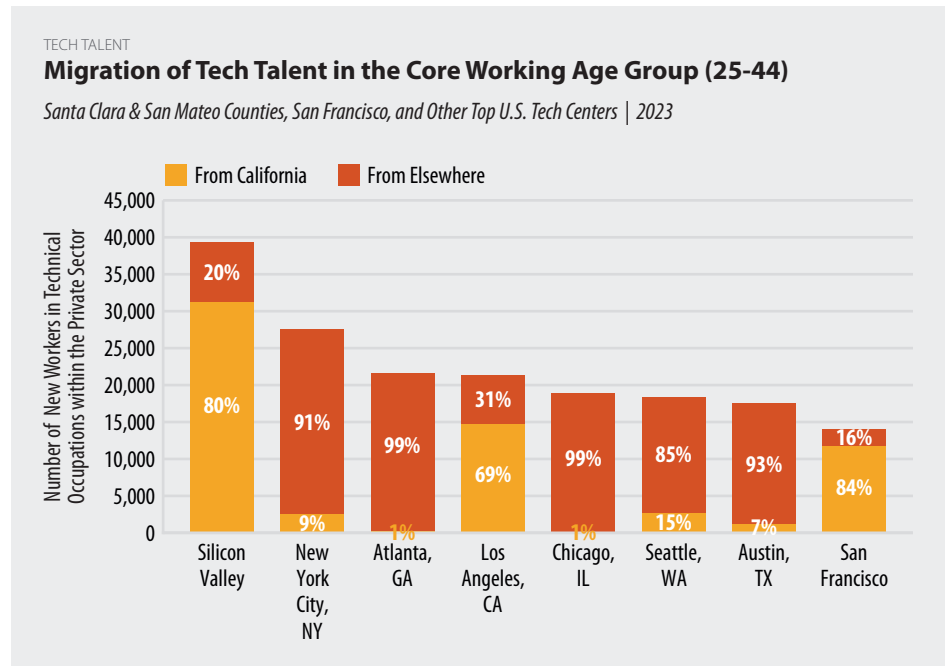
Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

More of Silicon Valley's highly-educated tech workers are from India or China (41% in 2023) than from the U.S. (30%).

Seventy percent of Silicon Valley's tech talent — those with a bachelor's degree or higher in technical occupations — are foreign-born, with the largest shares coming from India (23%) and China (18%).

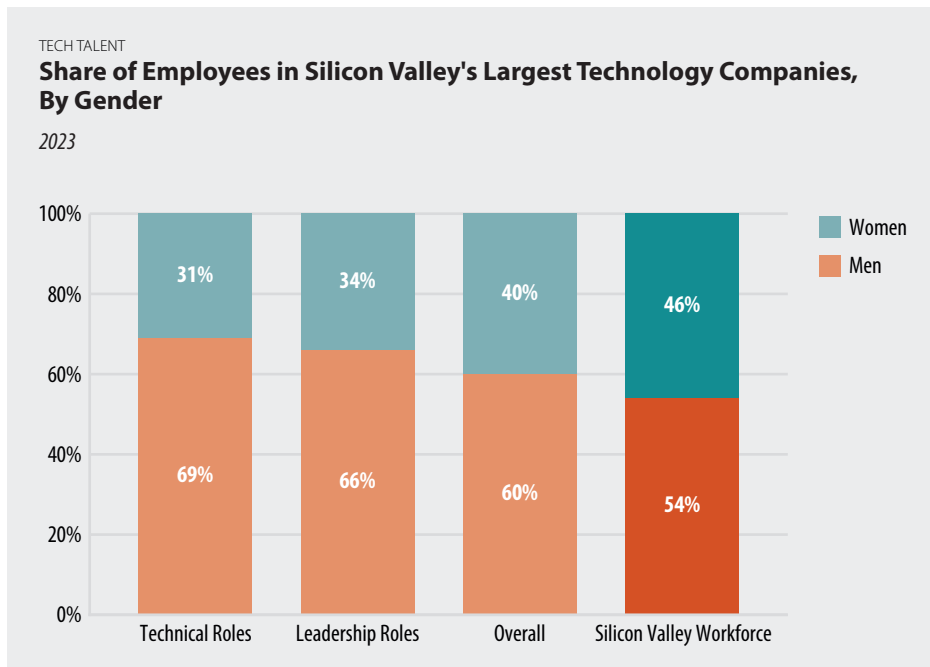
Of Silicon Valley's tech talent with a bachelor's degree or higher, 17% were born in California.

Silicon Valley is attracting more tech talent in the core working age group (ages 25 to 44) than other top U.S. tech centers.



Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

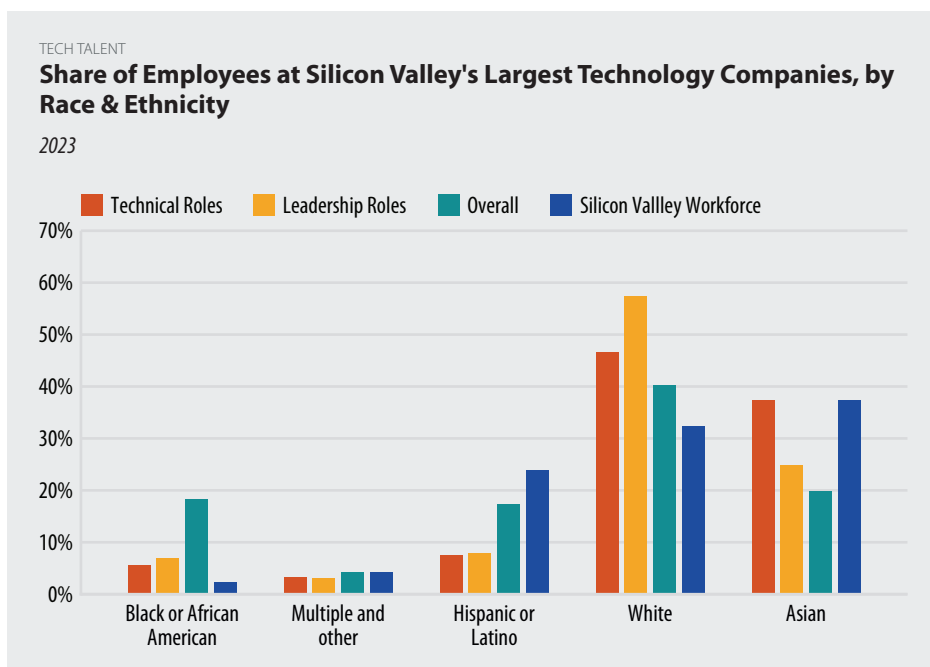
More than 53,000 employed, college-educated adults in technical occupations relocated to Silicon Valley or San Francisco in 2023, with more than 80% coming from within the state.



Women make up 46% of Silicon Valley's civilian workforce and 40% of employees at its 20 largest tech companies; however, women account for a disproportionately lower share of leadership positions (34%) and technical roles (31%) at those companies.

Data Sources: Individual company EEO-1 Consolidated Reports; www.linkedin.com; United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

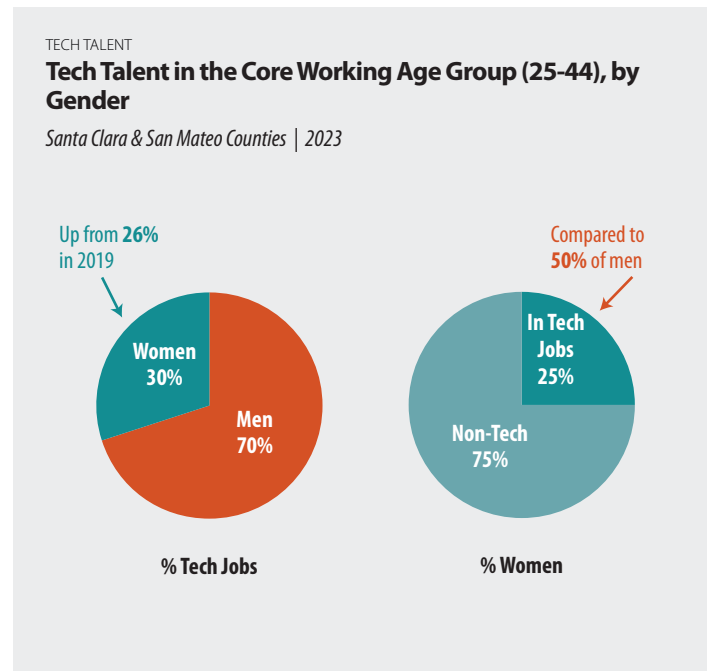
The share of Black or African American workers at Silicon Valley's 20 largest tech companies is 17%, including a 6% share of technical roles and a 7% share of leadership roles, while making up only 2% of the regional workforce.



White, not Hispanic or Latino workers make up 28% of Silicon Valley's civilian workforce but account for approximately 55% of leadership roles (and 45% of technical roles) at Silicon Valley's largest tech companies. In contrast, Hispanic or Latino workers represent a disproportionately small share (18%) of employees at these same companies despite making up 24% of the civilian workforce.

Asian workers represent 39% of technical roles and roughly 40% of all employees at the region's 20 largest technology companies.

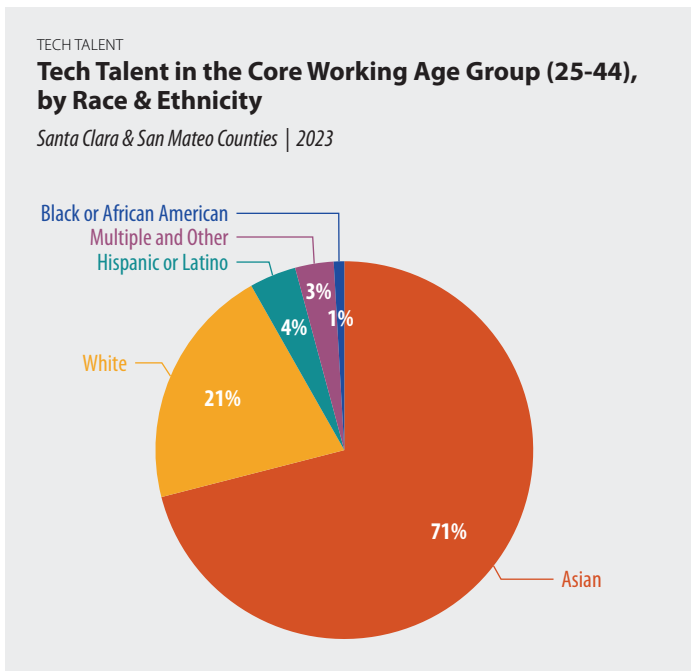
Note: Tesla, LinkedIn, and Intel are not included in the analysis since EEO-1 reports could not be accessed. | Data Sources: Individual company EEO-1 Consolidated Reports; LinkedIn; Silicon Valley Business Journal; United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies



Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

Only 25% of working women in the region occupy technical roles, compared to 50% of working men.

Women ages 25-44 occupied 30% of the tech jobs in Silicon Valley in 2023, an increase of 4 percentage points from 2019.



Data Source: United States Census Bureau, American Community Survey (PUMS) | Analysis: Silicon Valley Institute for Regional Studies

Of Silicon Valley's core working age group (ages 25-44) in technical roles, 71% are Asian and 21% are White, not Hispanic or Latino.

According to results from the *2024 Silicon Valley Poll*, approximately 19% of Bay Area residents either work for a technology company or live in a household with a tech industry employee; this compares to 25% of men ages 35-49, 28% of Asian or Pacific Islanders, and 14% of Hispanic or Latino residents.

WHAT ARE THE KEY FINDINGS?

After two years of steady gains, Silicon Valley's job growth has stagnated, with a slight decline of around 1,200 positions between mid-2022 and mid-2024. However, by the end of 2024, employment levels had rebounded to approximately 1% above pre-pandemic (2019) levels — a stark contrast to San Francisco, which remained 8% below its prior benchmark.

This divergence reflects a broader trend, as Silicon Valley has consistently outpaced both San Francisco and the state overall in terms of job creation, particularly within the thriving tech sector. While San Francisco experienced significant growth in tech-related roles, Silicon

Valley's overall employment expansion has been more rapid, growing 33% compared to 29% in San Francisco and 25% statewide since the Great Recession low.

Today, tech jobs in Silicon Valley stand 57% higher than their recession-era low, while overall employment has risen by a more modest 33%.

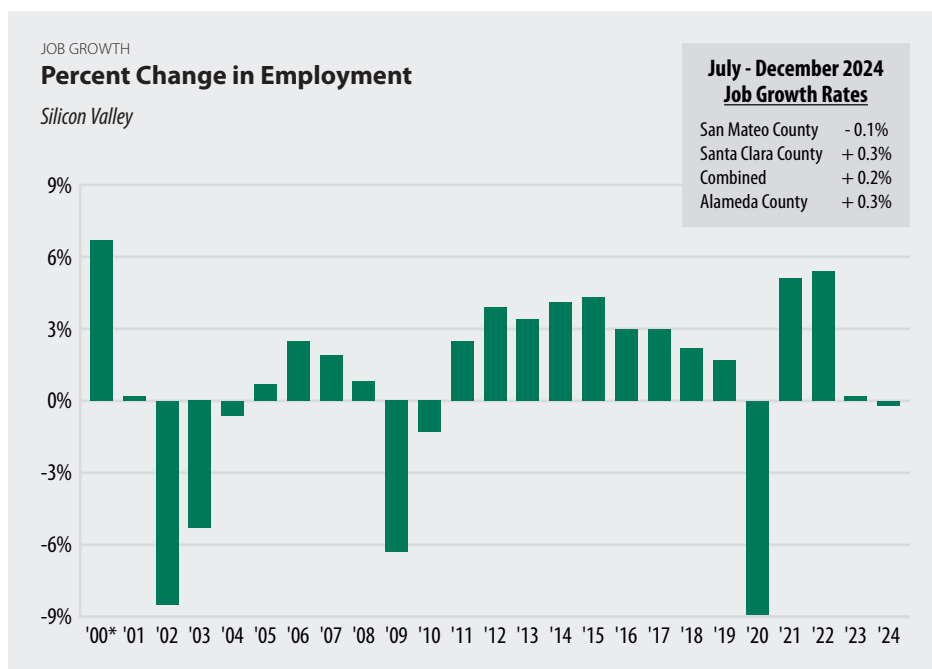
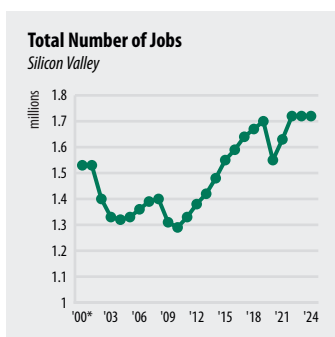
Beneath these high-level shifts, the region's occupational profile has also evolved. Software developers represent the largest group, with over 147,000 workers, followed by engineers, with 116,100. The construction

industry also maintains a significant presence, with approximately 13,500 laborers and nearly 49,000 specialists and managers.

Industry-specific trends have been equally dynamic. Healthcare and social services added more than 48,600 jobs (a 24% increase between mid-2023 and mid-2024), while retail shed 16,500 positions (-14%). This uneven recovery has reshaped the composition of Silicon Valley's economy, with Community Infrastructure & Services now accounting for more than half (51%)

of total employment.

Underpinning these changes is a broader shift that began during the Great Recession, as the tech sector's growth outpaced other industries by a factor of two. Today, tech



*Data prior to 2001 include Santa Clara & San Mateo counties only. | Note: Percent change is based on unsuppressed numbers for 2012-24, and QCEW data totals with suppressed industries for prior years. Second half of 2024 growth is based on EDD reported June through November growth rates by county. | Data Sources: U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages; JobsEQ | Analysis: BW Research

jobs in Silicon Valley stand 57% higher than their recession-era low, while overall employment has risen by a more modest 33%. The region's six largest tech companies now employ an estimated one in five tech workers and one in 18 workers across all industries.

Even as tech remains a driving force, the pandemic has left a lasting imprint on work patterns. Remote and hybrid arrangements have become more prevalent in the Bay Area than in other major regions, with the average worker spending 37% of their time at home in 2024. This shift suggests a fundamental recalibration of how and where work is conducted in Silicon Valley, with potentially far-reaching implications for the region's future.

WHY IS THIS IMPORTANT?

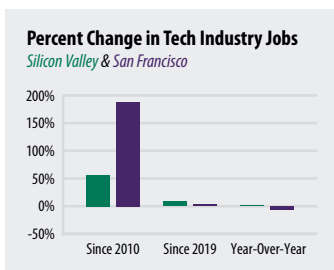
Employment gains and losses are a core means of tracking economic health and remain central to national, state, and regional conversations. Over the course of the past few decades, Silicon Valley (like many other communities) has experienced shifts in the composition of industries that underpin the local economy. The types of jobs and the composition of the region's workforce affect the availability of opportunities and uncover potential skills gaps.

Examining employment by wage and skill level allows for a higher level of granularity to help us understand the changing composition of jobs within the region. While employment by industry provides a broader picture of the region's economy as a whole, the unemployment rates of

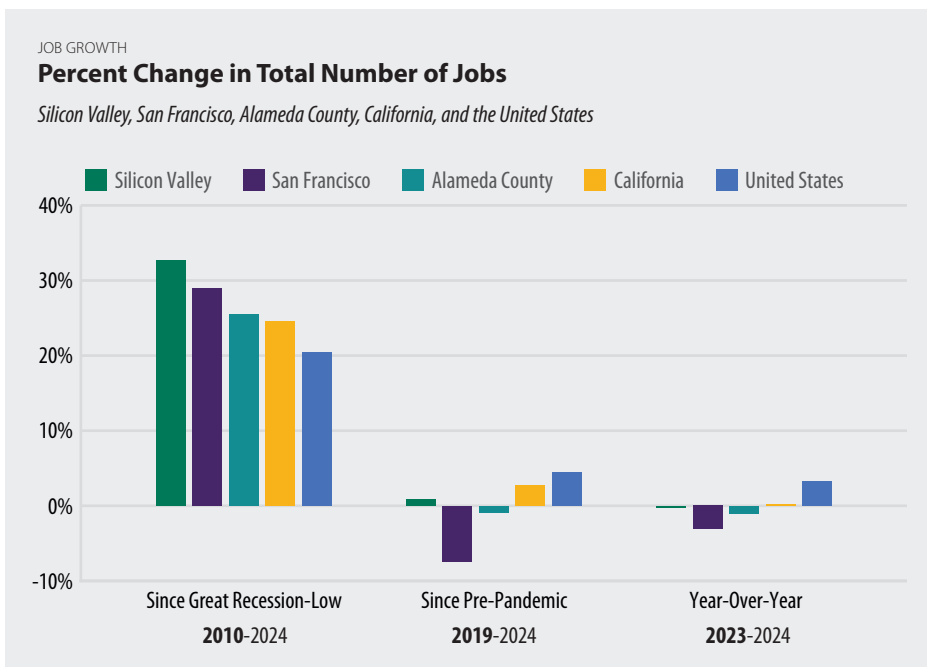
the population residing in the Valley reveal the status of the immediate Silicon Valley-based workforce. Changes in the region's industry patterns show to what extent our economy is balancing the needs of its community with maintaining its position in the global economy.

Silicon Valley employment growth has stagnated after two years of gains (2020-2022) following the early pandemic low.

Silicon Valley employment levels have declined by approximately 1,200 jobs between mid-2022 and mid-2024 (-0.1%), followed by an estimated +3,100 in the second half of 2024.⁸



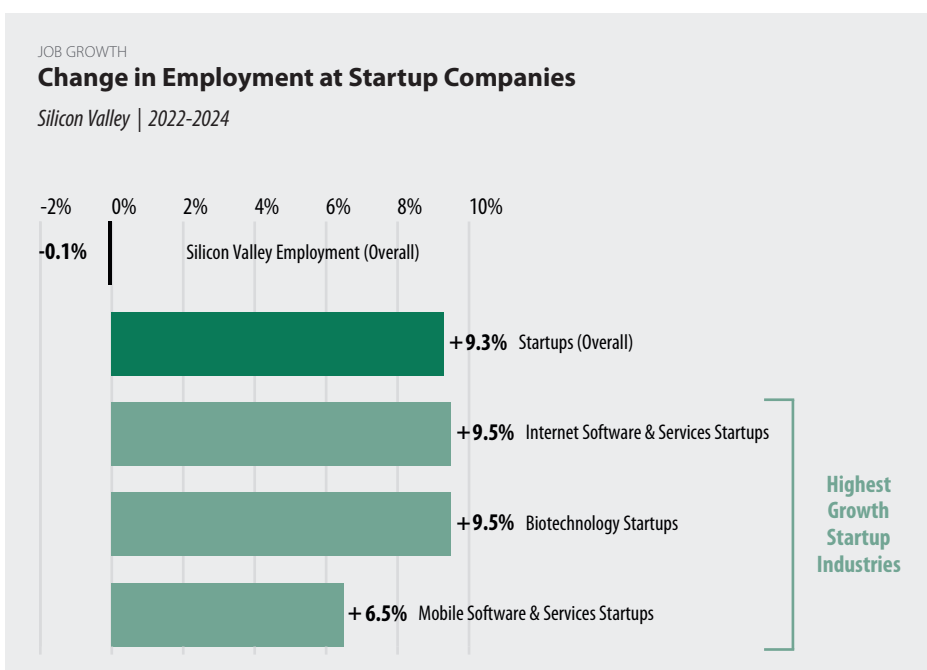
At the end of 2024, total employment levels in Silicon Valley were approximately⁹ 1% higher than pre-pandemic (2019) levels; in contrast, San Francisco employment levels remained approximately 8% below pre-pandemic levels.



Note: Relative growth is from June to June. | Data Sources: U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages; JobsEQ | Analysis: BW Research

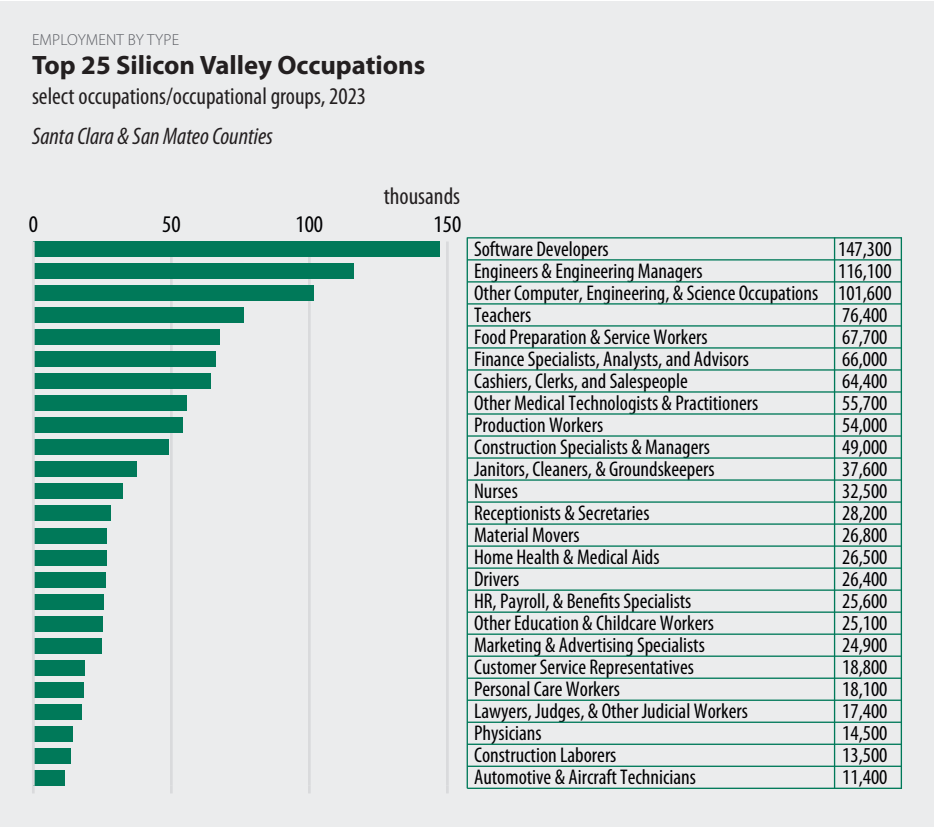
Silicon Valley jobs have grown more rapidly (+33%) than in San Francisco (+29%) or the state overall (+25%) since the low point of the Great Recession (mid-2010). Tech job growth since then, however, was significantly more rapid in San Francisco (+188%) than in Silicon Valley (+57%).

While total employment in Silicon Valley has declined slightly since 2022 (-0.1%), employment at the region's startup companies has grown by approximately 9.3%. Among these startups, those in the software and biotechnology sectors experienced the largest relative expansions in headcount.



Note: Startup companies include those founded in the past three years that have received at least Angel, seed, or early-stage (Series A) funding. | Data Sources: CB Insights; U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages; JobsEQ | Analysis: Silicon Valley Institute for Regional Studies; BW Research

Software Developers represent the largest occupational group among Silicon Valley residents, with a total of more than 147,000 workers in 2023; the second most common occupational group are Engineers, with approximately 116,100 workers.



Note: List represents a subsample of top occupational groups; it is not intended to be comprehensive of all groupings/combinations. | Data Source: United States Census Bureau, American Community Survey PUMS | Analysis: Silicon Valley Institute for Regional Studies

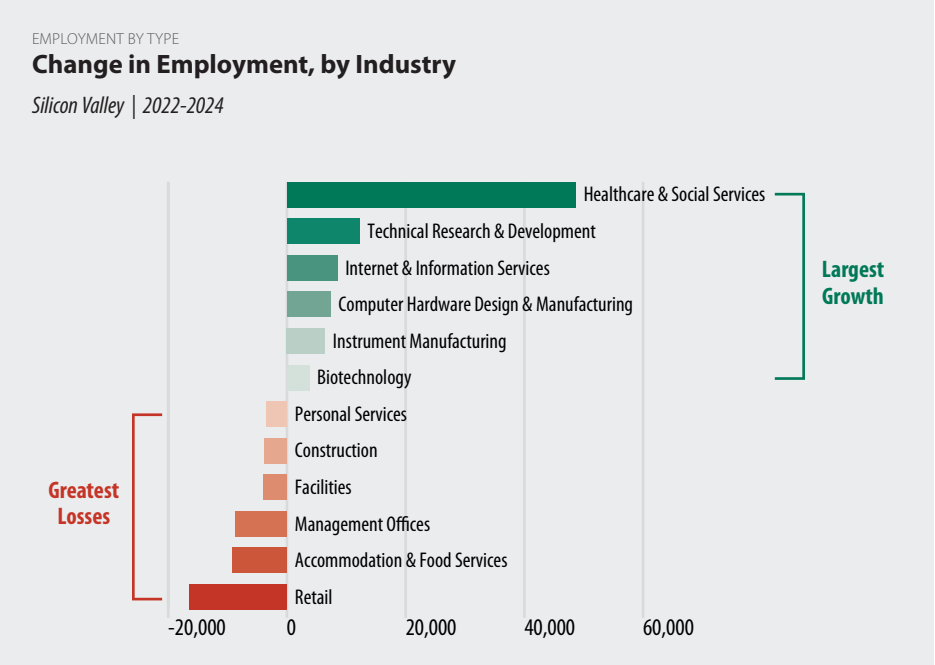
Approximately one in ten Silicon Valley residents' is a Software Developer.

1. Estimate includes employed residents of Santa Clara and San Mateo counties, ages 16 and over.

Food Preparation & Service Workers comprise 4% of Silicon Valley's employed residents; nearly half of them work in food preparation (e.g., chefs, cooks, and other related roles).

Silicon Valley workers include approximately 13,500 Construction Laborers and nearly 49,000 Construction Specialists & Managers; the largest shares of this specialized labor force¹ include Carpenters (25%); Electricians (20%); Plumbers, Pipefitters, and Steamfitters (15%); Painters and Paperhangers (10%); and Roofers (8%).

1. Excluding supervisors and managers.



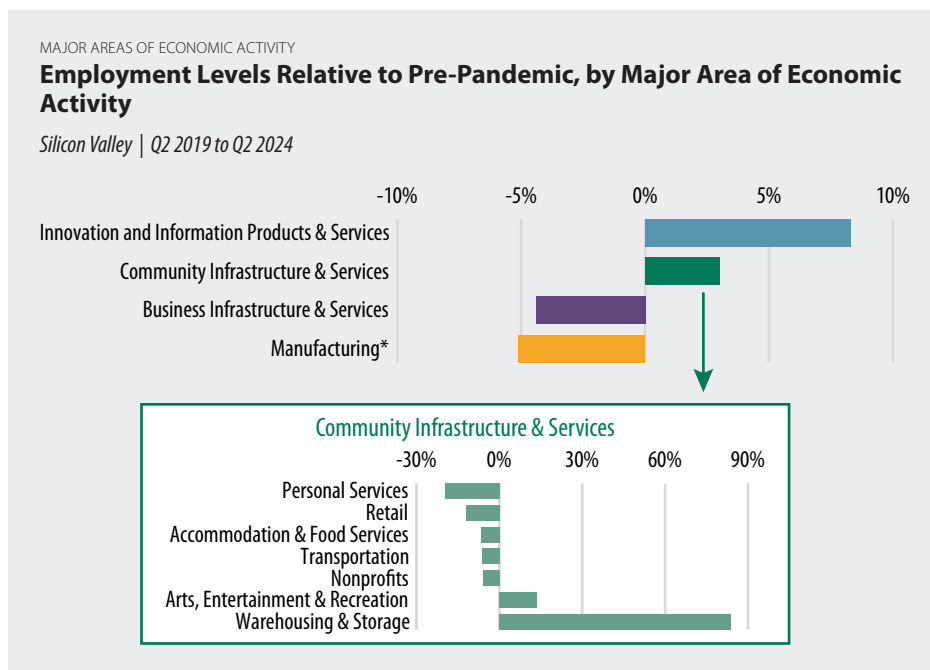
Note: Technical Research & Development and Biotechnology include Life Sciences; Education and Healthcare & Social Services include state and local government jobs. Data Sources: BW Research; U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages; JobsEQ | Analysis: BW Research; Silicon Valley Institute for Regional Studies

Employment growth (and losses) in Silicon Valley have varied widely among industries over the past two years, despite the stagnation of overall job growth. Over that period, Healthcare & Social Services jobs grew by more than 48,600 (+24%) while Retail jobs fell by 16,500 (-14%).

While overall Silicon Valley employment levels were 1% above pre-pandemic (2019) levels by mid-2024, growth (and losses) vary significantly among industries.

Although pandemic-related job losses in Community Infrastructure & Services (-15% year-over-year through mid-2020) were more drastic than in the region's Business Infrastructure & Services jobs (-7%), recovery has been more robust. As of mid-2024, Community Infrastructure & Services jobs — such as those in healthcare, education, and utilities — were 3% higher than 2019 levels, with some industries far exceeding that level of growth; in contrast, Business Infrastructure & Services jobs — which had recovered pandemic-related losses by 2023 — were 4% below 2019 levels.

Employment in Community Infrastructure & Services industries that remained below pre-pandemic levels last year included Personal Services (20% below 2019), Retail (-12%), Accommodation & Food Services (-7%), Transportation (-6%), and Nonprofits (-6%).



*excludes Computer Hardware, Semiconductors & Related Equipment, and Instruments (Navigation, Measuring & Electromedical). | Note: Definitions of the major areas of economic activity are included in Appendix A. | Data Sources: BW Research; U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages; JobsEQ | Analysis: BW Research; Silicon Valley Institute for Regional Studies

Employment Growth by Major Areas of Economic Activity			
Silicon Valley			
	2010-2024	2019-2024	2023-2024
Community Infrastructure & Services	+33%	+3%	+3%
Innovation and Information Products & Services	+57%	+8%	+1%
Business Infrastructure & Services	+19%	-4%	-4%
Manufacturing*	-1%	-5%	-4%
Total Employment	+33%	+1%	+/-0%

*excludes Computer Hardware, Semiconductors & Related Equipment, and Instruments (Navigation, Measuring & Electromedical). | Note: Percent change is from Q2 to Q2. Definitions of the major areas of economic activity are included in Appendix A.

The start of the Great Recession economic recovery period marked a shift in the region's job composition. Since 2010, Silicon Valley's tech sector employment (Innovation and Information Products & Services) grew more than twice as quickly as other jobs (+57% through mid-2024, compared to +25% for employment in all other industries).

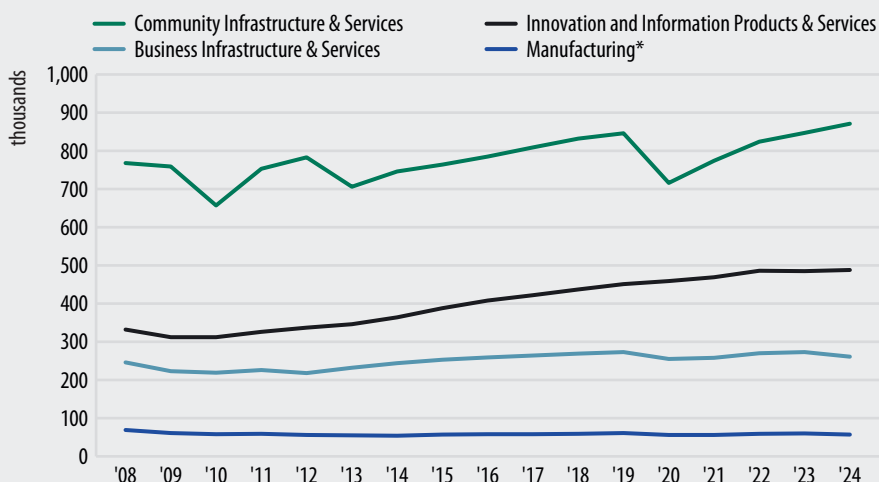
Silicon Valley jobs in Innovation and Information Products & Services — such as Computer Hardware, Software, Internet & Information Services, and Biotechnology — were 57% higher in mid-2024 (up by approximately 177,000 jobs) than the Great Recession-low in 2010; in contrast, overall regional employment levels were only 33% higher.

While Silicon Valley year-over-year job growth slowed to -0.2% in 2024, San Francisco employment levels fell by 3.1%. Only four out of nine Bay Area counties exhibited positive job growth over that period — San Mateo (+0.4%), Contra Costa (+1.0%), Napa (+1.4%), and Solano (+2.4%) counties; however, estimates for the second half of 2024 indicate losses in both Napa (-4.8%) and San Mateo (-0.1%) counties.

MAJOR AREAS OF ECONOMIC ACTIVITY

Mid-Year Employment Levels, by Major Areas of Economic Activity

Silicon Valley



*excludes Computer Hardware, Semiconductors & Related Equipment, and Instruments (Navigation, Measuring & Electromedical). | Note: Definitions of the major areas of economic activity are included in Appendix A. | Data Sources: BW Research; U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages; JobsEQ | Analysis: BW Research; Silicon Valley Institute for Regional Studies

While jobs in Community Infrastructure & Services industries have continued to grow over the past several years, other major areas of economic activity have contributed to a stagnation of overall employment growth (with +/- 0% change between mid-2023 and mid-2024).

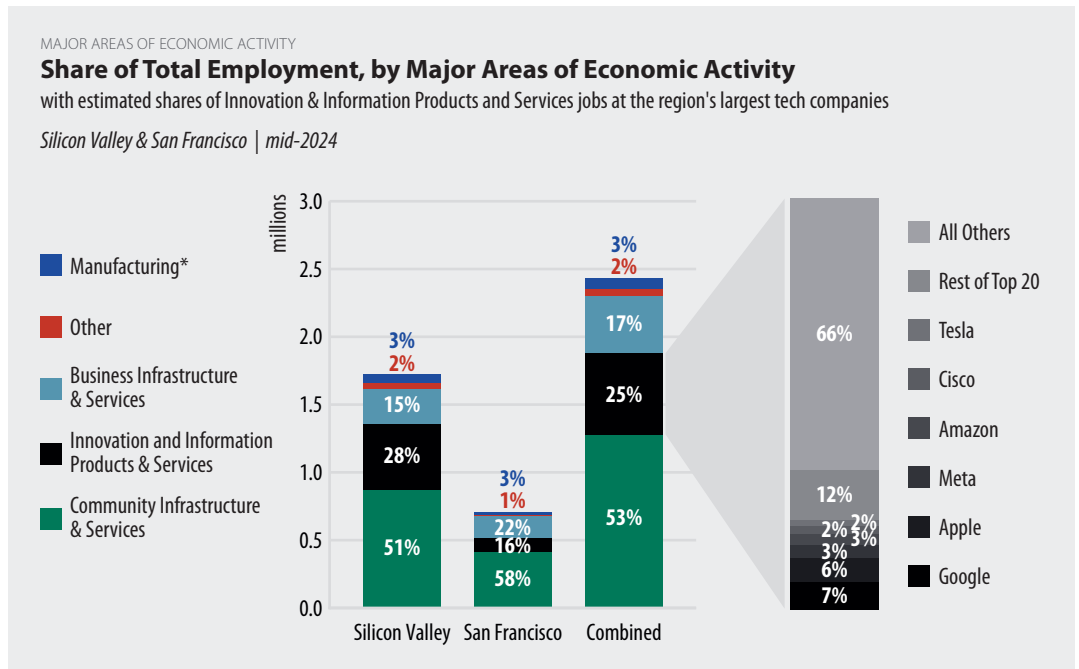
A net of more than 155,000 new jobs were added to Silicon Valley's Community Infrastructure & Services industries since the low in 2020.

Silicon Valley's Business Infrastructure & Services jobs declined last year by 4%, with the largest share of losses attributed to Personnel & Accounting Services (-4,900 jobs between mid-2023 and mid-2024), Facilities (-3,900), and Technical & Management Consulting Services (-1,200).

In contrast to negligible (+/-0%) regional job growth over the past two years,¹ Silicon Valley industries with employment gains over that period include Arts, Entertainment & Recreation (+26%), Investment & Employer Insurance Services (+23%), Warehousing & Storage (+19%), and Pharmaceuticals (+14%). By the number of jobs gained — rather than percent growth — Silicon Valley experienced the largest expansion of jobs among Healthcare & Social Services (+22,200); Education (+11,300); Arts, Entertainment & Recreation (+4,700); and Local Government Administration (+4,225).

1. From mid-2022 through mid-2024.

An estimated 34% of Silicon Valley and San Francisco tech jobs in mid-2024 were at the 20 largest tech companies alone; 66% were at all other tech companies, combined.



*excludes Computer Hardware, Semiconductors & Related Equipment, and Instruments (Navigation, Measuring & Electromedical). | Note: Definitions of the major areas of economic activity are included in Appendix A. | Data Sources: BW Research; U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages; JobsEQ; LinkedIn | Analysis: BW Research; Silicon Valley Institute for Regional Studies

The concentration of pandemic-related job losses in Community Infrastructure & Services — which had only recovered halfway by mid-2021 — accompanied by a boom in tech prosperity (market gains and hiring) — led to an increased share of Silicon Valley's workforce in tech jobs. That share (which grew slowly from 24% in 2009 to 26% a decade later) rose precipitously to 30% in 2020 and has since declined to 28%.

Google and Apple employ the highest shares (approximately 7% and 6%, respectively) of the combined Silicon Valley and San Francisco workforce, followed by Meta (3%), Amazon (3%), Cisco (2%), and Tesla (2%).

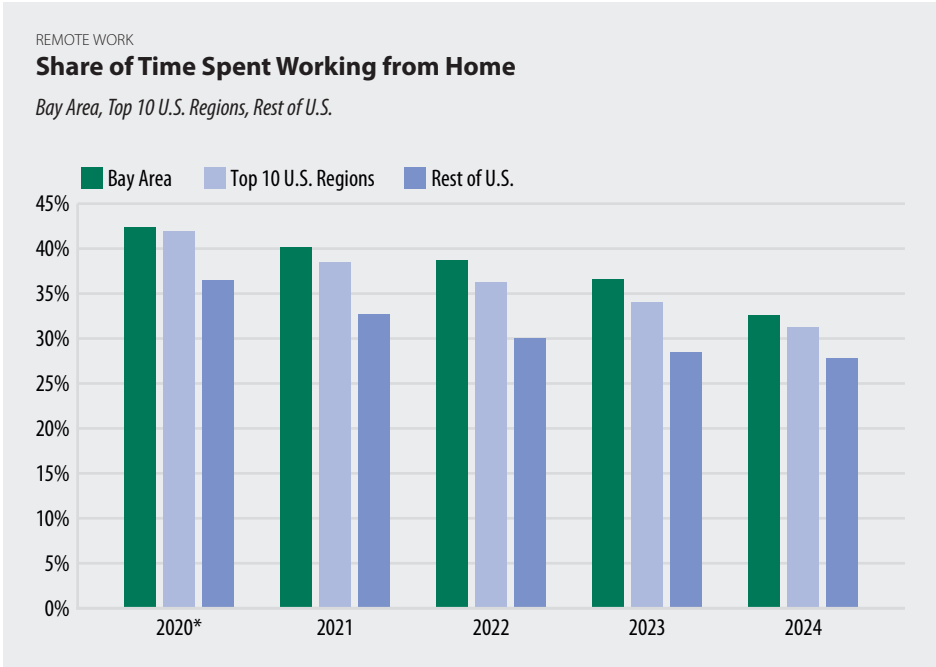
The six largest tech companies in Silicon Valley and San Francisco alone — Google, Apple, Meta, Amazon, Cisco, and Tesla — employ an estimated one out of every five tech industry workers (and one in 18 workers across all industries) within the region.¹⁰

Silicon Valley and San Francisco's six largest tech companies together constitute 5% of all regional jobs, including approximately 6% of Silicon Valley and 3% of San Francisco employees. While these numbers are staggering, employment at these top six — Google, Apple, Meta, Amazon, Cisco, and Tesla — fell by 15% year-over-year (from approximately 155,000 in mid-2023, to 132,000 in mid-2024).

The largest 20 tech companies in Silicon Valley and San Francisco employed 8% of the entire regional workforce (204,300 out of 2.42 million) in mid-2024; in Silicon Valley alone, they employed 10%.

In contrast to the share of Silicon Valley jobs in tech — which declined from 30% in 2020 to 28% in 2024 — Community Infrastructure & Services jobs have grown to represent more than half (51%) of the region's total employment.

Remote work has been more prevalent in the Bay Area than in other major U.S. regions, particularly in 2022-2023 (with the margin declining slightly in 2024).



*2020 data include November through December. | Data Sources: U.S. Survey of Working Arrangements and Attitudes (SWAA);¹ | Analysis: Silicon Valley Institute for Regional Studies

1. Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis (2021). "Why working from home will stick," National Bureau of Economic Research Working Paper 28731.

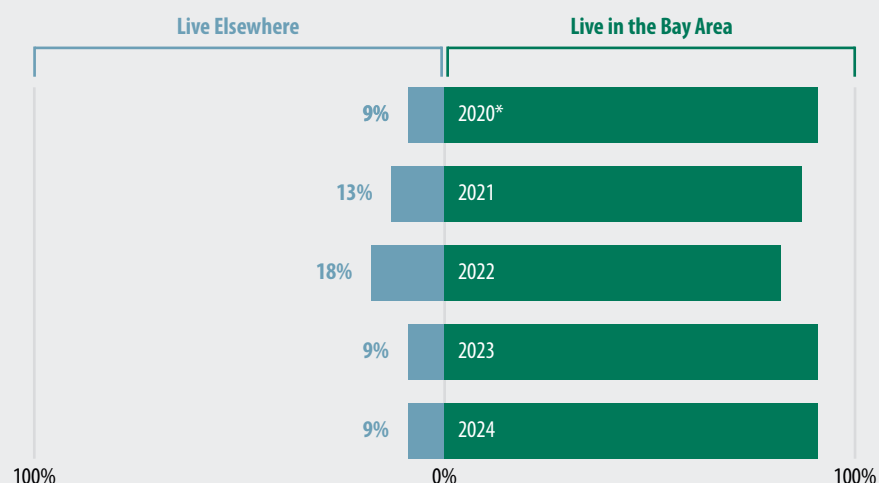
Over the past three years, the average Bay Area employee worked from home approximately 37% of their time — just under two days out of a typical five-day workweek. Similarly, employees across the ten largest U.S. regions worked remotely 35% of their workdays, although the inclusion of the Bay Area among the top ten was a likely contributor to this rate.

The share of remote work hours for Bay Area employees has declined by the equivalent of one-half of a workday since early in the pandemic. However, the average Bay Area employee still worked from home for about one-third of their time last year, suggesting long-term adoption of hybrid work models.

REMOTE WORK

Fully-Remote Workers, by Place of Residence

among those with Bay Area-based jobs



*2020 data include November through December. | Data Sources: U.S. Survey of Working Arrangements and Attitudes (SWAA); Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis, 2021. "Why working from home will stick," *National Bureau of Economic Research Working Paper* 28731. | Analysis: Silicon Valley Institute for Regional Studies

Among fully-remote Bay Area employees, the share working remotely from outside the region rose in 2021 and 2022 to nearly one in five. This share, however, has since declined – suggesting that those employees either moved back to the region or no longer hold their Bay Area positions.

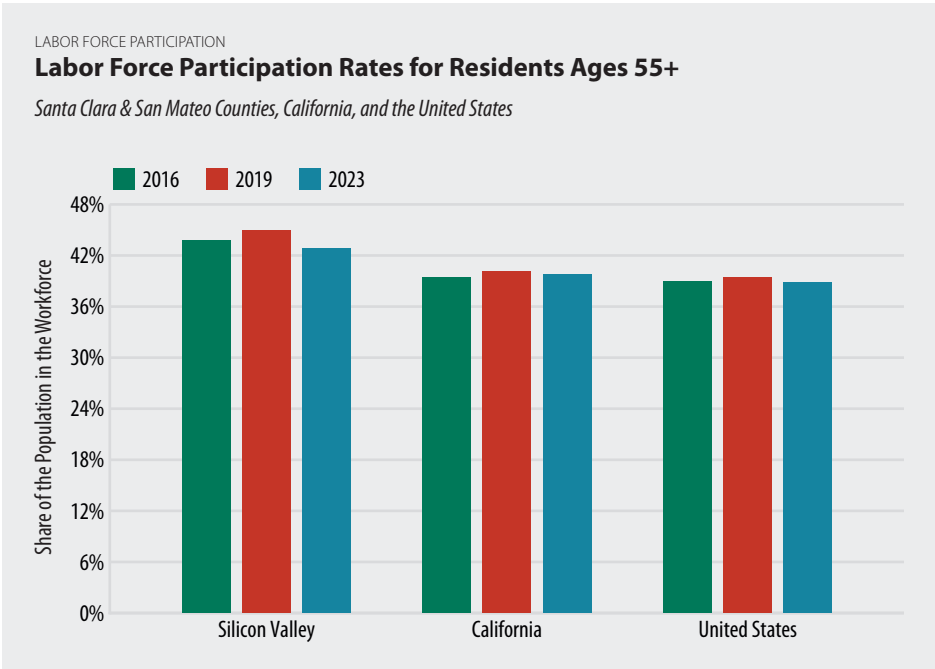
As of 2024, an estimated nine out of ten fully-remote workers with Bay Area employers also live within the region.

The share of fully-remote workers with Bay Area jobs living outside the region peaked in 2022 at approximately 18% before declining to 9% during the past two years.

Silicon Valley residents ages 25-54 have the highest labor force participation rates (87%), as well as significant gender gaps in participation based on educational attainment level and the presence of children.

Share of Labor Force Participation by Age and Gender
Santa Clara & San Mateo Counties
2023

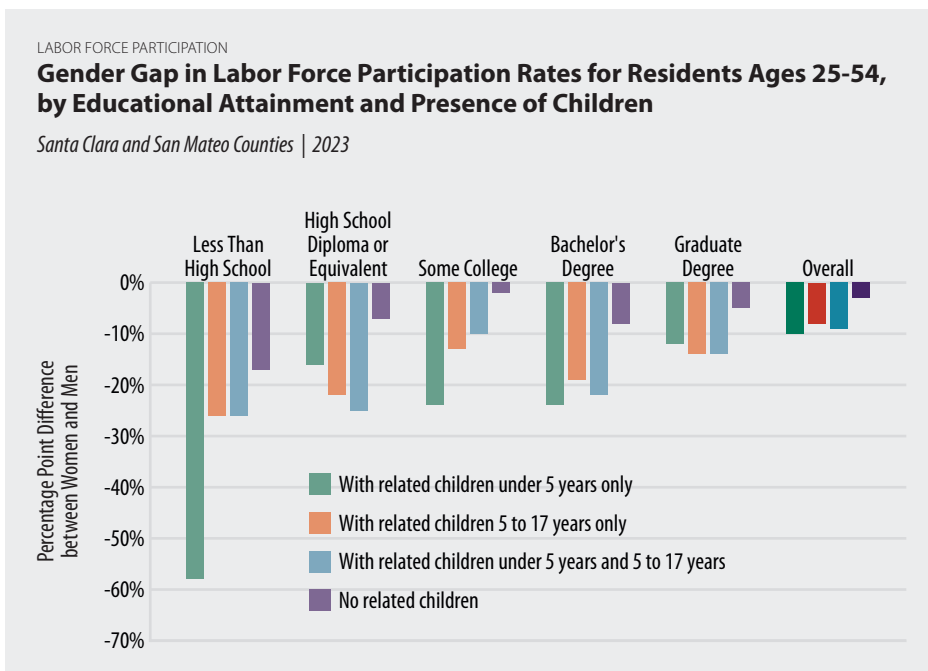
	Male	Female
16-24	53%	55%
25-54	92%	82%
55 and over	50%	38%
Total	73%	62%



Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

Labor force participation is higher among men (73%) compared to women (62%); this holds across all age groups with the exception of 16-24 (with 55% of women and 53% of men in the labor force).

In 2023, nearly 43% of Silicon Valley residents ages 55+ participated in the labor force — meaning that they were either employed or looking for employment — compared to 40% in California and 39% in the United States overall.



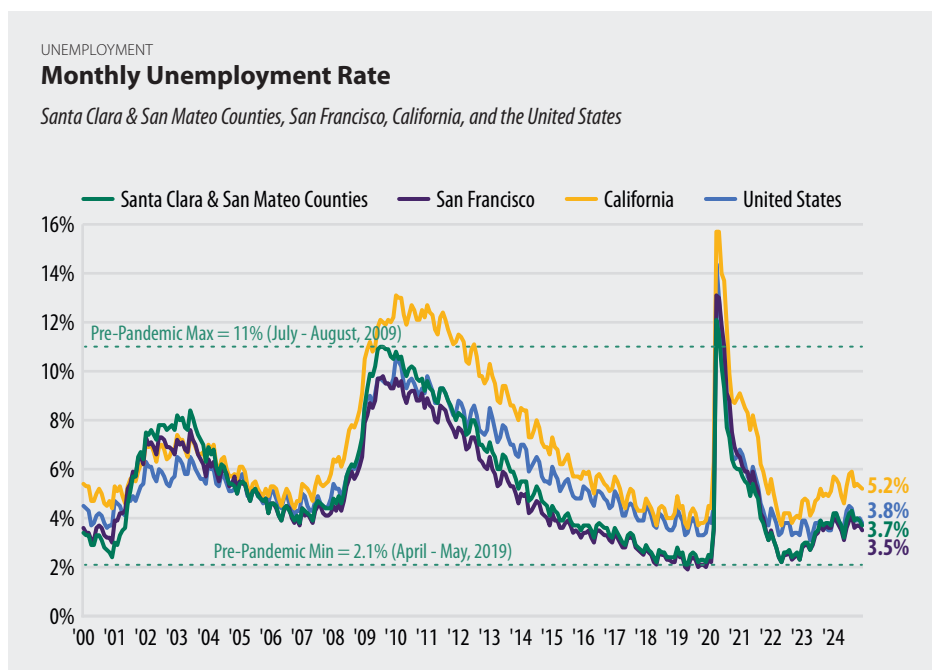
The gender gap in labor force participation among Silicon Valley residents ages 25-54 decreases with increasing educational attainment level (with or without the presence of children); when related children are present — especially those under age five — the gender gap becomes more pronounced across all education levels.

Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

Labor Force Participation Rates, by Age Group			
<i>Santa Clara & San Mateo Counties</i>			
	2016	2019	2023
Ages 16-24	55%	54%	54%
Ages 25-54	85%	86%	87%
55+	44%	45%	44%
Total	68%	68%	68%

As of December 2024, Santa Clara and San Mateo counties' combined unemployment rate was 3.7% — the same as it was one year prior, but noticeably higher than the post-pandemic low (2% in May 2022).

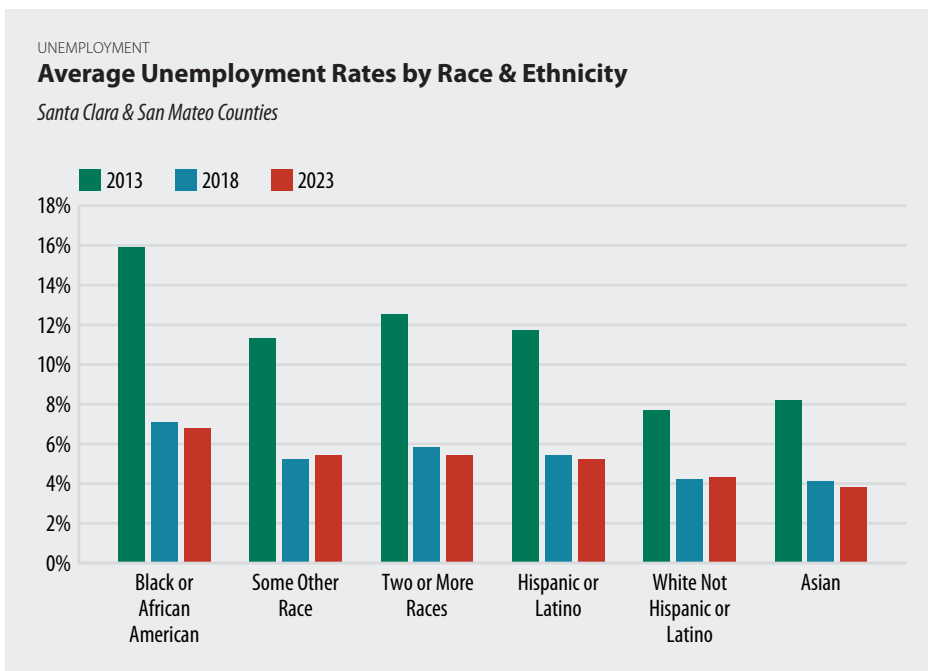
Silicon Valley's unemployment rate was 3.7% in December 2024; this compares to 4.0% in the nine-county Bay Area, 3.5% in San Francisco, 5.2% in California overall, and 3.8% nationwide.



Note: County-level and California data for November and December 2024 are preliminary; Rates are not seasonally adjusted. | Data Sources: U.S. Bureau of Labor Statistics, Current Population Survey (CPS) and Local Area Unemployment Statistics (LAUS); California Employment Development Department (EDD) | Analysis: Silicon Valley Institute for Regional Studies

Silicon Valley's unemployment rate peaked at an unprecedented 12.2% in April 2020 — higher than the 11% Great Recession peak in July and August 2009, or any other year on record (in 30+ years including the dot-com bust). The region's unemployment rate dropped back down to just 2.2% in May 2022, approaching a rate near its pre-pandemic low (2.1%) and that of the height of the dot-com boom (2.0% in December 1999).

At the end of 2024, approximately 53,600 people in Silicon Valley's labor force remained unemployed (14,500 in San Mateo County and 39,100 in Santa Clara County).



Five-year average unemployment rates indicate a decline across all racial and ethnic groups between 2009-13 and 2019-23 – most significantly for Black or African American residents (-9%).

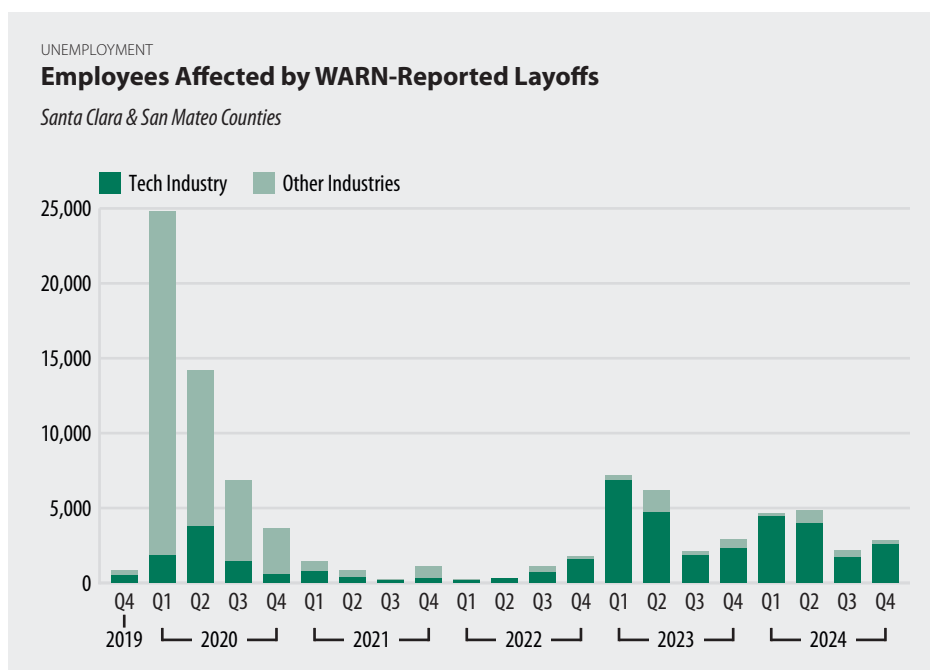
Data Sources: United States Census Bureau, American Community Survey; California Employment Development Department | Analysis: Silicon Valley Institute for Regional Studies

Silicon Valley's average annual unemployment rates across all racial and ethnic groups remained relatively stable through 2023. Black or African American residents experienced the largest increase in unemployment (+1.6 percentage points to 5.3% in 2023).

According to notices filed under the Worker Adjustment and Retraining Notification (WARN) Act,¹¹ companies located in Silicon Valley laid off at least 33,000 workers over the past two years.

Over the past two years, more than 87% of WARN-reported layoffs have been from technology companies.

Companies laying off the largest numbers of Silicon Valley workers included Meta, Cisco, Intel, Google, Broadcom, and Cepheid — which eliminated at least 1,000 jobs each.

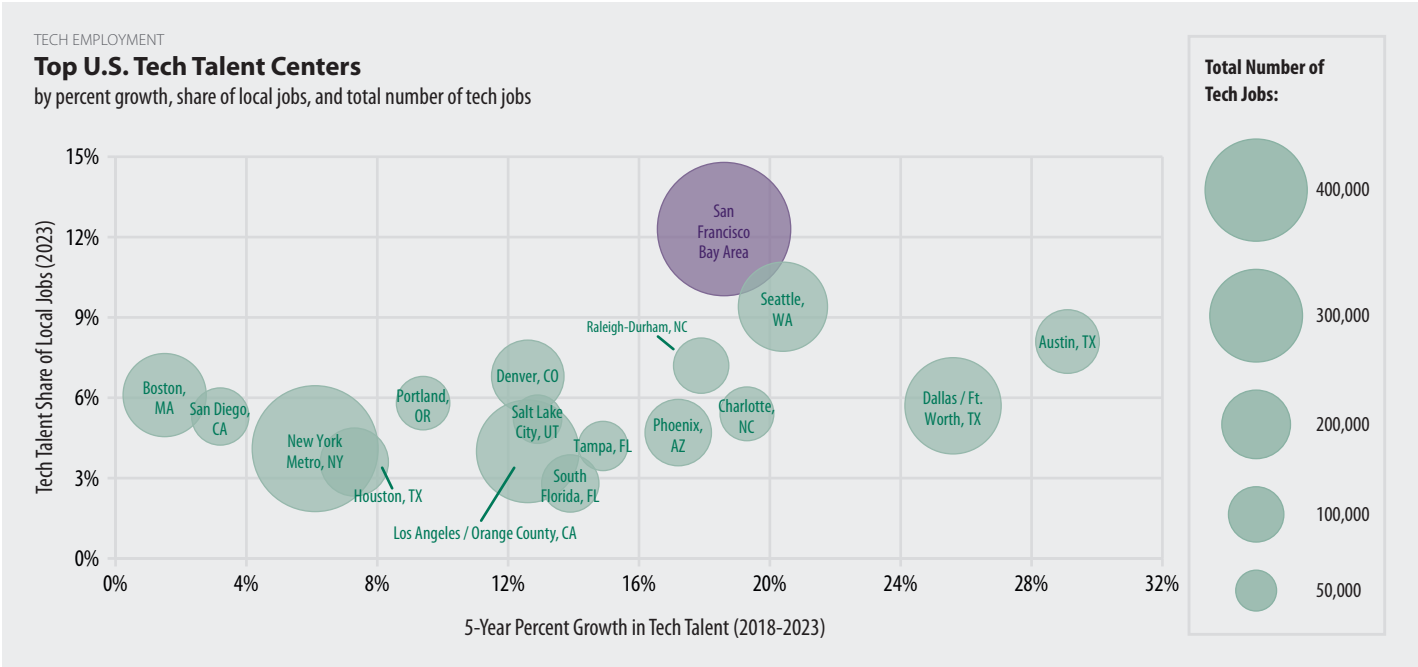


Data Sources: California Employment Development Department, Worker Adjustment and Retraining Notification (WARN) | Analysis: Silicon Valley Institute for Regional Studies

Silicon Valley's WARN-reported layoffs in March and April, 2020, affected nearly 27,500 employees (80% of which were classified as temporary). The layoffs spanned a variety of industries, with large numbers reported for in-store retailers, restaurants, movie theaters, hotels, personal care services, and gyms.

Since 2020, the composition of WARN-reported layoffs has shifted dramatically from sectors such as hospitality, entertainment, and recreation — all greatly affected by pandemic-era disruptions — to tech. In 2020, only 16% of layoffs were in the tech industry; this share rose to 88% in 2024.

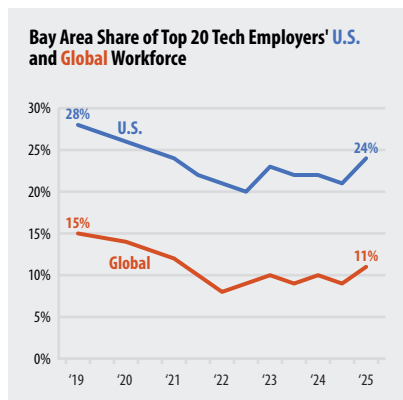
The Bay Area remains the top tech talent center in the United States, both in terms of the number of tech jobs¹² and the tech sector’s share of overall regional employment, and continues to grow. Between 2018 and 2023, the region increased the number of tech jobs by nearly 19%.



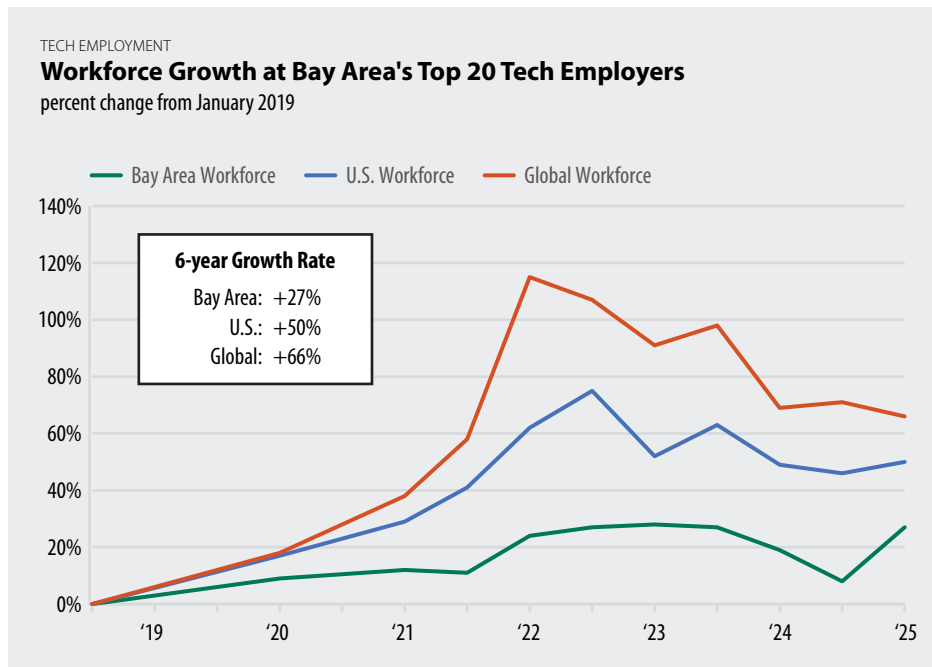
Other U.S. high-growth tech regions include Austin and Dallas, Texas (29% and 26%, respectively), Charlotte and Raleigh-Durham, North Carolina (19% and 18%, respectively), Tampa and South Florida (15% and 14%, respectively).

Compared to other established and emerging tech talent regions across the country, the San Francisco Bay Area creates the highest number of tech jobs relative to tech graduates.¹³ Over a period of four years, the region’s tech job growth exceeded tech degrees conferred by more than 20,000 — indicating that many of these jobs are sourced elsewhere.

Over the past six years, Silicon Valley's 20 largest tech employers have expanded their collective Bay Area workforce by 27%. However, expansion has been more rapid throughout the country as a whole (+50%) and globally (+66%) over that period.



Despite waves of layoffs in the region, the Bay Area's share of the top 20 tech employers' workforce grew to a four-year high at the end of 2024 (with 24% of the U.S. and 11% of the global workforce). While these shares have increased slightly over the past few years, they are down 4% and 3%, respectively, since pre-pandemic.



Data Source: LinkedIn | Analysis: Silicon Valley Institute for Regional Studies

Silicon Valley's largest 20 tech employers grew their collective Bay Area workforce by more than 6% in 2024 (approximately 15,890 jobs). NVIDIA experienced the strongest growth, increasing its regional headcount by more than 37% in 2024, and more than doubling in size since 2019.¹⁴

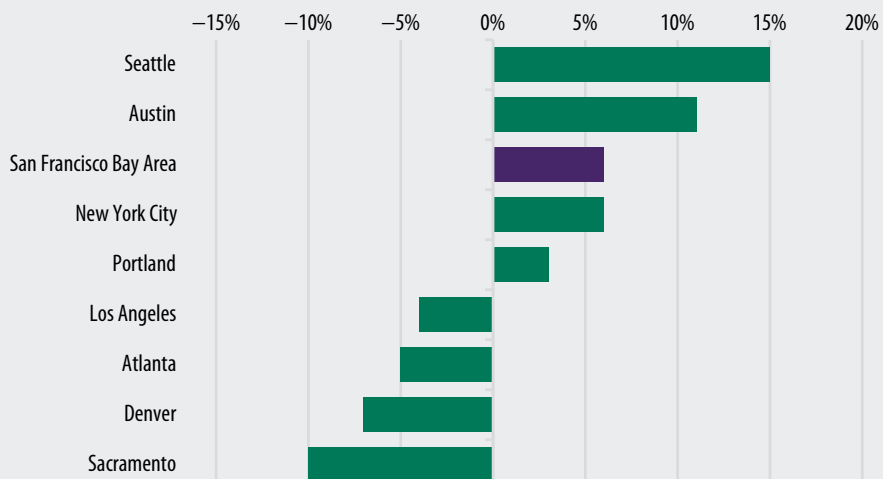
Fourteen out of Silicon Valley's 20 largest tech employers grew their Bay Area workforce in 2024. The largest gains were at Meta, NVIDIA, Google, and Amazon; the greatest losses were at Apple, Cisco, Oracle, and Intel.

In 2024, workforce growth among Silicon Valley's 20 largest tech employers was more rapid locally than in other parts of the U.S. and worldwide. These 20 companies reduced their collective global workforce by approximately 2% that year with little growth in their domestic workforce, meanwhile adding 6% to their Bay Area headcount.

TECH EMPLOYMENT

Change in Employment at Bay Area's Top 20 Tech Employers

estimated 2024 change, select U.S. regions



Data Source: LinkedIn | Analysis: Silicon Valley Institute for Regional Studies

While Silicon Valley's 20 largest tech employers barely expanded their collective U.S. headcount in 2024 (+0.7%), their workforce grew in select U.S. regions. Growth in places such as Seattle (+15%) and Austin (+11%) were driven primarily by Amazon, Microsoft, Apple, and Tesla, although gains were offset by losses in other markets (e.g., Sacramento, Denver, Atlanta, and Los Angeles).

WHAT ARE THE KEY FINDINGS?

Silicon Valley’s nominal per capita income hit a record \$157,000 in 2023; however, this top-line figure obscures the reality that inflation has eroded many of those gains. Inflation-adjusted per capita income remained largely stagnant, and median household income actually declined slightly in 2024 after accounting for rising costs.

This prosperity is highly unequal, with stark divides along racial and ethnic lines. White, non-Hispanic residents command a per capita income nearly three times higher than their Hispanic or Latino counterparts — a gap that persists even among those with similar educational attainment. For instance, White workers with a bachelor’s degree earn 60% more

on average than Black or African American degree-holders. These disparities are symptomatic of a deeper issue, as Silicon Valley’s household income inequality has acceler-

The top 1% of households now hold an estimated 15% of Silicon Valley’s collective liquid assets.

ated since the Great Recession, reaching an all-time high in 2022.

The concentration of wealth in the region is equally staggering. The top 1% of households now hold an estimated 15% of Silicon Valley’s collective liquid assets, while the bottom 50% struggle to claim even a fraction of that pie. In fact, a mere nine households

control more wealth than the entire bottom half. This stark divide is illustrated by the 2% of local households that are unbanked, meaning they lack even a basic checking or savings account. While the region’s billionaires saw their investable assets grow by 30% in the past year, those with less than \$25,000 had an average gain of \$41.

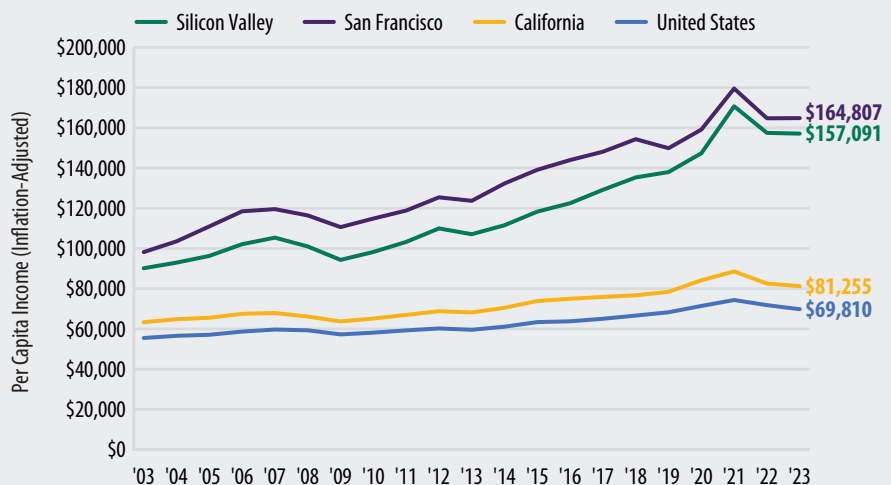
Despite the region’s reputation for affluence, a significant portion of the population faces significant economic hardship. An estimated 30% of Silicon Valley households do not earn enough to meet their basic needs without assistance, and the Self-Sufficiency wage for a family of four with two working adults is \$36 per hour per adult — more than double the statewide minimum wage.

Nominal per capita income in Silicon Valley reached an all-time high in 2023 at \$157,000 (+6% year-over-year). However, inflation-adjusted per capita income remained flat that year as a result of a +6.1% rise in the regional Consumer Price Index.

PERSONAL INCOME

Per Capita Personal Income

Santa Clara & San Mateo Counties, San Francisco, California, and the United States



Note: Personal income is defined as the sum of wage and salary disbursements (including stock options), supplements to wages and salaries, proprietors’ income, dividends, interest, rental income, and personal current transfer receipts, less contributions for government social insurance. | Data Source: United States Department of Commerce, Bureau of Economic Analysis | Analysis: Silicon Valley Institute for Regional Studies

This challenge is not limited to low-wage workers, as even those clearing the federal poverty threshold of \$31,008 for a family of four still struggle to afford the region's high costs. The need for food assistance in Silicon Valley remains high, with an estimated 286 million meals provided across the two-county region in the 2023-24 fiscal year. While public sources continue to provide the majority of this aid, the difference between public and private sources has narrowed. Organizations like Second Harvest of Silicon Valley have significantly increased their efforts, distributing 62% more meals than before the pandemic, despite a 2% decrease in the overall population.

WHY IS THIS IMPORTANT?

Income growth is as important a measure of Silicon Valley's economic vitality as job growth. Considering multiple income measures together provides a clearer picture of regional prosperity and its distribution. Per capita income rises when a region generates wealth faster than its population increases. The median household income represents the middle of the income distribution, and does not skew the way an average would with a small number of extremely high earners.

Examining income by educational attainment, gender, race, ethnicity, and occupational groups reveals the complexity of the region's income gaps. Around the country, states are passing pay transparency laws to provide job

seekers and employees with pay scale information for prospective and current positions. California's law, Senate Bill No. 1162, was approved by the governor on September 27, 2022.¹⁵

Increases in the cost of living in Silicon Valley occur in actual dollars, not in percentages. Measures of inequality that rely on the latter — whereby a proportion of income is assumed adequate to cover the cost of certain items — do not fully describe the effects of price changes on struggling individuals and families. As such, an income-normalized coefficient is necessary to examine changes in income inequality over time.

Looking at the shares of households by investable assets reveals the amount of money available for consumer and

Continued on next page

In places such as Silicon Valley that have a large degree of income inequality, per capita income is highly impacted by the number of extremely high-income earners.

Silicon Valley's per capita income was \$157,100 in 2023; this compares to \$164,800 in San Francisco, \$81,000 in California, and \$70,000 in the U.S. overall.

Over the past two decades, Silicon Valley and San Francisco have maintained substantially higher per capita incomes than the state and nation, with both areas reporting income levels more than two times higher than the U.S. overall in 2023.

Continued from previous page

discretionary spending, higher education, retirement, philanthropy, and overall financial security; it also helps to examine the extent to which income inequality leads to wealth inequality.

Datasets based on national-level surveys and broadly applicable estimation methodologies are not adequate for characterizing wealth inequality in Silicon Valley. The inclusion of ultra-high net worth outliers — households with more than \$30 million in liquid assets — provides a more accurate and stark picture of the extent of inequality and supports the need for more robust, local data collection to better understand regional wellbeing.

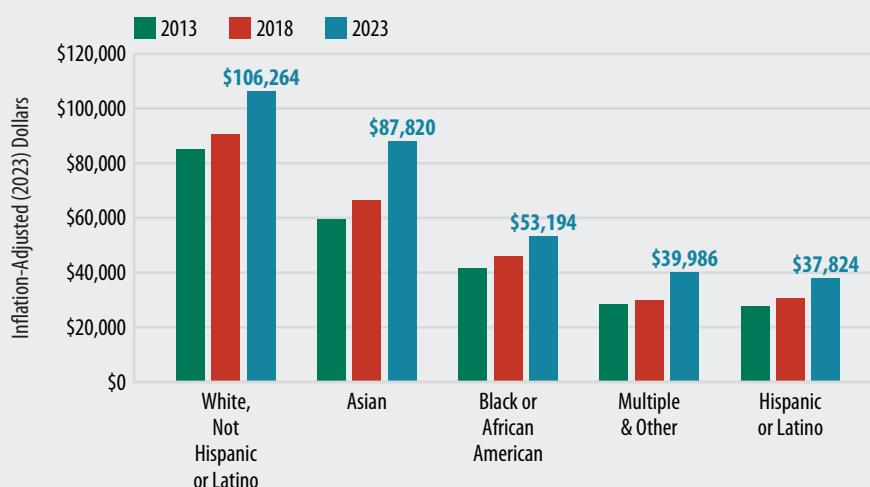
A lack of equality has been shown to negatively impact the way community members maintain social bonds, creating pressure to

achieve economic success even when there are no legal means to do so, and conjuring feelings of unjust deprivation.¹⁶ The share of households living below the federal poverty limit and/or Self-Sufficiency Standard are key indicators of the challenges facing many Silicon Valley residents, and directly relates to their risks of food insecurity, housing insecurity, and overall need for assistance.

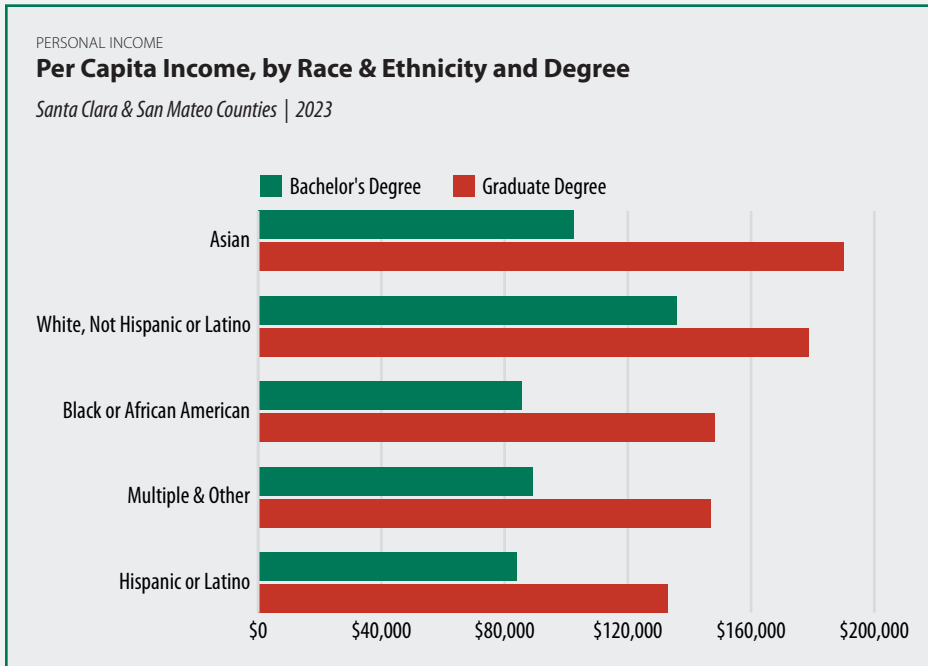
Silicon Valley's inflation-adjusted personal per capita income rose significantly between 2013 and 2023 across most racial and ethnic groups (by 25-48%), with Asian residents experiencing the greatest gains (+48%). One contributing factor to these income disparities is the variability in educational attainment levels across racial and ethnic groups, and the linkage between income and educational attainment. In 2023, 44% of Black or African American and 21% of Hispanic or Latino residents had bachelor's degrees or higher, compared to 64% of White and 70% of Asian residents.

Among the highest-earning racial/ethnic groups in 2023 were White, not Hispanic or Latino residents at a per capita income of nearly \$106,200 based on data from the U.S. Census Bureau.¹⁷ This number is significantly lower than estimates for the overall population from the Bureau of Economic Analysis (\$157,000) due to the exclusion of non-monetary compensation, bonuses, and additional employer benefits, and because it is limited to individuals only.¹⁸

PERSONAL INCOME
Per Capita Income, by Race & Ethnicity
Santa Clara & San Mateo Counties

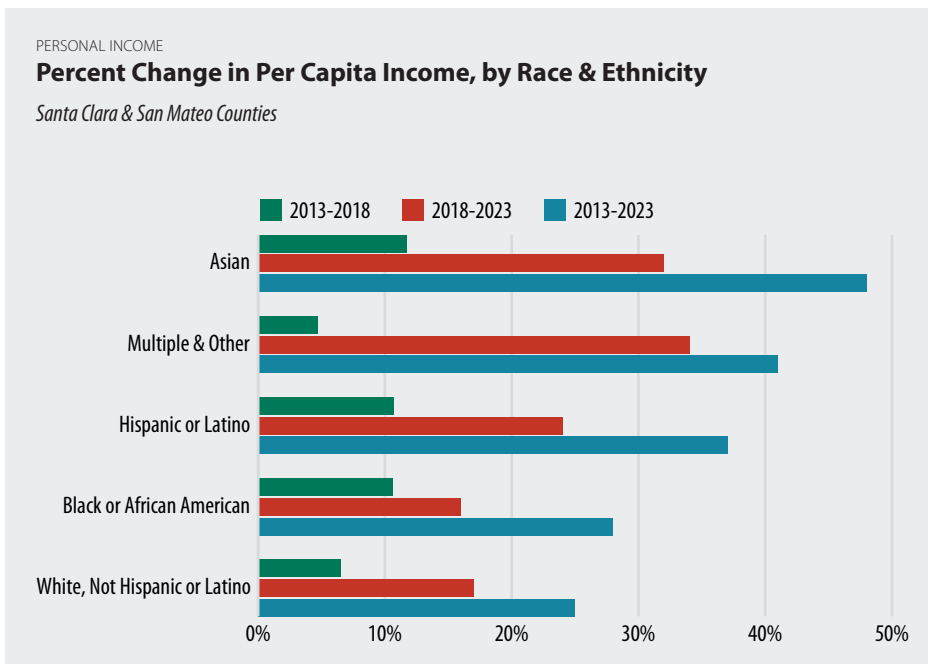


Note: Multiple & Other includes Native Hawaiian & Other Pacific Islander Alone, American Indian & Alaska Native Alone, Some Other Race Alone and Two or More Races; White is not Hispanic or Latino. | Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies



Education alone does not explain the disparities in per capita income by race and ethnicity. White, not Hispanic or Latino residents with a bachelor's degree have a per capita income that is 60% higher than similarly-educated Black or African American residents (and 20% higher for those with a graduate or professional degree).

Note: Multiple & Other includes Native Hawaiian & Other Pacific Islander Alone, American Indian & Alaska Native Alone, Some Other Race Alone and Two or More Races; White is not Hispanic or Latino. | Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

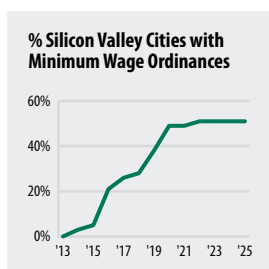


The per capita income for White, not Hispanic or Latino residents (\$106,300) is three times higher than that of Hispanic or Latino residents (\$37,800).

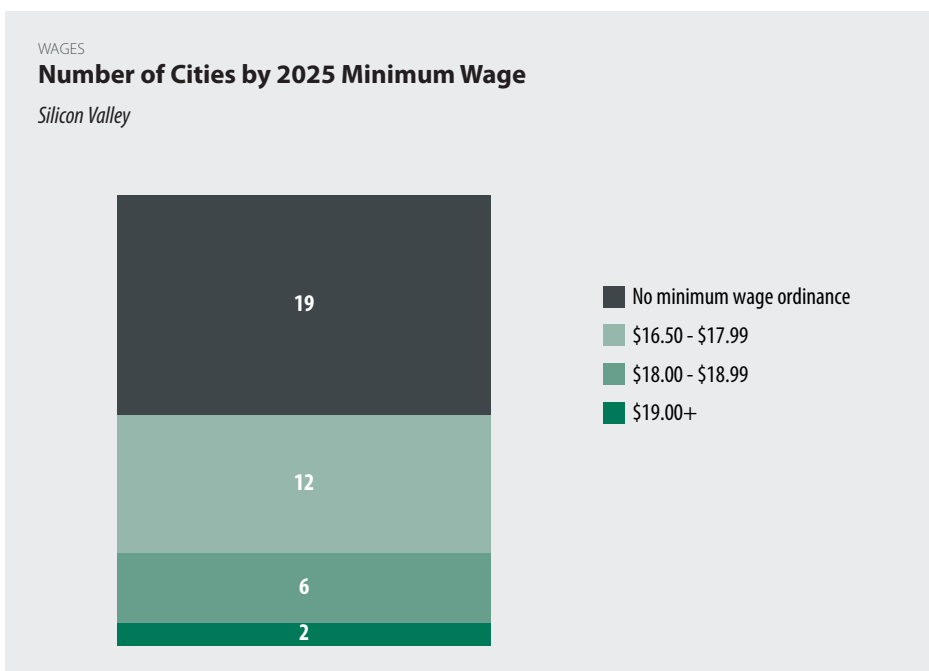
According to the results of the 2024 Silicon Valley Poll,¹⁹ less than half (47%) of Bay Area residents can consistently afford to pay their monthly expenses including 57% of Asian or Pacific Islander residents, 53% of men, and 50% of White residents. This compares to 25% of Black or African American residents, 34% of Hispanic or Latino residents, and 50% of 18- to 34-year-olds.

Note: Multiple & Other includes Native Hawaiian & Other Pacific Islander Alone, American Indian & Alaska Native Alone, Some Other Race Alone and Two or More Races; White is not Hispanic or Latino. | Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

Between 2014 and 2022, the number of Silicon Valley cities with minimum wage ordinances rose from one (Sunnyvale) to 20. Over the past three years, however, no additional Silicon Valley cities have passed minimum wage ordinances.



More than half of Silicon Valley's cities have minimum wage ordinances — city-level policies that set a higher minimum hourly wage than the \$16.50 required by the state. As of January 2025, these local minimum wages range from \$17.07/hour in Daly City to \$19.25/hour in Mountain View.



Note: Minimum wage ordinances are city-level policies that set a higher minimum wage than is required by the state. | Data Source: U.C. Berkeley Labor Center | Analysis: U.C. Berkeley Labor Center; Silicon Valley Institute for Regional Studies

Among Silicon Valley cities with minimum wage ordinances, average minimum wages rose by \$0.48 per hour in 2024 (to \$17.87). For a full-time minimum wage worker, this increase would amount to an additional \$998 annually in gross (pre-tax) income.

Minimum wage workers represent approximately 5% of the region's full-time, working population; they are disproportionately likely to be younger (49% ages 18-24), Hispanic or Latino, Black or African American, renters, women, and non-citizens.²⁰

Disparity in Median Income between Highest and Lowest Educational Attainment Levels

2023

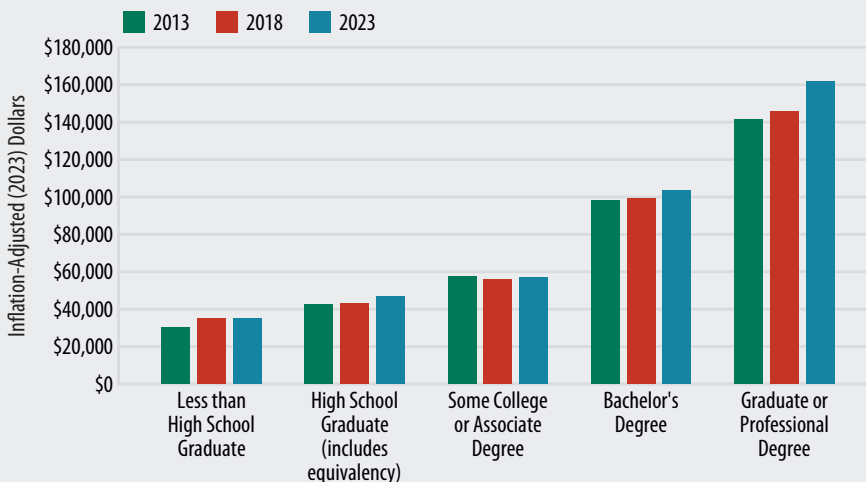
	Silicon Valley	San Francisco	California	United States
Lowest-Earning: Less than High School Graduate	\$35,000	\$32,500	\$31,500	\$31,700
Highest Earning: Graduate or Professional Degree	\$161,800	\$143,300	\$104,400	\$86,500
Gap	\$126,800	\$110,800	\$72,900	\$54,800
Ratio	4.6	4.4	3.3	2.7

In 2023, those at the highest level of educational attainment (graduate or professional degree) earned a median income nearly five times higher than those at the lowest level (without a high school diploma or equivalency).

PERSONAL INCOME

Individual Median Income, by Educational Attainment

Santa Clara & San Mateo Counties



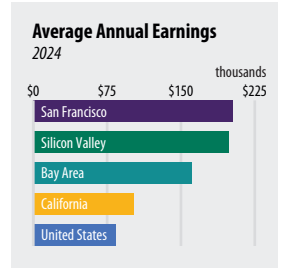
Note: Some College includes less than 1 year of college; 1 or more years, no degree; Professional certification.

Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

The income gap between residents of varying educational attainment levels is much wider in Silicon Valley than in California or the United States as a whole, with a \$56,500 gap between the median income of those with a bachelor's degree and those with only a high school diploma.

From 2019 to 2023, the largest increase in median income was among individuals with a graduate or professional degree (+7%), followed by those with a bachelor's degree (+3%) and with a high school diploma/equivalent (+3%); Median income declined by 4% over the same period for residents who did not complete high school.

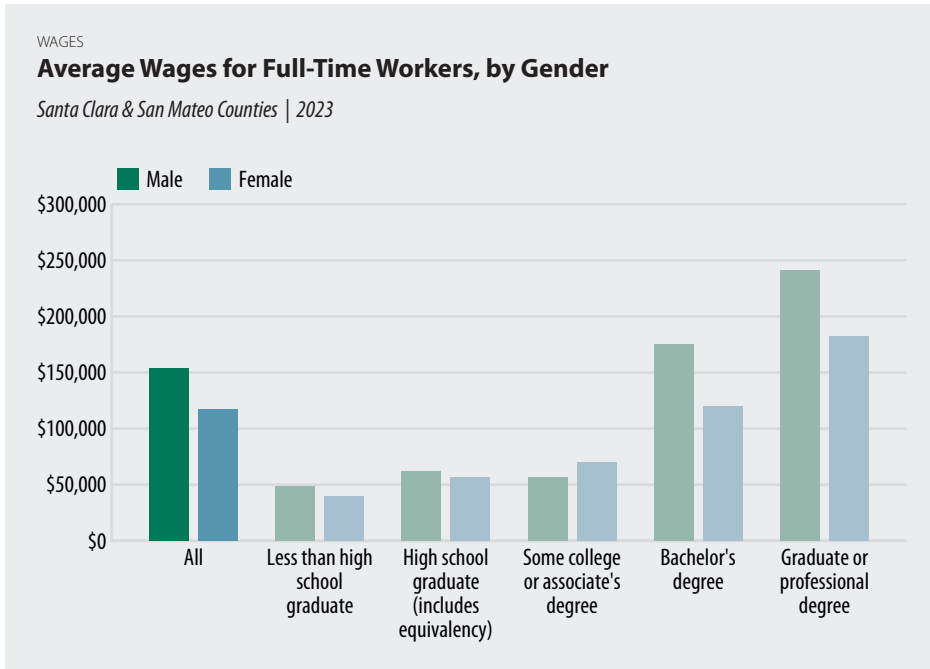
San Francisco's average annual earnings exceeded \$200,000 for the first time in 2024; Silicon Valley's average fell just below that mark (at \$199,010).



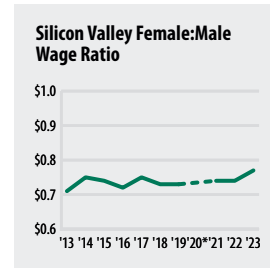
Note: Includes wages, salaries, profits, benefits, and other compensation. | Data Sources: California Employment Development Department; JobsEQ | Analysis: BW Research

Average annual earnings — including wages and supplements — are much higher in Silicon Valley and San Francisco (\$199,010 and \$202,480, respectively) than in the Bay Area overall (\$160,710), California (\$101,890), or the United States (\$83,970).

Average earnings in Silicon Valley are 2.4 times the national average — a ratio that has grown since the pandemic (from 2.1 in 2019 and 2020).



Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies



* 2020 data are unavailable.

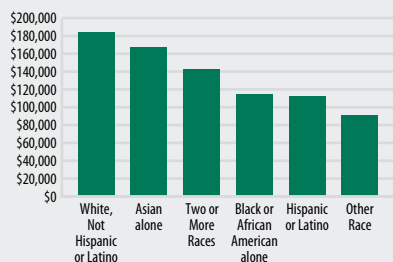
The greatest gender wage disparity (\$0.42 to the \$1) — across a range of characteristics including education, nativity, and occupation — is among those who are self-employed, adults ages 16-62 who live with related children, and those who are Black not Hispanic or Latino.

The female-to-male wage ratio for full-time workers has remained fairly consistent in Silicon Valley over the past decade, with an average of \$0.77 earned by females for every \$1 earned by males. In 2023, both San Francisco (\$0.78) and California (\$0.81) had greater gender parity in average wages compared to Silicon Valley or the nation as a whole (\$0.77).

The gender wage disparity was higher for full-time workers (\$0.77 earned by women compared to \$1.00 by men) than for part-time workers (\$0.83). This is particularly relevant, since women make up nearly 60% of the part-time workforce.

The gender wage gap in Silicon Valley is wider at higher levels of educational attainment. For full-time workers with a graduate degree, the gender wage gap was \$59,200 in 2023 (an increase of \$2,000 since 2019); in comparison, the gap was \$9,100 for workers without a high school diploma (up by \$2,100). This same trend is observed at the state and national levels.

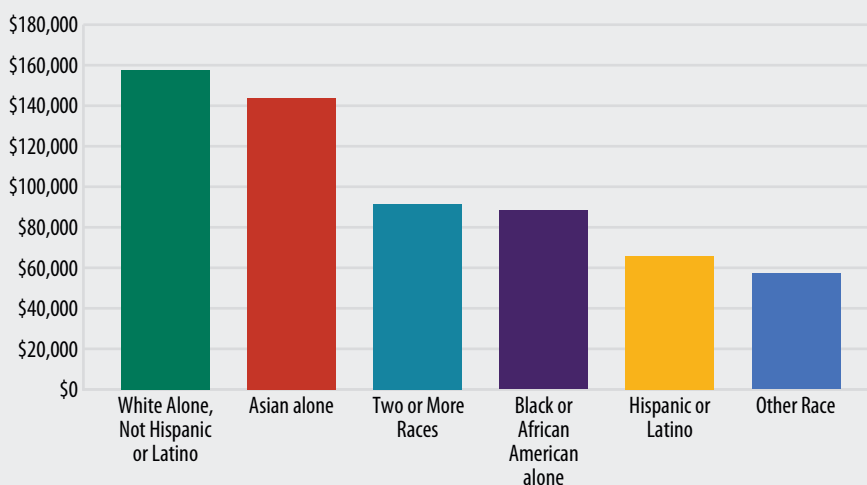
Average Wage for Full-Time Workers with a Bachelor's Degree or Above, by Race & Ethnicity
Santa Clara & San Mateo Counties | 2023



AVERAGE WAGES BY RACE & ETHNICITY

Average Wage for Full-Time Workers, by Race & Ethnicity

Santa Clara & San Mateo Counties | 2023



Note: Includes all full-time workers over age 15 with earnings. The Other Race category includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and Some Other Race. | Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

Among full-time workers, a significant wage gap exists between the highest and lowest earning groups. Hispanic or Latino and Other Race workers earn less than half the average wages of those who are White, not Hispanic or Latino.

White Alone, not Hispanic or Latino full-time workers commanded the highest average wages at approximately \$157,500 annually, followed by Asian workers at \$143,900.

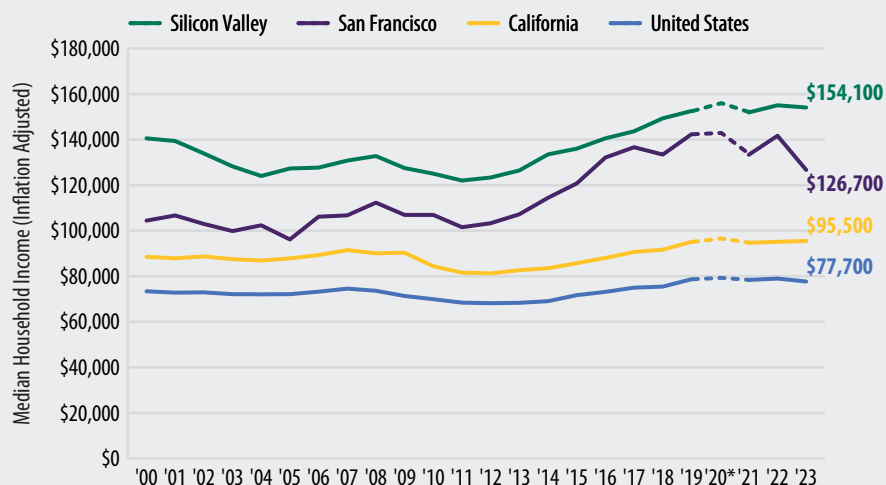
Black or African American workers earned average wages of approximately \$88,300 in 2023 — substantially below White, not Hispanic or Latino and Asian workers.

Racial wage gaps persist at similar levels of educational attainment. Among those with a bachelor's degree or higher, White, not Hispanic or Latino full-time workers earned the highest average wage at approximately \$184,000 in 2023, compared to \$112,000 for Hispanics or Latinos and \$115,000 for Black or African American workers.

HOUSEHOLD INCOME

Median Household Income

Santa Clara & San Mateo Counties, San Francisco, California, and the United States



While median household income in Silicon Valley rose by 26% (+\$32,100) between 2011 and 2023, average household income rose more rapidly (+28%, or +\$47,200) over that same period. This continued divergence of the region's mean and median incomes highlights disproportionate gains among higher-income households.

*2020 estimate from 1-year American Community Survey microdata with experimental weights. | Note: Household income includes wage or salary income; net self-employment income; interest, dividends, or net rental or royalty income from estates and trusts; Social Security or railroad retirement income; Supplemental Security income; public assistance or welfare payments; retirement, survivor, or disability pensions; and all other income; excluding stock options. | Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

The median household income in Santa Clara and San Mateo counties combined was approximately \$154,100 in 2023, representing a year-over-year decline of 0.6% after adjusting for inflation. This compares to \$126,700 in San Francisco (-11%), \$95,500 in California (+0.4%), and \$77,700 nationally (-2%).

Median household income in Silicon Valley remained around 1.6 times higher than in California overall, and nearly double the national figure in 2023.

Inflation-adjusted median household income increased by 26% in Silicon Valley and 25% in San Francisco since 2011 — the first year of positive household income growth following Great Recession losses (compared to 17% statewide, and 14% in the U.S. overall).

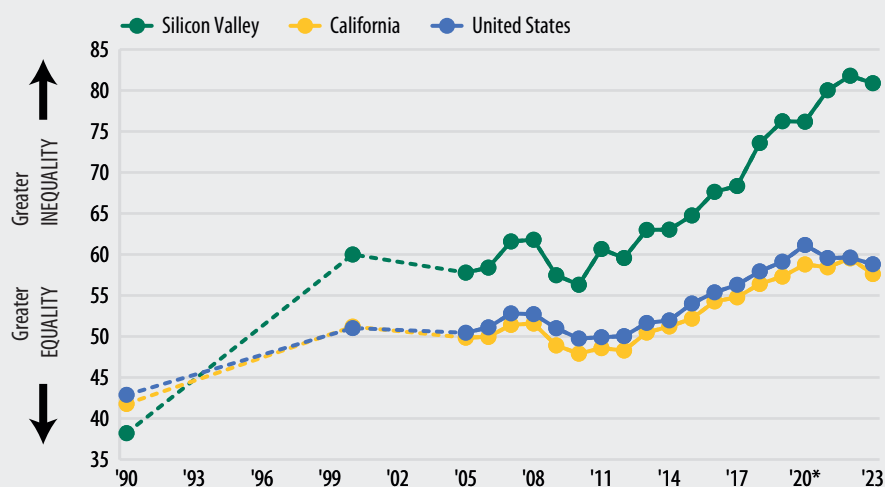
Silicon Valley's household income inequality reached an all-time high in 2022²¹ after more than doubling over the prior three decades. In 2023, income inequality declined slightly (by 1% year-over-year, compared to -3% in California and -1% nationally).

There have been several brief respites in the exponential rise of Silicon Valley's income inequality since 2010 — notably in 2012, 2020, and 2023.

HOUSEHOLD INCOME

Absolute Gini Coefficients of Income Inequality

Santa Clara & San Mateo Counties, California, and the United States

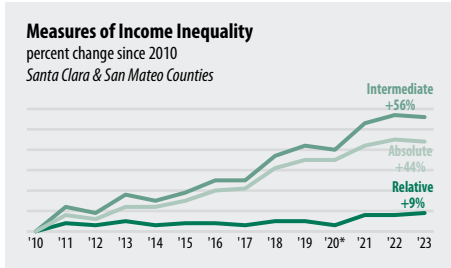


*2020 estimate from American Community Survey 1-Year microdata with experimental weights. | Note: The Absolute Gini Coefficient is an income-normalized value, determined by the product of the Relative Gini and the inflation-adjusted mean household income; it has been scaled to equal the Relative Gini in 1990. | Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies; Jon Haveman

In contrast to the traditional Gini coefficient, which is a relative measure of income inequality, the Absolute Gini²² accounts for differences in average household income and therefore the absolute (monetary) gap between the highest- and lowest-income households. It corresponds directly to one's ability to purchase necessary goods and services. In Silicon Valley, this gap has grown more than twice as quickly as the state or nation overall since 2010 (and three times more quickly since 1990).

The traditional (Relative) Gini coefficient assumes that high-income and low-income households spend the same proportions of earnings on basic needs like food, childcare, and housing; however, that is not the case. For example, low-income families throughout the country spent 26% of their income on food in 2023, whereas high-income families spent only 6%;²³ the absolute amount (actual dollar amounts) of money spent by the latter was approximately four times higher.

The growing income divide in Silicon Valley has accelerated since the beginning of the Great Recession economic recovery period, increasing twice as quickly as the state or nation as a whole between 2010 and 2022.

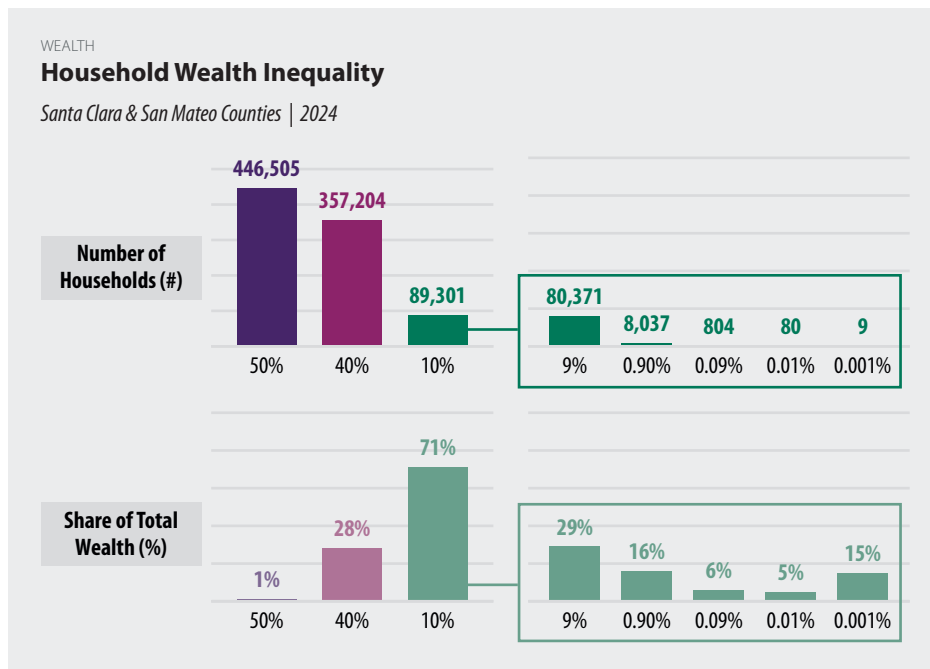


Several measures of household income inequality — Relative, Absolute, and Intermediate — indicate an upward trend with respect to Silicon Valley household income over the past several decades. This upward trend accelerated, though, in 2010 — coinciding with the start of the Great Recession economic recovery period.

Various coefficients are used to assess the degree of inequality within an income distribution. In relative terms — where income growth is proportional across all income groups — Silicon Valley's income inequality has increased twice as quickly as the nation's between 2010 and 2023 without becoming significantly more unequal (+9%). However, when measuring income inequality in absolute terms — where income gains are measured in fixed dollar amounts (reflecting changes in purchasing power) — the extent of inequality in Silicon Valley rose 44% over the same period. This increase is closely tied to the growing gap between mean and median incomes and has been attributed, by some, to a rise in housing prices as a result of increased demand from high-income households.²⁴

The San Francisco Bay Area is home to the greatest concentration of billionaires in the world (105 in 2024)²⁵ aside from New York and Hong Kong (144 and 107 billionaires, respectively).²⁶

Aggregate household (liquid) wealth in Silicon Valley is estimated at \$1.01 trillion in 2024 — an amount that, if evenly distributed among the region's households, would equal more than \$1 million each.



Note: Wealth includes investable (liquid) assets such as cash in checking accounts, CDs, and retirement accounts. Billionaire public and private holdings are excluded.
Data Sources: Claritas (data: Federal Reserve); Altrata; Forbes; Phoenix Global Wealth Monitor; U.S. Census Bureau, Survey of Income and Program Participation | Analysis: Silicon Valley Institute for Regional Studies

Nine Silicon Valley households hold more liquid wealth than the bottom 50% combined (447,000 households).

Gross billionaire wealth (liquid assets plus public and private holdings, and real estate) in Silicon Valley and San Francisco combined is approximately \$1.12 trillion. This represents 16% of national and 9% of world billionaire wealth; it is also more than the GDP of Saudi Arabia.²⁷

Silicon Valley's Middle 40% of households hold an estimated 28% of the liquid wealth. In the mid-1980s, the Middle 40% of the U.S. distribution held as much as 36%, but that share has since declined (especially since the late 1990s) to 27% in 2023. The Western European distribution of wealth, however, looks slightly different — with the Middle 40% holding more of the wealth (38%) and the top 1% holding less (25%, compared to 36% in the U.S.).²⁸

Of Silicon Valley's 145,000 millionaire households (those with more than \$1 million in investable assets), an estimated 7,500 have more than \$10 million — representing less than 1% of the region's households, but holding 22% of the collective wealth.

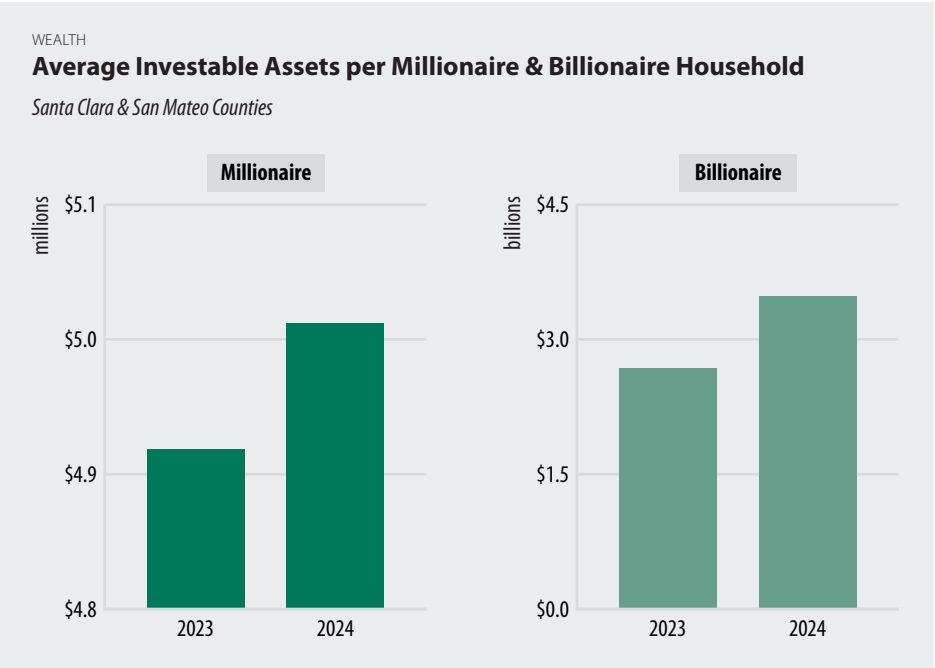
One out of every seven California millionaire households is in either San Francisco, Santa Clara, or San Mateo counties.

An estimated 201,000 Silicon Valley households have less than \$5,000 in total investable assets – providing little buffer to cover potential job losses or unexpected expenses; more than half (approximately 110,000) of these households have zero (or near zero) net assets.

An estimated \$195 billion in liquid wealth is held among billionaires with primary residences in San Mateo or Santa Clara counties, equivalent to a per-household average that is four orders of magnitude higher than that of the 447,000 households in the bottom 50%.

An estimated 2% of Silicon Valley households (nearly 18,000) are unbanked, meaning that none of the household members have a bank account. According to the FDIC National Survey of Unbanked and Underbanked Households 2021, more than 40% of survey respondents said they did not have enough funds to meet a bank’s minimum opening deposit requirements; eight out of ten unbanked households were unbanked long-term.

The top 0.001% of Silicon Valley households hold an estimated 15% of the collective wealth; the top 10% hold 71% of the wealth – a slightly higher share than the prior year (70% in 2023).



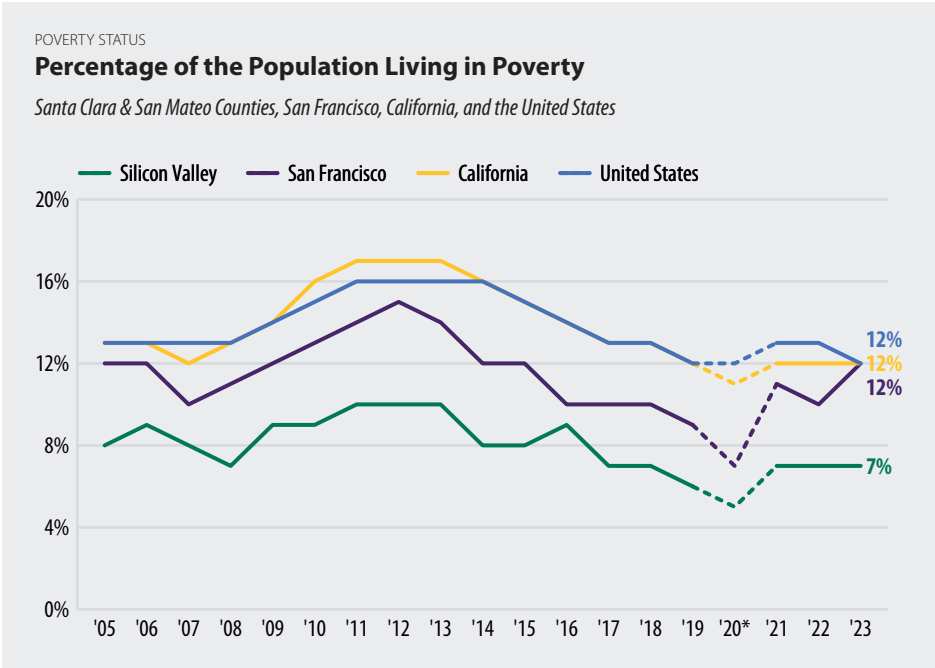
Investable assets held by Silicon Valley’s 56 billionaires grew by 30% in 2024, and the region’s 145,000 millionaire households grew their collective wealth by 2% year-over-year; meanwhile, more than 335,000 households with less than \$25,000 experienced an average gain of \$41 each.

Note: Wealth includes investable (liquid) assets such as cash in checking accounts, CDs, and retirement accounts. Billionaire public and private holdings are excluded.
Data Sources: Claritas (data: Federal Reserve); Altrata; Forbes; Phoenix Global Wealth Monitor; U.S. Census Bureau, Survey of Income and Program Participation | Analysis: Silicon Valley Institute for Regional Studies

Silicon Valley poverty rates vary significantly by race and ethnicity; the poverty rate for Black or African American residents is more than triple that of White (not Hispanic or Latino) residents.³⁰

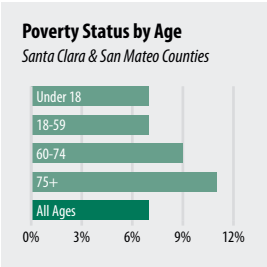
The poverty rate in Santa Clara and San Mateo counties combined was 7.3% in 2023.

Silicon Valley’s poverty rate remains low (7%) compared to San Francisco, California, and the United States as a whole (each at 12%); however, these poverty estimates are based on the Federal Poverty Thresholds (e.g., \$31,008 for a family of four in 2023),²⁹ and therefore do not take into consideration the region’s high cost of living.



*2020 estimate from 1-year American Community Survey microdata with experimental weights
Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

Fully 11% of Silicon Valley seniors (ages 75+) are living in poverty; this share has increased slightly (by 1 percentage point) over the past decade.



Share of Children Living in Poverty 2023		
Santa Clara & San Mateo Counties	7%	1 in 14
San Francisco	9%	1 in 11
California	15%	1 in 7
United States	16%	1 in 6

Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

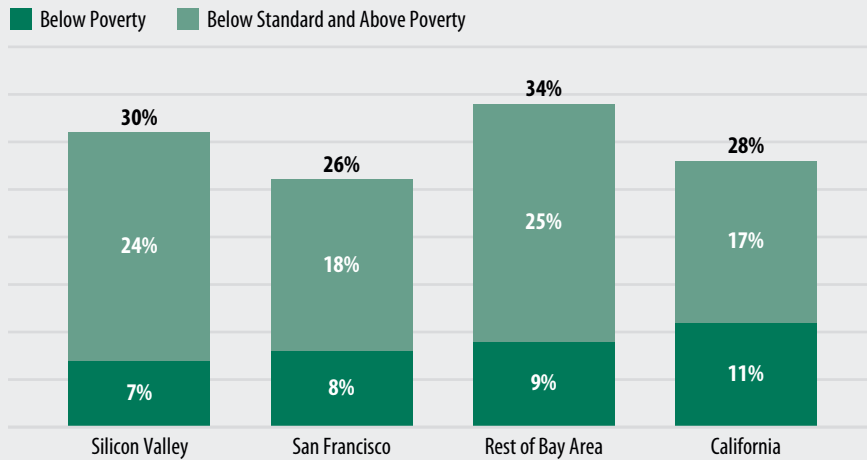
Approximately one in 14 Santa Clara or San Mateo county children (under age 18) was living in poverty in 2023; this compares to one out of 11 in San Francisco and one out of seven in California.

Until 2018, Silicon Valley’s childhood poverty rate was consistently higher than that of the population overall; since then, the two rates have been approximately the same.

INCOME-ADEQUACY

Percentage of Households Living in Poverty and Below Self-Sufficiency Standards

Santa Clara & San Mateo Counties, San Francisco, Rest of Bay Area, and California | 2024



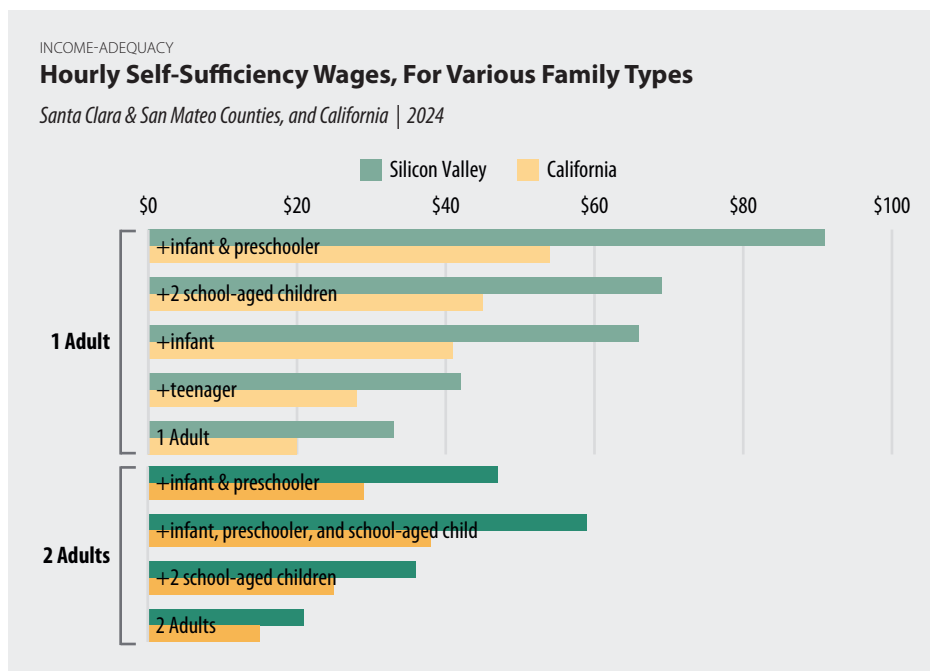
Note: The Self-Sufficiency Standard defines the amount of income necessary to meet basic needs without public subsidies or private/informal assistance. | Data Source: Center for Women's Welfare, University of Washington (via Maven Collaborative) | Analysis: Silicon Valley Institute for Regional Studies; Center for Women's Welfare, University of Washington

Despite a relatively low household poverty rate of 7% in 2024, nearly one-third (30%) of Silicon Valley households did not earn enough money to meet their most basic needs without public or private/informal assistance.

Self-Sufficiency varies significantly by race and ethnicity, educational attainment level, family composition, and citizenship status, among other factors.³¹

The share of households living below Self-Sufficiency Standards is higher in Silicon Valley (30%) than in San Francisco (26%) or statewide (28%); the six remaining Bay Area counties collectively have a larger share (34%) of households below Self-Sufficiency Standards in 2024.

Minimum wage is not a living wage³² in Silicon Valley. There are no household types that can theoretically meet their own basic needs without assistance on a minimum wage income, even given the region's local minimum wage ordinances.³³



Note: The Self-Sufficiency Standard defines the amount of income necessary to meet the most basic needs without public or private/informal assistance. | Data Source: Center for Women's Welfare, University of Washington | Analysis: Silicon Valley Institute for Regional Studies; Center for Women's Welfare, University of Washington

A single adult with an infant and preschooler would need to make \$91 per hour (\$193,000 annually) in order to be self-sufficient.

Silicon Valley's Self-Sufficiency wages — representing a bare-bones minimum for affording basic human needs such as housing, childcare, food, transportation, and healthcare — were out of reach for its approximately 132,000 full-time workers in 2024 earning the statewide minimum wage of \$16 per hour (or less).

Self-Sufficiency wages in Silicon Valley are significantly higher than the California average — about 1.6 times more across all family types.

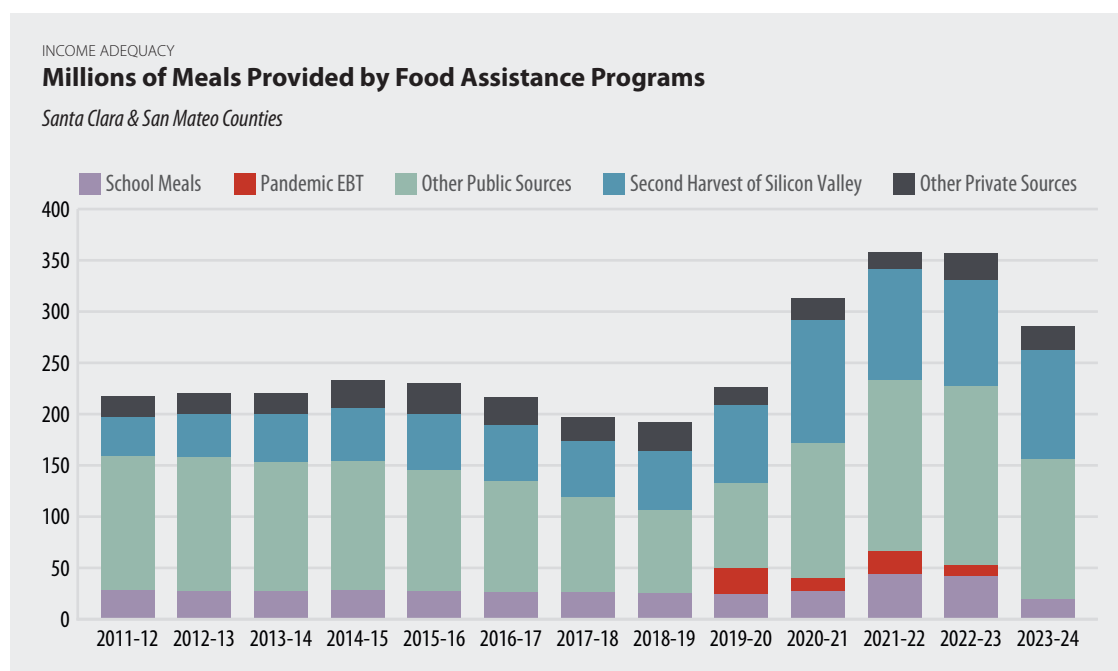
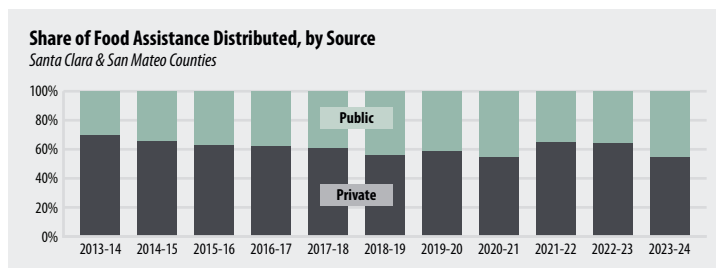
A single adult with two young children in Silicon Valley could have earned 800% of the federal poverty threshold in 2024, and still have not had enough income to comfortably afford transportation, childcare, rental housing at the minimum level of decency, and food on the USDA Low-Cost Food Plan.

Self-Sufficiency wages increase significantly when there are fewer adult wage earners per household, and with the presence of young children. In 2024, the estimated wages needed in order to meet a family's most basic needs without assistance in Silicon Valley ranged from \$21/hour for a two-adult household with no children to \$36/hour per adult in a family of four (with two working adults and two school-aged children), and higher.

A Silicon Valley family of four — with two adult income earners and two school-aged children — could have earned as much as 5x the federal poverty threshold in 2024 and would still struggle to afford anything other than the most basic necessities (e.g., eating at restaurants, going to the movie theater, taking a family vacation, or saving for retirement) without seeking outside support or incurring debt.

During the 2023-24 fiscal year, more than 286 million meals in food assistance were provided across Santa Clara and San Mateo counties; of this total, 55% was from public sources, and 45% from private sources.

Food assistance in Santa Clara and San Mateo counties grew rapidly during the first year of the pandemic and remained elevated through the 2023-24 fiscal year, despite a regional decline in population over that period (by 2%).³⁴

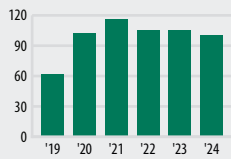


Data Sources: California Department of Social Services; California Department of Education; Second Harvest of Silicon Valley | Analysis: Leavey School of Business, Santa Clara University; unBox; Silicon Valley Institute for Regional Studies

Food assistance to the region's school-aged children provided by the federal Pandemic Electronic Benefits Transfer (P-EBT) program³⁵ declined significantly in FY 2022-23 (to approximately 10 million meals, from nearly 23 million meals the prior year). P-EBT was eliminated in early 2023, so there were no distributions during the 2023-24 fiscal year.

Silicon Valley distributions through the Supplemental Nutrition Assistance Program (SNAP/CalFresh) declined by nearly 24% over the last fiscal year; distributions through Women, Infants and Children (WIC) and the Child and Adult Care Food Program (CACFP) were also down year-over-year (by 3% and 4%, respectively).

Millions of Meals Distributed by Second Harvest of Silicon Valley



Data Source: Second Harvest of Silicon Valley

In 2024, Second Harvest distributed approximately 62% more meals to the region's residents than immediately prior to the pandemic (2019); meanwhile, the population of the two-county region declined by 2%.³⁶

Second Harvest of Silicon Valley is the largest non-public contributor to food assistance in the region, with approximately 106 million meals distributed in FY 2023-24 — enough to feed 100,000 people breakfast, lunch, and dinner for a year.

In FY 2023-24, food assistance programs provided the equivalent of approximately 286 million meals to community members in Santa Clara and San Mateo counties — 47% more than during the last full fiscal year before the pandemic. This increase is likely due to a rising number of residents in need and/or an increase in the number of meals required by each individual. Although the number of people served is unknown, if this assistance provided one meal per person per day, those 286 million meals would have served 784,000 people (30%, or one out of three Silicon Valley residents). **Even at three meals per person per day — an unlikely scenario — an estimated one out of every ten Silicon Valley residents utilized food assistance programs that year.**

Public assistance continues to provide most of the food available to the community, although the margin between public and private sources has declined. The largest reductions in assistance provided were in SNAP and Pandemic-EBT. Pandemic-EBT, eliminated in early 2023, saw no distributions in 2023-24. SNAP distributions in the two counties fell by almost 24% in 2024; WIC distributions were down 3.5%, and CACFP distributions were down nearly 4%.

Food distribution by Second Harvest of Silicon Valley ramped up significantly in 2020 and early 2021 to meet the region's increased need, reaching a height of more than 11.3 million meals provided in the month of March 2021. Over the past five fiscal years, the organization has distributed approximately 513 million meals.

The primary reason for the decline in SNAP was the end of “emergency allotments” that began during the pandemic. These allotments ended in March 2023, unfortunately coinciding with rising food inflation — translating to fewer meals that could be purchased by those allocated dollars.

The primary reason for the decline in SNAP was the end of “emergency allotments” that began during the pandemic. These allotments ended in March 2023, unfortunately coinciding with rising food inflation — translating to fewer meals that could be purchased by those allocated dollars.

During the pandemic, funding shifted from School Meals to Summer Meals, which is designed for distribution when school is out of session and therefore more adaptable to distance learning. The number of Summer Meals totaled nearly 28 million in FY 2020-21, with 343,700 School Meals distributed. In FY 2023-24, funds were redirected to School Meals, which rebounded to more than 19 million while Summer Meals fell to 534,000. As with other public programs, the aggregate volume of School Nutrition was down in absolute terms (-54% over the last fiscal year).

WHAT ARE THE KEY FINDINGS?

Silicon Valley's innovation ecosystem continues to drive the region's global leadership in cutting-edge technologies. Patent registrations by Silicon Valley inventors reached an all-time high in 2024, with a remarkable 23,622 patents granted. Nearly one-third of these patents included at least one woman inventor, more than double the 14% share in 1990. The region's innovation landscape is anchored by technology giants like Apple, Google, and Intel, which were the top patent assignees in 2024, collectively accounting for over 5,600 patents.

Venture capital investments in Silicon Valley companies more than doubled in 2024, with a 125% year-over-year increase after inflation adjustment. This influx of venture capital funding was fueled by a

record number of megadeals (exceeding \$100 million each), which accounted for 76% of all VC investments in Silicon Valley and San Francisco companies last year. Notably, artificial intelligence companies, particularly those focused on generative AI, attracted a large share of this venture capital (nearly \$60 billion), underscoring the region's leadership in this transformative technology. The largest deals included two \$6 billion (Series B and C) rounds to Burlingame-based xAI, and a \$10 billion Series J round to San Francisco-based Databricks.

The proliferation of unicorn and decacorn companies in Silicon Valley and San Francisco further highlights the region's innovation prowess. At the end of 2024, the region was home to 277 unicorns (including 21 decacorns), with AI companies dominating

the national and worldwide unicorn lists. This concentration of high-growth, high-valuation startups has contributed to the region's outsized share of venture capital, accounting for 52% of national venture capital funding in 2024 — more than at the height of the dot-com boom (30% in 2000).

Despite the volatility that has historically characterized Silicon Valley's economy, with greater GDP fluctuations than the national average, the region's inflation-adjusted GDP has grown an impressive 221% since 1984. This sustained economic expansion has been underpinned by the unparalleled innovation ecosystem that continues to attract top talent, capital, and disruptive technologies that are shaping the future.

Silicon Valley's creative potential shows no signs of waning, though the increasing

Share of Patents with At Least One Woman Inventor Silicon Valley

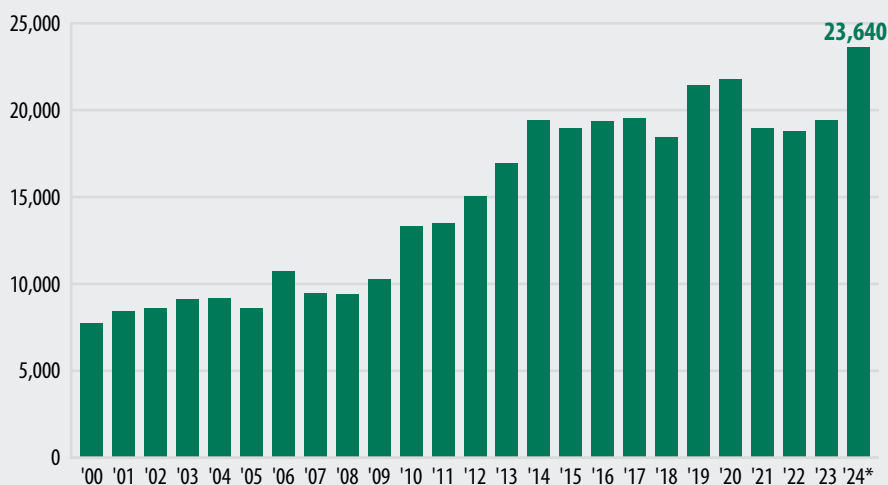
1990	14%
2000	19%
2010	23%
2020	29%
2023	31%

Silicon Valley patent activity spiked in 2024 following a three-year lull.

PATENT REGISTRATIONS

Total Number of Patent Registrations

Silicon Valley



*Data through December 13. | Data Source: United States Patent and Trademark Office | Analysis: Silicon Valley Institute for Regional Studies

number of inventors per patent assignee indicates that the innovation engine has moved from garages into corporate spaces. Despite this shift, Silicon Valley remains at the forefront of national and global technological innovation, driven by record-breaking patent registrations, a surge in venture capital investments, and the proliferation of high-growth startups.

innovation system. Entrepreneurs are the creative risk-takers who create new value and new markets through the commercialization of novel and existing technology,

ideas as well as the ability to disseminate and commercialize those ideas. The activity of mergers and acquisitions (M&As) and initial public offerings (IPOs) indicate that a region is cultivating successful and potentially high-value companies. Growth in firms without employees indicates that more people are going into business for themselves.

This influx of venture capital funding was fueled by a record number of megadeals.

WHY IS THIS IMPORTANT?

Innovation, a driving force behind Silicon Valley's economy, is a vital source of regional competitive advantage. It transforms novel ideas into products, processes, and services that create and expand business opportunities. Entrepreneurship is an important element of Silicon Valley's

products, and services. A region with a diverse and thriving innovation habitat supports a vibrant ecosystem for starting and growing businesses.

Entrepreneurship in both new and established businesses hinges on investment and value generated by employees. Patent registrations track the generation of new

Finally, tracking both the types of patents and areas of venture capital investment over time provides valuable insight into the region's longer-term direction of development and innovation in Silicon Valley.

Utility patent registrations to Silicon Valley inventors hit an all-time high in 2024, with 23,600 granted that year.

In 2023, nearly one-third of patents granted to Silicon Valley inventors included at least one woman; this share was more than double that of 1990, when women inventors were named on 14% of the region's patents.

In 2024, the total number of utility patents issued to the region's inventors rose to 23,600 — 22% more than during the prior year.

Based on data through September, Silicon Valley's top patent assignees in 2024 were Apple (2,590), Google (1,648), Intel (1,427), Applied Materials (681), Cisco (649), Oracle (446), VMware (363), Rovi Guides (318), Meta (316), and NVIDIA (309). The total number of annual patents granted to these ten companies was on pace to exceed the prior year by approximately 68%.³⁷

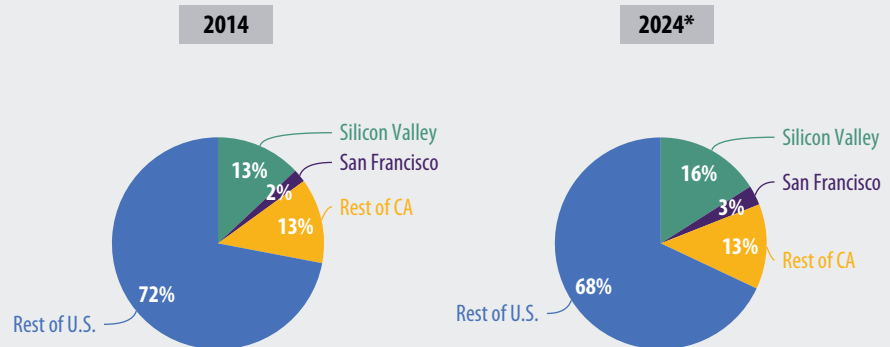
In 2024, 19% of U.S. (and 58% of California) patents were granted to Silicon Valley or San Francisco inventors; this share has risen from 15% (and 53%, respectively) in 2014.

Over the past decade, Silicon Valley's share of U.S. patent registrations rose from 13% in 2014 to 16% in 2024; San Francisco's share rose from 2% to 3%.

PATENT REGISTRATIONS

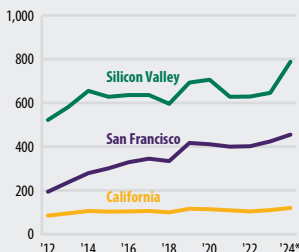
Share of U.S. Patents

Silicon Valley, San Francisco, and Rest of California



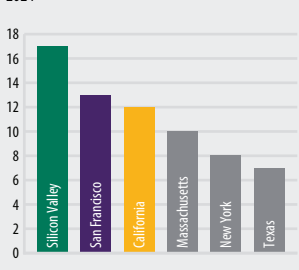
*Data through December 13. | Data Sources: United States Patent and Trademark Office; California Department of Finance | Analysis: Silicon Valley Institute for Regional Studies

Patents Per 100,000 People



Per capita patent registrations in Silicon Valley rose sharply in 2024, reaching an unprecedented 788 per 100,000 people — a 22% increase year-over-year; this compares to a 7% rise in San Francisco, and a 10% rise in California.

Inventors Per Patent Assignee



The number of inventors per patent assignee last year was much higher in Silicon Valley and San Francisco (17 and 13, respectively) than throughout California and other top tech patenting states.³⁸ Statewide, the number of inventors per patent assignee has doubled since 1990 (from 6 to 12).

Top 10 Patent Generating Cities in California <i>with United States rank and share, 2024*</i>			
	Count	Share	U.S. Rank (Share)
San Diego	5,494	11.7%	1 (3.7%)
San Jose	4,979	10.6%	2 (3.4%)
San Francisco	3,834	8.1%	3 (2.6%)
Mountain View	3,492	7.4%	4 (2.4%)
Cupertino	2,934	6.2%	5 (2.0%)
Santa Clara	2,346	5.0%	6 (1.6%)
Palo Alto	1,677	3.6%	11 (1.1%)
Sunnyvale	1,499	3.2%	15 (1.0%)
Los Angeles	907	1.9%	20 (0.6%)
Irvine	862	1.8%	21 (0.6%)
TOTAL TOP 10	28,024	59%	

*Data through December 4. | Data Sources: United States Patent and Trademark Office; California Department of Finance | Analysis: Silicon Valley Institute for Regional Studies

Although San Jose ranked first in the state every year for (at least) the prior two decades, it was overtaken by San Diego in 2024 by a margin of approximately 500 patents granted.

Cities beyond California that made the top-15 national list in 2024 included Seattle (1.5% of all U.S. patents), New York (1.4%), Houston (1.3%), and Redmond (1.2%).

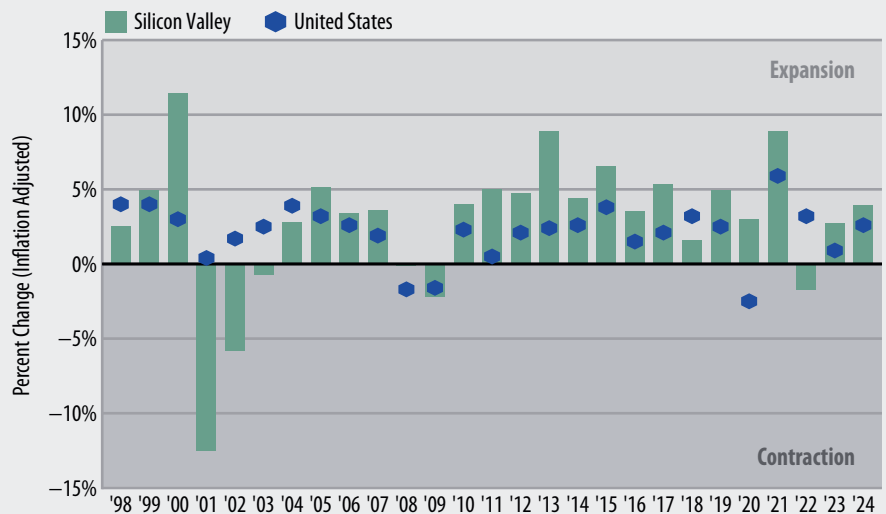
Silicon Valley cities represented six of California’s top ten patent-generating cities in 2024. The other four cities were San Diego (which rose to the top rank), San Francisco (third), Los Angeles (ninth), and Irvine (tenth).

The year 2024 marked the second straight year of growth following a 1.7% contraction in 2022, which came after a decade of above-average growth, and was the first time Silicon Valley's GDP contracted more sharply than U.S. GDP since the dot-com bust.

Silicon Valley's inflation-adjusted GDP expanded by 3.9% in 2024, slightly outpacing its average rate of growth over the past two decades (+3.8%), and strongly outpacing year-over-year growth in the United States overall (+2.6%).

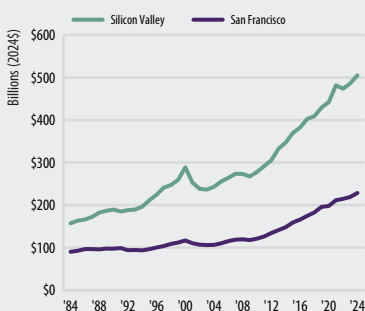
Silicon Valley's economy is far more volatile than the national average. Since 1998, the region has experienced eight years of GDP swings greater than $\pm 5\%$, while the U.S. economy has experienced only one. Despite these fluctuations, Silicon Valley's GDP has outpaced national growth in 19 of the past 27 years, expanding by 104% and far exceeding the U.S. economy's 68% growth over that same period.

PRODUCTIVITY AND GROWTH
Annual Change in Inflation-Adjusted GDP



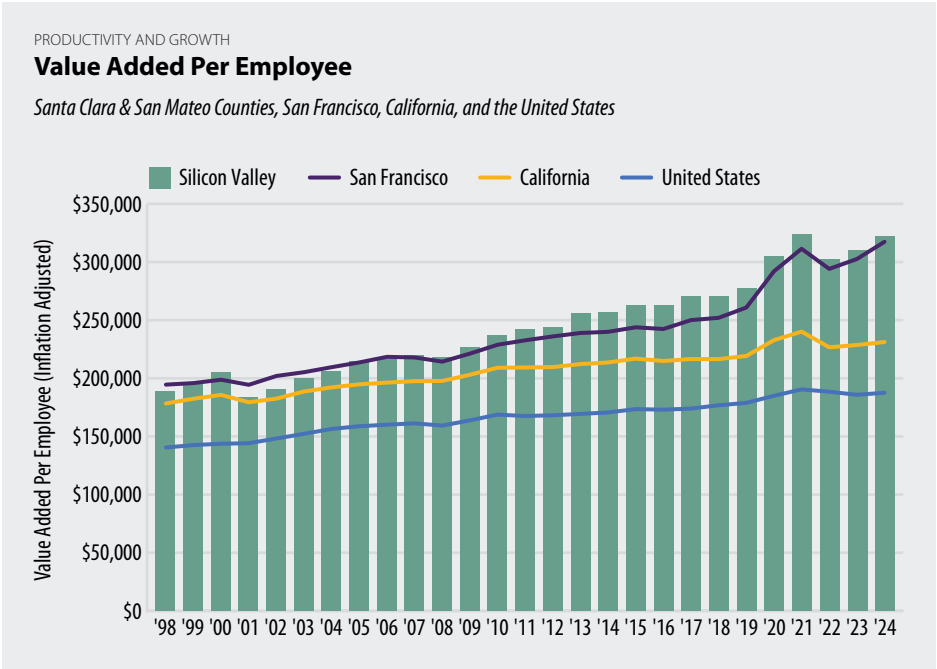
Data Source: Moody's Economy.com | Analysis: Silicon Valley Institute for Regional Studies

Inflation-Adjusted GDP



Silicon Valley's inflation-adjusted GDP has grown 221% since 1984, far outpacing San Francisco, which has grown 153% over the same time period.

Silicon Valley labor productivity – regional GDP per employee – was \$321,780 in 2024, an increase of nearly 4% over the prior year.



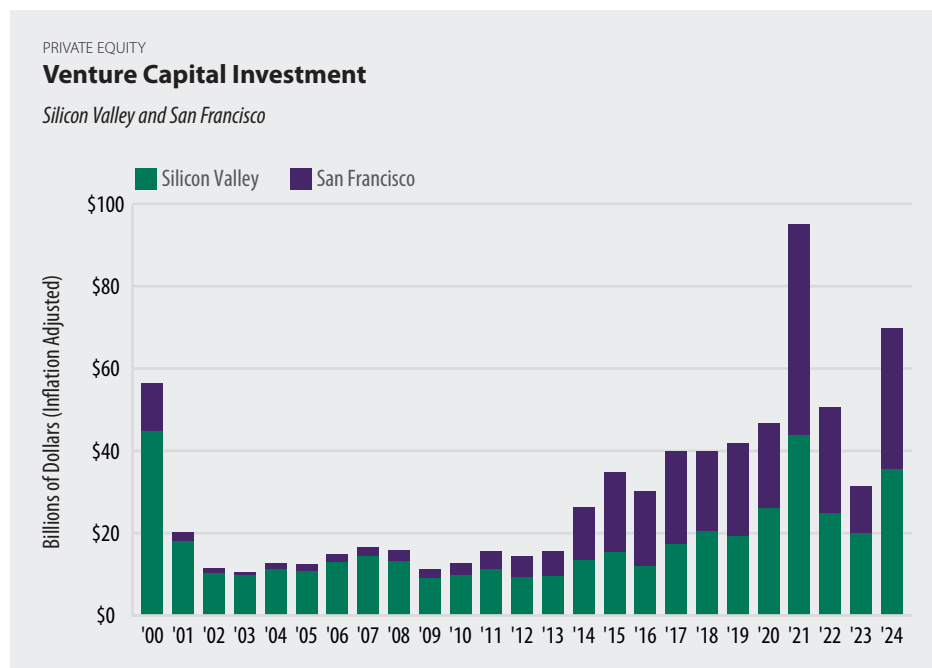
Data Source: Moody's Economy.com | Analysis: Silicon Valley Institute for Regional Studies

Labor productivity in Silicon Valley is 3% higher than in San Francisco, 42% higher than in California, and 75% higher than the national average.

Venture Capital (VC) investments in the region's companies more than doubled in 2024 with a 125% year-over-year increase after inflation adjustment; this compares to a 43% gain nationally.

Total VC funding to Silicon Valley companies last year (\$35.7 billion) exceeded the wealth of more than half of the region's households combined.

Despite a significant year-over-year gain in regional VC investments, the total amount of funding to Silicon Valley and San Francisco companies last year (\$69.7 billion) was \$15 billion less than the all-time high in 2021 (\$84.8 billion, nominally).



Data Sources: PricewaterhouseCoopers/National Venture Capital Association MoneyTree™ Report, Data: CB Insights (Q4 2015-2016), Thomson Reuters (prior to Q4 2015); CB Insights (2017+) | Analysis: Silicon Valley Institute for Regional Studies

VC investments to San Mateo County companies rose to an historic high in 2024, reaching nearly \$18.7 billion (a 62% increase over the prior year, after adjusting for inflation). This total was bolstered by several extremely large deals including those to two Internet Software & Services companies, xAI and Stripe, and one Biotechnology company, ArsenalBio, as well as 16 additional megadeals totaling \$3.4 billion.

Venture capital funding totals in 2024 were \$35.7 billion in Silicon Valley, \$34.0 billion in San Francisco, \$86.1 billion in California, and \$134.5 billion in the United States overall.

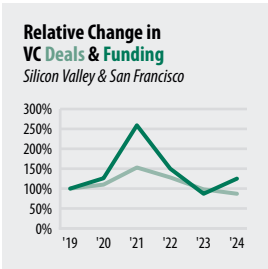
Silicon Valley and San Francisco venture capital investments hit a record high in 2021 of nearly \$95 billion combined; this compares to \$57 billion at the height of the dot-com boom in 2000 (both amounts in 2024 inflation-adjusted dollars).

The largest Silicon Valley VC deals of 2024 were two rounds (Series B and C) at \$6 billion each to Palo Alto-based xAI; the largest among San Francisco companies was a \$10 billion Series J round to San Francisco-based artificial intelligence company, Databricks. Menlo Park-based venture capital firm, Andreessen Horowitz, participated in all three.

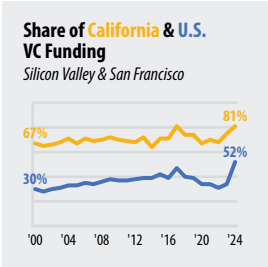
Top Venture Capital Deals of 2024						
Silicon Valley				San Francisco		
Investee Company Name	City	Amount (millions)	Quarter	Investee Company Name	Amount (millions)	Quarter
xAI	Palo Alto	\$6,000	4	Databricks	\$10,000	4
xAI	Palo Alto	\$6,000	2	OpenAI	\$6,600	4
Waymo	Mountain View	\$5,600	4	Scale	\$1,000	2
Stripe	South San Francisco	\$694	2	Safe Superintelligence	\$1,000	3
Figure	Sunnyvale	\$675	1	Anthropic	\$750	3
Groq	Mountain View	\$640	3	Perplexity	\$500	4
ArsenalBio	South San Francisco	\$325	3	Xaira Therapeutics	\$500	2
GondolaBio	Palo Alto	\$300	3	Xaira Therapeutics	\$500	2
SandboxAQ	Palo Alto	\$300	4	Physical Intelligence	\$400	4
Glean	Palo Alto	\$260	3	Magic	\$320	3

Data Source: CB Insights | Analysis: Silicon Valley Institute for Regional Studies

All of San Francisco's 10 largest venture capital investments in 2024 went to companies working in the Artificial Intelligence (AI) space. In contrast, only three out of Silicon Valley's top 10 deals last year went to AI companies (xAI and ArsenalBio).

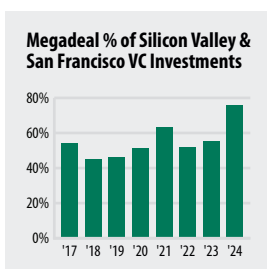


The region attracted a larger share of state and national VC dollars last year (81% and 52%, respectively) than during the height of the dot-com boom (67% and 30%, respectively, in 2000).

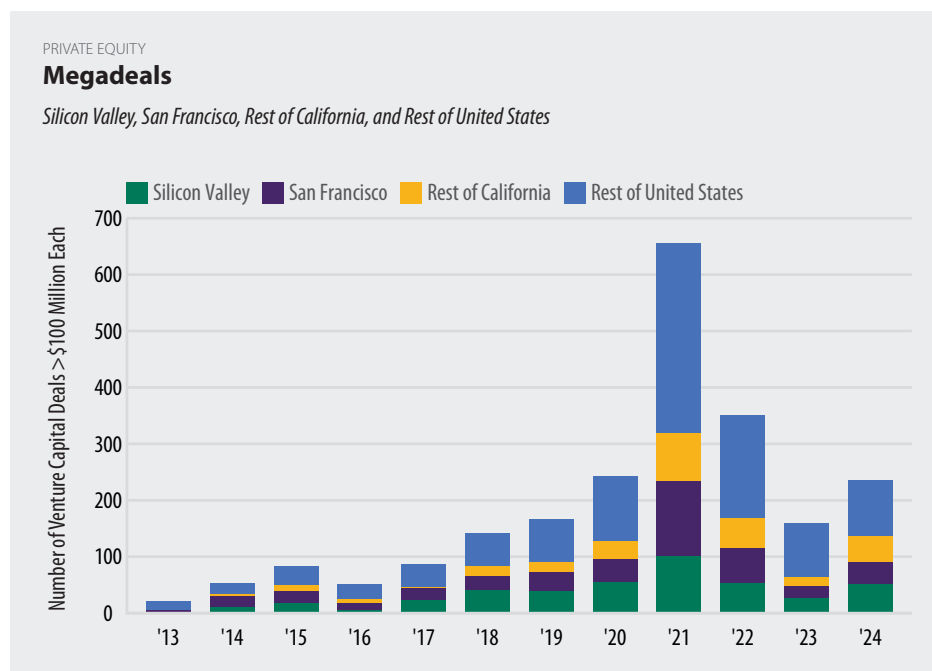


The region's venture capital deals are down relative to pre-pandemic (2019), while total VC funding is up (+125%).

The number of megadeals — a name given to venture capital deals over \$100 million — skyrocketed in 2021, hitting an all-time high with 1,225 worldwide and 655 in the United States; however, both the frequency and total amounts of funding in megadeals has come down significantly over the past three years.



In 2024, a record-high share (76%) of all Silicon Valley and San Francisco venture capital funding was in the form of megadeals (more than \$100 million each); the share in previous years ranged from 54% in 2017 to 63% in 2021.



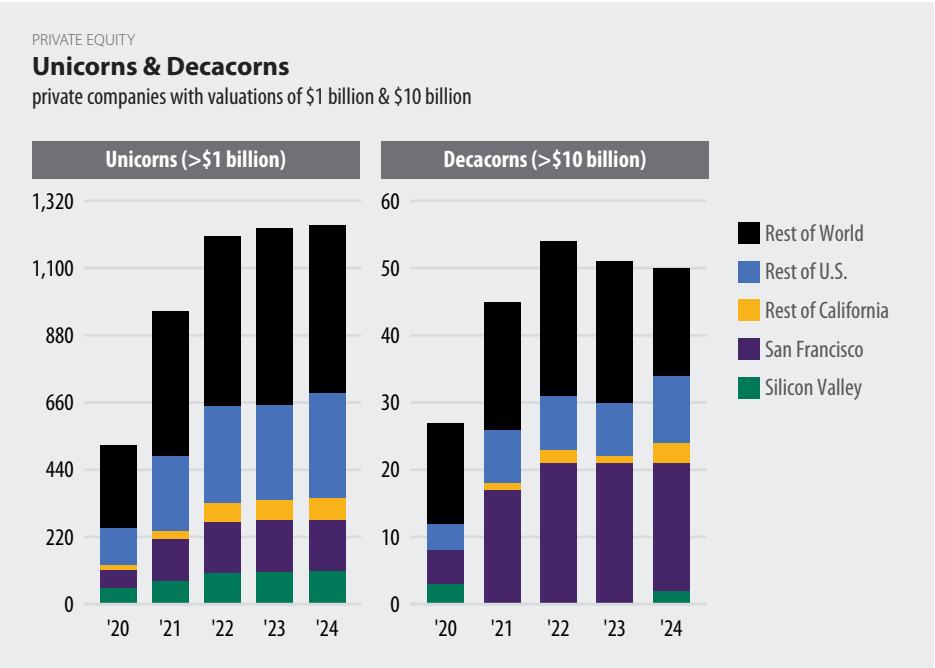
Data Sources: CB Insights; Thomson ONE | Analysis: Silicon Valley Institute for Regional Studies

Three-quarters (75%) of all 2024 venture capital to Silicon Valley companies was in the form of megadeals, with \$26.9 billion among 52 megadeals combined; this compares to \$12.3 billion (in nominal dollars) and 28 megadeals during the prior year.

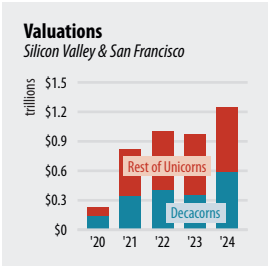
In 2024, there were a total of 52 megadeals to Silicon Valley companies, 39 to San Francisco companies, and 46 throughout the remainder of the state.

At the end of 2024, Silicon Valley and San Francisco had 277 unicorns and 21 decacorns (private companies valued at more than \$1 billion and \$10 billion, respectively).

Artificial Intelligence (AI) companies are dominating the national and worldwide unicorn list, representing 25% and 20%, respectively; this compares to 31% in San Francisco and 47% in Silicon Valley.



Data Source: CB Insights | Analysis: Silicon Valley Institute for Regional Studies



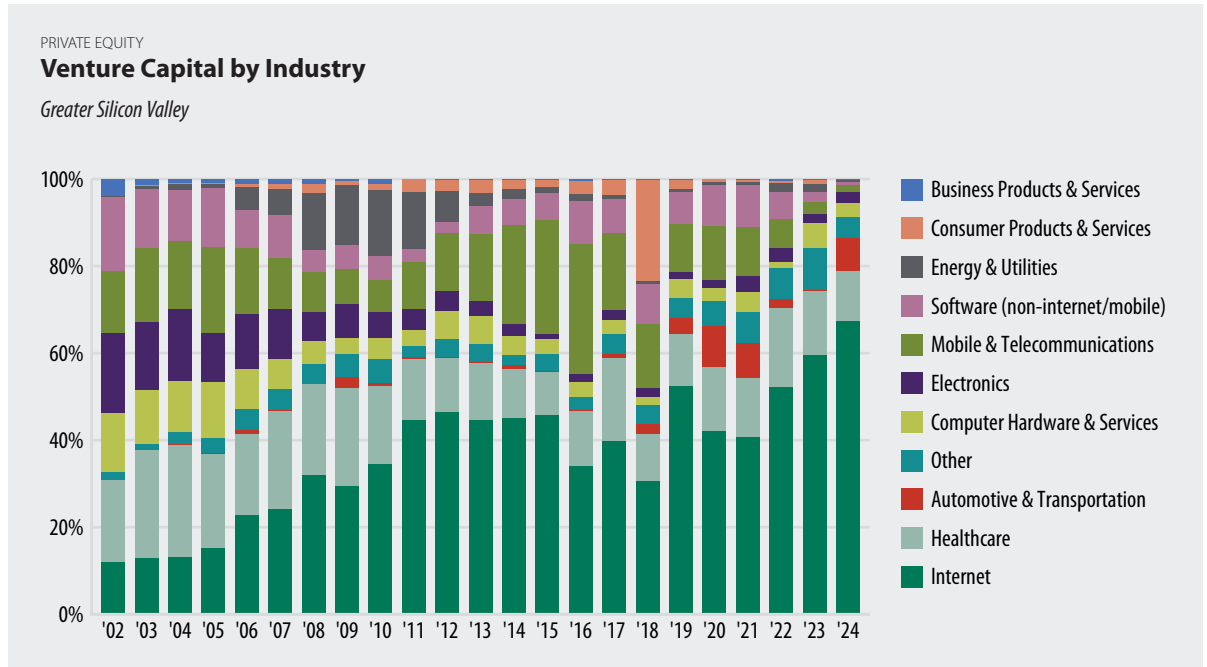
The valuations of Silicon Valley and San Francisco's 21 decacorn companies (\$590 billion in January 2025) represented nearly half (47%) of the region's 277 unicorn valuations combined (\$1.25 trillion).

San Francisco continues to dominate the decacorn list, with 38% (19) of the 50 decacorns worldwide and 56% of the 34 nationwide (representing 27% and 43% of total valuations, respectively). Silicon Valley has two decacorn companies — South San Francisco-based Stripe, and Palo Alto-based xAI.

The region's total number of unicorn companies doubled over five years, reaching 277 in 2024.

Nearly half (47%) of Silicon Valley's 110 unicorn companies are in AI.

Four out of ten unicorn companies nationwide are located in either San Francisco (24%) or Silicon Valley (16%). In total, these 277 unicorns are worth approximately \$1.25 trillion.



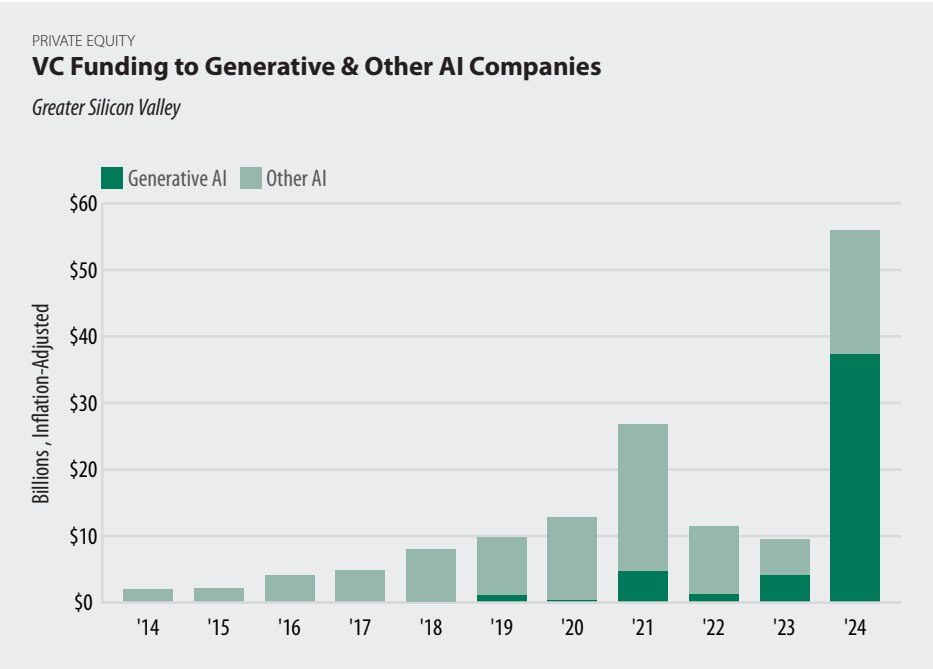
The share of Greater Silicon Valley VC dollars to Mobile & Telecommunications companies peaked in 2016 at nearly 30%; in 2024, that share had dropped to less than 2%.

A record share of Greater Silicon Valley venture capital (VC) funding went to Internet companies (68%) in 2024; meanwhile, the share into non-internet/mobile Software companies (<1%) was the lowest it has been since at least 1996.

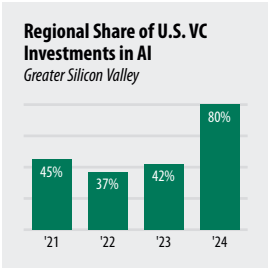
AI companies attracted 75% of all Greater Silicon Valley VC funding in 2024; 50% went to generative AI companies.

In 2024, 75% of all Greater Silicon Valley VC funding went to AI companies; this compares to 51% nationally and 26% globally.

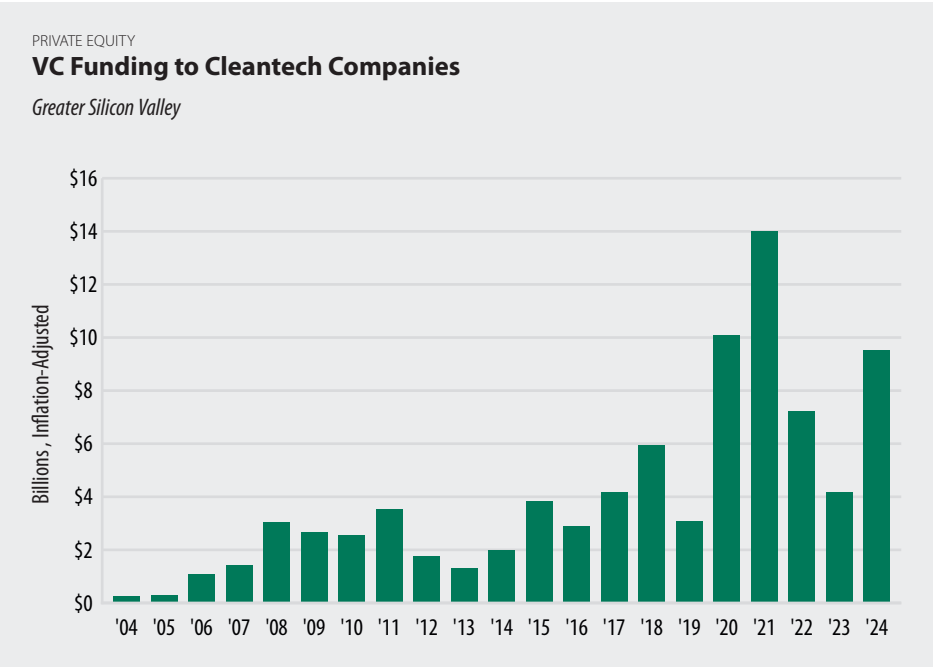
Greater Silicon Valley Artificial Intelligence (AI) companies experienced sharp gains in VC funding last year, attracting 6x more than the prior year (with \$55.9 billion in VC dollars invested) via double the number of deals (approximately 600, compared to 270 in 2023).



Data Sources: CB Insights | Analysis: Silicon Valley Institute for Regional Studies



Generative AI represented 67% of all 2024 VC funds to Greater Silicon Valley AI companies (\$37 of \$56 billion); this compares to 52% nationally.

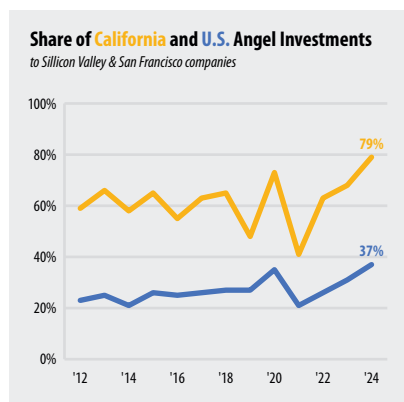


Note: Cleantech includes a variety of keywords focused on renewable energy, energy storage, energy management, environmental endeavors, decarbonization, climate change, electric vehicles, and energy efficiency. | Data Sources: CB Insights | Analysis: Silicon Valley Institute for Regional Studies

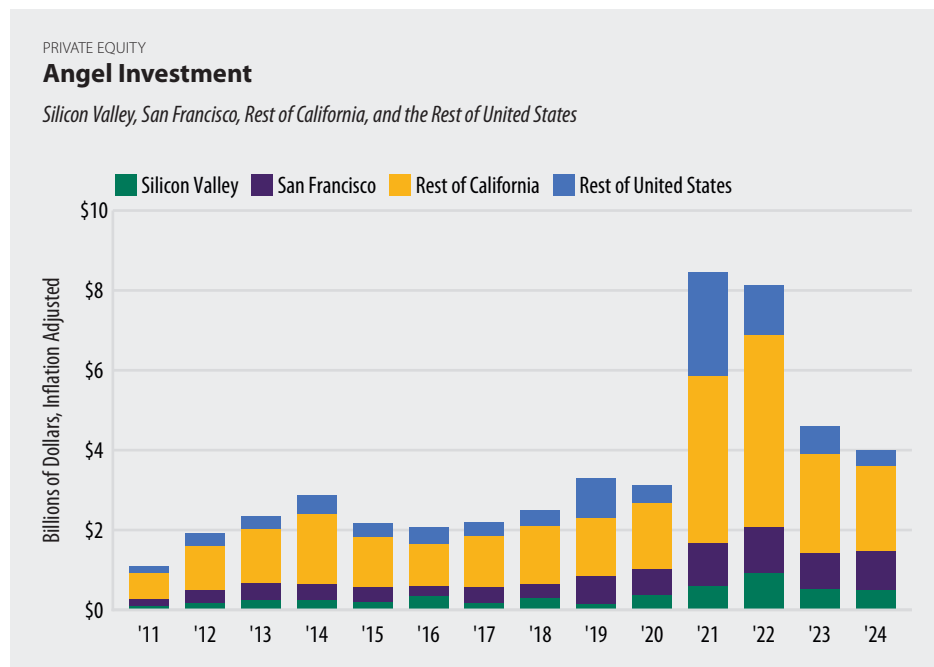
Greater Silicon Valley VC funding to cleantech companies peaked in 2021 at nearly \$14 billion (in inflation-adjusted dollars), representing a nearly 4x increase from a decade prior and a 40x increase over 2001.

In 2024, VC funding to Greater Silicon Valley cleantech companies totaled \$9.5 billion through 134 deals with disclosed funding amounts.

Angel investment hit an all-time high in 2021 nationally (\$8.4 billion in inflation-adjusted dollars), statewide (\$4.3 billion), and regionally (\$1.7 billion to Silicon Valley and San Francisco companies).



Angel investments to Silicon Valley and San Francisco companies over the past two years have remained higher than inflation-adjusted historical averages (although they remain significantly lower than the highs of 2021-2022).



Note: Include all Angel rounds and seed stage investments that included at least one Angel investor. Dollar amounts include deals with disclosed financing data. Locations are by investee company location; share of California and U.S. investments are by total dollar amounts. | Data Source: CB Insights | Analysis: Silicon Valley Institute for Regional Studies

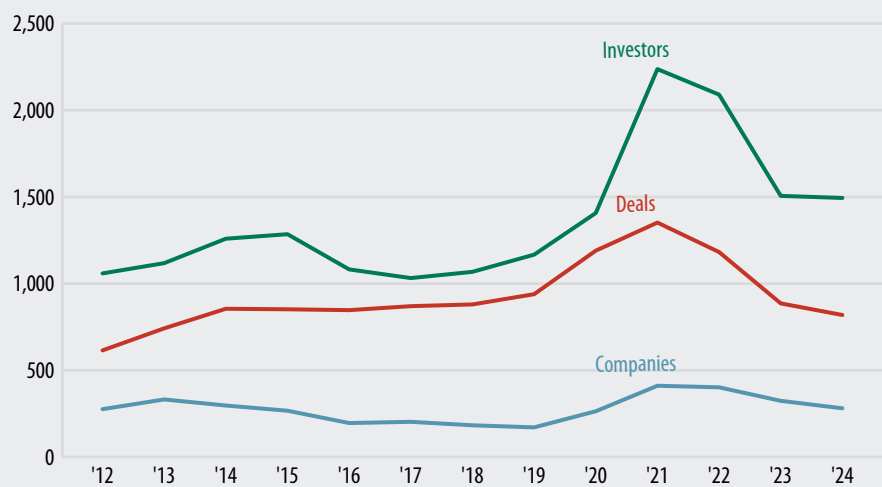
Of the nearly \$1.5 billion in Angel funding received by San Francisco and Silicon Valley companies last year, only 2% (\$30 million) were Angel-only deals; the rest were seed-stage deals involving at least one Angel investor.

In 2024, 79% of statewide (and 37% of national) Angel investments went to Silicon Valley or San Francisco companies.

PRIVATE EQUITY

Angel Deals, Angel Investors, & Companies Funded

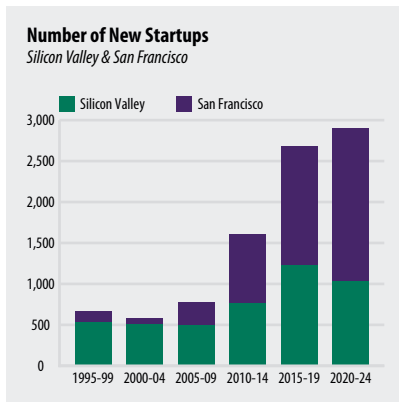
Silicon Valley & San Francisco



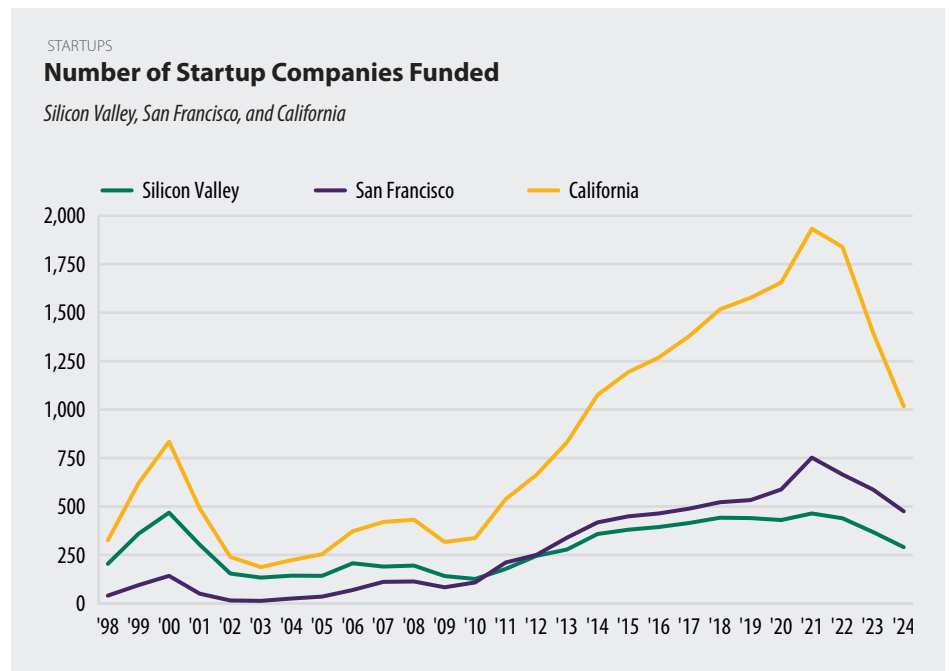
Data Source: CB Insights | Analysis: Silicon Valley Institute for Regional Studies

The year 2021 saw record-high Angel deals and total investment in the region, accompanied by a steep increase in the number of Angel investors actively engaging in deals (up 5% year-over-year to more than 2,200). In 2024, nearly 1,500 Angel investors participated in San Francisco or Silicon Valley deals.

An estimated 9,230 new startups (which received Angel, seed, or early-stage funding) have been founded in Silicon Valley and San Francisco over the past three decades, with more than half (60%) founded over the past decade alone.



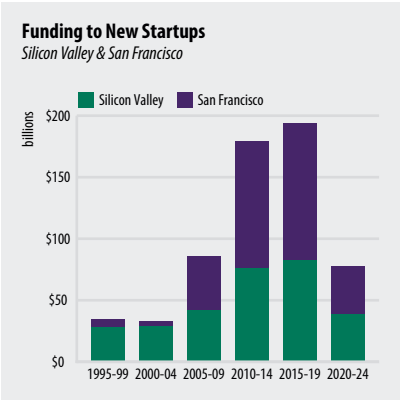
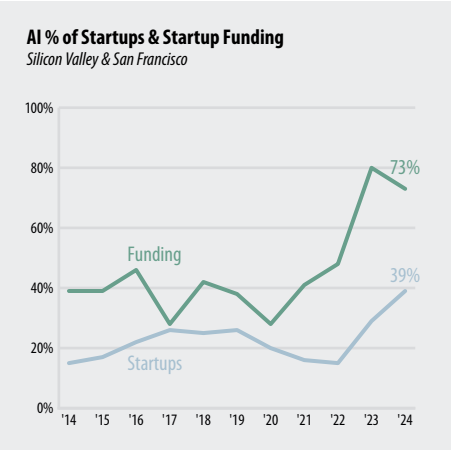
The number of funded startup companies has declined for three consecutive years, following an all-time high in 2021 (when there were 750 startups in San Francisco, 460 in Silicon Valley, and 720 in other parts of California).



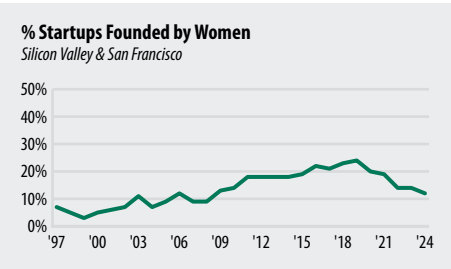
Note: Includes companies less than three years old receiving Angel, seed, or early-stage (Series A) funding. | Data Source: CB Insights | Analysis: Silicon Valley Institute for Regional Studies

Regional startup activity — which has historically been concentrated in Silicon Valley — shifted to San Francisco around 2011. However, while a greater number of San Francisco startups received Angel, seed, or early stage (Series A) funding in 2024 than in Silicon Valley (475, compared to 290), they received a relatively small share (29%) of regional startup funding that year.

A large majority of the region's startup funding went to Artificial Intelligence (AI) companies in 2024 (74%), despite those companies representing only 39% of new startup companies funded that year.

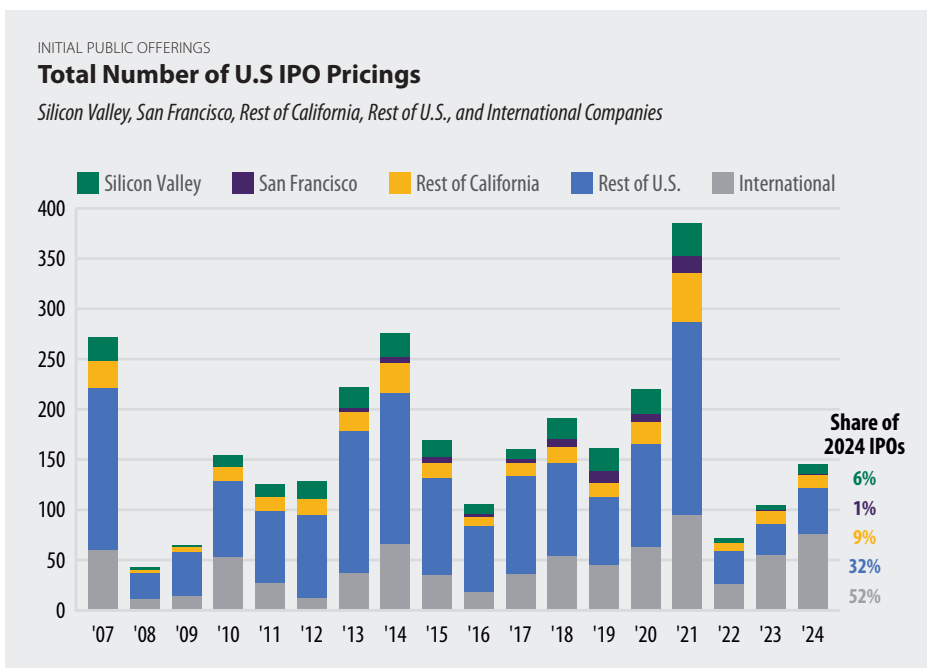


The region's AI startup activity has skyrocketed since 2020, rising from \$11.8 billion in Angel, seed, and early-stage funding that year to \$22.3 billion in 2024 — a 90% increase over four years.



Note: Percent of startups founded by women refers to share of startups founded each year that are listed as having at least one female founder.
Data Source: Crunchbase | Analysis: Silicon Valley Institute for Regional Studies

While the share of new Silicon Valley and San Francisco startup companies with at least one woman founder has increased steadily over the past quarter-century, it dropped from a high of 24% in 2019 to 12% in 2024.

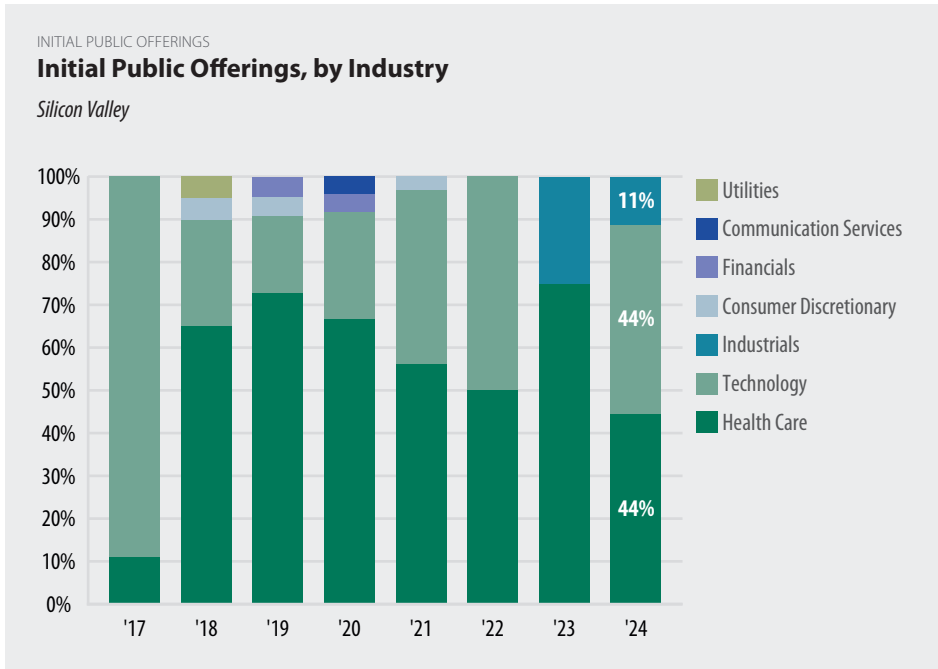


Note: Location based on corporate address provided by IPO ETF manager Renaissance Capital; Rest of California includes all of the state except Silicon Valley for 2007-2013, and all of the state except Silicon Valley and San Francisco for subsequent years. | Data Source: Renaissance Capital | Analysis: Silicon Valley Institute for Regional Studies

Nine companies in Silicon Valley and one company in San Francisco went public via IPO in 2024 (up from four and one in 2023). These companies raised a combined total of more than \$2.5 billion and accounted for 7% of all IPOs on U.S. markets last year.

For the second year in a row, more than half of all IPOs on U.S. markets were from companies based outside the country, more than double the average share from 2007-2022.

U.S. IPO activity picked up over the past two years. However, IPOs of U.S. companies (69) last year remained well below the annual average of the preceding decade (135 per year from 2014).

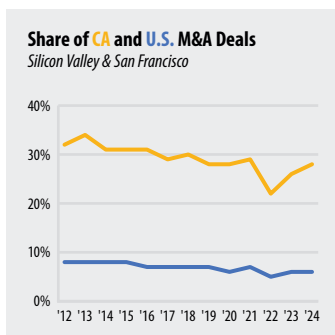


Note: Location based on corporate address provided by IPO ETF manager Renaissance Capital. | Data Source: Renaissance Capital | Analysis: Silicon Valley Institute for Regional Studies

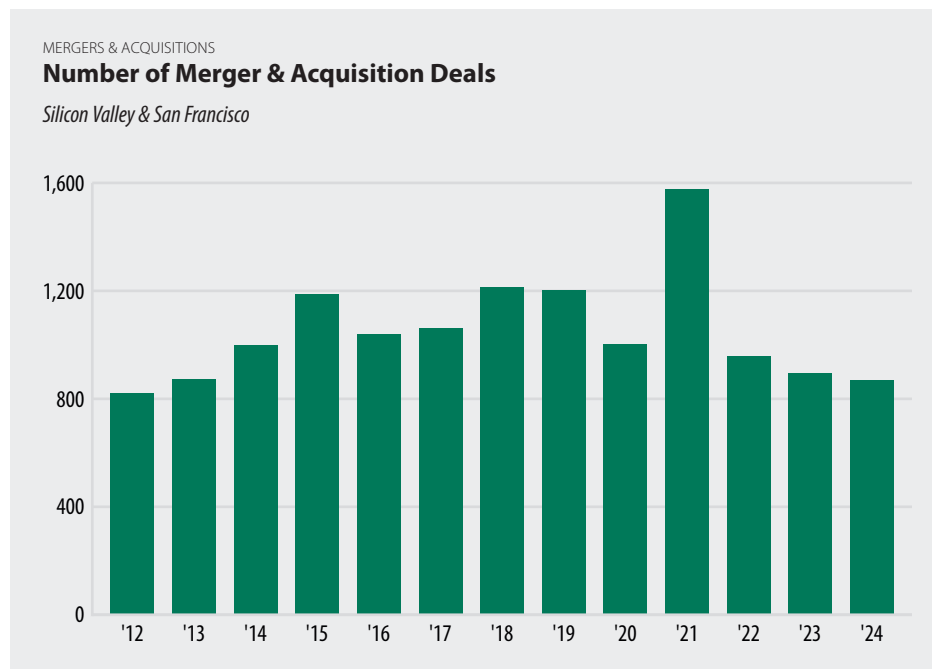
While the overwhelming majority of Silicon Valley companies to go public in recent years have been from the technology and healthcare sectors, these sectors only accounted for 40% of IPOs on U.S. stock exchanges in 2024.

Eight of Silicon Valley's nine IPOs last year were technology or healthcare companies. Technology IPOs included Santa Clara-based Astera Labs and Silvaco, San Mateo-based Life360, and San Jose-based zSpace. Healthcare IPOs included Sunnyvale-based CeriBell, Los Altos-based Alto Neuroscience, and South San Francisco-based Septerna and Alumis.

One out of ten regional M&A deals in 2024 involved *both* a local target and acquirer.



Silicon Valley and San Francisco Mergers & Acquisitions (M&A) activity peaked in 2021, with nearly 1,600 deals representing 29% of M&A activity statewide. In 2024, 870 deals involved a Silicon Valley or San Francisco participant (28% of M&A activity statewide).



Note: Deals include Acquirers and Targets. | Data Source: FactSet Research Systems, Inc. | Analysis: Silicon Valley Institute for Regional Studies

The share of national M&A activity involving a Silicon Valley or San Francisco participant has declined over the past decade, from 8% in 2014 to 6% in 2024; Silicon Valley alone has declined from 6% to 3% over the same period.

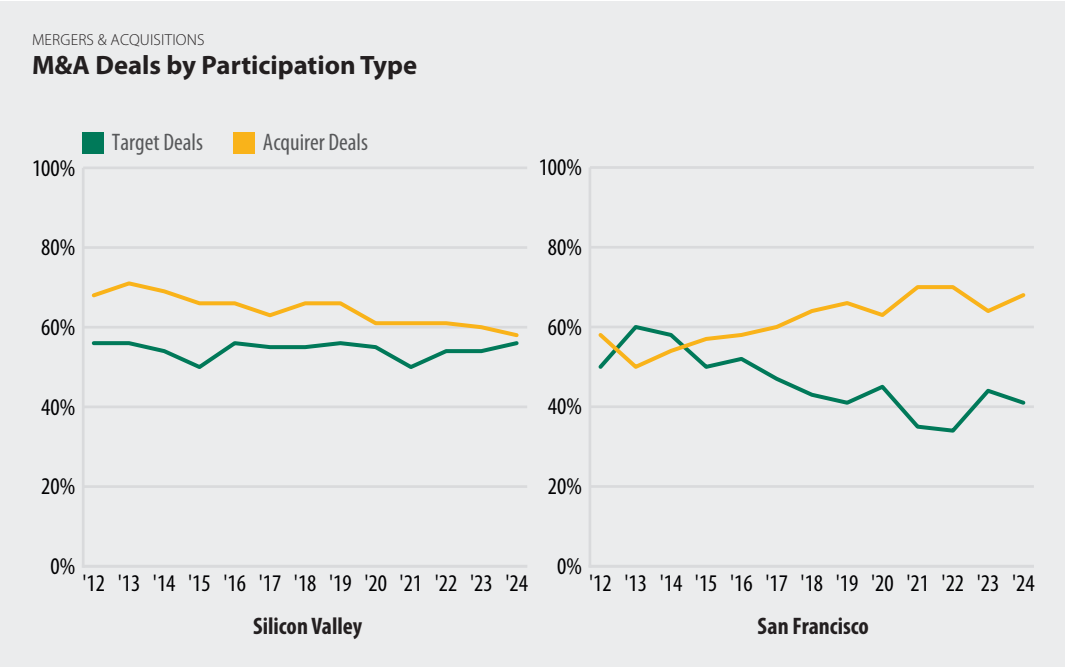
The largest pending M&A deal announced in 2024 was the Synopsys acquisition of Ansys for approximately \$32 billion in cash and stock, which will delist it from the Nasdaq. The second largest deal pending is the Hewlett Packard Enterprise acquisition of Juniper Networks for approximately \$13 billion in cash.

Industries most targeted for M&A last year were Packaged Software (representing 37% of deals), Information Technology Services (9%), and Internet Software/Services (5%). While the Medical Specialties industry represented a mere 2% of deals, it accounted for 10% of all disclosed base equity. This share was bolstered by the acquisition of Santa Clara-based medical device company Shockwave Medical by Johnson & Johnson for nearly \$13 billion, which was the region's largest deal completed in 2024.

The region's ten largest completed M&A deals of 2024 alone totaled \$95 billion — representing 62% of deals with disclosed transaction values.

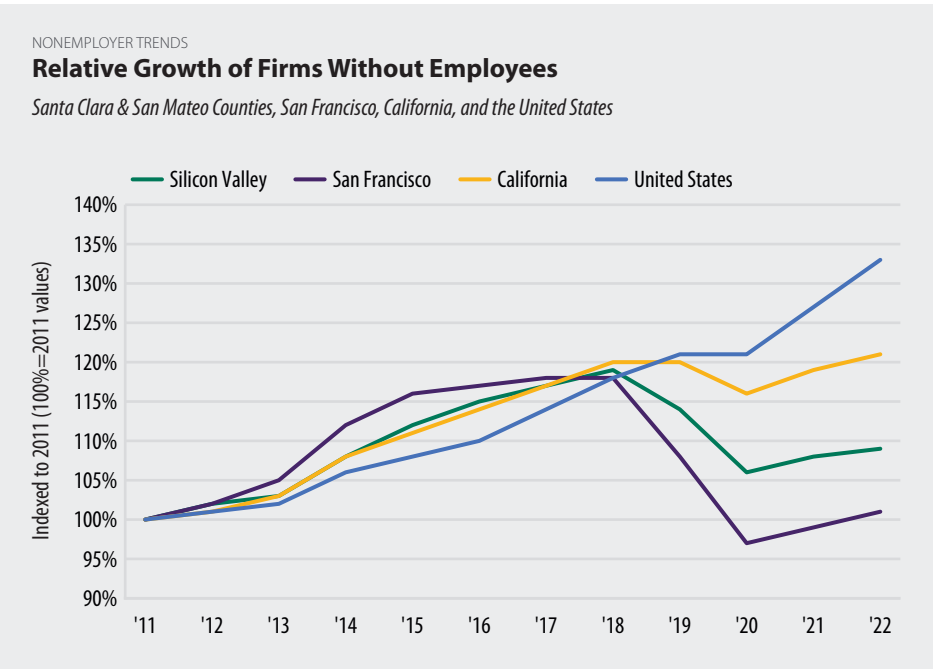
By January 2025, 88% of the region's M&A deals announced in 2024 had been completed.

Among the region's more than 400 targeted M&A deals, AI companies represented 11% of transactions and 10% (approximately \$15 billion) of disclosed transaction value. These AI companies were primarily acquired locally, with 69% of acquirers also based in Silicon Valley or San Francisco, 7% based in other parts of the state, 19% in other parts of the country, and 5% outside the United States.



While Silicon Valley companies were evenly involved as targets and acquirers in M&A deals, 68% of San Francisco M&A activity last year included a participating acquirer — a trend that has become more noticeable over the past decade.

Note: Shares are inclusive of deals involving both a local Target and Acquirer. They do not add up to 100%. | Data Source: FactSet Research Systems, Inc. | Analysis: Silicon Valley Institute for Regional Studies



Data Source: United States Census Bureau, Nonemployer Statistics | Analysis: Silicon Valley Institute for Regional Studies

Historically, heightened unemployment rates have been tied to a rise in nonemployer firms, primarily consisting of self-employed individuals operating very small, unincorporated businesses.³⁹ However, this was not the case during the pandemic, as the number of nonemployer firms declined across California, including in Silicon Valley and San Francisco.

The number of Silicon Valley nonemployer firms peaked in 2018 at nearly 223,000, then declined over the following two years. However, it has since increased by nearly 3%, consistent with trends across the rest of California and in the United States.

WHAT ARE THE KEY FINDINGS?

Strong demand for commercial space in Silicon Valley fueled waves of speculative development over the past decade. While the market has softened significantly since the pandemic, 2024 showed signs of stabilization as companies continued to adjust to shifting workplace dynamics and recalibrate their operations.

Commercial development in the past two decades peaked in Q1 of 2020 but has dropped by more than 60% since, with just over eight million square feet of space under construction at the end of 2024. Vacancy rates rose across all space types for the second consecutive year and are now at their highest average level since 2006.

Oversupply has contributed to declines in inflation-adjusted rents that are now, on average, 4% lower than they were before the pandemic (2019), and 27% lower than at the height of the dot-com boom (2000).

More than one out of every five square feet of office space in Silicon Valley stood vacant at the end of the year.

Despite these headwinds, a total of 7.4 million square feet of new Silicon Valley commercial space was delivered in 2024. While this was the largest volume of new completions since 2021, the vast majority was lab and industrial space; only 1.2 million was office and R&D space — the

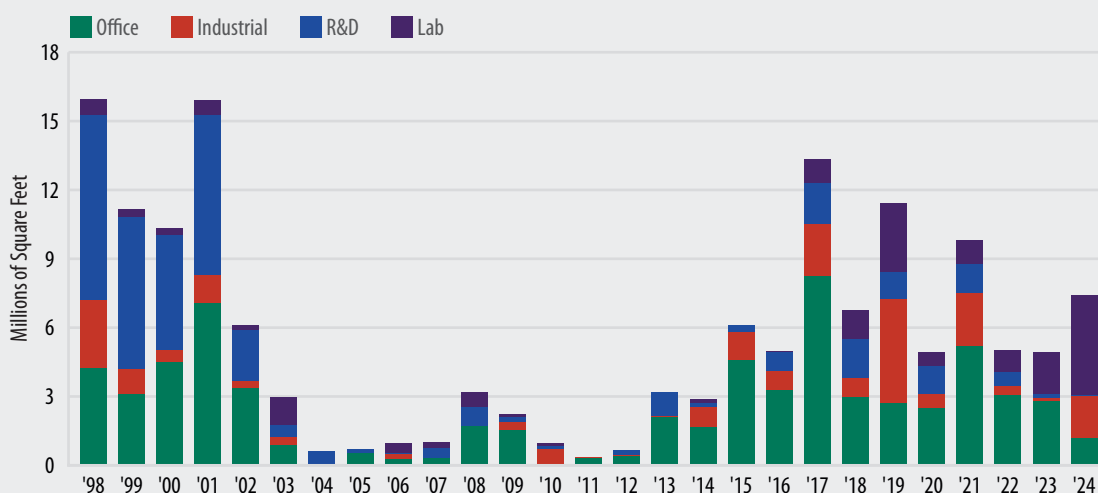
smallest amount since 2012. Commercial leasing volume also picked up, increasing 24% year-over-year. However, the volume of renewals overtook new leases for the first time since 2015, suggesting companies are more focused on maintaining rather than expanding their footprints.

While office leasing activity picked up significantly in 2024, more than one out of every five square feet of office space in Silicon Valley stood vacant at the end of the year. Construction of new office space is down 78% from pre-pandemic levels and inflation-adjusted rental rates have declined for three years in a row. Six of the region's biggest tech tenants have not significantly increased their footprints

COMMERCIAL DEVELOPMENT

New Commercial Development Completions

Silicon Valley



Data Source: JLL | Analysis: Silicon Valley Institute for Regional Studies

over the last five years (after quadrupling since 2013). Return-to-office mandates, along with growing demand from new AI-driven firms, may help stabilize the market for office space in 2025.

The market for lab space was very different: new development surged in 2024, with over four million square feet completed — the highest total in more than two decades. Two of the year's three largest completions were for lab space, and for the first time since 2002, there is now more lab space under construction in Silicon Valley than office space. While this influx of supply has driven vacancy rates higher,

inflation-adjusted rents for lab space have nearly doubled over the past decade, reflecting strong demand from the region's biotech and life sciences industry.

WHY IS THIS IMPORTANT?

Changes in the supply of commercial space, vacancy rates, and asking rents provide leading indicators of regional economic activity. A decline in available commercial space may suggest strengthening economic activity and tightening in the commercial real estate market. Increases in vacancy (the amount of space that is not physically occupied),

as well as declines in rents, can reflect slowing demand relative to supply. Rents and vacancy rates near transit illustrate the value that prime locations provide to tenants and their employees. Changes in the real estate footprint of major tech companies can reflect the prevalence of remote work, as well as trends in consolidation or expansion, with the latter impacting regional employment levels. Leasing activity is also indicative of overall real estate demand and affects optimism toward speculative development.

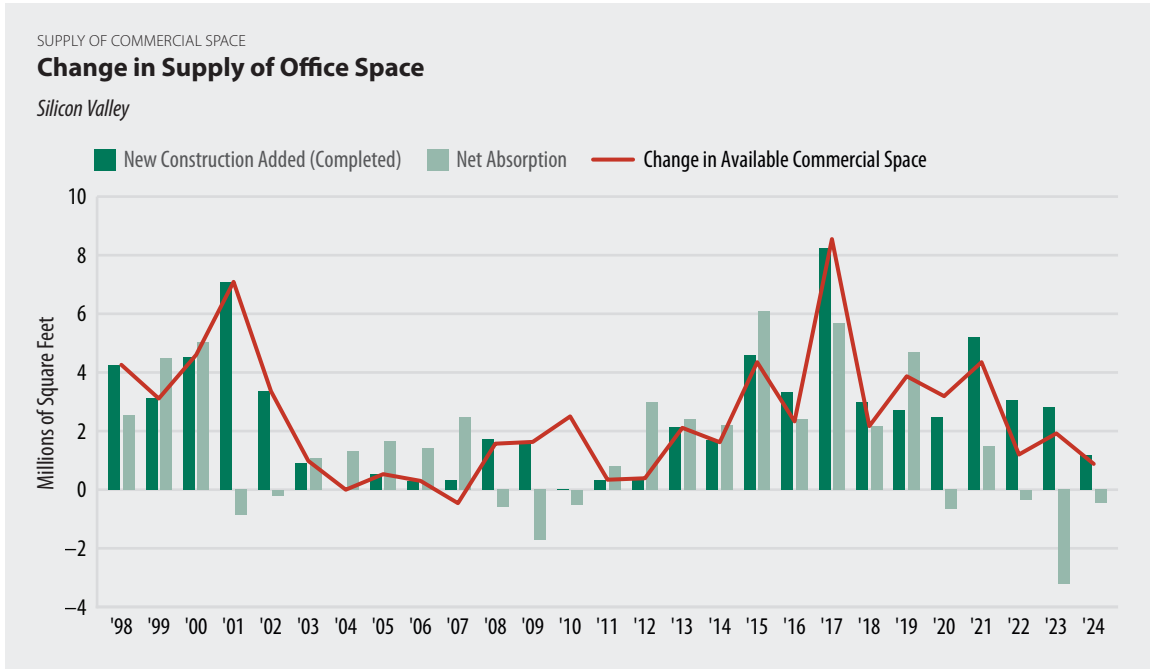
A total of 7.4 million square feet of new commercial space was completed in 2024, the largest amount of new development since 2021. Of this new space, 58% was Lab, 25% Industrial, 16% Office, and 1% R&D.

Only 1.18 million square feet of office space was completed in 2024, the lowest total since 2012, and the smallest share (16%) of new completions since 2010.

In 2024, over four million square feet of lab space were completed — the highest total in more than two decades. Among the top three completions of the year were the second phase of Kilroy Oyster Point in South San Francisco and The Landing in Burlingame, each adding over half a million square feet of new lab space.

10 Largest Commercial Space Completions <i>Silicon Valley, 2024</i>					
Development Name	Location	Owner/Developer	Rentable Building Area (square feet)	Type of Space	Quarter Completed
Kilroy Oyster Point, Phase II <i>384 Oyster Point</i>	South San Francisco	Kilroy Realty Corporation	865,000	Lab	Q2/Q4
Cityline Sunnyvale <i>200/250 W Washington Ave.</i>	Sunnyvale	Hunter Properties, Inc.	595,159	Office	Q4
The Landing <i>1699/1701 Bayshore Hwy.</i>	Burlingame	King Street Properties	503,500	Lab	Q4
Fremont Technology Center <i>40445/40541 Albrae St. & 40901 Encyclopedia Circle</i>	Fremont	Ares Management	395,125	Industrial	Q3
McCarthy Business Park <i>901/1001 Venture Way</i>	Gilroy	McCarthy Ranch	382,565	Industrial	Q2
Gateway of Pacific, Phase V <i>475 Eccles Ave.</i>	South San Francisco	BioMed Realty Trust	321,000	Lab	Q2
Genesis Marina <i>3000/3500 Marina Blvd.</i>	Brisbane	Phase 3 Real Estate Partners	279,475	Lab	Q2
Pear Village <i>1300 La Avenida St.</i>	Mountain View	The Sobrato Organization	228,210	Office	Q1
San Jose Logistics Center <i>650 N King Rd.</i>	San Jose	Ares Management	212,683	Industrial	Q3
The Creekview <i>1700 Dell Ave.</i>	Campbell	Dollinger Properties	165,984	Office	Q3

Data Source: JLL | Analysis: Silicon Valley Institute for Regional Studies

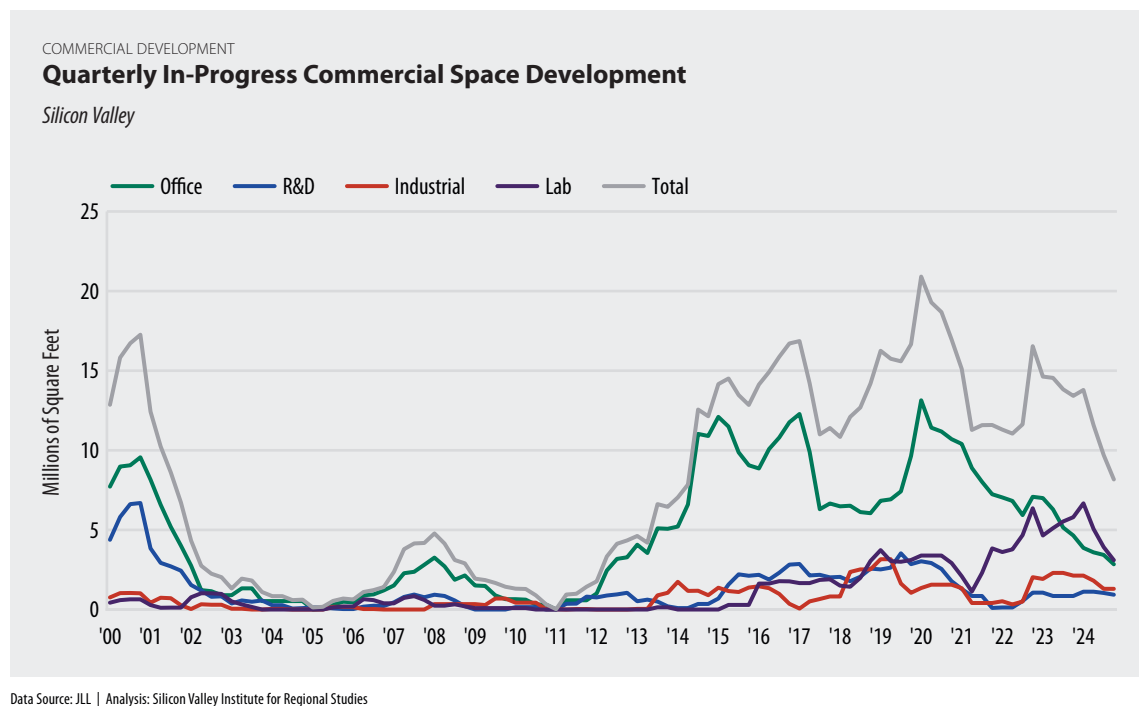


Data Source: JLL | Analysis: Silicon Valley Institute for Regional Studies

After accounting for newly completed developments, newly occupied space, and vacancies, total available commercial office space in Silicon Valley grew by approximately 880,000 square feet in 2024 — the smallest increase since 2012. Net absorption of Silicon Valley office space has been negative during four out of the past five years, representing a decrease in occupancy and an increase in rentable building area.

Silicon Valley commercial space development of the past two decades peaked in Q1 of 2020, but has dropped by nearly 61% as of Q4 2024. Development of office space has slowed the most, down 78% since before the pandemic.

Of the 8.17 million square feet of commercial space under construction as of Q4 2024, 38% was Lab, 35% Office, 16% Industrial, and 11% R&D.



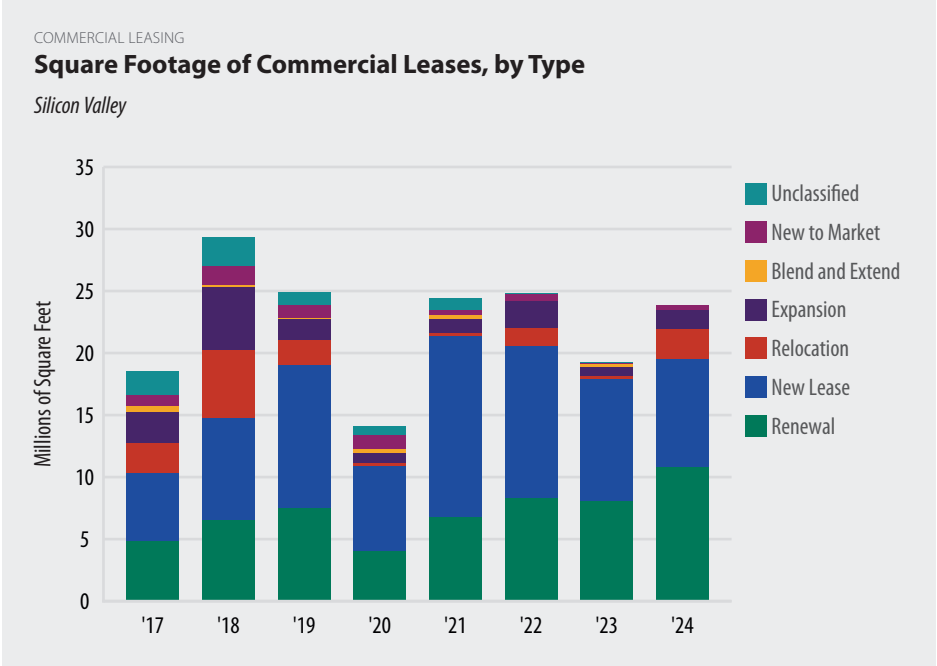
Silicon Valley's commercial space in progress decreased by approximately 19% for a second consecutive year, likely driven by rising development costs and high vacancy rates.

While the end of 2024 saw approximately half as much lab space in-progress compared to the end of 2023, Lab still accounts for the largest share of regional in-progress development.

Major commercial construction efforts underway at the end of 2024 included several large owner-user developments, including Google's 1.4 million-square-foot office project on Caribbean Drive and Intuitive Surgical's 847,000 square-foot campus on Kifer Road, both in Sunnyvale, and the 440,000 square-foot redevelopment of YouTube's headquarters in San Bruno.

There were 618 agreements for office space executed in 2024, the highest number since 2009. Office space accounted for 48% of the total number of leases and 32% of the square footage leased in 2024.

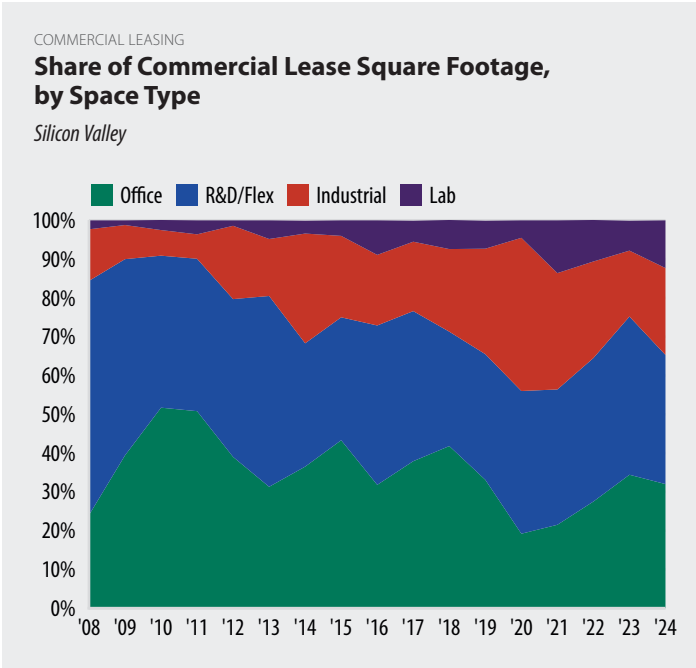
While the shares of lease transactions for office and R&D space have held relatively steady over time, the shares for Industrial and Lab have increased significantly. In 2024, 5.4 million square feet of industrial space and 2.9 million square feet of lab space were leased, representing increases of 412% and 619% since 2010, respectively.



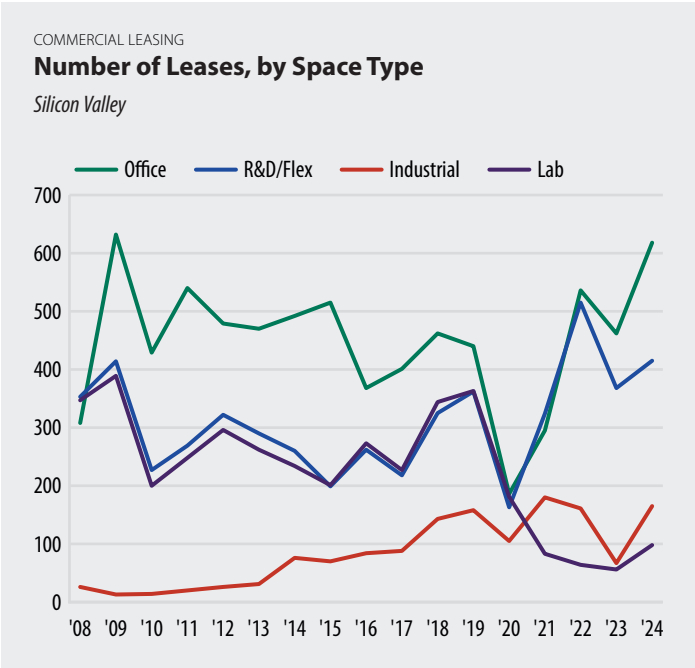
Note: Lease transactions include New to Market (tenant moves into a new market from another market), Relocation (tenant moves from one location to another in the same market), Renewal (tenant renews its existing lease at its current location), Expansion (when a tenant expands its current premises to include new premises outside of its currently leased premises), Blend-and-extend (tenant's remaining lease term, usually one to three years, is extended and the current rental rate is "blended" with a newly negotiated one), and New Lease (when it is unclear if the tenant is new to market, relocating, expanding, or renewing, to indicate that a new lease transaction has taken place). | Data Source: JLL | Analysis: Silicon Valley Institute for Regional Studies

The share of lease transactions that were renewals continued to rise in 2024, accounting for 45% of all leased square footage. For the first time since 2015, renewals accounted for a higher share of square footage than new leases (37%).

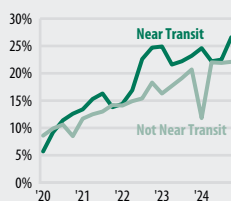
Commercial space leasing activity in Silicon Valley picked up in 2024, with 23.9 million square feet leased across 1,296 lease agreements — increases of 24% and 36% year-over-year, respectively.



Note: Lease transactions include New to Market (tenant moves into a new market from another market), Relocation (tenant moves from one location to another in the same market), Renewal (tenant renews its existing lease at its current location), Expansion (when a tenant expands its current premises to include new premises outside of its currently leased premises), Blend-and-extend (tenant's remaining lease term, usually one to three years, is extended and the current rental rate is "blended" with a newly negotiated one), and New Lease (when it is unclear if the tenant is new to market, relocating, expanding, or renewing, to indicate that a new lease transaction has taken place). | Data Source: JLL | Analysis: Silicon Valley Institute for Regional Studies



Office Vacancy Rates

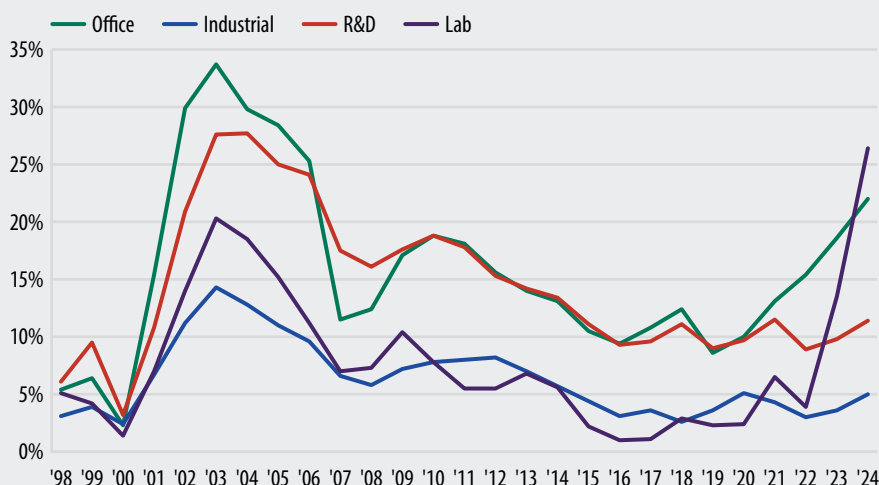


More than one out of every five square feet of office space in Silicon Valley was vacant as of the end of 2024. Office vacancy rates have risen steadily since the pandemic, and are now at their highest level since 2006.

COMMERCIAL VACANCY

Annual Rate of Commercial Vacancy

Silicon Valley



Data Source: JLL | Analysis: Silicon Valley Institute for Regional Studies

For the second consecutive year, vacancy rates for Silicon Valley commercial space rose across the board. Average vacancy rates across all space types have now reached their highest levels since 2006.

Average vacancy rates for Silicon Valley commercial space were 22% for Office, 11% for R&D, 26% for Lab, and 5% for Industrial space in 2024.

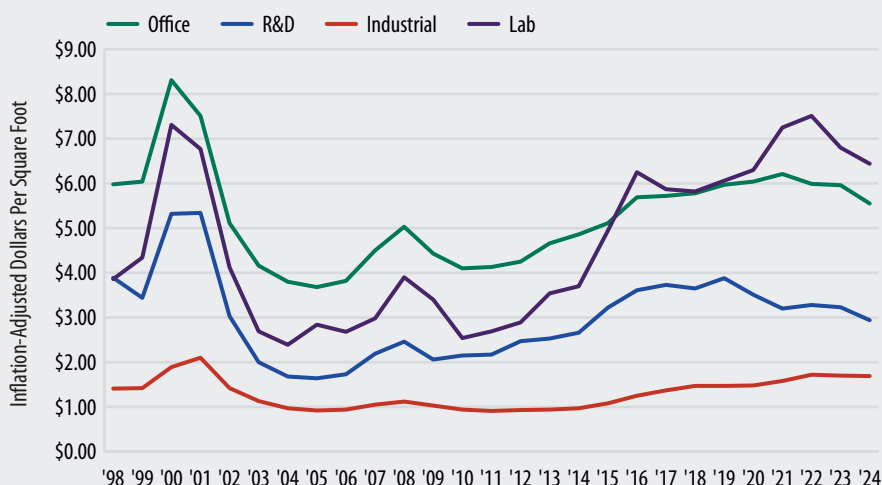
Vacancy rates for lab space spiked to 26%, and are nearly seven times higher than they were just two years ago, due to a combination of new lab completions and tenants vacating their existing space.

Silicon Valley office vacancies beyond a 10-minute walk from public transit nearly converged with vacancy rates within a 10-minute walk throughout the course of 2024, but remained 4% higher as of year-end.

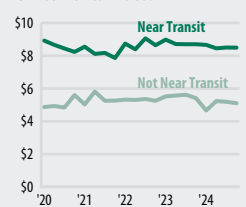
COMMERCIAL RENTS

Annual Average Asking Rents

Silicon Valley



Office Rental Rates



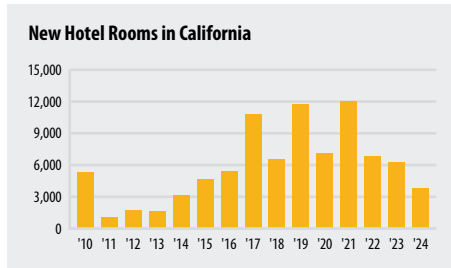
Despite a year-over-year decline, inflation-adjusted rates for lab space have nearly doubled in just the past decade, reflecting strong demand from the biotech and life sciences industry.

Note: Average office space asking rents are "Full Service Gross" (FSG), which is the monthly rental rate and includes common area maintenance fees, utility fees, and taxes/insurance fees. Industrial, R&D, and Lab asking rents are quoted "triple net" (NNN), which is the monthly base rental rate in which common area maintenance fees, utility fees, and taxes/insurance fees are excluded. | Data Source: JLL | Analysis: Silicon Valley Institute for Regional Studies

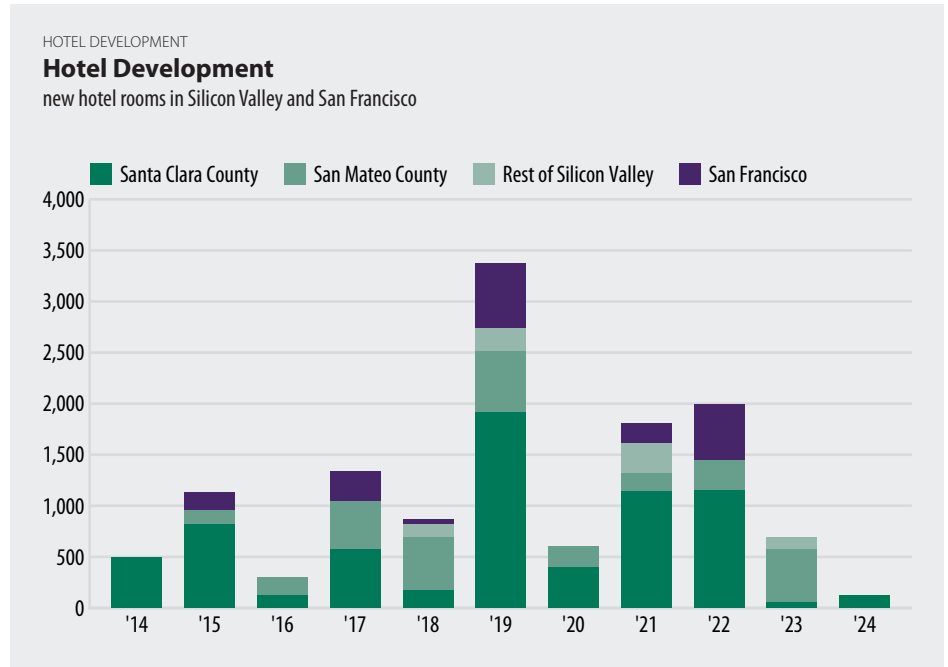
Inflation-adjusted rates for commercial space in Silicon Valley plateaued by the end of 2022, and have since declined across all space types. On average, rates across all commercial space types are more than 27% lower than they were in the year 2000 (at the height of the dot-com boom) and more than 4% lower than they were in 2019 (before the pandemic).

Inflation-adjusted rates for all types of Silicon Valley commercial space fell year-over-year. R&D experienced the largest decline (-9%), followed by Office (-7%), Lab (-5%), and Industrial (-1%). Average asking rents in 2024 were \$5.55 per square foot (full-service gross) for office space, \$6.44 for Lab, \$2.94 for R&D, and \$1.69 for Industrial.

At the end of 2024, Silicon Valley office space asking rents were approximately 66% higher at locations within a 10-minute walk of a Caltrain, BART, or VTA station compared to those further from transit.

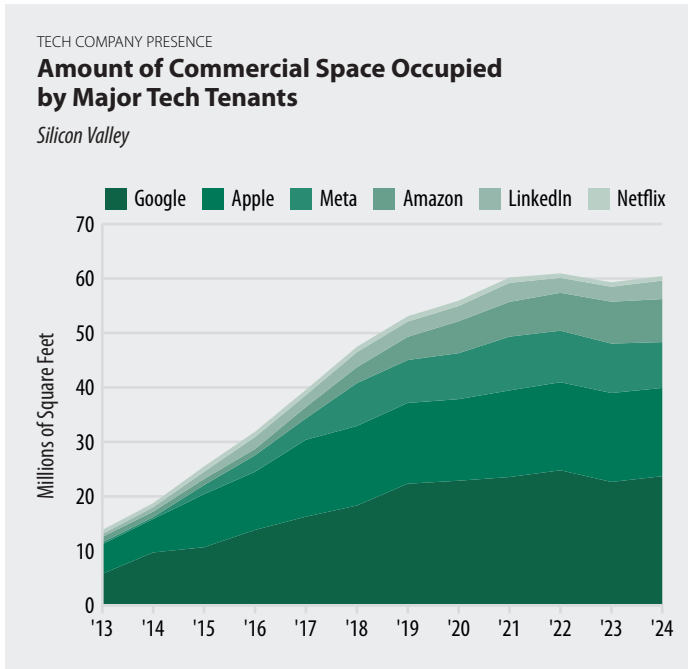


At the end of 2024, there were only six hotels under construction in Greater Silicon Valley — four in Santa Clara County, one in San Mateo County, and one in San Francisco, with a total of 818 rooms between them.



Note: Rest of Silicon Valley data not available prior to 2017. | Data Source: Atlas Hospitality Group | Analysis: Silicon Valley Institute for Regional Studies

Hotel development in California slowed significantly in 2024, with only 35 new hotels opening statewide — the lowest number over the past decade. The slowdown was particularly noticeable in Silicon Valley, where just one new hotel opened, down from five in 2023 and nine in 2022.



Data Source: Colliers International Silicon Valley | Analysis: Colliers International Silicon Valley

Commercial space occupied by six of the region's largest tech companies (Google, Apple, Meta, Amazon, LinkedIn, and Netflix) has reached a plateau, as companies continue to adjust to remote and hybrid work. Total space occupied by these tenants has not grown significantly since 2021, after having more than quadrupled over the previous eight years.

Six of the region's largest tech companies together occupy more than 60 million square feet of commercial space in Silicon Valley, including (primarily) office and R&D space. Of them, Google holds the largest footprint (approximately 23.7 million square feet as of the end of 2024).

WHAT ARE THE KEY FINDINGS?

Silicon Valley's educational landscape showed mixed progress in 2024, with continued signs of post-pandemic impacts and persistent disparities across race and ethnicity, income levels, and other student subpopulations. Graduation rates have remained above 80% since 2010, reaching 89% in 2024, though significant disparities exist (e.g., Asian high school students graduated at a rate of 96% compared to 80% of Hispanic or Latino students).

While the dropout rate decreased to 7% — inching closer to pre-pandemic levels — college preparation has improved over the past decade with 64% of graduates meeting UC/CSU requirements in 2024, although this represents a slight decline for the second consecutive year.

The disruption of regular school attendance that began during the pandemic lingers as the chronic absenteeism rate among K-12 students continues to exceed pre-pandemic levels. One in six Silicon Valley students was chronically absent last year, missing 10% or more of expected attendance days. Math proficiency among eighth-graders increased slightly to 49% but remains below pre-pandemic levels, with substantial achievement gaps across racial and ethnic groups.

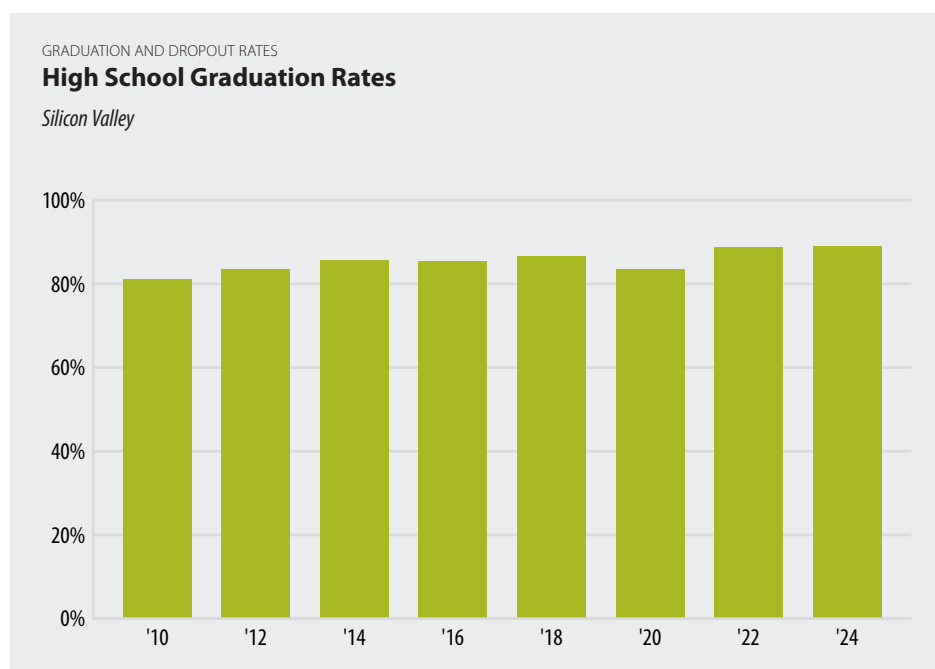
Digital access is strong overall with 96% of households having computers and 98% having broadband internet. The pandemic brought to light the region's long-standing digital divide, which disproportionately impacts low-income households (26% of which lack broadband access),

Hispanic or Latino, and Black or African American households.

WHY IS THIS IMPORTANT?

The future success of Silicon Valley's knowledge-based economy depends on the ability of younger generations to prepare for and access higher education and to provide all residents with a fundamental requirement for 21st century life — robust, high-speed network connectivity.

High school graduation and dropout rates are important measures of how well our region prepares its youth for future success. Preparation for postsecondary education can be measured by the proportion of Silicon Valley youth that complete high school and meet entrance requirements for the University of California (UC) or California



Note: Due to changes in the California Department of Education methodology for 2017 and subsequent years, caution should be used when comparing cohort outcome data to prior years. Graduation rates are four-year derived rates. All racial groups are not Hispanic or Latino. | Data Source: California Department of Education | Analysis: Silicon Valley Institute for Regional Studies

Silicon Valley's Asian high school students in the 2023-24 cohort graduated at a rate of 96% — 16 percentage points higher than Hispanic or Latino students (80%), who had the highest dropout rate among racial/ethnic groups at 13%.

State University (CSU) systems. Student stability, reflected in consistent enrollment and attendance, influences academic success and strengthens connections that support the overall health of the student and the school community, including relationships with peers, teachers, and families. Educational achievement can also be measured by proficiency in math.

Breaking down high school graduation rates and the share of those meeting UC/CSU entrance requirements by race

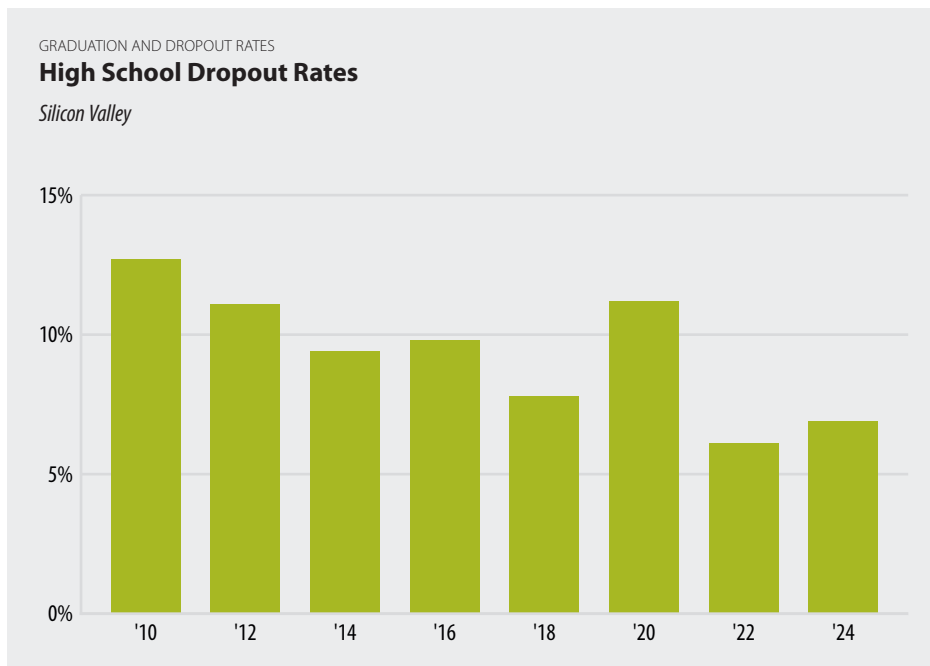
and ethnicity sheds light on disparities in educational achievement. And whether

One in six Silicon Valley students was chronically absent last year.

the region's residents have access to a computer with broadband internet connectivity is indicative of their ability to engage in the community, look for

jobs, do homework, manage finances, interact with government, access a wide variety of resources, and conduct the business of everyday life. The need for high-speed network connectivity (and lack thereof) was magnified during the pandemic with the implementation of distance-learning and a sharp rise in remote work.

Since 2010, graduation rates in Silicon Valley have consistently stayed above 80% with the 2023-24 school year marking the highest (89%). With the exception of the 2019-20 school year, the Silicon Valley graduation rate has remained higher than that of the state overall.



Note: Due to changes in the California Department of Education methodology for 2017 and subsequent years, caution should be used when comparing cohort outcome data to prior years. Graduation rates are four-year derived rates. All racial groups are not Hispanic or Latino. | Data Source: California Department of Education | Analysis: Silicon Valley Institute for Regional Studies

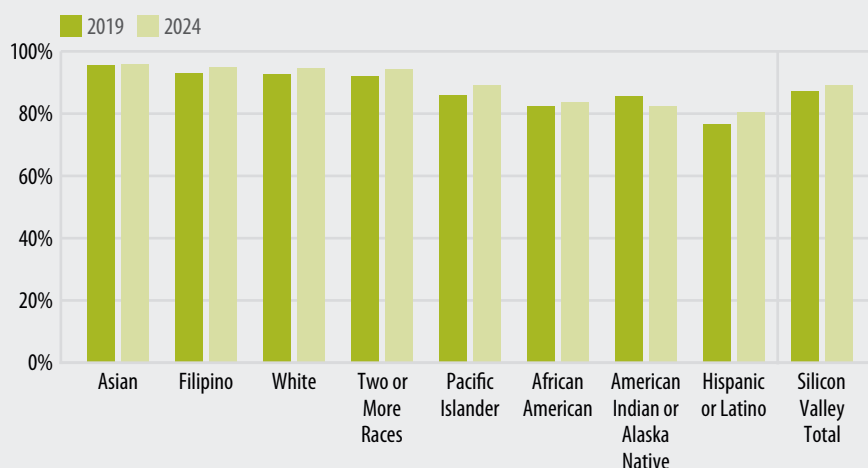
Approximately 2,200 Silicon Valley students dropped out of high school in 2023-24 (a dropout rate of 7%), large shares of whom were among several (not mutually exclusive) student subpopulations: 76% were socioeconomically disadvantaged, 76% Hispanic or Latino, 39% English-learners, and 12% students experiencing homelessness.

The subpopulations with the highest dropout rates in 2023-24 included foster youth (30%), students who are homeless (21%), English learners (16%), and Hispanic or Latino students (13%).

GRADUATION AND DROPOUT RATES

High School Graduation Rates, by Race and Ethnicity

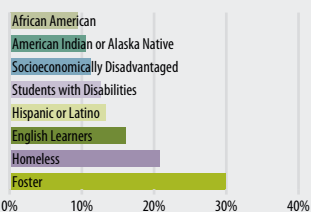
Silicon Valley



Note: Due to changes in the California Department of Education methodology for 2017 and subsequent years, caution should be used when comparing cohort outcome data to prior years. Graduation rates are four-year derived rates. All racial groups are not Hispanic or Latino. | Data Source: California Department of Education | Analysis: Silicon Valley Institute for Regional Studies

Highest Dropout Rates by Sub-Population

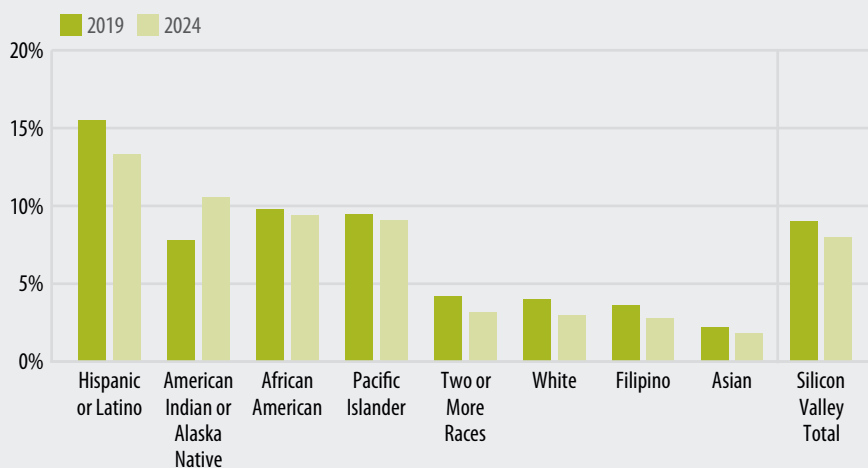
Silicon Valley | 2024



GRADUATION AND DROPOUT RATES

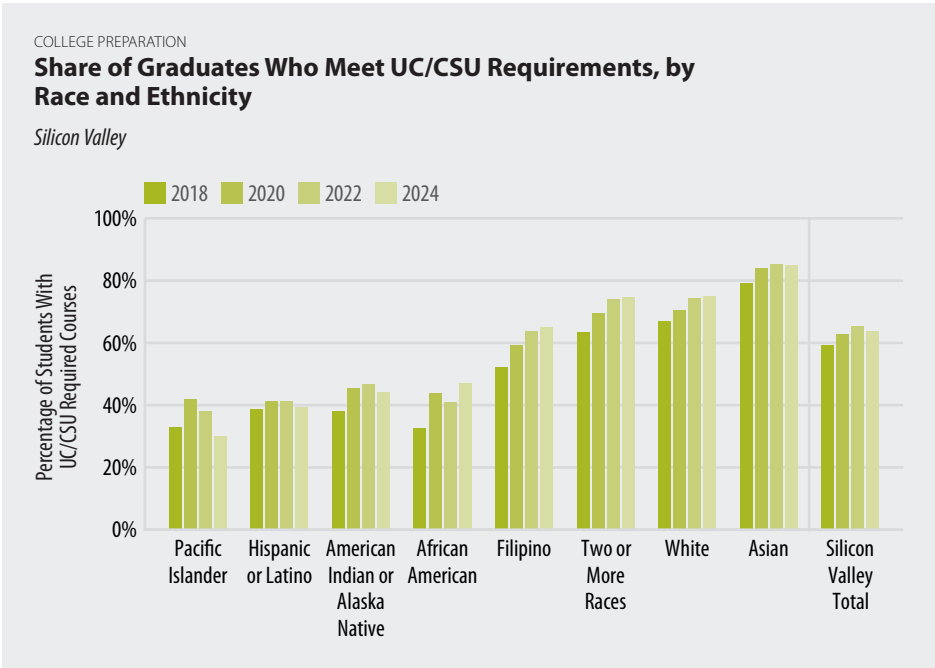
High School Dropout Rates, by Race & Ethnicity

Silicon Valley



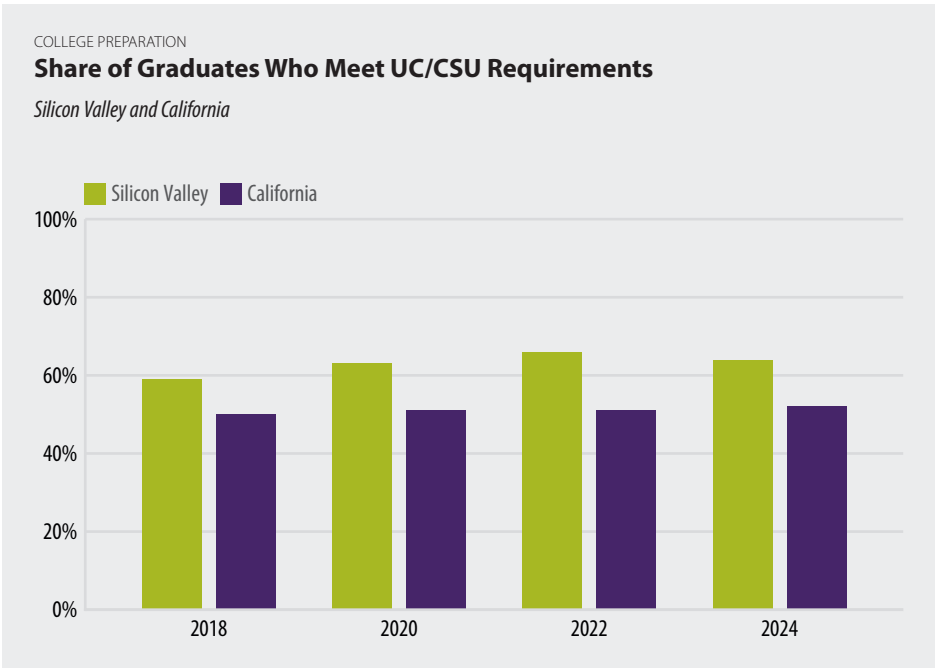
Note: Due to changes in the California Department of Education methodology for 2017 and subsequent years, caution should be used when comparing cohort outcome data to prior years. Graduation rates are four-year derived rates. All racial groups are not Hispanic or Latino. | Data Source: California Department of Education | Analysis: Silicon Valley Institute for Regional Studies

The share of Silicon Valley high school graduates meeting UC/CSU requirements has increased most dramatically since 2014 for those of Two or more races, Filipino, White students (by +16, +14, and +13 percentage points, respectively).



Note: All racial groups are not Hispanic or Latino | Data Source: California Department of Education | Analysis: Silicon Valley Institute for Regional Studies

Asian students have the highest rate of graduates meeting UC/CSU requirements among Silicon Valley's racial and ethnic groups reported, at 85% in 2023-24.



Note: All racial groups are not Hispanic or Latino | Data Source: California Department of Education | Analysis: Silicon Valley Institute for Regional Studies

For the second straight year, the share of Silicon Valley high school graduates meeting University of California/California State University (UC/CSU) requirements declined slightly after nearly a steady rise year-over-year since 2010. The UC/CSU requirement rate increased by 9 percentage points over the past decade (from 55% in 2014 to 64% in 2024).

Silicon Valley's public school student population has had relatively stable enrollment (based on enrollment for a full school year at the same school) from 2019 to 2024 (92%), and has been consistently more stable than San Francisco and California (81% and 91%, respectively, in 2024).

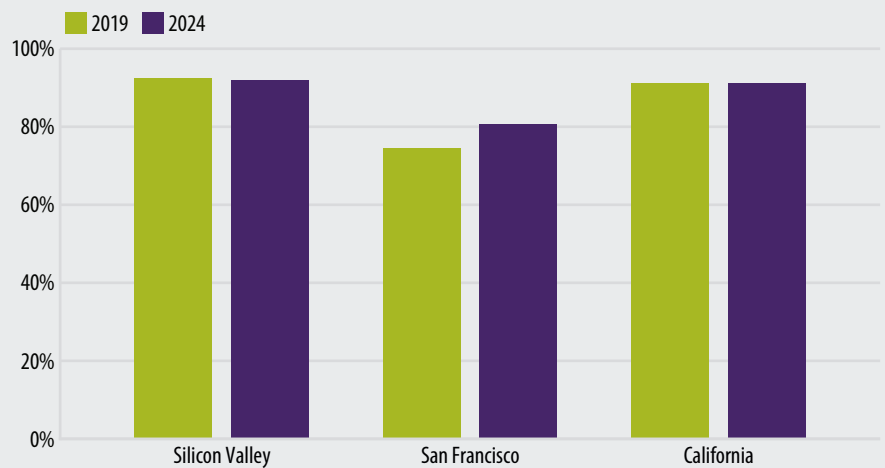
Disparities exist across race and ethnicity with Black or African American students having less stability (86%) compared to the regional level (91%) and nearly 10 percentage points less stable than students of Two or more races (95%) and Filipino students (95%).

ATTENDANCE

School Enrollment Stability Rate

Share of Students Enrolled at the Same School for a Full School Year

Santa Clara and San Mateo Counties, San Francisco, and California



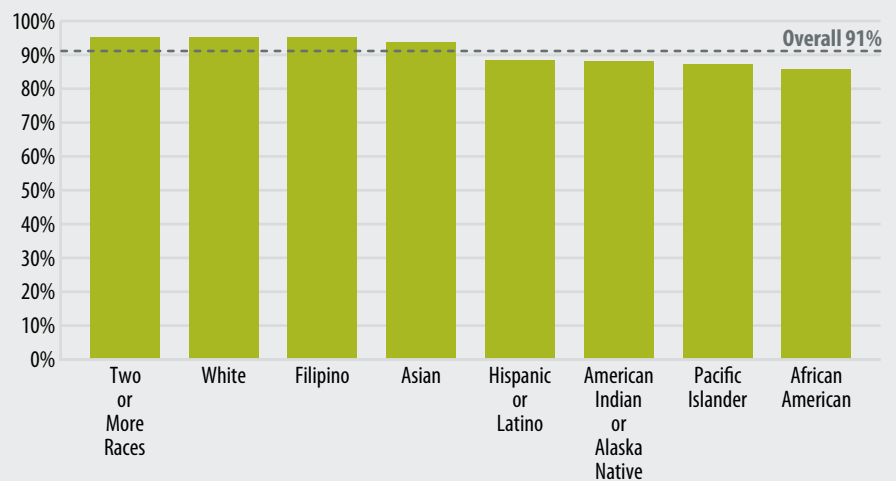
Data Source: California Department of Education | Analysis: Silicon Valley Institute for Regional Studies

ATTENDANCE

School Enrollment Stability Rate, by Race and Ethnicity

Share of Students Enrolled at the Same School for a Full School Year

Santa Clara & San Mateo Counties | 2024

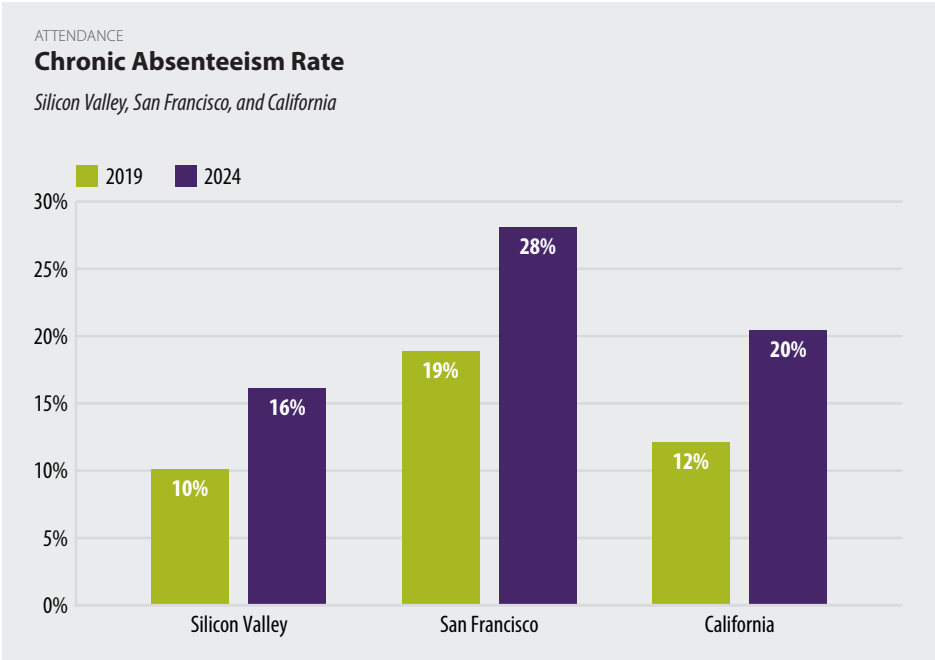


jointventure.org

Data Source: California Department of Education | Analysis: Silicon Valley Institute for Regional Studies

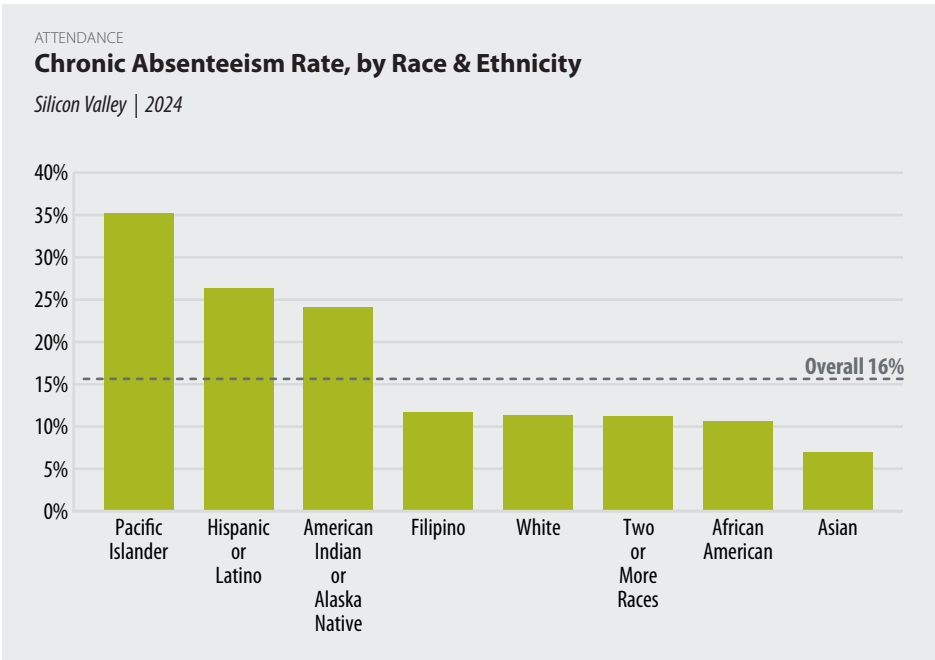
One in six Silicon Valley students was chronically absent from school last year, missing more than 10% of expected attendance days.

The disruption of regular attendance that began during the COVID-19 pandemic lingers as the chronic absenteeism rate (absent more than 10% of expected attendance days) among K-12 students continues to exceed pre-pandemic levels in Silicon Valley (up by 6 percentage points), San Francisco (9 points), and the state (8 points).



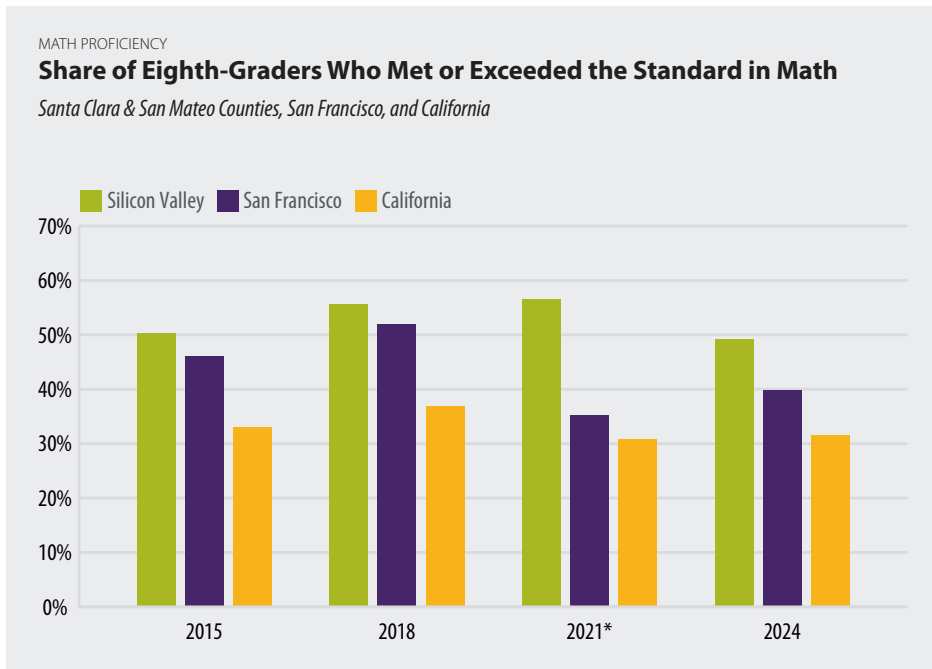
Data Source: California Department of Education | Analysis: Silicon Valley Institute for Regional Studies

In 2024, Silicon Valley’s chronic absenteeism rate (16%) decreased from the previous year (19%) and was below that of San Francisco (28%) and California (20%). Over the past five years the region has consistently had lower rates than San Francisco and California.



Data Source: California Department of Education | Analysis: Silicon Valley Institute for Regional Studies

Significant disparities exist across racial and ethnic groups in attendance patterns. Chronic absenteeism is highest among Pacific Islander (35%), Hispanic or Latino (26%), and American Indian and Alaska Native students (24%) — all well above the regional total of 16%. Similar disparity patterns exist in San Francisco and statewide, though notably Black or African American students exhibited much higher levels of chronic absenteeism in San Francisco (60%) and statewide (32%) than regionally (11%).



Share Who Met or Exceeded the Standard in Math, by Race and Ethnicity

Eighth-Graders, 2023-24 (with percentage point change since 2018-19)

Santa Clara & San Mateo Counties

Asian	80% (-4%)
White	67% (-2%)
Two or More Races	65% (-5%)
Filipino	49% (-4%)
Native Hawaiian or Pacific Islander	26% (+1%)
Black or African American	22% (-5%)
Hispanic or Latino	19% (-7%)
Overall	49% (-5%)

*Math proficiency data for 2020-21 include a lower share of enrolled students with scores than typical. | Data Source: California Department of Education | Analysis: Silicon Valley Institute for Regional Studies

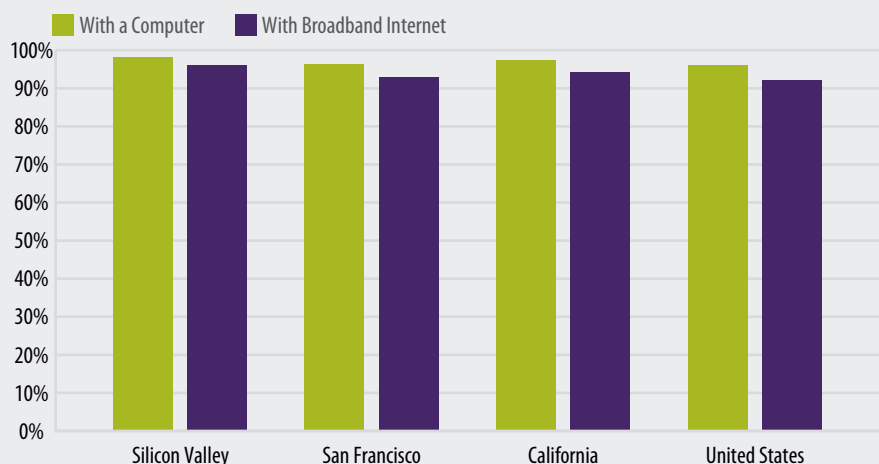
Combined, Santa Clara and San Mateo counties’ share of eighth-graders who met or exceeded the standard in math during the 2023-24 school year increased by almost 2 percentage points year-over-year to 49%. However, this share is well below 2019 levels (down by 5 percentage points), indicating persistent post-pandemic academic challenges.

Most racial and ethnic groups in 2023-24 experienced year-over-year increases in meeting or exceeding the eighth-grade math standard, with the largest increases observed among students who identify as Native Hawaiian or Pacific Islander, White, and Black or African American.

Hispanic or Latino students had the lowest share of students meeting or exceeding standards in math (19%, with a 5 percentage point decline from the 2018-19 school year). Asian students had the highest rates of math proficiency at 80% but also experienced a decline from pre-pandemic levels (down by 4 percentage points).

Eighth-grade math proficiency remains higher in Silicon Valley (49% in 2023-24) compared to San Francisco (40%) and California overall (32%).

COMPUTER & INTERNET ACCESS

Share of Households with a Computer and Broadband Internet Access*Santa Clara & San Mateo Counties, San Francisco, California, and the United States | 2023*

Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

Share of Households Without Internet Access At Home, by Income Range

2023

	Low-Income	Moderate-Income	High-Income
Silicon Valley	17%	9%	2%
San Francisco	27%	8%	3%
California	20%	9%	3%
United States	25%	11%	4%

Approximately 26% of households with an annual income less than \$75,000 did not have internet access in 2023 (compared to 29% in California and 35% in the United States).

Silicon Valley has a greater share of households with computers (96%) and broadband internet access (98%) than San Francisco, California, or the United States overall.

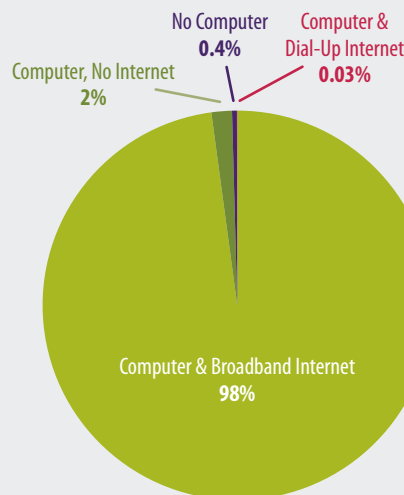
Since 2021, California has dedicated state funds and received federal funds for last-mile broadband infrastructure to expand high-speed internet connectivity to currently unserved or underserved locations.⁴⁰

Among the region's children, almost all had a computer and broadband internet access at home in 2023; 2% (more than 9,400 children) had a computer without an internet subscription, and a fraction of a percent (0.4%, or approximately 2,300 children) had no computer in their home at all.

COMPUTER & INTERNET ACCESS

Share of Children With Computers and Internet Access at Home

Santa Clara & San Mateo Counties | 2023



Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

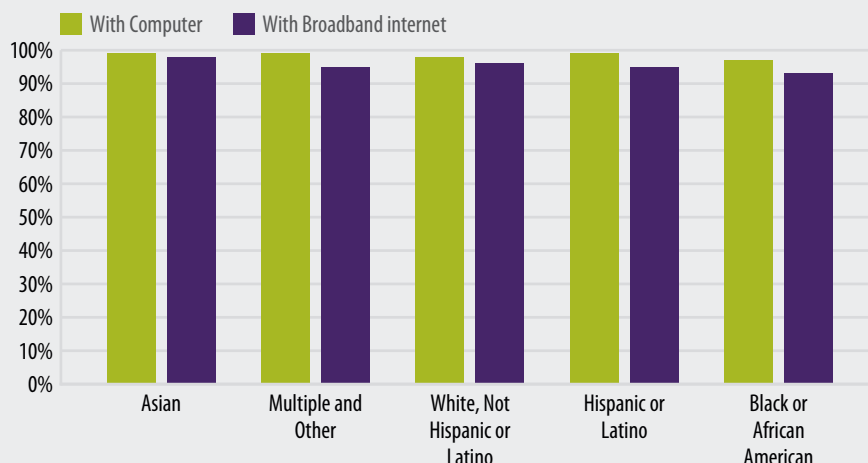
The share of Silicon Valley households with a computer is high across all racial and ethnic groups, with 99% of Asian households having a computer and 97-98% across all other groups.

The share of households with broadband internet varies among Silicon Valley's racial and ethnic groups; 93% of Black or African American households and 95% of Hispanic or Latino households have access, compared to 98% of Asian households.

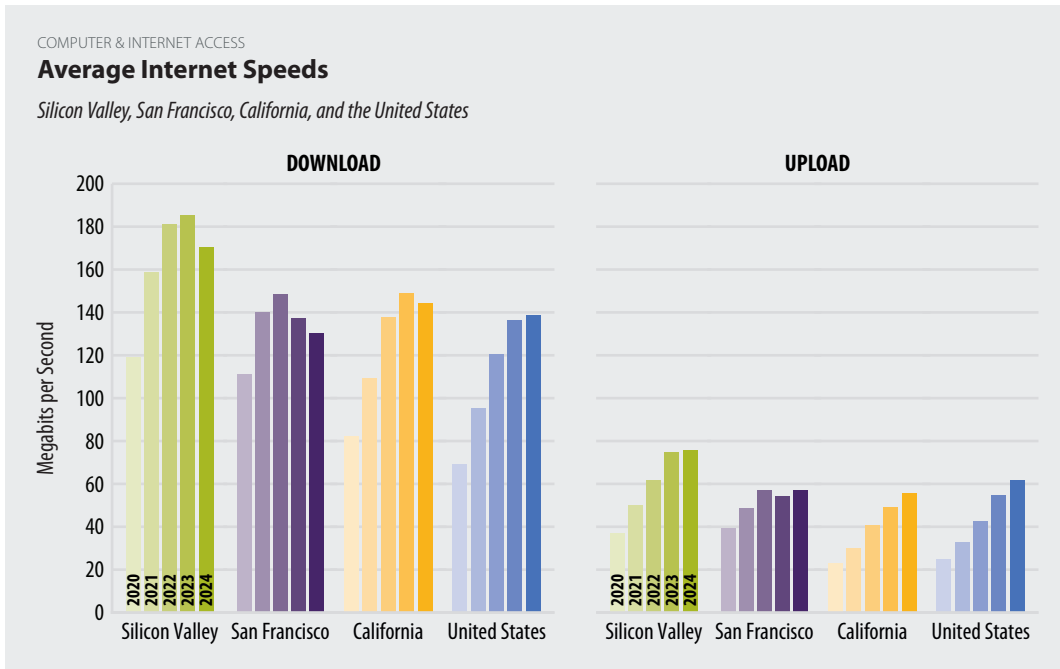
COMPUTER & INTERNET ACCESS

Share of Households with Computers and Internet Access, by Race & Ethnicity

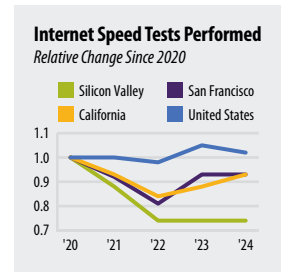
Santa Clara & San Mateo Counties | 2023



Note: Multiple and Other includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Some Other Race, and Two or More Races.
Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies



Data Source: M-Lab | Analysis: Silicon Valley Institute for Regional Studies



Since 2020, the average internet speeds in Silicon Valley for both uploads and downloads have been consistently faster than those in San Francisco, California, and the United States. In 2024, the region had an internet speed that was 36% faster than average speeds statewide and 22% faster than U.S. averages.

The number of internet speed download tests performed annually remained constant in Silicon Valley and San Francisco from 2023 to 2024, while increasing by 5% in California and decreasing by 3% nationally.

Silicon Valley's average internet speeds increased in 2024 for uploads (+1% to 76 Megabits per second) and decreased for downloads (-8% to 170 Mbps); average upload speeds have more than doubled since 2020.

WHAT ARE THE KEY FINDINGS?

Silicon Valley's preschool enrollment has declined in recent years, mirroring broader trends across California and the United States. In 2023, more than 32,400 three- and four-year-olds attended public and private preschools in Santa Clara and San Mateo counties, representing nearly 63% of the age group's total population. This is higher than the 48% enrollment rates statewide and nationally. However, all three regions experienced notable year-over-year declines in enrollment at the start of the pandemic, which persisted through 2022. While national preschool enrollment returned to pre-pandemic levels in 2023, Silicon Valley and California continued to

lag behind 2019 levels by 4 and 2 percent-age points, respectively.

The data reveal variability in Silicon Valley

While national preschool enrollment returned to pre-pandemic levels in 2023, Silicon Valley and California continued to lag behind 2019.

preschool enrollment by race and ethnicity. In 2023, 66% of Black or African American three- and four-year-olds were enrolled, compared to 65% of White, not Hispanic or Latino, and 49% of Hispanic or Latino children. This aligns with the trend of a greater

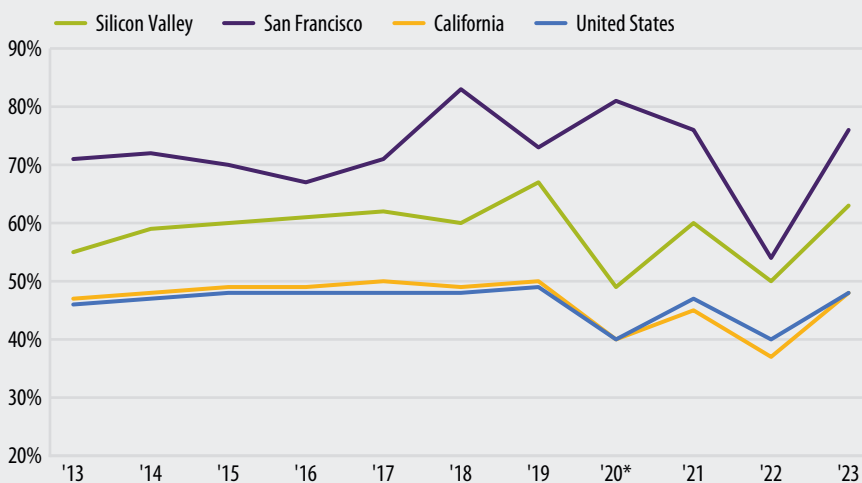
share of Silicon Valley and San Francisco preschoolers attending private schools (41% and 66%, respectively) than the state over-all (21%). In fact, San Francisco's private school enrollment increased by 12 percentage points from 2019 to 2023, resulting in only 9% of three- and four-year-olds enrolled in public preschool.

Regarding academic performance, Silicon Valley's third graders have a higher share meeting or exceeding the English Language Arts (ELA) standard (55%) compared to the state (43%). However, this share is still 5 percentage points lower than pre-pandemic levels, mirroring the broader decline in student achievement observed across the region and nation. The data also reveal significant

SCHOOL ENROLLMENT

Share of the Population 3- to 4-Years-Olds Enrolled in School

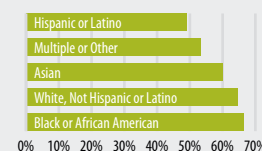
Santa Clara & San Mateo Counties, San Francisco, California, and the United States



*2020 data for Santa Clara, San Mateo and San Francisco counties, and California are based on ACS-1 Year microdata with experimental weights. 2020 U.S. data are from the U.S. Census Bureau, Current Population Survey. | Note: Data includes enrollment in private and public schools. | Data Source: United States Census Bureau, American Community Survey Analysis: Silicon Valley Institute for Regional Studies

Share of 3- and 4-Year-Olds Enrolled in School, by Race & Ethnicity

Santa Clara and San Mateo Counties | 2023



Not only has the share of preschool enrollment fallen since 2019, but the total number of three- and four-year-olds living in the region has declined by more than 14,000. As a result, a surplus of preschool capacity by 2028 was predicted in a recent Santa Clara County facilities needs assessment.⁴¹

disparities in ELA proficiency by race and ethnicity, with 79% of Asian students meeting or exceeding the standard, compared to 28% of Hispanic or Latino students and 40% of Black or African American students.

WHY IS THIS IMPORTANT?

Early childhood education provides a foundation for lifelong accomplishment. Research has shown that quality preschool-age education is vital to a child's long-term success, earnings, and social-emotional wellbeing. Enrollment trends in private and public schools highlight access to quality early childhood education. Reading and writing abilities function as important indicators for a child's future, as they correlate strongly

with continued academic achievement and are critical enablers of participation in various enrichment activities.

Infant care and preschool costs are higher in affluent areas,⁴² creating a divide in access to quality care. Childcare costs not only affect parents' ability to access affordable care, placing a financial strain on their overall living expenses, but also impact caregiver wages (and their ability to afford housing near work). This disparity limits opportunities for low-income families and reflects systemic inequities in regional economic well-being.

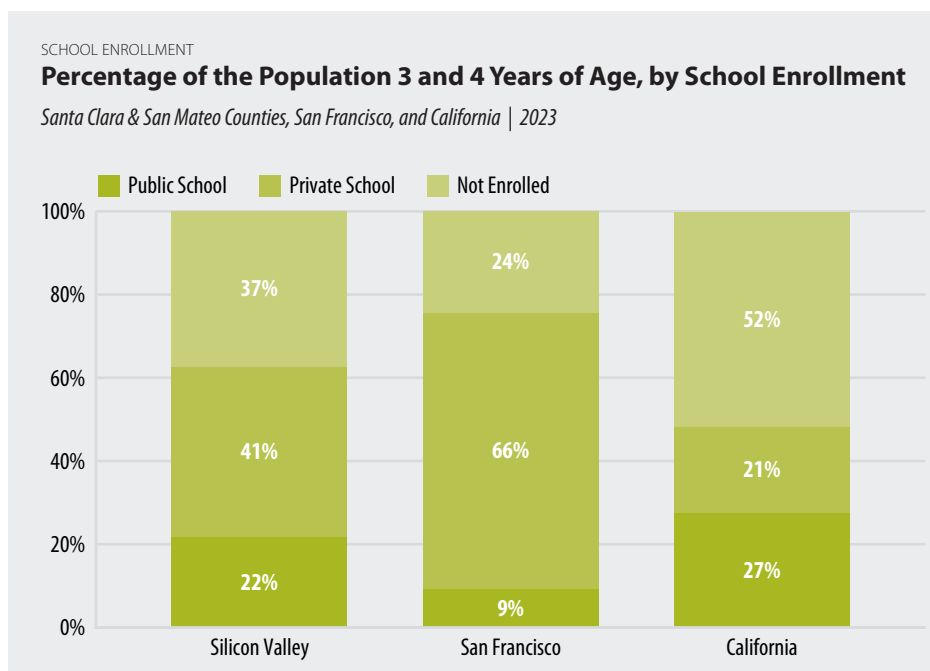
In 2023, more than 32,400 three- and four-year-olds attended public and private preschools in Santa Clara and San Mateo counties, or nearly 63% of the age group's total population (compared to 48% in both California and the U.S.).

Data show variability in Silicon Valley preschool enrollment by race and ethnicity, with 66% of Black or African American three- and four-year-olds enrolled compared to 65% White, not Hispanic or Latino, and 49% Hispanic or Latino.

Silicon Valley, the state, and the nation all experienced significant year-over-year declines in enrollment from 2019 to 2020, which persisted through 2022. However, in 2023 national preschool enrollment rates returned to pre-pandemic levels (48%) while Silicon Valley and California both lagged behind 2019 levels (by 4 and 2 percentage points, respectively).

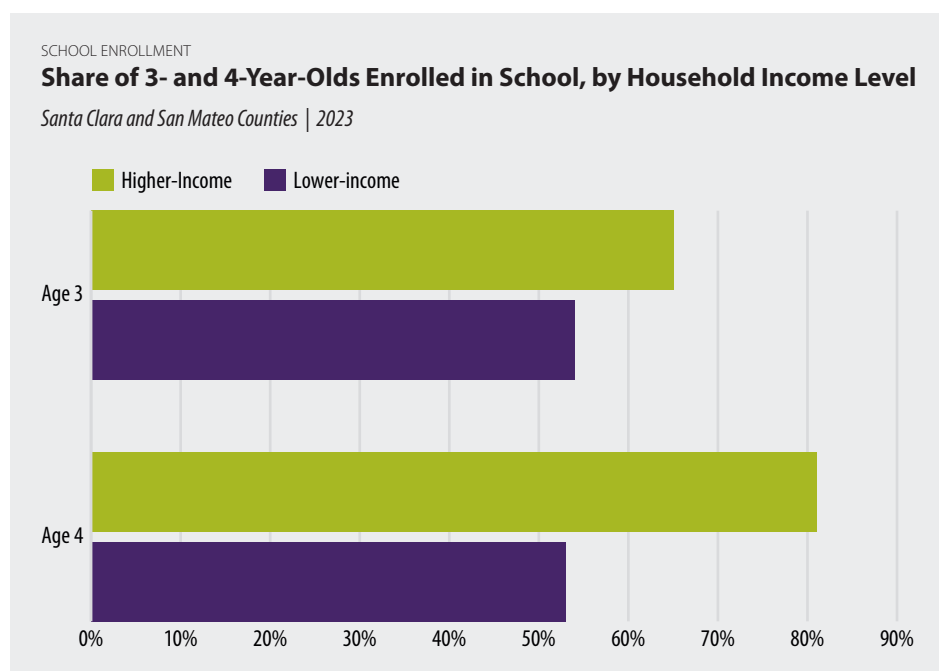
A greater share of Silicon Valley and San Francisco preschoolers attended private schools (41% and 66%, respectively) in 2023 than in the state overall (21%). San Francisco's private school enrollment increased by 12 percentage points between 2019 and 2023, resulting in only 9% of three- and four-year-olds enrolled in public preschool that year.

Percentage Point Change in the Share of Enrolled 3- and 4-Year-Olds 2019-2023			
	Silicon Valley	San Francisco	California
Public School	-1%	-12%	-2%
Private School	-3%	15%	0%
Total Enrolled	-4%	3%	-2%



Note: Data includes enrollment in private and public schools. | Data Source: United States Census Bureau, American Community Survey
 Analysis: Silicon Valley Institute for Regional Studies

The share of four-year-olds attending preschool (69%) was greater than three-year-olds (56%) in 2023.



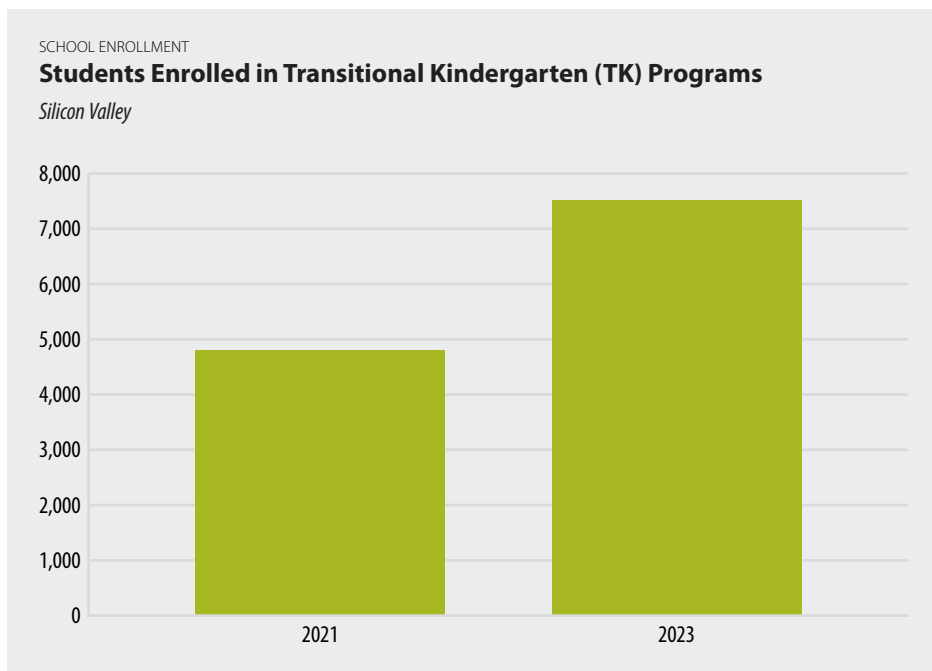
Note: Data includes enrollment in private and public schools. | Data Source: United States Census Bureau, American Community Survey
 Analysis: Silicon Valley Institute for Regional Studies

Of Silicon Valley's three- and four-year-olds in lower-income households,¹ 53% attended school in 2023 (an increase from 39% in 2022), with a higher share enrolled in public schools (87%) compared to those in higher-income households (24%).

School enrollment varies by household income level, although 60% of all three- and four-year-olds in Silicon Valley live in households that are considered higher-income.²

1. Defined as having household income within 200% of the Federal Poverty Level (FPL).

2. In 2023, higher-income households were defined as those with a household income of \$150,000+ based on 501%+ of the federal poverty level for a family of four (\$60,000 in 2023).



Data Source: California Department of Education | Analysis: Silicon Valley Institute for Regional Studies

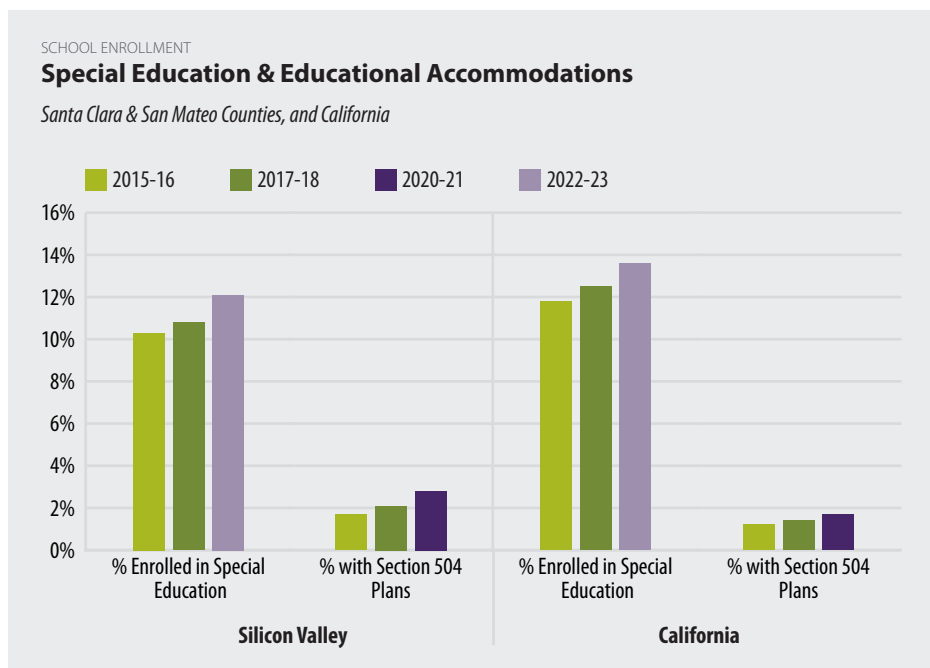
Share of Transitional Kindergarten Enrollment, by Subpopulation <i>Silicon Valley</i>		
	2021	2023
English learners	34%	40%
Socioeconomically Disadvantaged	30%	39%
Hispanic or Latino	33%	40%
Asian, Not Hispanic	36%	30%
White, not Hispanic	16%	15%
Two or More Races, Not Hispanic	6%	6%
Filipino, Not Hispanic	5%	4%
African American, not Hispanic	2%	2%
Pacific Islander, Not Hispanic	1%	1%

The total number of students in Silicon Valley attending transitional kindergarten increased by 56% between 2021 and 2023.

In 2023, 69% of four-year-olds were enrolled in school (up from 56% in 2021). With the expansion of transitional kindergarten in both San Mateo and Santa Clara counties — and in every school district throughout California — the share of four-year-olds is expected to continue to increase as universal transitional kindergarten is rolled out to all four-year-olds in California by the 2025-26 school year (at no cost to families).⁴³

Silicon Valley transitional kindergarten enrollment varies by subpopulation, with an increase in enrollment rates between 2021 and 2023 for English Learners (up 6 percentage points), Socioeconomically Disadvantaged (9 points), and Hispanic or Latino students (7 points), coupled with declines for Asian, not Hispanic or Latino students (down 6 points).

Approximately one in eight Silicon Valley public school students (12%) receives Special Education services (compared to one in seven statewide).⁴⁴ Specialized instruction meets the needs of students in 13 disability categories including, most predominantly, specific learning disabilities, speech or language impairments, and autism.⁴⁵

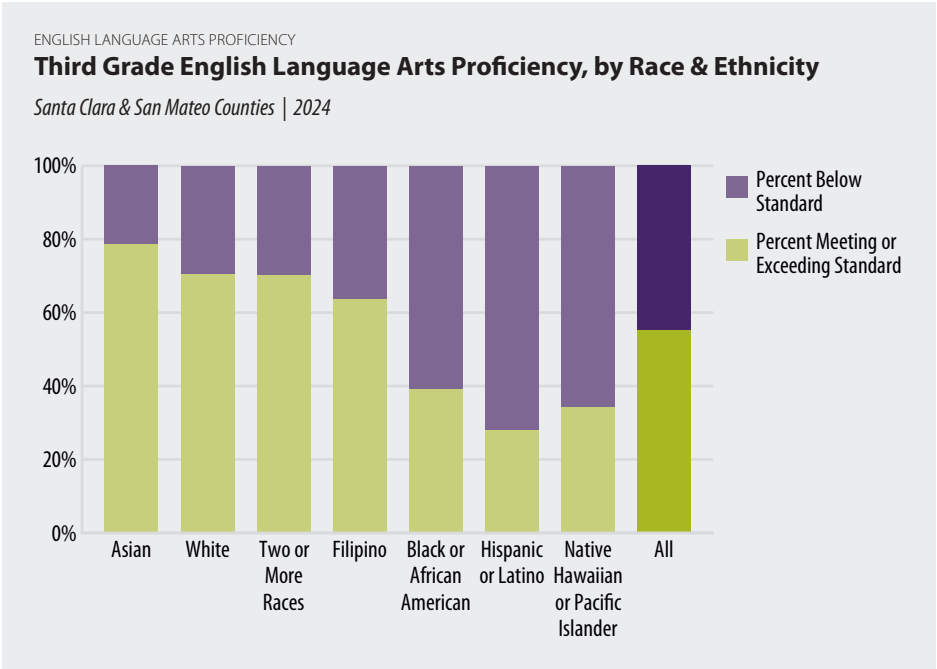


Data Sources: California Department of Education; U.S. Department of Education, Office for Civil Rights | Analysis: Silicon Valley Institute for Regional Studies

An additional 2.8% of Silicon Valley’s public school students (who may not qualify for Special Education) have formal accommodations through 504 plans (compared to 1.7% statewide, and 1.7% in Silicon Valley five years ago).⁴⁶ These plans, authorized under Section 504 of the Rehabilitation Act of 1973, ensure Free Appropriate Public Education (FAPE) to qualified students with disabilities.⁴⁷

While studies suggest that English Language Learners are disproportionately placed in Special Education due to assessment and language mismatches, local data show the opposite.⁴⁸ Although 19% of Silicon Valley English Learners are in Special Education (higher than the 12% of all students), this is relatively low given that 22% of Silicon Valley students are English Learners.⁴⁹

The share of third-graders meeting or exceeding the ELA standard is lower for economically disadvantaged students (defined as those qualifying for free or reduced-price school meals).⁵⁰ In 2023-24, 32% of economically disadvantaged students met or exceeded the ELA standard compared to 70% of not economically disadvantaged students; this trend is evident across all racial and ethnic groups.



Data Source: California Department of Education, California Assessment of Student Performance and Progress (CAASPP) | Analysis: Silicon Valley Institute for Regional Studies

Share of Third-Graders Meeting or Exceeding the Standard in English Language Arts		
	2019	2024
Silicon Valley	60%	55%
San Francisco	52%	51%
California	49%	43%

Silicon Valley has a higher share of third-graders meeting or exceeding the English language arts standard (55% in 2023-24) than San Francisco (48%) or the state as a whole (43%), although this share is low compared to pre-pandemic levels (by 5 percentage points).

Share of Third Graders Meeting or Exceeding the English Language Arts Standard, by Race & Ethnicity and Economic Status		
Santa Clara & San Mateo Counties 2024		
	Economically Disadvantaged	Not Economically Disadvantaged
Asian	63%	81%
White	56%	72%
Filipino	52%	65%
Two or More Races	47%	78%
Black or African American	27%	53%
Native Hawaiian or Pacific Islander	23%	45%
Hispanic or Latino	20%	43%
All	32%	70%

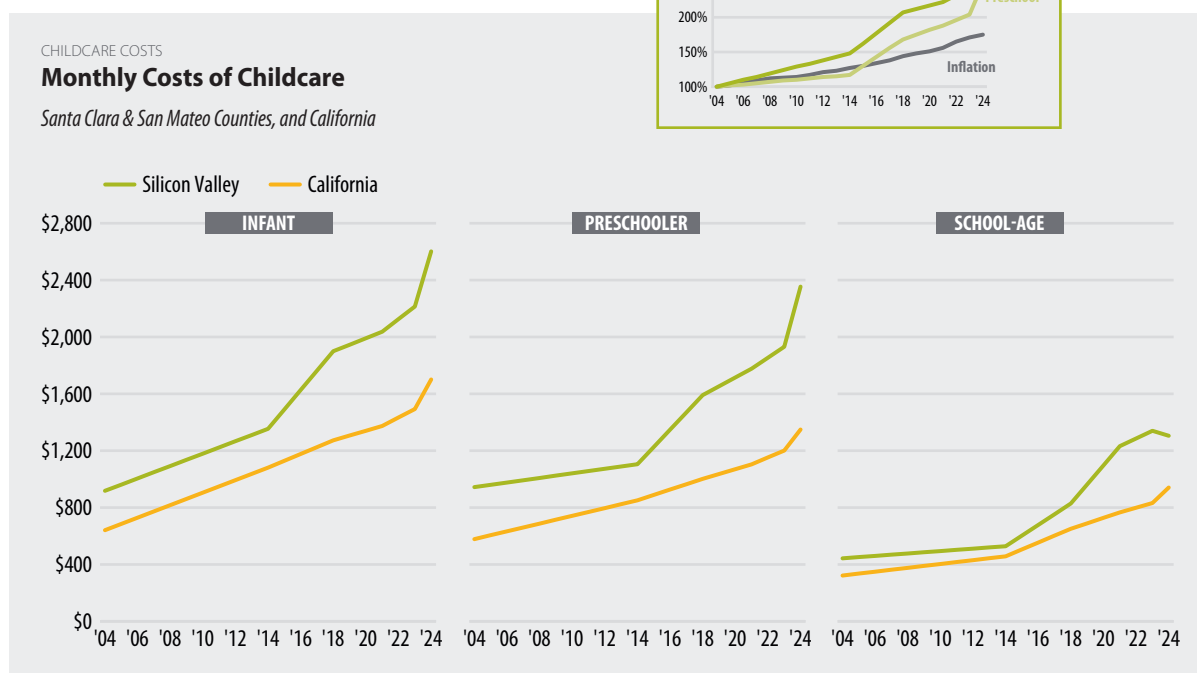
Note: A student who qualifies for free or reduced-price school meals is considered economically disadvantaged.

Third-grade English Language Arts (ELA) proficiency in Silicon Valley varies significantly by race and ethnicity, with Asian students having the highest share (79%) meeting or exceeding the standard, while only 28% of Hispanic or Latino students and 40% of Black or African American students met or exceeded the standard during the 2023-24 academic year.

Silicon Valley childcare costs have tripled over the past two decades, rising twice as quickly as the regional inflation rate.

The cost of full-time childcare at licensed infant care facilities rose to \$31,200 in 2024.

Childcare costs have doubled over the past decade and tripled since 2003.



Data Source: Center for Women's Welfare, University of Washington; U.S. Bureau of Labor Statistics | Analysis: Silicon Valley Institute for Regional Studies

Silicon Valley families with three children (for example, one infant, one preschooler, and one school-aged child) may have paid more than \$75,000 last year on childcare alone.

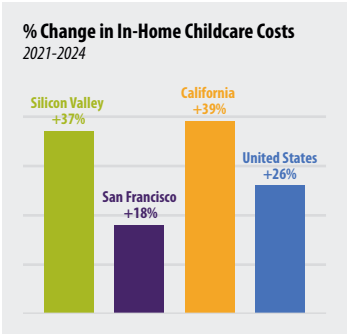
For many Silicon Valley families with young children, childcare costs are the largest monthly expense — above even housing, healthcare, and taxes. This is particularly apparent in families with young children and those with more children than adults (e.g., one adult with two preschoolers, or two adults with a preschooler and two school-age children). In contrast, high housing costs — and associated increase in taxes at a Self Sufficiency wage — tend to be the largest monthly expense item across most family types.⁵¹

Annual Costs of Childcare for various family compositions 2024				
	1 Infant	1 Infant 1 Preschooler	2 School- Age Children	1 Infant 1 Preschooler 1 School-Age Child
Silicon Valley	\$31,200	\$59,500	\$31,300	\$75,100
Bay Area	\$28,000	\$52,500	\$28,900	\$66,900
California	\$20,400	\$36,600	\$22,600	\$47,900

The average annual cost of an in-home childcare provider in Silicon Valley rose by 4% year-over-year in 2024, reaching more than \$57,000 annually for one child — not inclusive of additional employer costs such as household employment taxes, workers’ compensation insurance, or tax and payroll services.

Average In-Home Childcare Costs costs of full-time care of one child 2024		
	Monthly	Annual
Silicon Valley	\$4,800	\$57,540
San Francisco	\$4,510	\$54,160
California	\$4,170	\$50,020
Portland, OR	\$3,670	\$43,990
Phoenix, AZ	\$3,540	\$42,470
San Antonio, TX	\$2,960	\$35,510
National Average	\$3,510	\$42,060

Data Source: Care.com | Analysis: Silicon Valley Institute for Regional Studies



The average monthly cost of an in-home childcare provider in Silicon Valley (\$4,800) or San Francisco (\$4,510) is higher than the national average (\$3,510) and many other major U.S. cities such as San Antonio (\$2,960), Phoenix (\$3,540), and Portland (\$3,670).

The cost of an in-home childcare provider in Silicon Valley rose 37% over the past four years (and 4% in 2024 alone). This compares to +18% in San Francisco, +39% in California overall, and +26% nationally.

The cost of an in-home childcare provider for one child remains significantly higher in the ten most expensive Silicon Valley cities (\$61,540 annually in 2024) than in the ten least expensive areas (\$54,140 annually). This indicates that the cost of care is dictated to a larger extent by what hiring parents can afford than by the income needs of care providers.

Childcare at licensed facilities is a more affordable option in Silicon Valley than an in-home childcare provider (at approximately \$28,200 for preschool at a licensed facility, compared to \$57,500 per year for a nanny in 2024).

Nannies in Silicon Valley earned an average of \$27.66 per hour in 2024. While this amount is well above that of even the highest local city minimum wage ordinance that year (Mountain View at \$18.75),⁵² it should be noted that in-home care providers are unlikely to receive medical coverage⁵³ or other benefits of employment.

Significant savings are made possible by hiring one in-home childcare provider to care for multiple children in one household (or participating in a *nanny share*). Nationally, an in-home childcare provider for two children offers a 48% discount per child; the average daycare center discount is 13%.⁵⁴

WHAT ARE THE KEY FINDINGS?

Arts and culture industries play a significant role in Silicon Valley’s regional economy, contributing an estimated \$255 billion in direct, indirect, and induced economic output in 2023 — representing 26% of the region’s total economic output. While the direct impact of core arts and culture industries is relatively small at 5% of total output, the contribution rises to 21% when including supporting industries, as well as indirect and induced (through household spending) effects.

The arts and culture sector also generated \$2.31 billion in local government tax revenues in 2023, though this was down from \$2.6 billion in 2021. Employment in core arts and culture industries grew by

15% between 2021 and 2023, but supporting industry employment declined by 39%. Notably, the number of arts and culture nonprofits in Silicon Valley has grown

Employment in core arts and culture industries grew by 15% between 2021 and 2023.

substantially, with 190 new or revived organizations added since 2021, reflecting the region’s growing diversity and community engagement in the arts.

WHY IS THIS IMPORTANT?

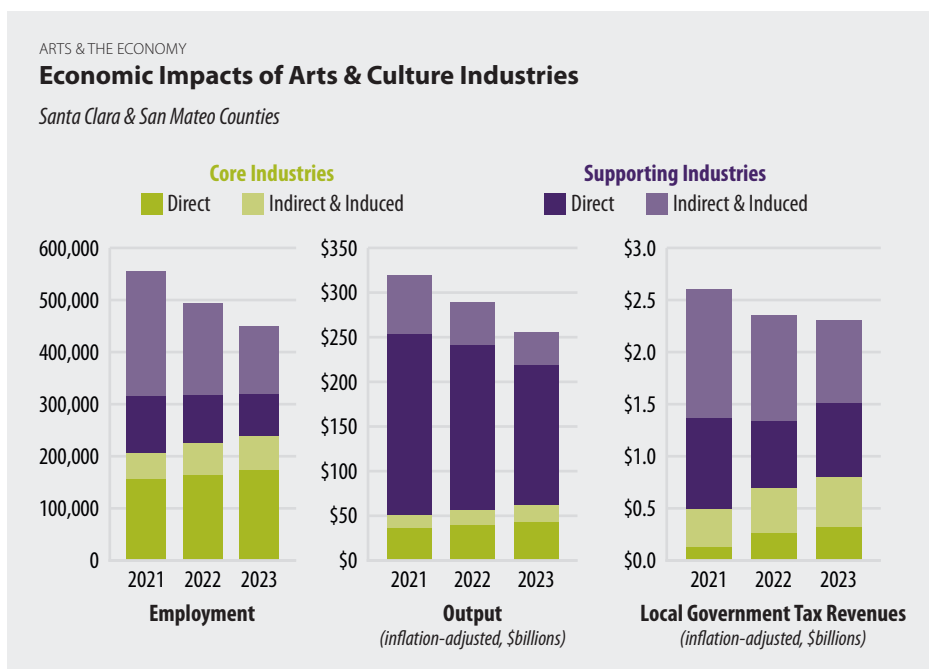
Arts and culture industries play an integral role in Silicon Valley’s economic, social,

and civic health. They bring the community together for both enjoyment and enrichment, and contribute significantly to creative thinking, social activity, and quality of life overall.

As both producers and employers, nonprofit arts and cultural organizations reflect regional interests and diversity. Unique cultural activities help attract and retain residents, as well as support businesses and promote civic connections

throughout the community.

Arts and culture industries have direct impacts on Silicon Valley’s economic activity, as well as significant indirect (through business-to-business spending) and induced impacts (from household spending by employees within the supply



Note: See methodological notes for definitions of Core and Supporting industries. | Data Source: IMPLAN | Analysis: Silicon Valley Institute for Regional Studies

Core arts and culture industries, in combination with supporting industries (such as musical instrument manufacturing, art support services, and sound recording industries), together contribute \$201 billion to Silicon Valley’s direct economic output. This total rises to an estimated \$255 billion when including indirect and induced (through household spending) impacts related to arts and culture’s core and supporting industries — representing 26% of total regional output in Santa Clara and San Mateo counties in 2023.

chain) on employment, output, and local government tax revenues.

The region's growing number and mix of arts nonprofits are indicative of its ability to organize and generate cultural and creative activities for its increasingly diverse community. Event attendance

and spending on arts and culture activities reflect the public's interests; they help sustain the organizations and their employees and indirectly support local retail, hotel, restaurant, and other economic activity within downtowns and neighborhood centers.

The contribution of core and supporting arts and culture industries to Silicon Valley's regional economic output rose by 22% for core industries between 2021 and 2023 (after inflation-adjustment), but declined by 28% for supporting industries — resulting in an overall decline of 20% over that period.

Arts and culture's core and supporting industries, combined, contributed an estimated \$2.31 billion in local government (sub-county) tax revenues in 2023. This total illustrates how local government tax revenues are positively impacted by arts and culture industries, with labor-intense activities taking place locally (using local suppliers), and including spillover spending at hotels, restaurants, and bars, and on parking and other local services.

While core arts and culture industry employment levels grew by 15% between 2021 and 2023, supporting industry employment declined by 39%.

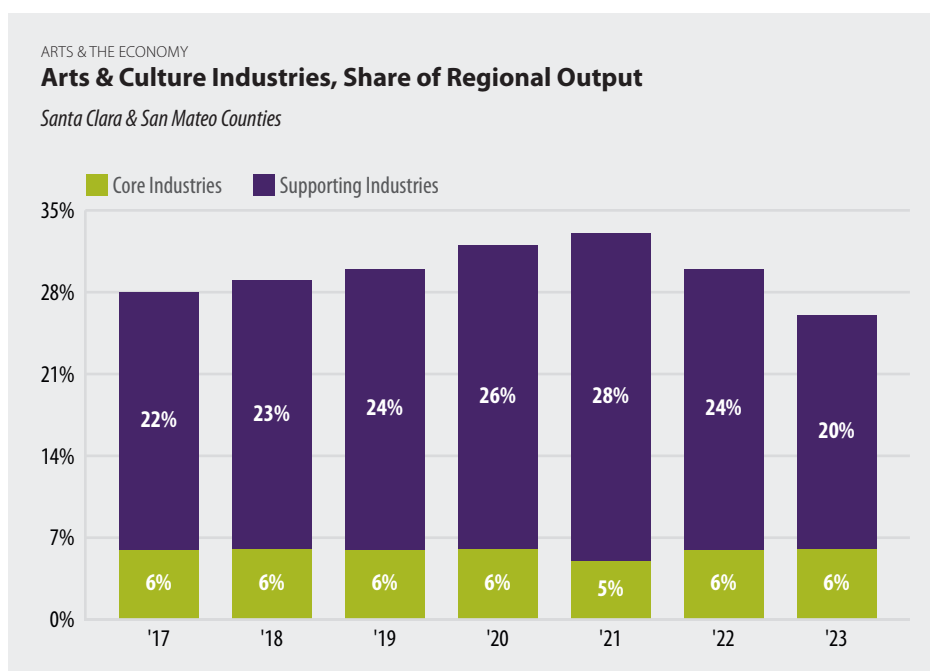
While the direct impact of core arts and culture industries on Silicon Valley's regional economy is relatively small (5% of total output in 2023), this share rises significantly when including supporting industries (to 21%) and even more when taking into account the indirect and induced economic effects (to 26%).

Arts- and culture-generated local government tax revenues declined from \$2.6 billion in 2021 to \$2.31 billion in 2023 (after inflation-adjustment), including a 60% gain in the impact of core industries but a 28% decline in that of supporting industries.

The gains in employment, output, and local tax revenues for core arts and culture industries were primarily due to indirect and induced impacts, rather than direct impacts.

The contribution of arts and culture (core and supporting) industries on Santa Clara and San Mateo counties' total economic output continued a two-year downward trend (from 33% in 2021 to 26% in 2023) following four straight years of increasing gains.

While core arts and culture industries — such as performing arts companies, independent artists, and photographic services — contributed 6% to Silicon Valley's regional output in 2023, supporting industries contributed more than three times that share (20%).

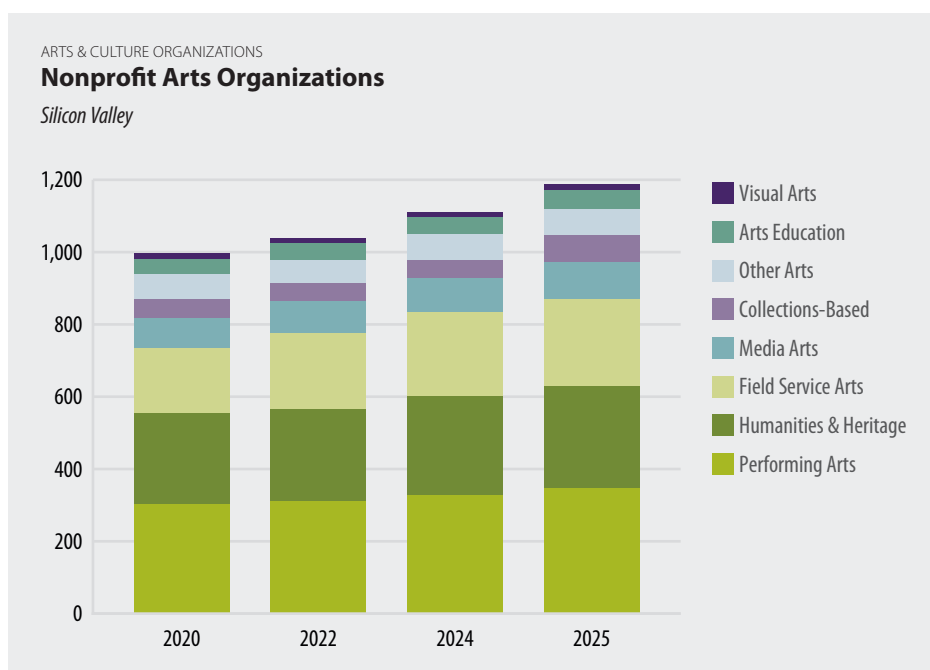


Note: See methodological notes for definitions of Core and Supporting industries. | Data Source: IMPLAN | Analysis: Silicon Valley Institute for Regional Studies

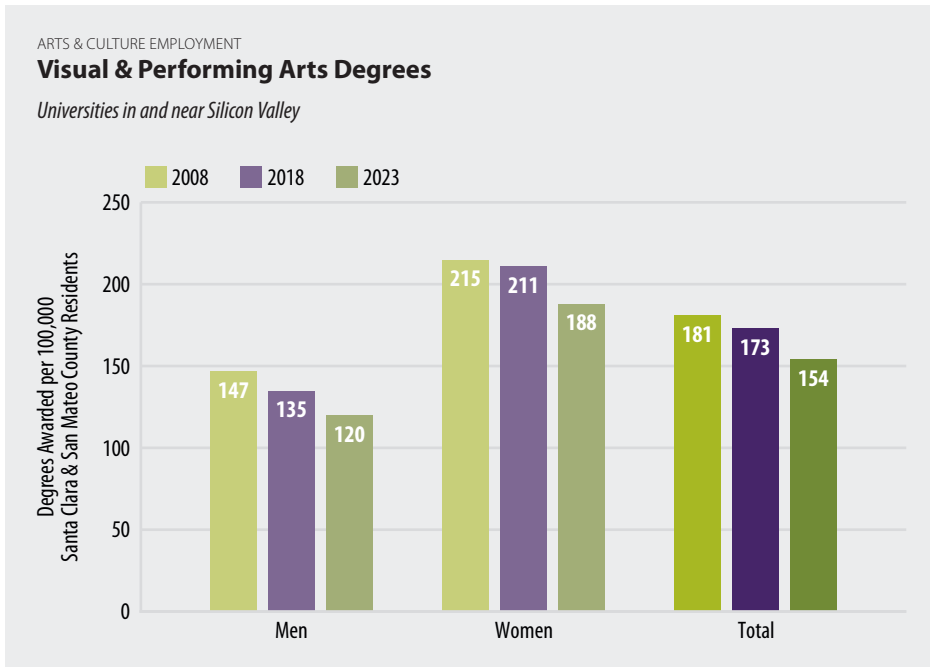
The number of Silicon Valley arts & culture nonprofits increased by 75 organizations last year (+7%); 18 of these organizations were in performing arts, and seven were in media arts.

Performing arts (e.g., dance companies, theaters, orchestras and ensembles, and performing arts centers) represent the largest share (29%) of arts organizations in Silicon Valley.

Since 2020, Silicon Valley has gained 190 new (or revived) arts & culture organizations, reaching a total of nearly 1,190 in early 2025.



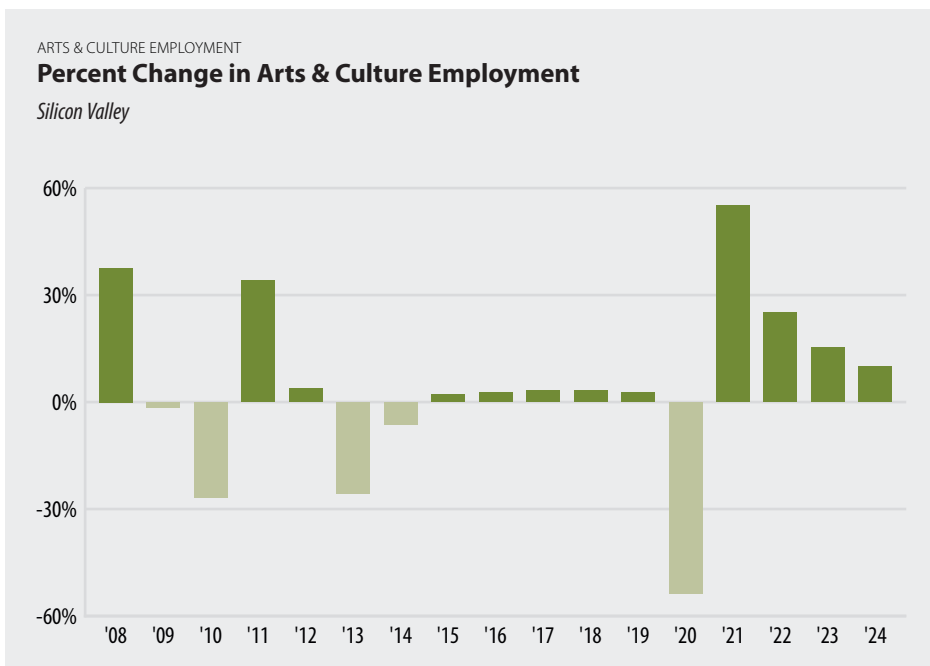
Data Source: Internal Revenue Service | Analysis: Silicon Valley Institute for Regional Studies



Data Sources: National Center for Educational Statistics, IPEDS; United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

The number of visual and performing arts degrees conferred (per capita) by greater Silicon Valley academic institutions declined by 11% between 2018 and 2023; this trend was observed for both men and women.

Since 2008, women have consistently outpaced men in terms of the number of arts degrees conferred per 100,000 residents.

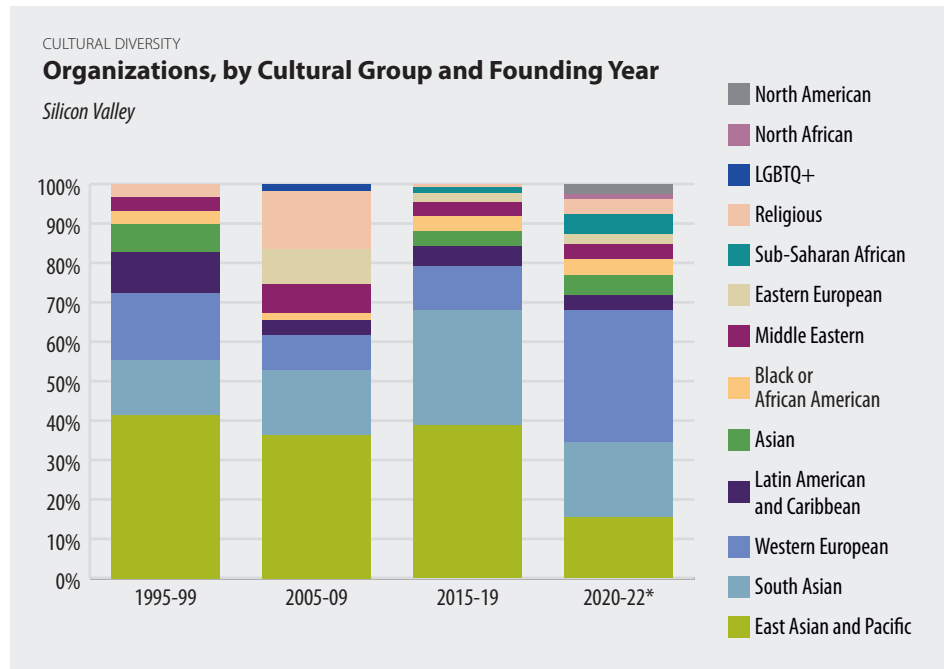


Note: Includes jobs in arts, entertainment, and recreation. | Data Sources: U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages; JobsEQ | Analysis: BW Research; Silicon Valley Institute for Regional Studies

Arts, Entertainment & Recreation jobs in Silicon Valley grew by 10% year-over-year, reaching more than 22,700 in mid-2024; this compares to a slight decline (less than 1%) in Silicon Valley jobs overall, across all industries.

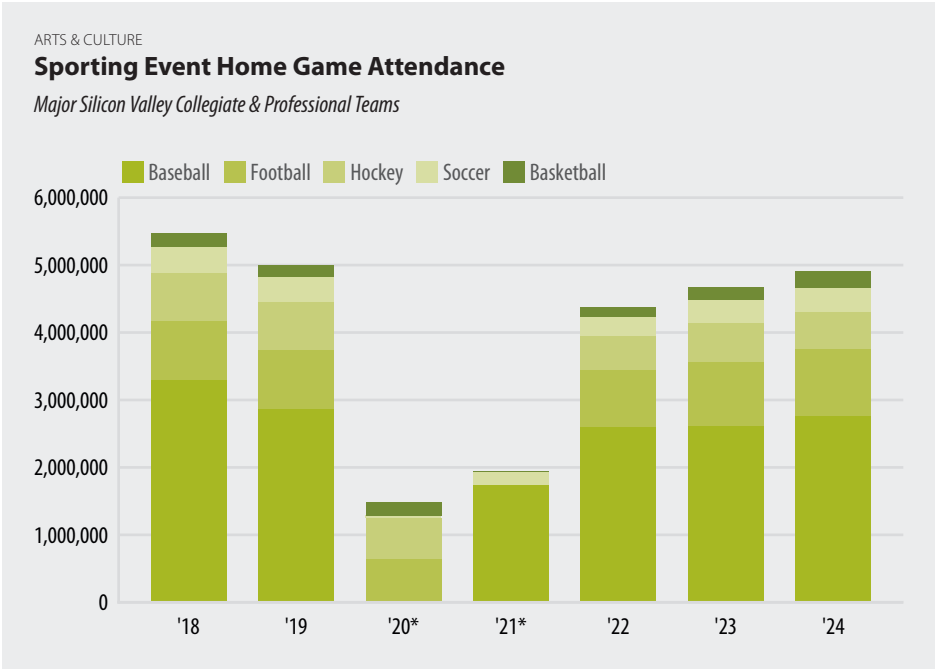
Interest in a multitude of creative and cultural activities is evidenced by the growth of nonprofit Arts, Culture, and Humanities organizations.

Silicon Valley is experiencing growth in the number of small, voluntary community arts organizations.



The number and diversity of newly-formed arts organizations in Silicon Valley representing BIPOC⁵⁵ communities continued to grow faster than those with Western European art forms as their primary focus; the growing diversity of these organizations is becoming more reflective of the region's highly diverse population.

Silicon Valley sporting game home attendance continued a four-year upward trend last year, reaching a total of 14.5 million.



*Attendance numbers not reported for all teams in the 2020 and 2021 seasons due to severely limited attendance/capacity requirements during the pandemic. | Note: Years represent the season ending (or completely within) a given year. | Data Sources: National Collegiate Athletic Association (NCAA); ESPN; WorldFootball.net; The Baseball Cube; San Jose Sharks; StatBroadcast; San José State Spartans; Baseball Reference; Hockey Reference; Stanford Athletics; Santa Clara University Athletics | Analysis: Silicon Valley Institute for Regional Studies

As is typical among Silicon Valley’s major collegiate and professional sports, the largest share of home-game attendance was at baseball games (57%) during the 2024 season — primarily at San Francisco Giants games, which attracted nearly 2.7 million attendees that year.

The San Francisco 49ers’ home game attendance rose sharply in 2023 (+17% year-over-year), then came down slightly during the 2024 season (by less than 1%).

Collegiate sports gained attendance at home games over the prior year (+19%), but remained at less than three-quarters (71%) of pre-pandemic levels.

WHAT ARE THE KEY FINDINGS?

Silicon Valley's working-age population has experienced a significant rise in health insurance coverage since 2013, with an estimated 94% of 19–64-year-olds covered in 2023. Although this exceeds the state and national averages (91% and 89%, respectively), coverage rates vary by employment, with a 3 percentage-point decline for unemployed residents (89%) and a 1-point increase for employed residents (95%).

In 2023, one in six Bay Area single adults with children struggled to pay medical bills, compared to one in 13 Bay Area adults overall. Despite earning 34% more on average, these single parents were more likely to struggle with medical bills (18%) than those statewide (14%). This suggests that even

higher-income residents are struggling to afford healthcare, underscoring the need to address access for vulnerable populations.

Bay Area residents with health insurance

One in six Bay Area single adults with children struggled to pay medical bills.

self-reported “very good” or “excellent” health at a rate 14 percentage points higher than those without. Men (61%) were more likely than women (54%) to rate their health as “very good” or “excellent” (61%), as were children across Santa Clara and San Mateo counties (76%) compared to

young adults ages 18–34 (56%) or the population overall (58%).

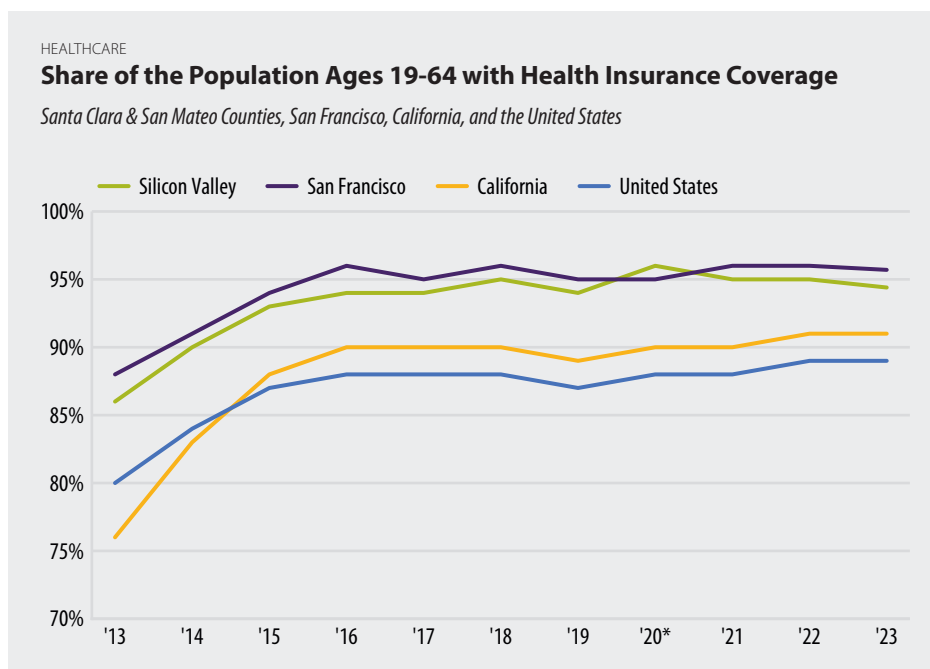
Looking at broader health trends, the rates of diabetes and hypertension diagnoses rose by 2 and 4 percentage points, respectively, since 2019. However, the shares of Silicon Valley adults ever diagnosed with these conditions (9% and 12%) are still much lower than state averages (12% and 35%). Cancer has remained

the leading cause of death in Silicon Valley over the past decade (23%), while COVID became the third-leading cause in 2020–2021 and Alzheimer's deaths doubled from 3% to 6% between 2014 and 2024.

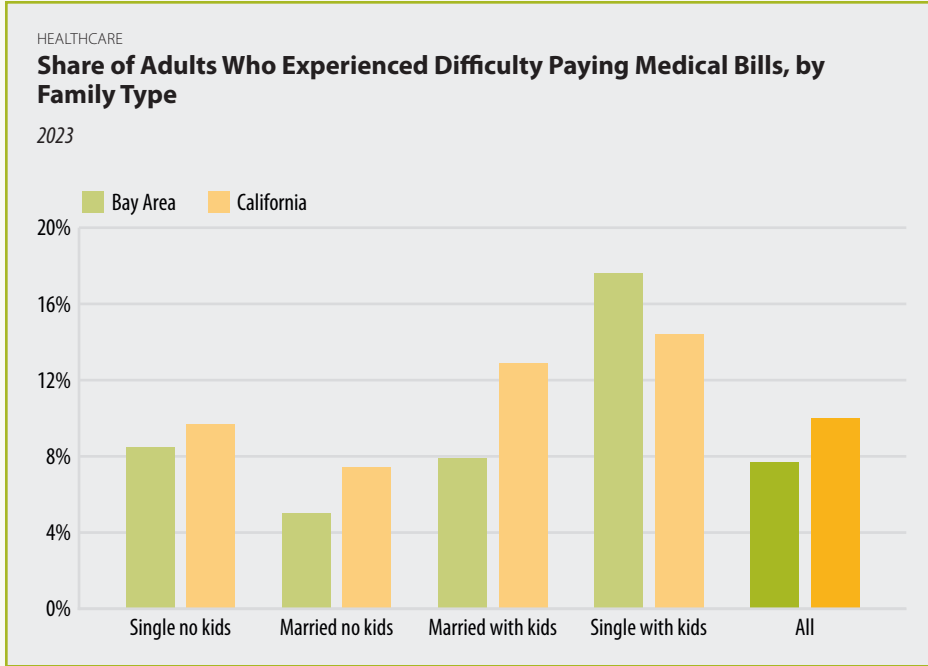
The share of Silicon Valley children experiencing serious psychological distress rose to 43% in 2021, including more than half (56%)

Continued on page 130

Health insurance coverage for the working-age population increased significantly between 2013 and 2023, influenced by the availability of coverage through the Affordable Care Act. Since 2016, the share with health insurance has hovered between 94% and 96%. In 2023, an estimated 94% of Silicon Valley's 19- to 64-year-olds were covered by health insurance (compared to 96% in San Francisco, 91% in California, and 89% in the United States as a whole).



*2020 estimate from 1-year American Community Survey microdata with experimental weights | Data Source: United States Census Bureau, American Community Survey & Household Pulse Survey | Analysis: Silicon Valley Institute for Regional Studies



Bay Area single adults with children were more likely to experience difficulty paying their family's medical bills (18%) than those statewide (14%) in 2023, despite having average annual incomes that were 34% higher.⁶⁰

One in six Bay Area single adults with children faced difficulty paying medical bills in 2023; this compares to one in 13 Bay Area adults overall.

Note: Difficulty includes at any time over the past 12 months. | Data Source: UCLA Center for Health Policy Research, California Health Interview Survey
Analysis: Silicon Valley Institute for Regional Studies

Percentage of Individuals Ages 18+ with Health Insurance, by Employment Status 2023			
	Unemployed	Employed	Not In Labor Force
Silicon Valley	89%	95%	93%
San Francisco	87%	97%	92%
California	84%	92%	89%

Silicon Valley's health insurance coverage rates between 2019 and 2023 varied by employment status, with a 3 percentage point decline for unemployed residents (89%) and a 1 percentage point increase for employed residents (95%).

Change in the Percentage of Individuals Ages 18+ with Health Insurance, by Employment Status Santa Clara & San Mateo Counties 2019-2023	
Unemployed	-3%
Employed	1%
Not in Labor Force	1%

Data from the National Health Interview Survey (NHIS) show a decline in the uninsured rate for all ages by an estimated 2 percentage points (from 10% to 8%) between 2020 and 2023. Early 2024 data reveal a national uninsured rate of approximately 8%. Those least likely to be insured include adults ages 18 to 64, with 11% uninsured nationally.⁶¹

Continued from page 128

of female children. Prior to the pandemic, an estimated 12% of Silicon Valley residents reported severe psychological distress. Just over half of Silicon Valley adults (51%) who sought help for mental health or substance abuse issues in 2021 actually received it, indicating large gaps in access.

Significant racial disparities are evident regionally. For example, Hispanic/Latino and Black/African American residents are three to six times more likely to go to the emergency room for asthma or COPD. Black/African American women in the Bay Area die of pregnancy-related complications at a rate significantly higher than women of other races and ethnicities and were nearly four times more likely than White women to have an infant die before their first birthday. Life expectancy in Silicon Valley is higher (85

years) than in the state or country, but varies among racial/ethnic groups.

WHY IS THIS IMPORTANT?

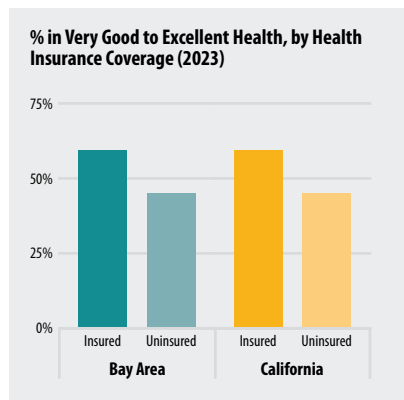
Early and continued access to quality, affordable health care is important to ensure that Silicon Valley's residents are thriving. Given the high cost of healthcare, individuals without health insurance are less likely to seek routine medical care and preventive health screenings.

An unhealthy weight increases the risk of many diseases and health conditions, including Type 2 diabetes, hypertension, coronary heart disease, stroke, and some types of cancers — all of which are among Silicon Valley's leading causes of death. These conditions decrease residents' ability to participate in their communities, increase

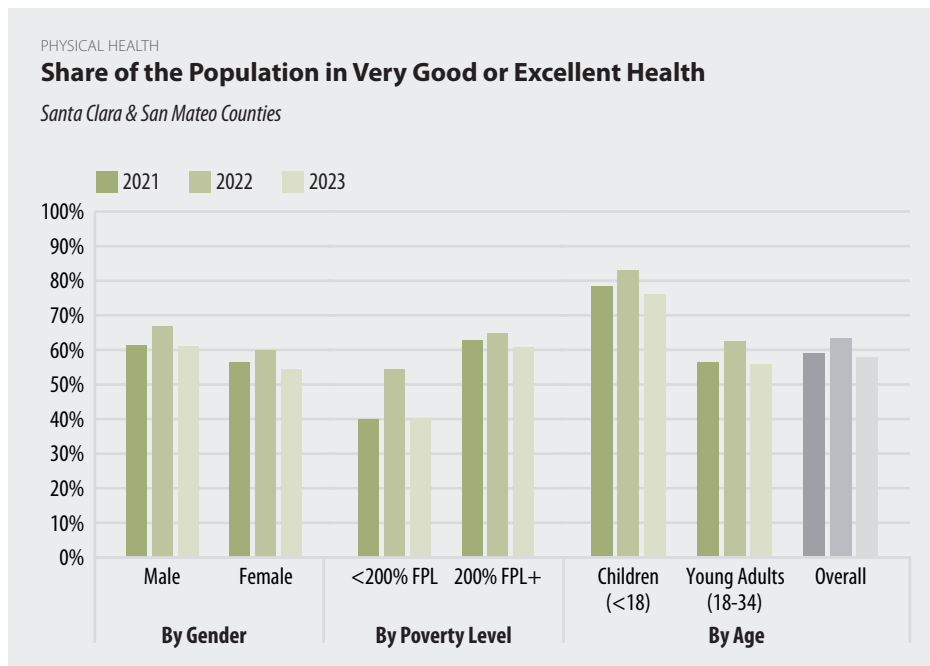
medical expenses, and have significant economic impacts on the nation's healthcare system, as well as on the overall economy.

Asthma rates have increased significantly over the past 30 years, and Chronic Obstructive Pulmonary Disease (COPD) is one of the leading causes of death. People with COPD are more susceptible to respiratory infection. Asthma attacks may result from unhealthy air quality in general, or from exposure to point-source or emissions-based pollutants.⁵⁶

Hypertension, in particular, is responsible for one out of every three deaths in California and is a risk factor for a number of other diseases. Additionally, the prevalence of hypertension has been closely tied to inequities in access to healthcare throughout the state.⁵⁷



Estimates based on self-reported ratings of "very good" or "excellent" overall health are 14 percentage points higher for Bay Area residents who have health insurance compared to those without (in 2023); this same trend is observed throughout the state (with a 16-point differential).



Data Source: UCLA Center for Health Policy Research, California Health Interview Survey | Analysis: Silicon Valley Institute for Regional Studies

Improving the wellbeing of mothers, infants, and children is an important public health goal for any region, and maternal morbidity and mortality metrics are considered fundamental indicators of public health. Maternal and infant health statistics shed light on outcomes linked to systemic racism⁵⁸ and provide information about how well the region is preparing the next generation of healthy young residents.

Timely childhood immunizations promote long-term health, save lives, prevent significant disability, and reduce medical costs. Cesarean sections (C-Sections) are a necessary intervention that can prove life-saving in many cases. Overuse of non-medically

indicated C-Sections, however, has been documented in wealthy communities around the world but has not been linked to added health benefits for mothers or babies.⁵⁹

Mental and emotional health of individuals is essential to community wellbeing; the circumstances of the pandemic — such as financial hardships, loneliness and isolation, among many other challenges — may have contributed to the share of people experiencing symptoms of anxiety and/or depression.

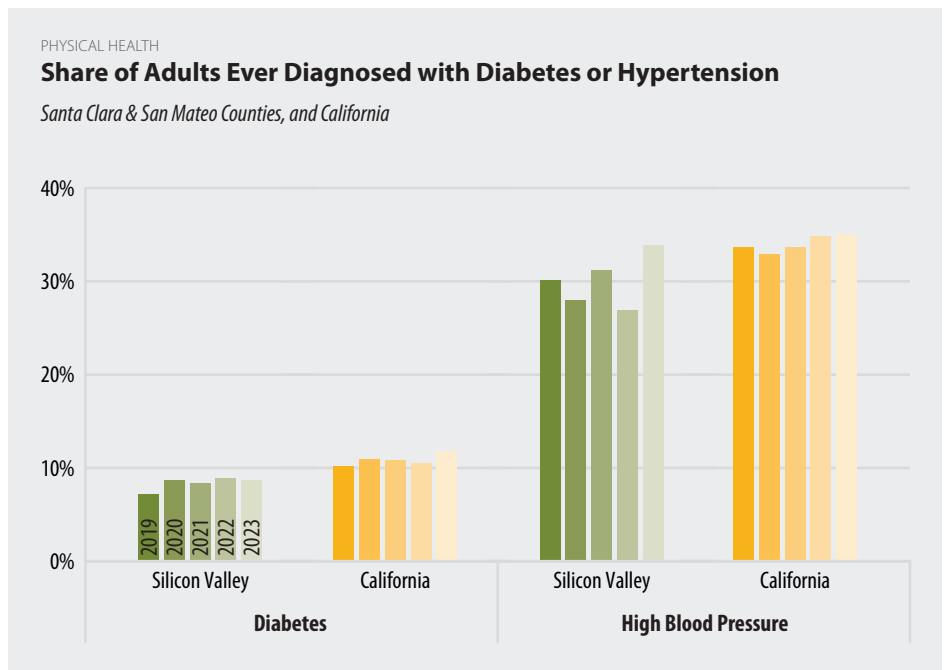
Silicon Valley's "very good" or "excellent" general health ratings declined slightly in 2023 across all groups analyzed — down by 6 percentage points overall, 14 points for those with incomes less than 200% of the federal poverty limit (and 4 points for those above it), 7 points for children, and 7 points for young adults.

Men in Silicon Valley are more likely to rate their health as "very good" or "excellent" (61% in 2023) compared to women (54% that year).

Children across Santa Clara and San Mateo counties are more likely to rate their general health as "very good" or "excellent" (76% in 2023) than young adults (56% of those ages 18-34) or the population overall (58%).

The rates of both diabetes and hypertension diagnoses in Silicon Valley increased since 2019 (by 2 and 4 percentage points, respectively); a similar increase is estimated statewide.

The shares of Silicon Valley adults ever diagnosed with either diabetes or hypertension are much lower than those of California overall; in 2023, the Silicon Valley shares were 9% and 12%, respectively, compared to 12% and 35% throughout the state.



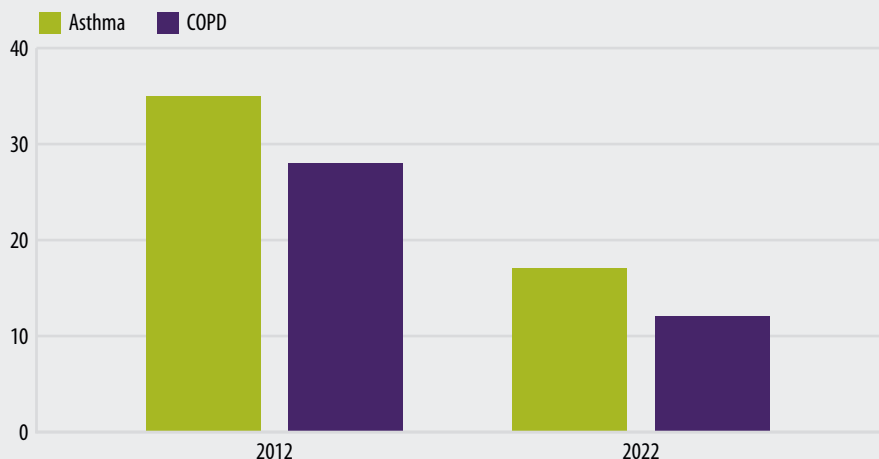
Note: High Blood Pressure includes borderline. | Data Source: UCLA Center for Health Policy Research, California Health Interview Survey
Analysis: Silicon Valley Institute for Regional Studies

PHYSICAL HEALTH

Asthma- & COPD-Related Emergency Department Visits

age-adjusted rates per 10,000

Santa Clara & San Mateo Counties



Data Source: Public Health Institute | Analysis: Silicon Valley Institute for Regional Studies

The incidence rate of asthma- and Chronic Obstructive Pulmonary Disease (COPD)-related emergency room visits has declined significantly in Silicon Valley and statewide over the past decade.

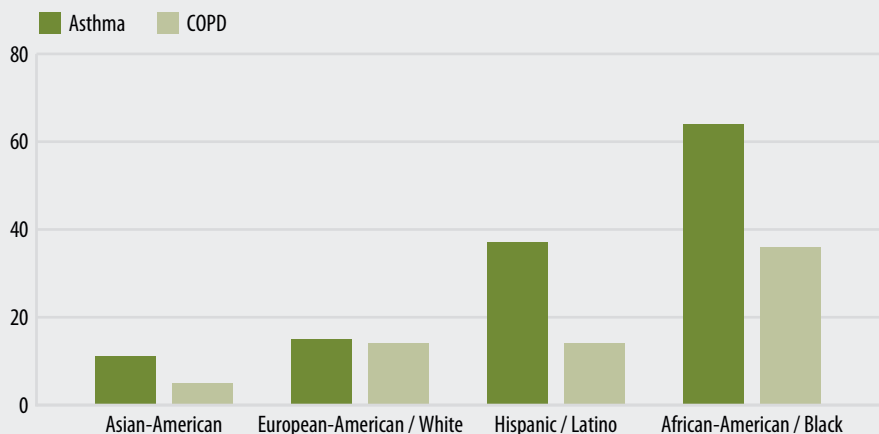
The rates of both asthma- and COPD-related emergency room visits in Santa Clara and San Mateo counties are much lower than those in the state overall.

PHYSICAL HEALTH

Asthma- & COPD-Related Emergency Department Visits, by Race & Ethnicity

age-adjusted rates per 10,000 (2022)

Santa Clara & San Mateo Counties



Data Source: Public Health Institute | Analysis: Silicon Valley Institute for Regional Studies

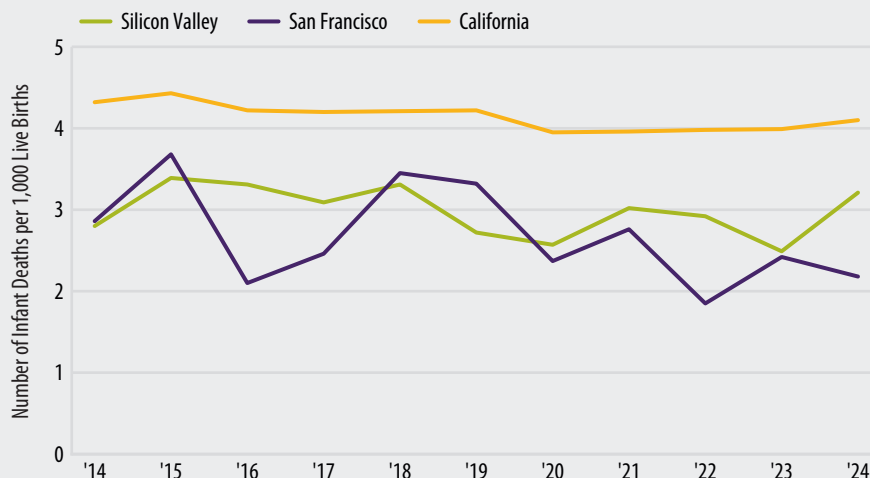
Emergency room visits due to asthma or COPD in Silicon Valley vary widely by race and ethnicity. The lowest age-adjusted rates are among Asian-Americans (11 per 10,000 people for asthma, and 5 per 10,000 for COPD), and the highest are among Hispanic/Latino residents (37 and 14 per 10,000) and African-American/Black residents (64 and 36 per 10,000).

In 2024, Silicon Valley's infant mortality rate (3.2 per 1,000 live births)⁶² is higher than in San Francisco (2.2 per 1,000), but lower than in California overall (4.1 per 1,000), the national average (5.1 per 1,000 live births), and is significantly lower than the world average (28 per 1,000 live births in 2022).⁶³

MATERNAL, INFANT, AND CHILDREN'S HEALTH

Infant Mortality Rate

Santa Clara & San Mateo Counties, San Francisco, and California



Data Sources: U.S. Department of Health and Human Services, Centers of Disease Control and Prevention (CDC); California Department of Public Health
Analysis: Silicon Valley Institute for Regional Studies

Pooled data for years 2018 to 2023 indicate that Black or African American women in the nine-county Bay Area died of pregnancy-related complications at significantly higher rates than women of other races/ethnicities (69 per 100,000 live births, compared to 16 per 100,000 for all other women).

Multiple ongoing efforts in California and nationwide aim to improve transparency, monitoring, and data surrounding birth equity and the improvement of both maternity care and maternal outcomes for all mothers; many of these projects are specifically focused on improving outcomes for Black or African American mothers given their historically high rates of maternal morbidity and mortality.⁶⁴

Over the six-year period between 2017 and 2022, Black or African American women in Silicon Valley were nearly four times more likely than White women (and approximately three times more than the overall rate) to have an infant die before their first birthday.

Infant Mortality Rate by Race & Ethnicity

number of infant deaths per 1,000 live births
Santa Clara & San Mateo Counties | 2017-2022

Black or African American	8.3
Multiple, Other or Unknown	3.8
Hispanic or Latino	2.7
White	2.0
Asian	2.2
Overall	2.8

Note: Except Hispanic or Latino, all subpopulations are not Hispanic or Latino.

Maternal Mortality Rate, by Race & Ethnicity

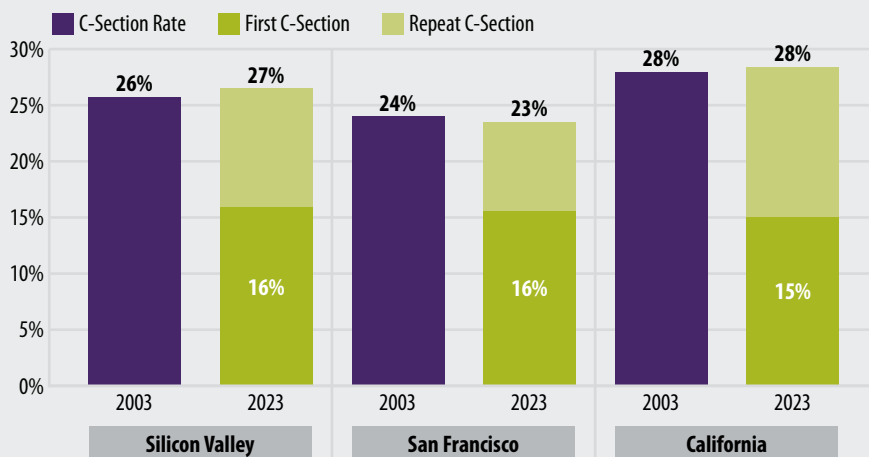
number of deaths related to pregnancy, childbirth, and the postpartum period per 100,000 live births
(2018-2023)

Nine-County Bay Area

Black or African American	69
Hispanic or Latino	13
Asian or Pacific Islander	8
White	18
Overall	16

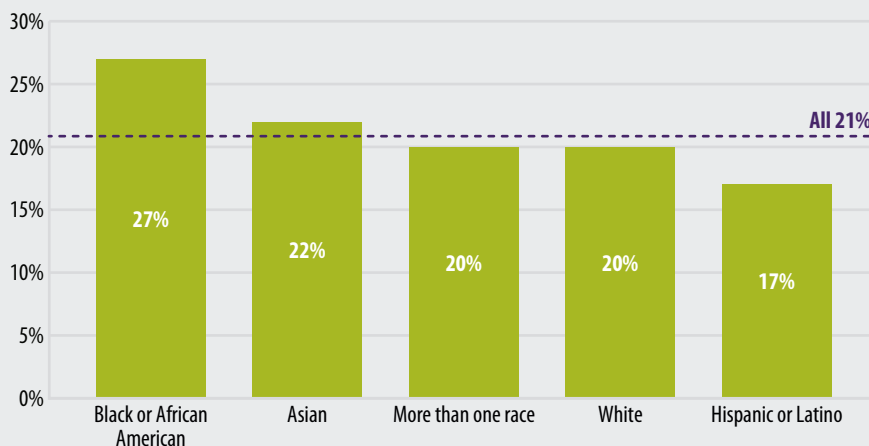
Note: Except Hispanic or Latino, all sub-populations are not Hispanic or Latino.

National statistics reveal similar racial disparities in maternal health. A recent Kaiser Family Foundation study found that broad social and economic factors and structural and systemic racism, in addition to access to health insurance coverage and care, are primary drivers for maternal and infant health.⁶⁵

Cesarean Section Rate*Santa Clara & San Mateo Counties, San Francisco, and California*

Note: C-Section data by primary (first) and repeat were not available prior to 2016. | Data Source: U.S. Department of Health and Human Services, Centers of Disease Control and Prevention (CDC) | Analysis: Silicon Valley Institute for Regional Studies

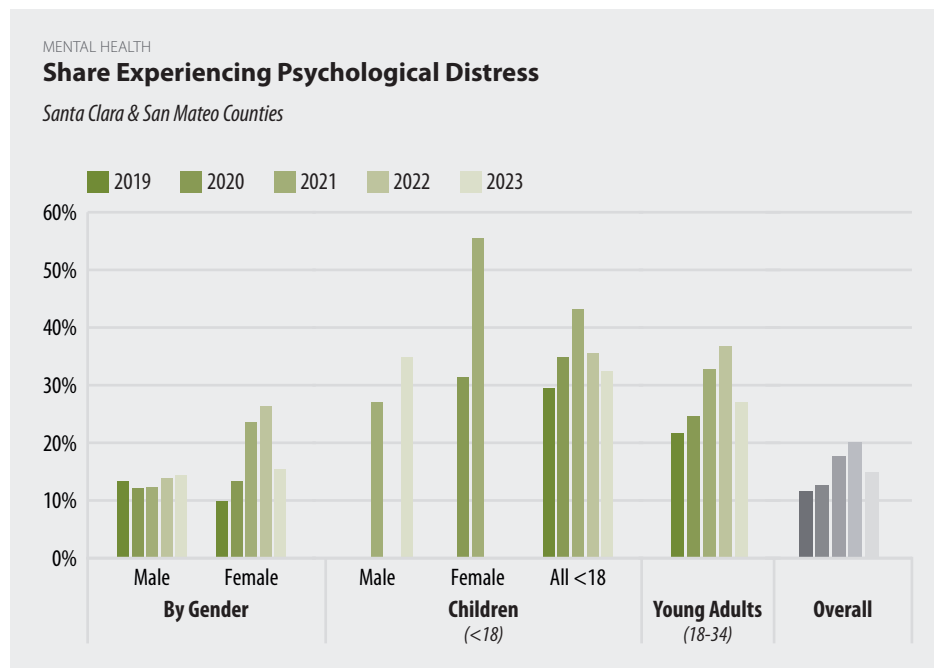
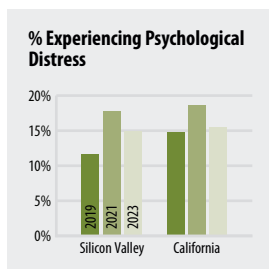
In 2023, the C-Section rate in Silicon Valley (27%) was the lowest rate since 2004.⁶⁶ These rates compare to 23% in San Francisco and 28% statewide. On the national level, the 2023 cesarean delivery rate (32%) remained unchanged from 2021,⁶⁷ and was significantly higher than the federal Healthy People 2030 goal of 24% for low-risk deliveries.⁶⁸

Cesarean Section Rate, by Race and Ethnicity*First Birth, Low-Risk, at Term**Santa Clara & San Mateo Counties | 2016-2022*

Data Source: U.S. Department of Health and Human Services, Centers of Disease Control and Prevention (CDC) | Analysis: Silicon Valley Institute for Regional Studies

Black or African American women delivering their first at-term baby in Silicon Valley experience C-Sections at a rate (27%) that is significantly higher than women of other races and ethnicities (20-22%), despite low-risk factors.

The share of Silicon Valley children (under age 18) who experienced serious psychological distress at the height of the pandemic in 2021 rose to 43%, including more than half (56%) of female children.



Note: Statistically stable data for male (2019, 2020, 2022) and female (2019, 2022, 2023) children not available. | Data Source: UCLA Center for Health Policy Research, California Health Interview Survey | Analysis: Silicon Valley Institute for Regional Studies

Silicon Valley's children (<18), young adults (ages 18-34), and females experience disproportionately high shares of psychological distress.

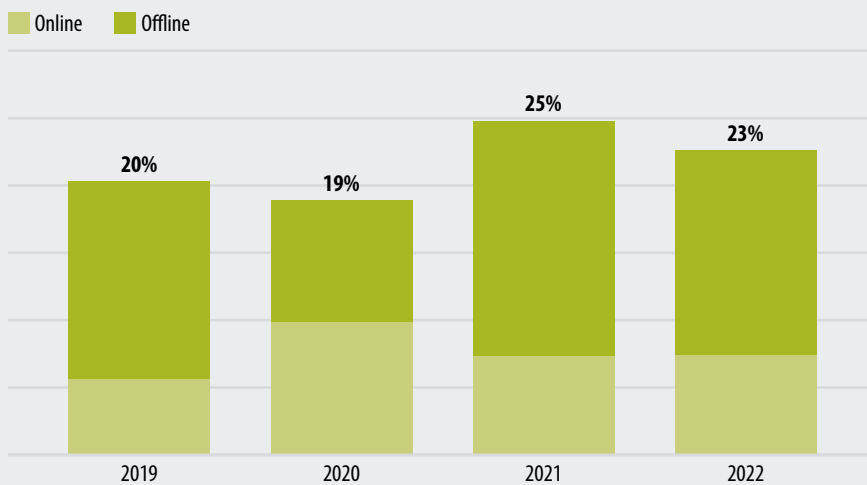
Prior to the pandemic (in 2019), an estimated 12% of Silicon Valley residents experienced severe psychological distress symptoms consistent with the Kessler Scale (feeling worthless, nervous, hopeless, restless or fidgety, so depressed that nothing could cheer them up, or that everything is an effort). This share rose to 18% in 2021, then declined slightly to 15% in 2023.

Rates of psychological distress for the population as a whole are slightly higher statewide than in Santa Clara and San Mateo counties; however, this is not the case for Silicon Valley children, whose experienced some form of serious psychological distress at rates 27% higher than the state in 2021 and 10% higher in 2023.

MENTAL HEALTH

Share of Adults Seeking Help for Mental Health or Alcohol/Drug Issues

Santa Clara & San Mateo Counties



Note: Statistically stable data for male (2019) and female (2019 and 2023) children not available. | Data Source: UCLA Center for Health Policy Research, California Health Interview Survey | Analysis: Silicon Valley Institute for Regional Studies

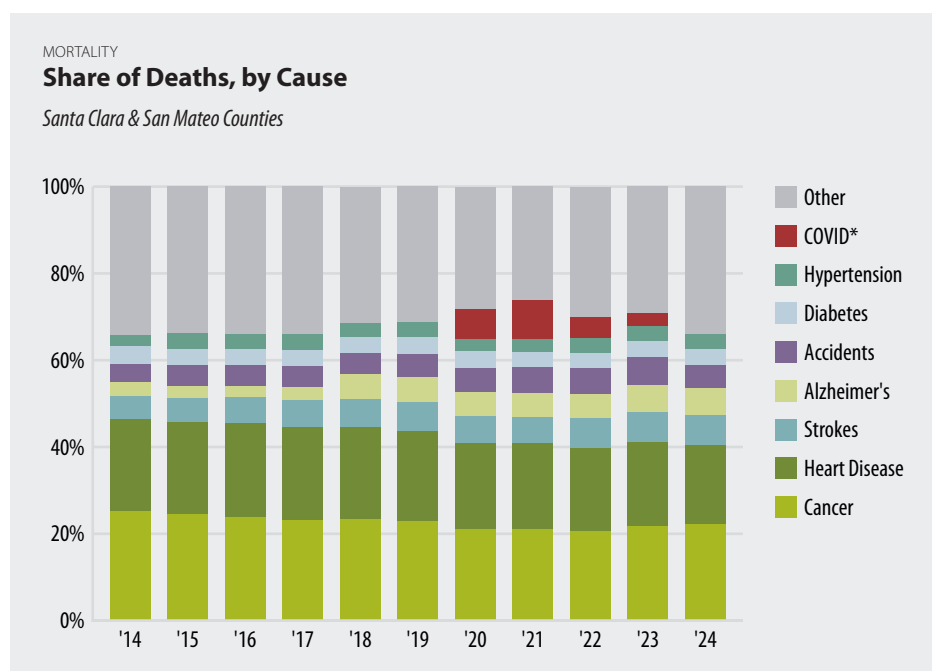
Approximately one in four (25%) Silicon Valley adults sought help for mental health or alcohol/drug issues in 2021. While fewer (19%) sought help in 2020, a larger share of those seeking help sought it online (52%).

Among Silicon Valley adults who sought help for either mental health issues or those related to alcohol or drugs in 2021, only about half (51%) received it.

The share of deaths related to Alzheimer's rose from 3% in 2014 to more than 6% in 2024.

In 2020 and 2021, COVID was the third leading cause of death in the region (associated with 8% of deaths) behind cancer (21%) and heart disease (20%).

The leading causes of death for Silicon Valley residents last year were, in order of prevalence, cancer, heart disease, strokes, Alzheimer's, accidents, and diabetes.



*COVID deaths through December 19, 2023. | Data Source: California Department of Public Health | Analysis: Silicon Valley Institute for Regional Studies

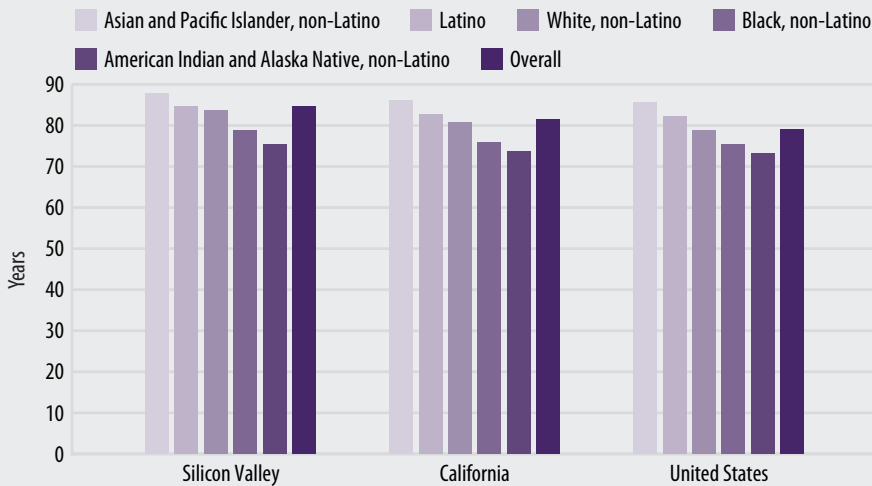
The share of deaths attributed to cancer, strokes, diabetes, hypertension, and other leading causes dipped slightly (by 1 to 2 percentage points) in 2020 and 2021, then came back up in 2022; this is likely due to comorbidities with COVID listed as the primary cause of death.

Over the past decade, nearly a quarter (23%) of Santa Clara and San Mateo county deaths have been cancer-related.

LONGEVITY

Average Life Expectancy at Birth

Santa Clara & San Mateo Counties, California, and the United States | 2019



Data Sources: United States Institute for Health Metrics and Evaluation (data: National Center for Health Statistics) | Analysis: Silicon Valley Institute for Regional Studies

Average life expectancy at birth is higher in Silicon Valley (85 years) than in the state overall (82 years) or the country (79 years); however, a large degree of variability exists among the region's racial/ethnic groups.

Life expectancy at birth in Silicon Valley is highest among Asians and Pacific Islanders (at nearly 88 years). In contrast, the average life expectancy for Black (79 years) and American Indian or Alaska Native residents in 2019 (75 years) were six and nine years below the regional average, respectively.

WHAT ARE THE KEY FINDINGS?

Crime rates in Silicon Valley have declined slightly, following several years of steady increases. The rate of violent crime fell by 2% in 2023, but remains elevated after spiking by more than 25% in 2020 to levels not seen since the early 2000s. Silicon Valley has a violent crime rate two-thirds that of the state. Notably, 2024 was the first year since 2017 without a mass shooting in Silicon Valley.

While the rate of property crime fell by about 14% year-over-year, incidents of shoplifting (+40%), pickpocketing (+25%), and car theft (+23%) all rose sharply in 2023 — trends that were mirrored across the state. Of the 75,000 crimes reported within the region that year, 86% were property related,

and more than one-third involved theft of or from a motor vehicle.

Of those arrested for felony offenses in Silicon Valley, 95% were adults (18+) and

Perceptions of crime and safety diverge sharply across demographic groups.

80% were male. The region's juvenile felony arrest rate closely followed statewide trends, rising for a second straight year. While the region's rate of juvenile arrests is now 66% higher than it was in 2021, the long-term trend has been downward.

Perceptions of crime and safety diverge sharply across demographic groups. Black

or African American, Latino, and lower-income residents are much less likely to report feeling safe in their neighborhoods.

While Black and Latino residents are more concerned about crime, they are also disproportionately likely to be injured from police officer use of force.

Concerns over crime coincide with a 15% year-over-year increase in the number of public safety officers in Silicon Valley, bringing the region more closely in line with the state of California. In 2015, public safety officers per capita was 69% of the statewide figure; in 2024, that share rose to 87%.

WHY IS THIS IMPORTANT?

Public safety is an important indicator of societal health. The ability to feel safe at

Responses to the 2024 *Silicon Valley Poll* revealed that approximately 50% of Bay Area residents think crime is a very serious problem within the region.

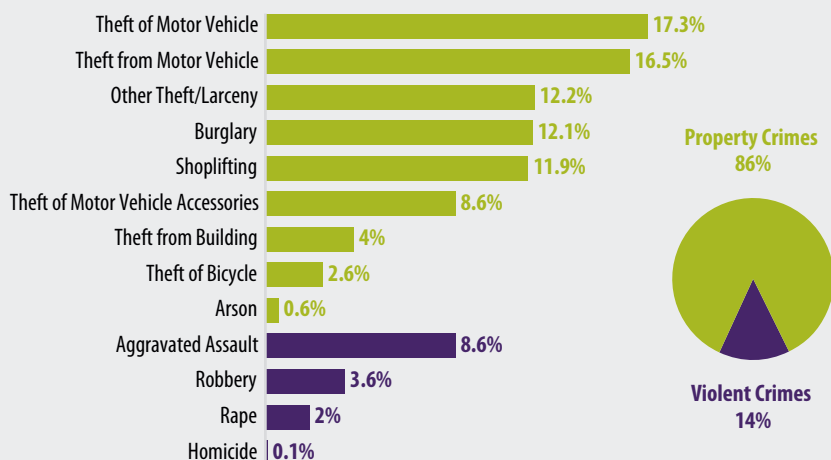
% Think Crime is a Very Serious Problem Bay Area 2024	
Republicans	72%
Black or African American	66%
Financially Insecure	58%
Hispanic or Latino/a/x	56%
Overall	50%
Asian / Pacific Islander	50%
White / Caucasian	42%
Financially Secure	41%
Democrats	40%

Data Source: 2024 *Silicon Valley Poll* (www.jointventure.org/svpoll)

CRIMES

Share of Total Crimes, by Type

Silicon Valley | 2023

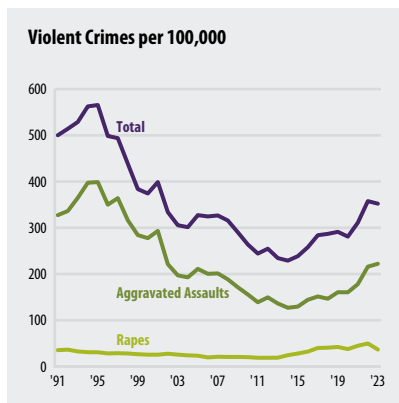


Data Sources: California Department of Justice; California Department of Finance | Analysis: Silicon Valley Institute for Regional Studies

home and move safely throughout the community is vital to wellbeing but is not universally enjoyed. Crime erodes community cohesion by creating fear and instability and poses an economic burden as well. Gun violence, such as mass shooting incidents, are particularly horrific and frightening, and have unfortunately become more common. The number

of Silicon Valley public safety officers provides a unique window into the changing infrastructure of our city and county governments, and affects the public's perception of safety. Police use-of-force has been a central topic of discussions about institutional racism in America,⁶⁹ so must be examined in the context of race and ethnicity.

Silicon Valley's rate of reported rapes decreased by 35% year-over-year, yet is nearly double what it was a decade ago. The rate of reported rape rose faster in Silicon Valley than in the rest of the state, where it increased 72% over the same time period.

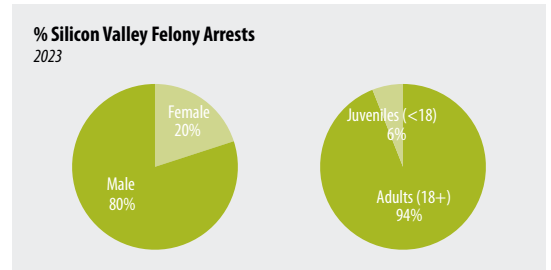


While the rate of violent crimes in Silicon Valley declined slightly in 2023 (-2%), it remains elevated after having spiked more than 25% since 2020, reaching levels not seen since the early 2000s. Even still, Silicon Valley's violent crime rate is only two-thirds of California's overall rate.

Just over 75,000 crimes were reported within the region in 2023; 14% of them were violent crimes, and the remaining 86% were property crimes. Of all crimes in Silicon Valley, more than one-third involved either theft of or from a motor vehicle.

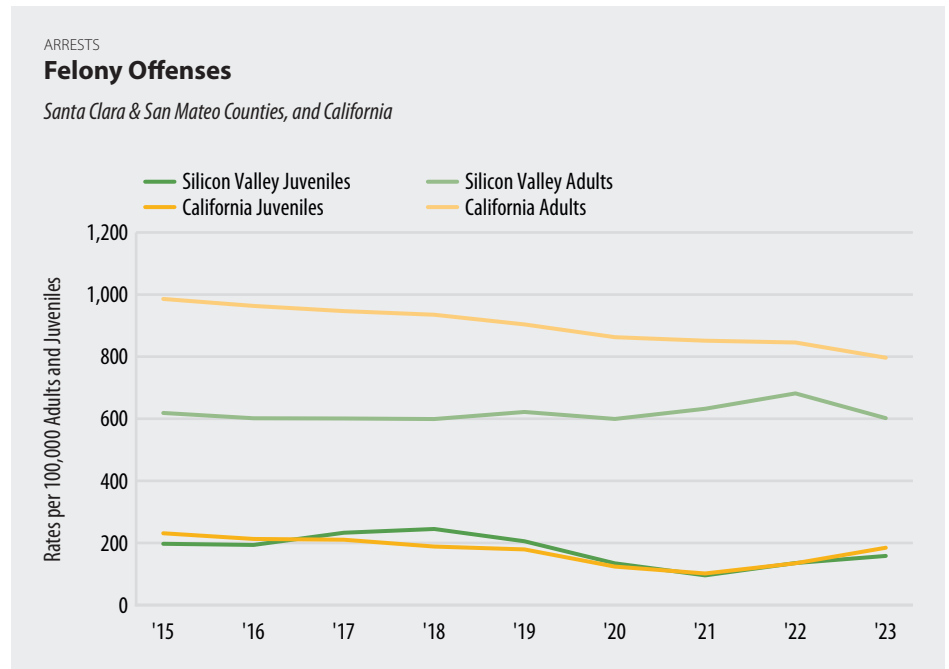
While the overall number of reported property crimes dropped by 14% in 2023, incidents of shoplifting (+40%), pickpocketing (+25%), and car theft (+23%) all rose significantly — trends that were mirrored across the state.

Silicon Valley's felony offense rate has historically been lower than that of the state overall, but the gap has narrowed in recent years. The arrest rate for adults age 18+ fell by 19% since 2015 across California, but by only 3% in Silicon Valley.



The share of Silicon Valley and statewide felony arrests of females has remained fairly consistent year after year, averaging approximately 20% over the past decade. The share of felony arrests of juveniles, however, has been nearly cut in half over the past decade in both Silicon Valley and across California.

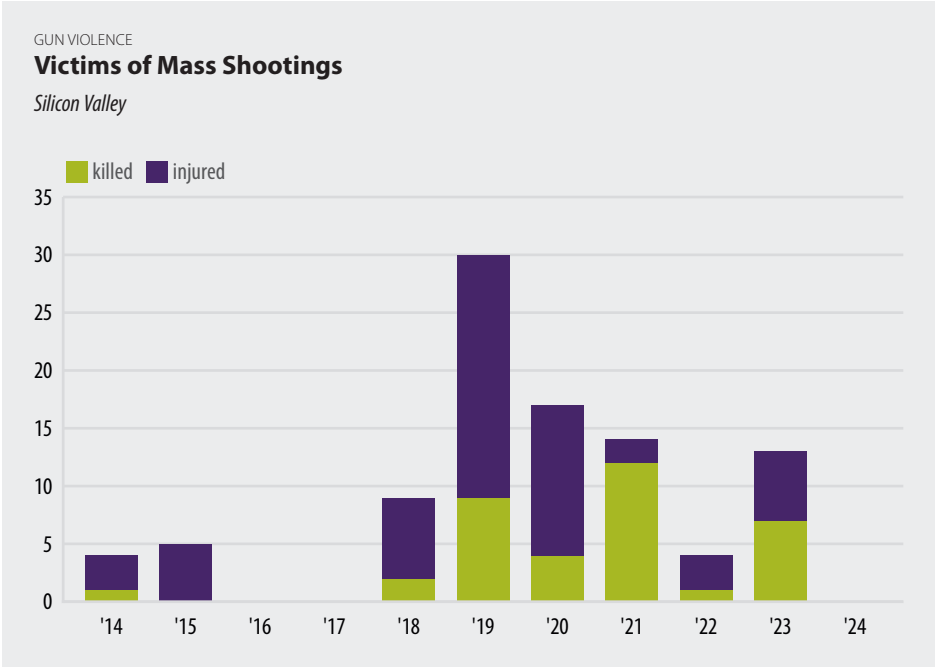
Silicon Valley's juvenile felony arrest rate closely followed trends across the rest of the state, rising for a second straight year. While the region's rate of juvenile arrests is now 66% higher than it was in 2021, the long-term trend has been downward.



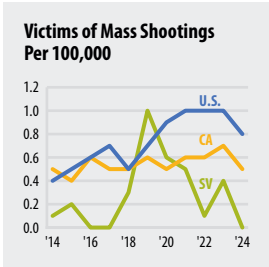
*The felony arrest rates for 2015 and subsequent years were affected by the passage of Propositions 47 (2014) and 64 (2016), so caution is advised in comparing to previous years. Note: California Department of Justice felony arrest data do not include the gender non-binary category due to the small sample size. | Data Sources: California Department of Justice; California Department of Finance | Analysis: Silicon Valley Institute for Regional Studies

The share of Silicon Valley men who feel safe in their neighborhoods declines to 79% as income approaches the Federal Poverty Level (FPL). The share of adults feeling safe in their neighborhoods decreases more precipitously for men (94% to 79%) than for women (89% to 85%) with declining income levels.

Thirty-six people were killed in 14 mass shooting incidents in Silicon Valley between 2014 to 2023 (and 57 people were injured), accounting for 6% of all homicides in the region during that decade.

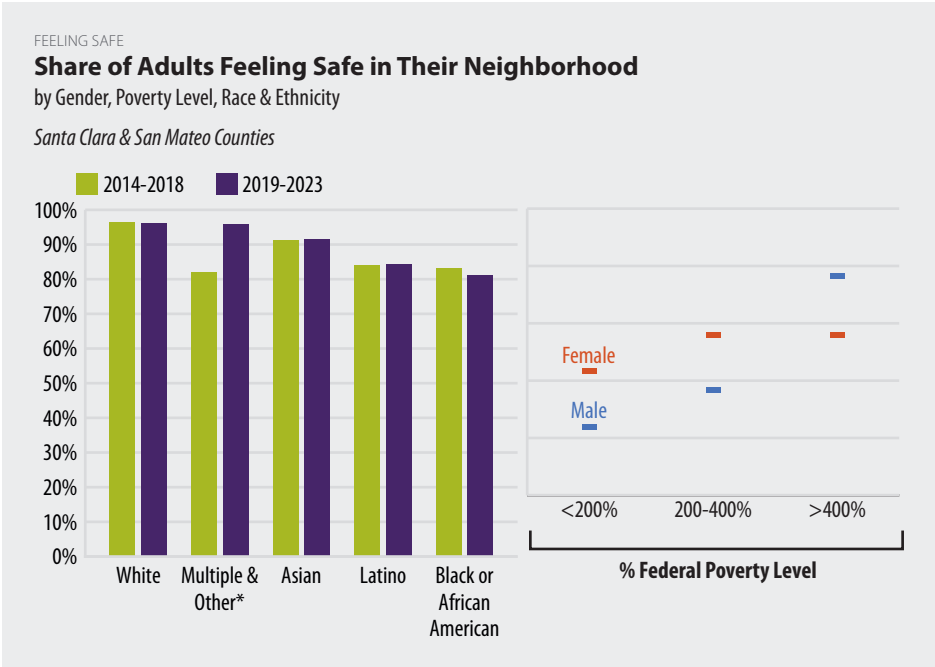


Data Sources: Gun Violence Archive; California Department of Finance; United States Census Bureau | Analysis: Silicon Valley Institute for Regional Studies



The rate of fatalities from mass shootings (per 100,000 residents) has generally been lower in Silicon Valley than in the state or nation as a whole. The year 2019 was an exception, with nine people killed and an additional 21 injured, the highest number of mass shooting victims on record for the region.

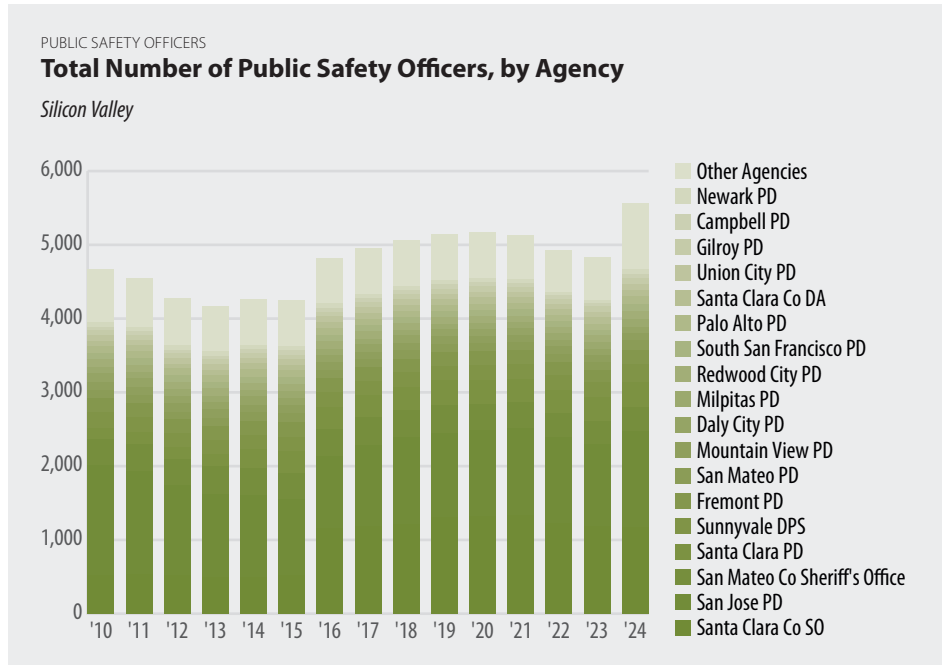
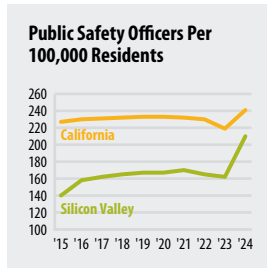
2024 was the first year without any mass shooting incidents in Silicon Valley since 2017.



*Multiple & Other includes Native Hawaiian/Pacific Islander, American-Indian/Alaska Native, and Two or More Races. All races are non- Latino. | Data Source: California Health Interview Survey (CHIS) | Analysis: Silicon Valley Institute for Regional Studies

Among racial and ethnic groups in Silicon Valley, the share of residents feeling safe in their neighborhoods remained relatively stable between the 2014-2018 and 2019-2023 periods with an overall share of 91% and 92%, respectively. Black or African American residents not only experienced a decline in perceived safety (from 83% to 81%) but also reported the lowest sense of neighborhood safety across all groups during both time periods.

Silicon Valley has approximately 210 sworn full-time and reserve public safety officers per 100,000 residents; this compares to approximately 240 per 100,000 (15% more) throughout the state.



Data Source: California Commission on Peace Officer Standards and Training | Analysis: Silicon Valley Institute for Regional Studies

Silicon Valley had 5,558 sworn full-time and reserve public safety officers employed throughout the region in 2024 — 728 more than the prior year. Nearly half (44%) of Silicon Valley’s public safety officers were employed by just two of the region’s 43 agencies — the San José Police Department and the Santa Clara County Sheriff’s Office.

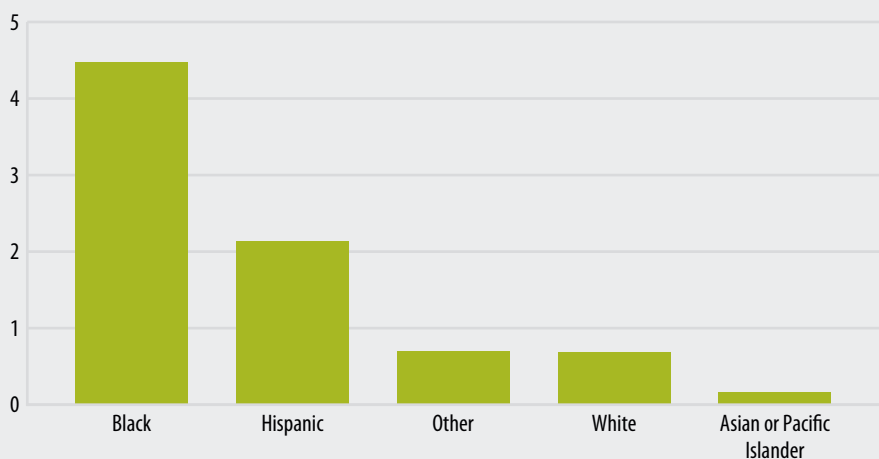
Between 2015 and 2024, Silicon Valley experienced significant growth in its public safety officer staffing levels. While California overall saw a modest 6% increase in officers per 100,000 residents, Silicon Valley experienced a 50% rise. Within the region, Santa Clara County’s officer-to-100,000 resident ratio grew by 45%, while San Mateo County’s increased by 13%. The past year alone brought increases across all areas, with Silicon Valley’s public safety officer staffing levels rising 30% per 100,000 residents.

PUBLIC SAFETY OFFICERS

Injuries from Police Use of Force, by Civilian Race & Ethnicity

injuries per 100,000

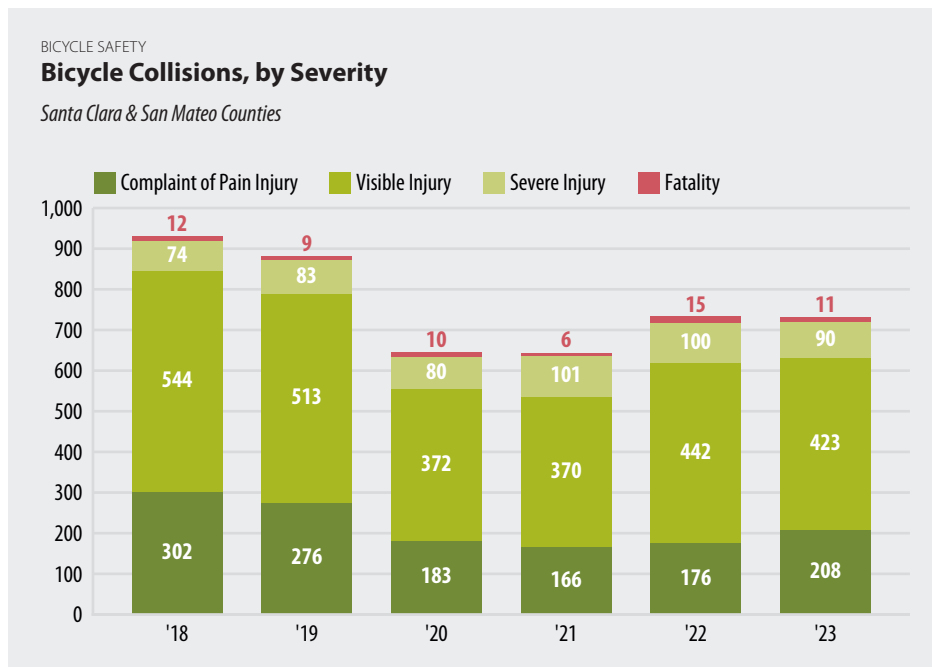
Santa Clara & San Mateo Counties | 2017-2023



Note: Racial and ethnic categories are mutually exclusive, consistent with California Department of Justice reporting. | Data Source: California Department of Justice | Analysis: Silicon Valley Institute for Regional Studies

Injuries from police use of force have disproportionately affected Black and Hispanic residents in Silicon Valley in recent years. Black individuals are more than four times as likely, and Hispanic individuals more than twice as likely, to be injured by police use of force compared to White and Asian or Pacific Islander residents.

In 2023, the total number of Silicon Valley bicycle collisions resulting in injury or fatality was 732, a 21% decline from 2018 levels. Fatalities decreased over the past year from 15 to 11, with more reports of less serious injuries (and fewer severe injuries).

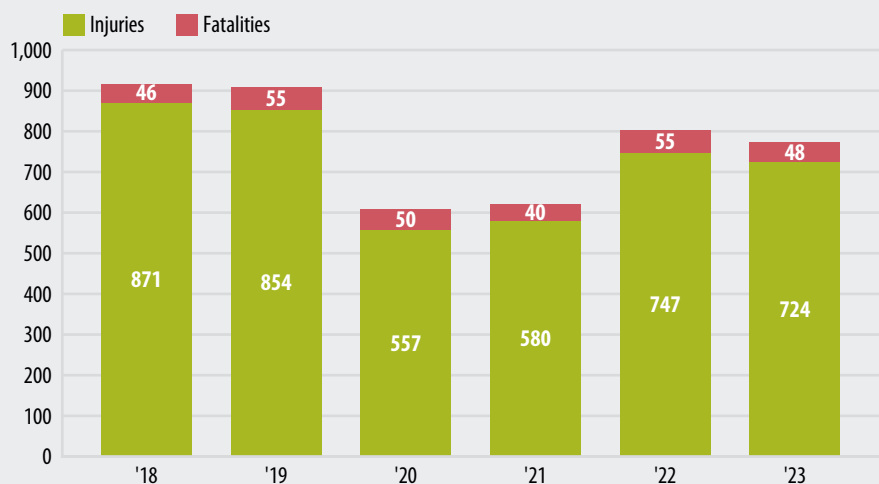


Data Sources: Statewide Integrated Traffic Records System (SWITRS); Transportation Injury Mapping System (TIMS) | Analysis: Silicon Valley Institute for Regional Studies

PEDESTRIAN SAFETY

Pedestrian Vehicle-Related Fatalities & Injuries

Santa Clara & San Mateo Counties



Data Sources: Statewide Integrated Traffic Records System (SWITRS); Transportation Injury Mapping System (TIMS) | Analysis: Silicon Valley Institute for Regional Studies

Pedestrian injuries have declined from 2018 levels (-17%), but fatalities have increased by 4%. However, there were seven fewer fatalities in the past year — down from 55 in 2022 to 48 in 2023.

WHAT ARE THE KEY FINDINGS?

Silicon Valley Community Foundation (SVCF) — the largest community foundation in the nation — plays a significant role in the region. In 2023, SVCF distributed \$118.7 million in donor-advised funds (DAF), \$5.9 million in discretionary grants, and \$6 million in corporate-advised grants to organizations within Santa Clara and San Mateo counties. In 2023, 3% of total SVCF donor-advised grant dollars (\$4.13 billion) went to local nonprofits — lower than the historical average of 8% since 2015.

Silicon Valley's top 45 corporate philanthropists gave a total of \$127 million to local organizations in 2023, and corporate-advised grants through the Silicon Valley

Community Foundation amounted to \$6 million locally, with an additional \$10.1 million to organizations in other parts of the Bay Area. As with DAF grant dollars, the share

Nonprofit revenues are highly concentrated, with just five organizations accounting for 68%.

of corporate-advised grant dollars to local nonprofits declined in 2023 to 4% — down from nearly 7% in 2022.

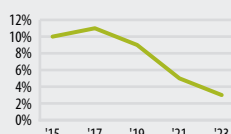
The nonprofit sector in Silicon Valley continues to grow. In 2024, the number of 501(c)(3) organizations in Santa Clara and San Mateo counties increased by 8%, adding 180 organizations, while total reported

revenues also grew by 8% (approximately \$2.4 billion). The region has more than 2,300 active nonprofit organizations with annual revenues of \$100,000 or more, plus additional smaller organizations. However, nonprofit revenues are highly concentrated, with just five organizations accounting for 68% of the region's total nonprofit revenues of approximately \$33 billion.

WHY IS THIS IMPORTANT?

A region's community-based nonprofit organizations serve a vital role by delivering essential services and resources not provided by public or private entities. These services cross a wide variety of sectors including social and human services, arts and culture, education, health, and the

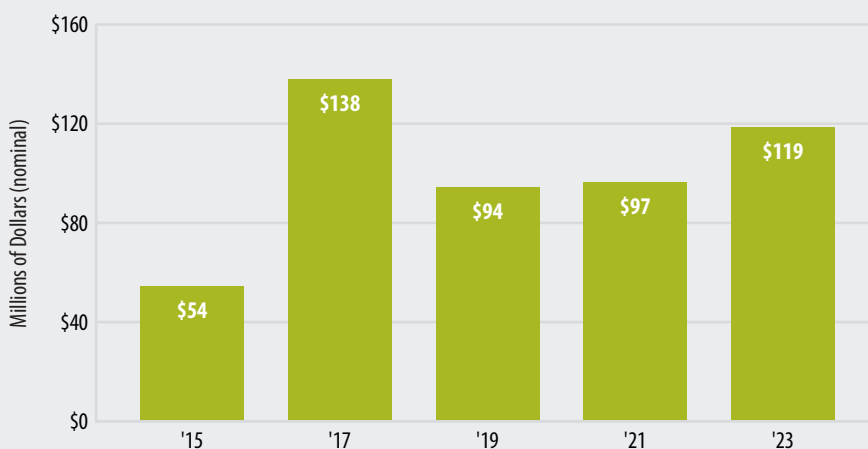
Local Share of Silicon Valley Community Foundation's National Donor-Advised Grants
Santa Clara & San Mateo Counties



INDIVIDUAL GIVING

Silicon Valley Community Foundation Donor-Advised Grants to Local Recipients

Santa Clara & San Mateo Counties



Data Source: Silicon Valley Community Foundation | Analysis: Silicon Valley Institute for Regional Studies

environment. Nonprofit organizations rely on local philanthropy in addition to other revenue and sources outside the region, and many struggle to fund their work.⁷⁰ Local philanthropy — particularly in a region with as much wealth and inequality as Silicon Valley — is therefore a critical component in sustaining the work of these nonprofits and hence the vitality of the community.

Nationally, the propensity to give to charities has been in decline since the Great Recession. The decline has been attributed to behavioral changes from economic uncertainty and changing attitudes about giving, rather than a lack of wealth or income.⁷¹ Additionally, recent tax reform has significantly impacted giving behavior, resulting in large shifts in the

number of individuals itemizing tax returns and thus able to deduct charitable giving. While national trends may be reflected on the regional level, tracking local philanthropy provides a clearer picture of support for Silicon Valley's community-based nonprofit organizations, as well as their ability to grow over time and through fluctuations in the economy.

Nationally, there were more than 1,140 charitable organizations that sponsored DAFs in 2023, including national charities, community foundations, and single-issue charities. Collectively, DAF charitable sponsors granted \$54.8 billion, a slight decline from the previous year. This decline marks only the second year since 2007 that there has been a drop in grantmaking nationally.⁷³

Donor-advised fund (DAF) grants made through the Silicon Valley Community Foundation (SVCF) in the U.S. totaled \$4.13 billion in 2023 (a 133% increase year-over-year). Of that total, approximately \$119 million⁷² (3%) went to local charitable organizations in Santa Clara and San Mateo counties.

Of the more than 10,100 Silicon Valley Community Foundation DAF grants made to U.S. charitable organizations in 2023, 27% of them were to local Silicon Valley organizations; the average amount of funding per grant was \$51,300.

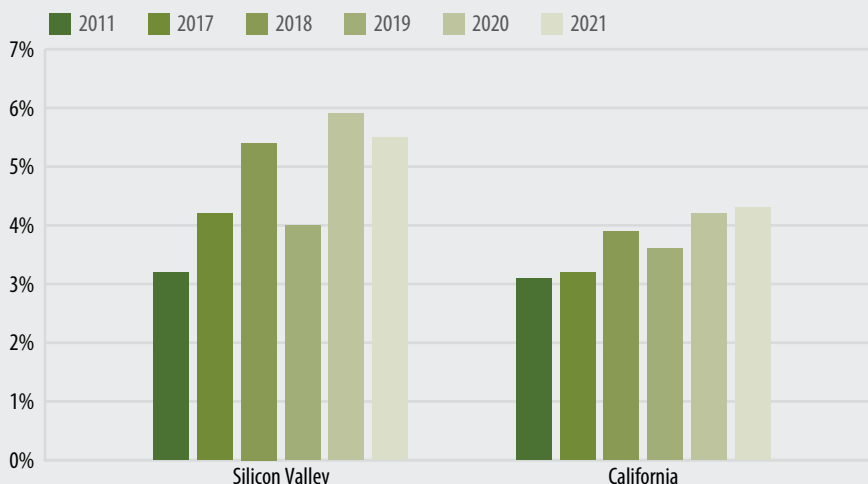
In 2021 (the most recent year available), 21% of Silicon Valley's individual (single and joint) returns included itemized deductions. Of these, 80% included donations to charities totalling \$11 billion (26% of California's total charitable donations and 4% of U.S. donations).

The share of taxable income donated to charity increased by more than 2 percentage points over the past decade (from 3.2% to 5.5%) though the most recent year of data shows a slight decline from 2020 to 2021.

INDIVIDUAL GIVING

Share of Individual Taxable Income Donated to Charity

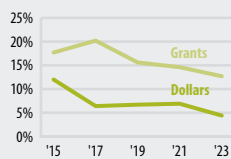
Santa Clara & San Mateo Counties, and California



Note: Data include only returns with itemized deductions. | Data Source: United States Internal Revenue Service | Analysis: Silicon Valley Institute for Regional Studies

Santa Clara County and San Mateo county recipients represented 13% of all Silicon Valley Community Foundation corporate-advised grants in 2023, but only 4% of the grant dollars; an additional 8% of total grant dollars went to organizations located in the rest of the Bay Area, while 88% went outside the region.

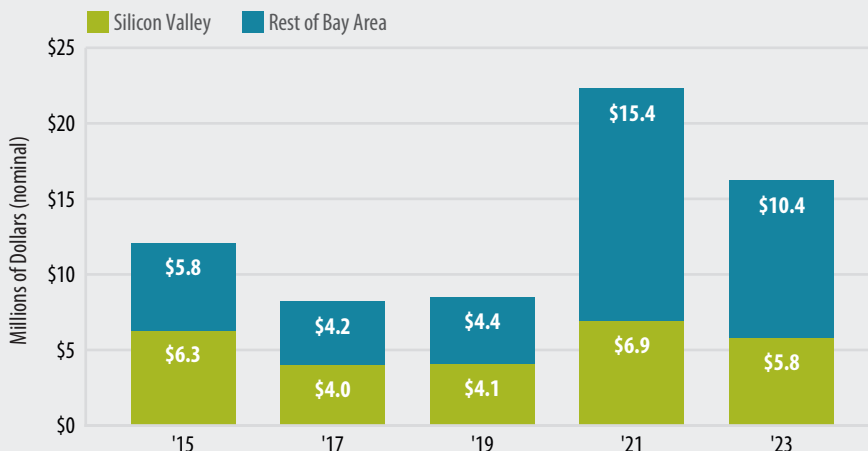
% Number of Grants and Amounts Silicon Valley



CORPORATE PHILANTHROPY

Silicon Valley Community Foundation Corporate-Advised Grants to Local Recipients

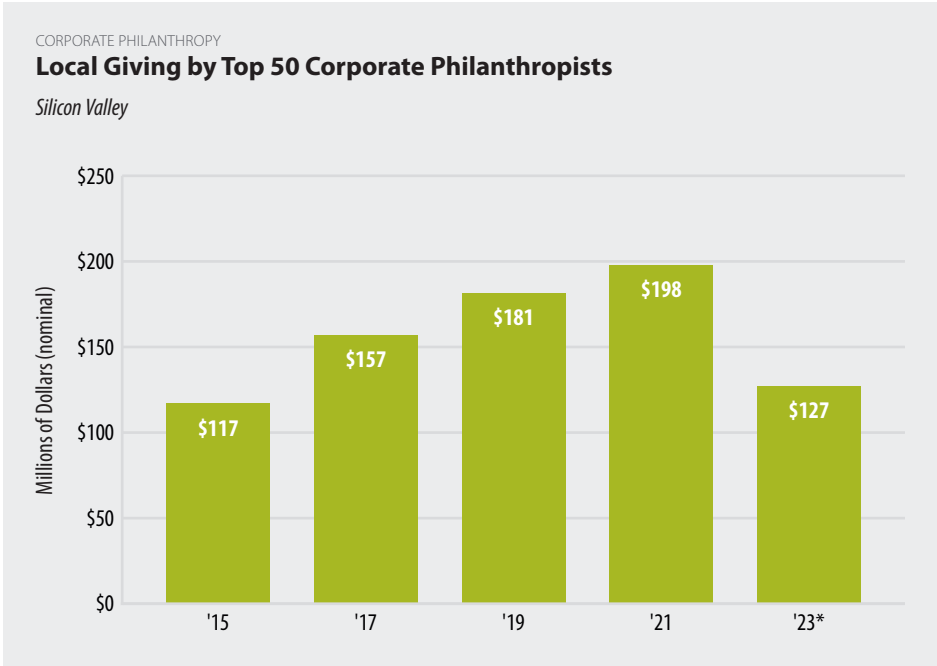
Santa Clara & San Mateo Counties



Data Source: *Silicon Valley Business Journal*, Book of Lists | Analysis: Silicon Valley Institute for Regional Studies

The largest local donor among Silicon Valley’s top 45 corporate philanthropists in 2023 was Sobrato Philanthropies (\$42.6 million), which topped the corporate donor list during 11 out of the past 12 years (with \$825 million dollars donated worldwide over that period, 62% of which was donated locally).

Top 15 Corporate Philanthropists	
Local Giving 2023	
	Amount (millions)
Sobrato Philanthropies	\$42.58
Alphabet/Google LLC	\$36.33
Adobe Inc.	\$8.99
Applied Materials	\$5.09
San Francisco 49ers	\$4.86
Bank of America	\$3.35
JPMorgan Chase Bank NA	\$2.76
NetApp	\$2.74
Gilead Sciences Inc.	\$2.67
Oracle Corp.	\$1.90
Cupertino Electric Inc.	\$1.63
Wells Fargo Bank NA	\$1.50
eBay Inc.	\$1.43
Lockheed Martin	\$1.35
San Jose Sharks	\$1.09



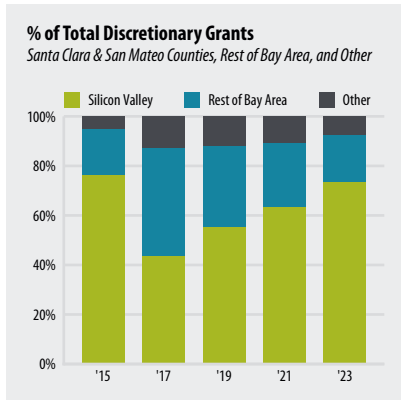
*Includes top 45 corporate philanthropists | Note: Data are for the fiscal year; amounts are self-reported and only include companies that chose to participate. | Data Source: *Silicon Valley Business Journal*, Book of Lists | Analysis: Silicon Valley Institute for Regional Studies

The top 45 corporate philanthropists in Silicon Valley alone donated \$127 million to local organizations in 2023; this represented a \$26 million decline (-17%) from the previous year, and a 26% decline from pre-pandemic levels.⁷⁴

In 2023, the top 15 corporate philanthropists (among those who self-reported) based on local giving included companies from a variety of sectors such as engineering, sports, banking, tech, real estate, and biotech.

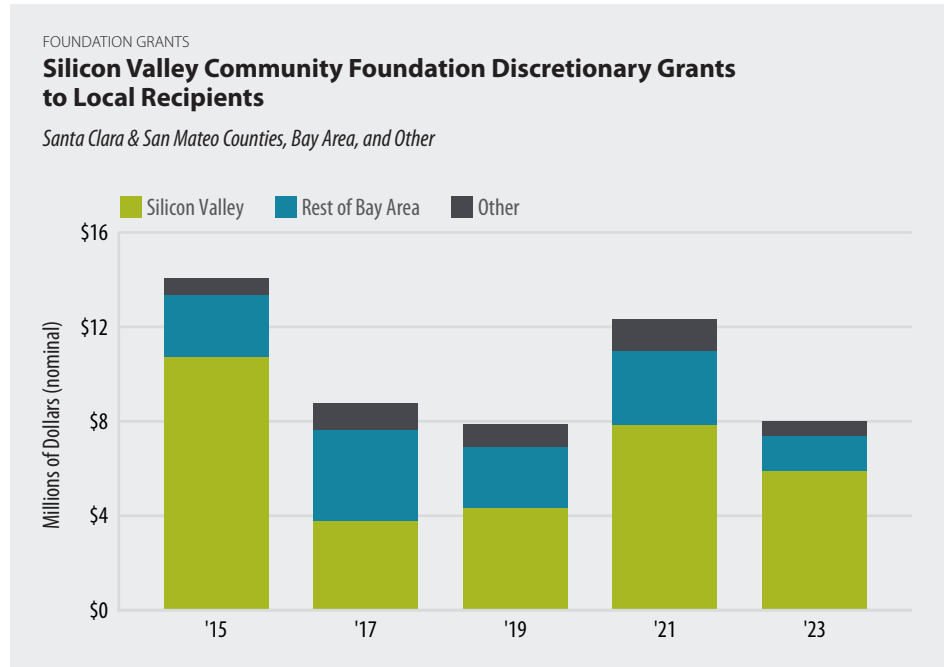


Corporate-advised grants through the Silicon Valley Community Foundation to local organizations totaled \$6 million in 2023, with an additional \$10.4 million to those in other parts of the Bay Area (representing a 53% decrease year-over-year). While this is a significant amount of money, it likely represents a relatively small share of total regional corporate philanthropy, as many of the larger corporate donors tend to donate directly to nonprofit organizations.



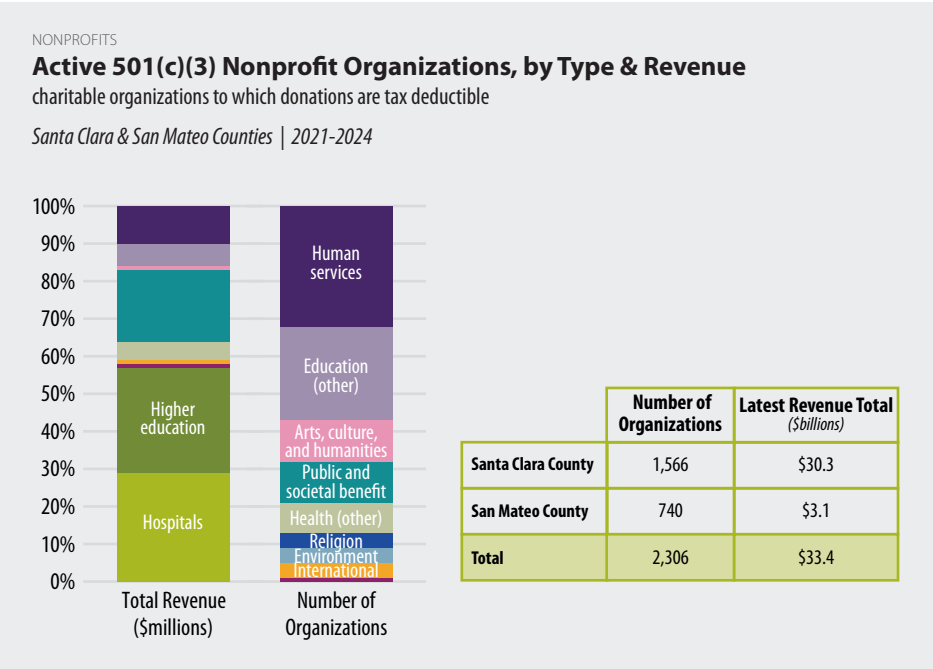
Discretionary grantmaking to local organizations by the Silicon Valley Community Foundation declined by 36% in 2023 to \$5.9 billion.⁷⁵

Of the Silicon Valley Community Foundation's \$8.0 million in total discretionary grantmaking in 2023, 74% went to Silicon Valley-based organizations (and 93% to those within the nine-county Bay Area).



Note: Other may include organizations operating locally but based in another part of California or elsewhere in the United States.
Data Source: Silicon Valley Community Foundation | Analysis: Silicon Valley Institute for Regional Studies

Nonprofit organization revenues may include a variety of sources, such as earned revenue, membership fees, and donations from both individuals and the broader philanthropic community. In total, Silicon Valley’s nonprofit 501(c)(3) organizations generate an estimated \$33 billion annually⁷⁷ — a figure that increased by \$2 billion last year.



In 2024, the number of 501(c)(3) nonprofit organizations⁷⁶ in Santa Clara and San Mateo counties rose by 8% (+180 organizations), and total reported revenues increased by 8% (approximately \$2.4 billion).

In Santa Clara and San Mateo counties combined, there are a total of more than 2,300 active nonprofit organizations with 501(c)(3) status (to which donations are generally tax-exempt) that reported \$100,000 or more in annual revenues. The region also has an additional 4,320 501(c)(3) organizations below that revenue threshold, which include a wide variety of organization types such as youth sports clubs, parent-teacher associations, library volunteer groups, and theater programs, among many others.

More than half (57%) of the region’s nonprofit 501(c)(3) organizations are focused on either Education (excluding higher education) or Human Services; however, they account for a disproportionately smaller share (17%) of total nonprofit revenues.

Just five of Silicon Valley’s 2,300 nonprofit 501(c)(3) organizations account for 68% of total revenues reported; the top 20 account for 80%.⁷⁸ The rest of the region’s 501(c)(3) organizations have an average annual revenue of \$3.3 million (with a median of \$443,000).

WHAT ARE THE KEY FINDINGS?

The housing market in Silicon Valley is characterized by high home values and prices. The average home value for White homeowners is 8% higher than the overall average, while average home values for Black, Hispanic, and Indigenous homeowners are 14%, 24%, and 26% below the overall average, respectively. The median home sale price in Silicon Valley reached \$1.92 million in 2024, more than double the statewide median of \$867,000 and over four times the national median of \$412,000.

Homeownership rates in Silicon Valley vary widely among racial and ethnic groups. Rates are highest among White residents (60%), but lowest among Black or African American residents and Hispanic

or Latino residents (both at 34%). Native Hawaiian homeowners are more likely than other groups to own their homes outright,

Housing affordability remains a significant challenge.

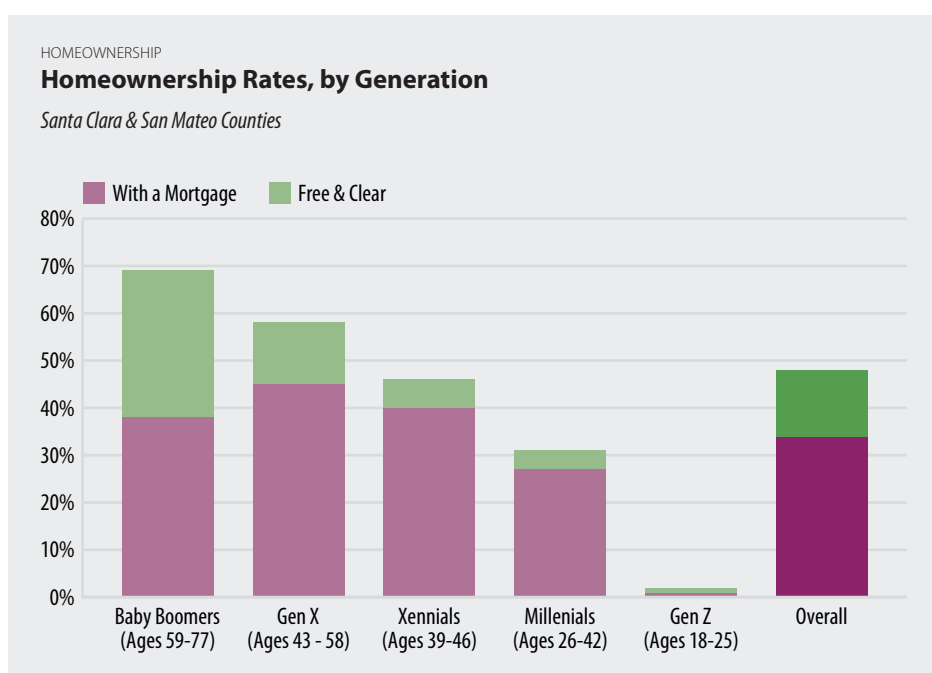
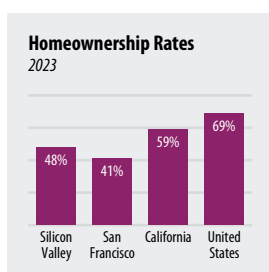
with nearly 40% owning their properties free and clear.

Silicon Valley has experienced a decline in residential permitting in recent years, with fewer than 4,900 units permitted in 2024 compared to a peak of 9,800 in 2022. The share of multifamily units in residential building permits has also fallen, from 81% in 2015 to 50% in 2024. While it is early in the 6th Regional Housing Needs Allocation (RHNA)

cycle — which calls for more than double the number of residential units compared to the previous cycle — progress toward the 2023-2031 goals is uneven, with 6% of above moderate-income units already permitted compared to only 3% of very low-income units.

Housing affordability remains a significant challenge in Silicon Valley.

Approximately 45% of renters and 44% of homeowners are burdened by housing costs, spending more than 30% of their income on rent or mortgage payments. The affordability gap is particularly wide for Black or African American and Hispanic or Latino home buyers, with only 9% able to afford a median-priced home compared to 21% of White and 25% of Asian potential home buyers.



Data Source: United States Census Bureau, American Community Survey PUMS | Analysis: Silicon Valley Institute for Regional Studies

WHY IS THIS IMPORTANT?

The housing market impacts a region's economy and quality of life, particularly in places where housing costs are extraordinarily high. An inadequate supply of new housing negatively affects prospects for job growth. A low for-sale inventory drives up prices.

Whether or not a person owns their home is a significant factor in their long-term financial security, housing stability, ability to retire, and even their health — including susceptibility to mental health impacts of unaffordable housing⁷⁹ and self-perceived physical health.⁸⁰

A lack of affordable housing results in longer commutes, diminished productivity, curtailment of family time, and increased traffic congestion, while restricting the

ability of essential service providers — such as teachers, registered nurses, and police officers — to live near the communities in which they work.

Additionally, high housing costs can limit families' ability to pay for basic needs, such as food, health care, transportation, child-care, and clothing. High housing costs can lead to evictions, push residents to live with one another for economic reasons, and cause crowded living conditions. Overcrowded households are a common last living situation prior to homelessness, and have been linked to increased susceptibility to diseases (particularly respiratory infections).⁸¹

As a region's attractiveness increases, average home prices and rental rates tend to increase. Higher levels of new housing

and attention to increasing housing affordability are critical to the economy and quality of life in Silicon Valley.

The homeownership rate in Silicon Valley (48% in 2023) is lower than that of the state (59%) or nation overall (69%).

Silicon Valley's Baby Boomers are much more likely to own their own home (68%) than younger generations; they are also more likely to own their homes without mortgages or liens — among owners, 45% are Free & Clear.

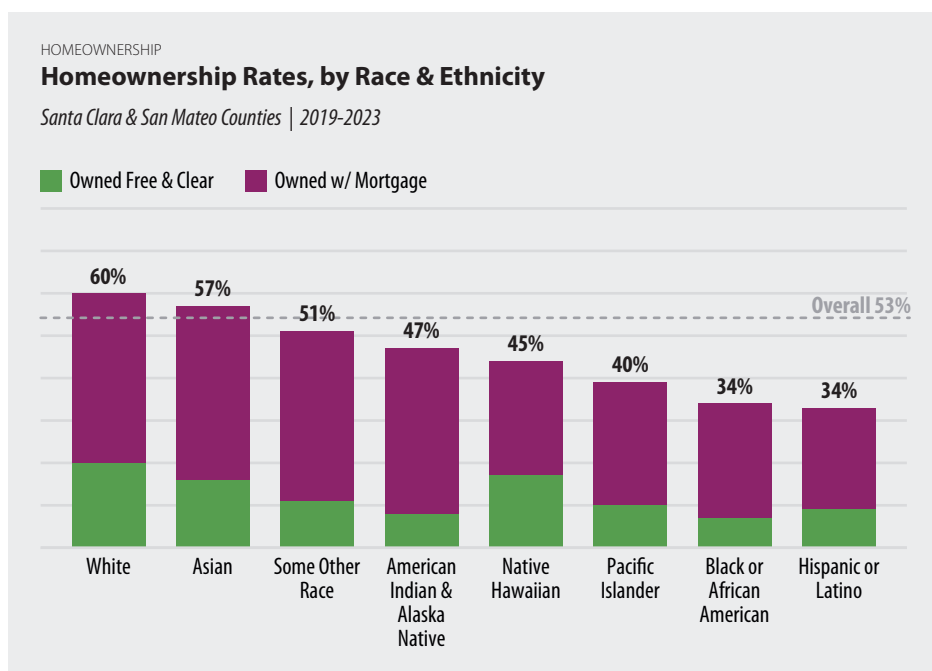
Less than one-quarter of all Silicon Valley Gen X homeowners (and only 13% of Millennial homeowners) own their home free of mortgages or liens.

Homeownership rates in Silicon Valley vary widely among racial and ethnic groups. Rates are highest among White residents (60%) and lowest among Black or African American residents and Hispanic or Latino residents (both 34%).

Native Hawaiian homeowners in Silicon Valley are more likely than other groups to own their homes outright, with nearly 40% owning their properties Free & Clear. This compares with about one in three White homeowners, one in five Black or African American homeowners, and one in six American Indian and Alaska Native homeowners.

In the San Jose MSA, which includes Santa Clara and San Benito counties, the average home value for White homeowners is 8% higher than the overall average. In contrast, the average home values for Black, Hispanic, and Indigenous homeowners are significantly lower — 14%, 24%, and 26% below the overall average, respectively. This disparity is also reflected across the state and the nation as a whole.

In late 2024, average home values reached nearly \$1.6 million in the San Jose MSA and \$1.2 million in the San Francisco MSA, higher than values in the state and nation overall by as much as two and three times, respectively.

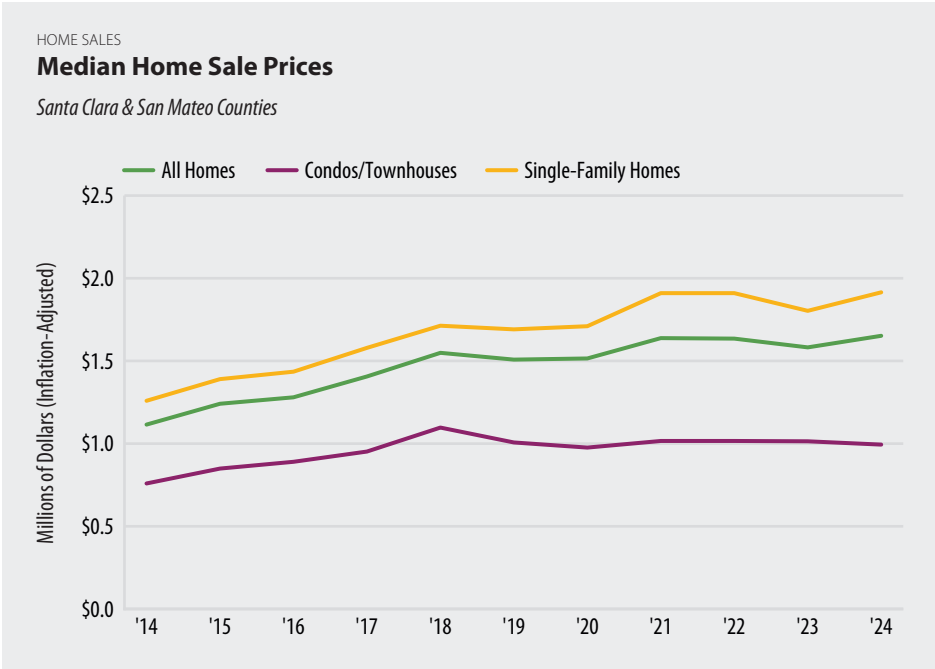


Note: Race categories are alone or in combination with another race; all categories other than Hispanic or Latino are not-Hispanic or Latino. | Data Source: United States Census Bureau, American Community Survey PUMS | Analysis: Silicon Valley Institute for Regional Studies



Data Source: Zillow Research (data: Zillow; U.S. Census Bureau) | Analysis: Zillow Research; Silicon Valley Institute for Regional Studies

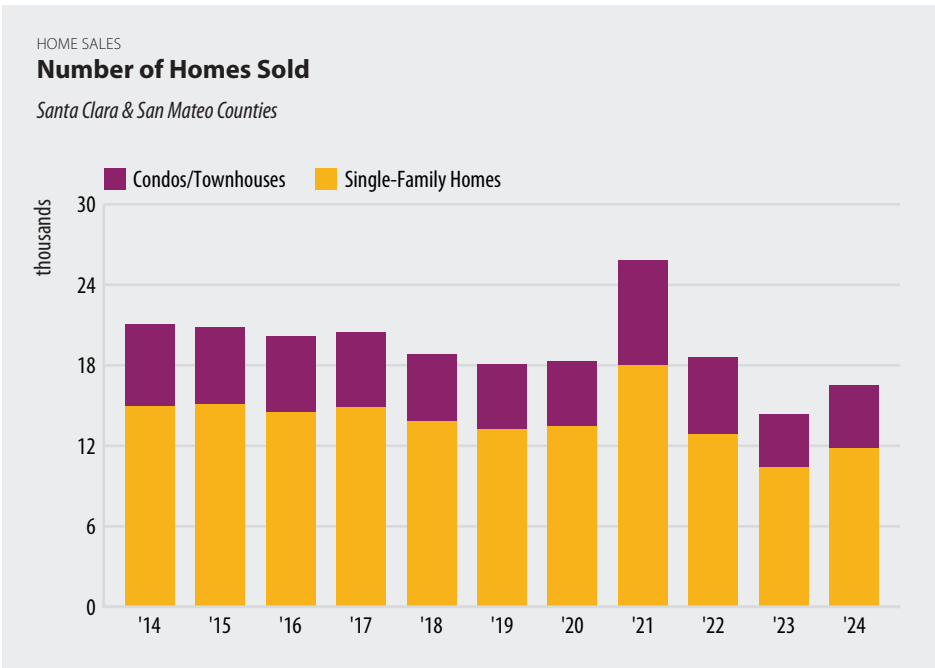
Median home sale prices in Silicon Valley – including single-family homes and condos/townhouses – rose by 48% in 2024 after inflation-adjustment.



Data Sources: Santa Clara County Association of REALTORS® (SCCAOR); San Mateo County Association of REALTORS® (SAMCAR); California Association of REALTORS®; National Association of REALTORS® | Analysis: Silicon Valley Institute for Regional Studies

The median home sale price for a single-family residence in Silicon Valley was \$1.92 million in 2024 (\$1.95 million in San Mateo County, and \$1.90 million in Santa Clara County), compared to \$867,000 in California and \$412,000 nationwide.

While condos/townhouses sell for less than single-family homes, there are fewer on the market. In 2024, approximately 4,700 condos/townhouses were sold within Santa Clara and San Mateo counties, compared to 11,800 single-family homes.



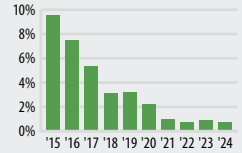
Data Sources: Santa Clara County Association of REALTORS® (SCCAOR); San Mateo County Association of REALTORS® (SAMCAR); California Association of REALTORS®; National Association of REALTORS® | Analysis: Silicon Valley Institute for Regional Studies

The total number of homes sold in Silicon Valley spiked in 2021 at nearly 26,000, then declined in subsequent years. In 2024, approximately 16,500 homes were sold throughout the region (4,700 in San Mateo County, and 11,800 in Santa Clara County). The large majority (71%) were single-family homes.

The number of Silicon Valley homes sold below \$1 million dropped to fewer than 600 annually in 2024 — one-tenth of the number sold in 2017.

Silicon Valley accounts for a mere 1% of California homes sold below \$1 million; this share is down from nearly 10% in 2015.

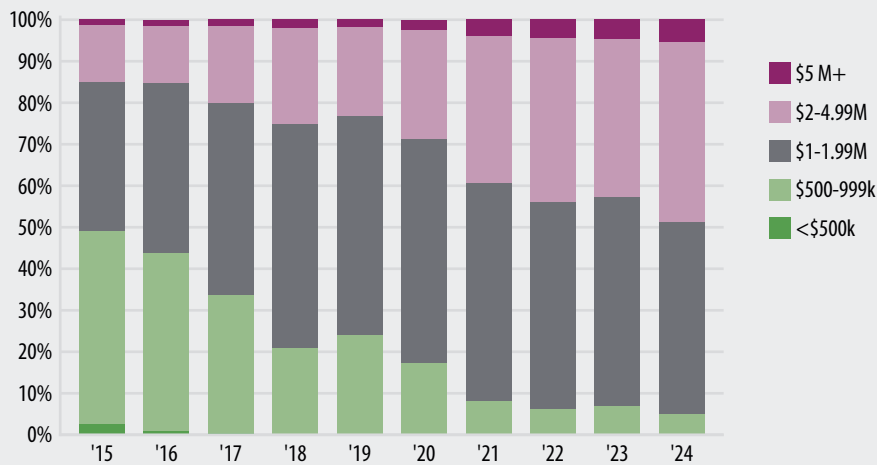
Share of Single-Family Homes Sold for <\$1 Million Statewide
Santa Clara & San Mateo Counties



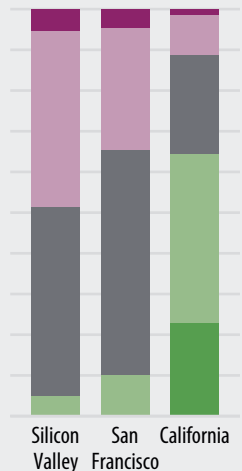
HOME SALES

Share of Single-Family Homes Sold, by Price Range

Santa Clara & San Mateo Counties



2024

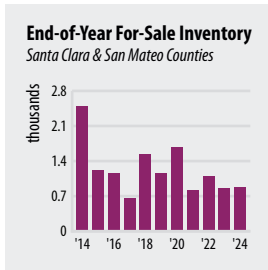


Data Sources: California Association of REALTORS® | Analysis: Silicon Valley Institute for Regional Studies

While the number of Silicon Valley single-family homes sold annually has declined by 21% (and for-sale inventory by 75%) over the past decade, the region's median sale price rose by 52% after inflation adjustment. One of the primary contributing factors is the increasingly large share of higher-end homes on the market. In 2024, 95% of Silicon Valley's single-family homes sold for \$1 million or more.

Nearly half (49%) of the region's single-family homes sold last year were at or above \$2 million; 5% were \$5 million or more (compared to 11% and 11%, respectively, statewide).

Following a record year for residential development in 2014 — with more units permitted than in any other year since 1986 — the number of units permitted annually has trended downward across Santa Clara and San Mateo counties. This trend has been due to multifamily development alone; the number of single-family units permitted annually actually rose over the past decade (+15%).



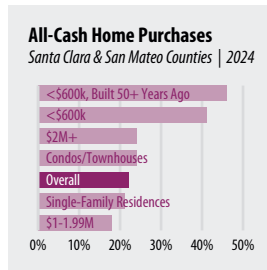
Data Sources: Santa Clara County Association of REALTORS® (SCCAOR); San Mateo County Association of REALTORS® (SAMCAR) | Analysis: Silicon Valley Institute for Regional Studies

The number of Silicon Valley homes on the market at the end of 2024 (480) fell to one-quarter of what it was a decade ago (1,940).

The number of San Mateo County single-family homes listed for sale in December 2024 (169) was lower than any other end-of-year inventory in at least a dozen years.

% All-Cash Home Purchases		
	2022	2024
Santa Clara & San Mateo Counties	17%	22%
San Francisco	22%	32%
California	21%	27%
United States	29%	31%

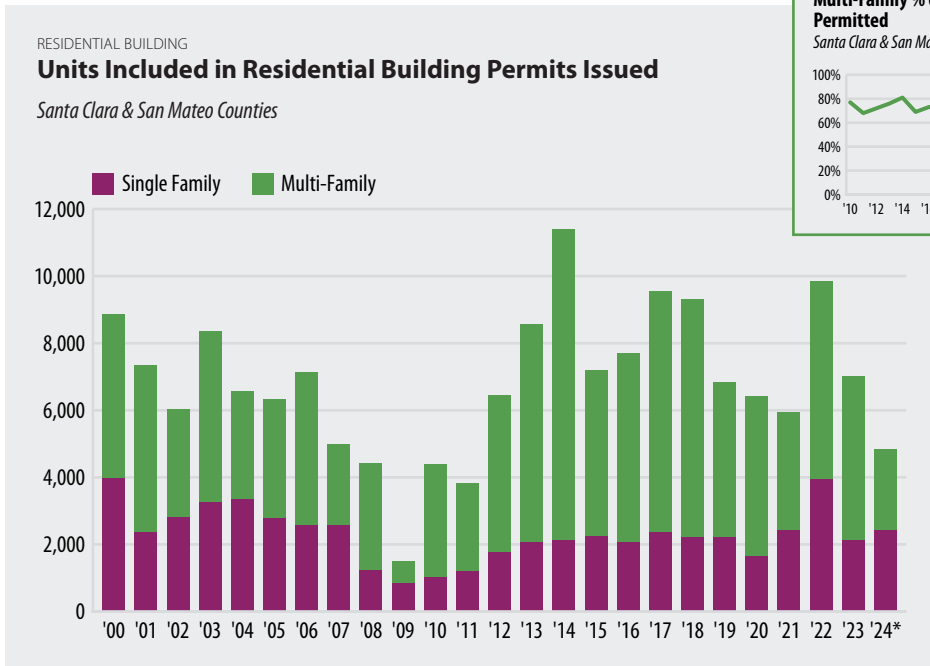
Data Source: CoreLogic | Analysis: Silicon Valley Institute for Regional Studies



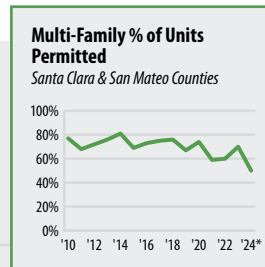
At 22%, the share of homes sold for all-cash in Silicon Valley last year was lower than in San Francisco (32%), California (27%), or nationwide (31%).

The share of homes purchased for all-cash in Silicon Valley rose from 17% in 2022 to 22% in 2024. Greater increases were observed in San Francisco and statewide (+10 and +6 percentage points, respectively, over the same period).

Fewer Silicon Valley residential units were permitted last year than during any of the dozen years prior.



Data Source: U.S. Department of Housing and Urban Development | Analysis: Center for Continuing Study of the California Economy; Silicon Valley Institute for Regional Studies



The share of multifamily units in Silicon Valley residential building permits issued last year fell to 50%; this share has slowly declined since it peaked at 81% in 2014.

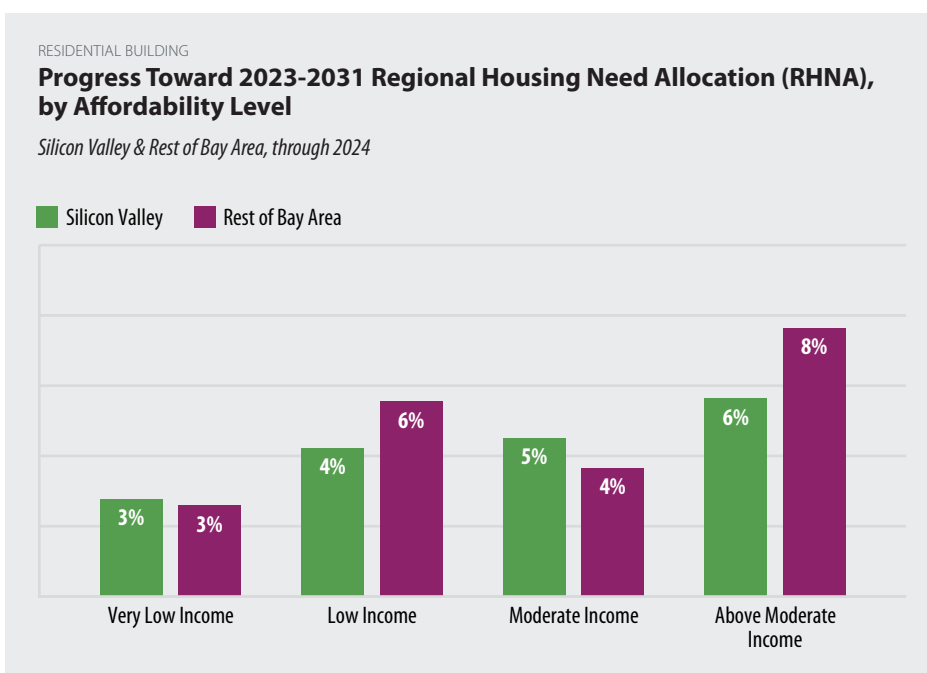
Multi-family units represented 50% of Silicon Valley units permitted last year, which could add approximately 2,400 units in small apartment complexes and larger (5+ unit) developments. In comparison, 39% of residential units permitted statewide in 2024 were for multi-family development.

Permitting of residential units in Santa Clara and San Mateo counties declined by 15% year-over-year in 2024; there were fewer than 4,900 units in building permits issued that year, compared to 11,400 in 2014 and — the most recent peak — 9,800 in 2022.

The 6th Regional Housing Needs Allocation cycle (RHNA 2023-2031) allocates more than double the number of residential units compared to the previous cycle, with nearly 196,000 units needed in Silicon Valley.

Of these, 79,000 are in the Low and Very Low Income categories. Allocations are intended not only to increase the region's stock of low-income units but also to address racial and economic segregation within and between communities.

While it is early in the 6th RHNA cycle (2015-2023), progress through 2024 is unevenly spread across affordability levels, with 6% of Silicon Valley's Above Moderate Income units already permitted, compared to 3% of Very Low Income units.

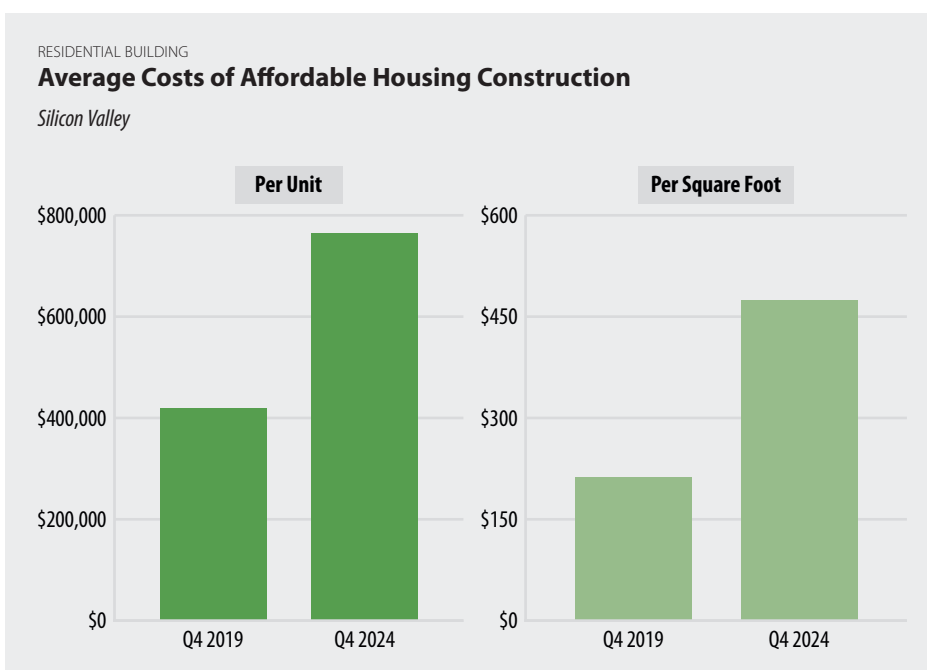


Data Source: California Department of Housing & Community Development | Analysis: Silicon Valley Institute for Regional Studies

At the end of 2024, the average cost of building one unit of affordable housing in Silicon Valley was \$765,600.

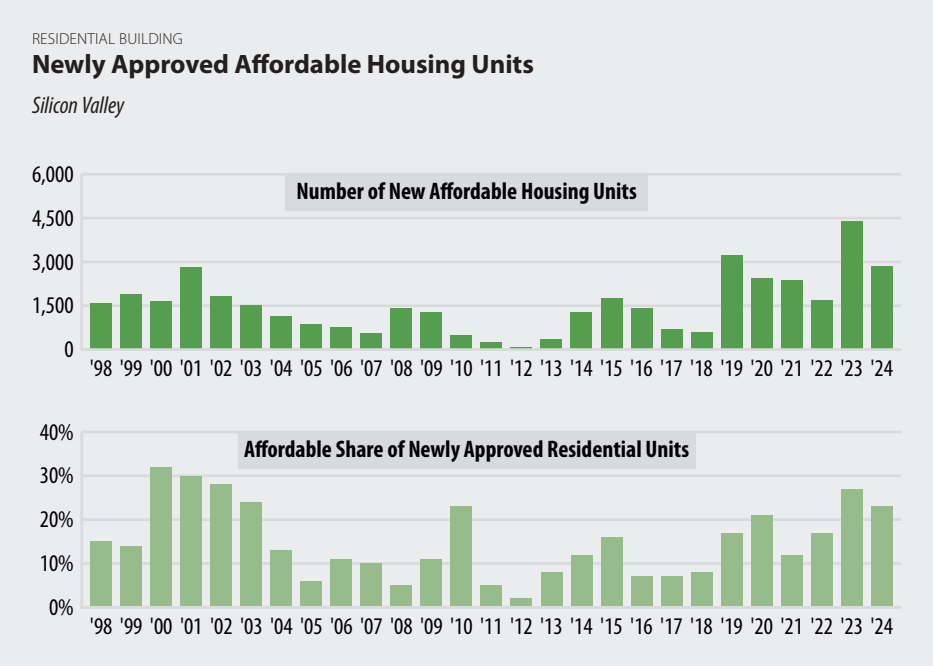
The cost of building affordable housing in Silicon Valley has grown significantly over the past five years, with the cost per square foot more than doubling since 2019.

Between 2019 and 2024, the average cost per unit of Silicon Valley affordable housing rose by 83%, and the average cost per square foot more than doubled (from \$212 to \$475).⁸²



Data Source: California State Treasurer, California Tax Credit State Allocation Committee | Analysis: Silicon Valley Institute for Regional Studies

So far in the 2023-2031 Regional Housing Needs Allocation (RHNA) cycle, more than half (54%) of Silicon Valley's permitted residential units fall into the Above Moderate Income category (120%+ of the Area Median Income), while 16% are designated as Very Low Income, 14% as Low Income, and 17% as Moderate Income units.



Note: Beginning in 2008, the Land Use Survey was expanded to include cities northward along the U.S. 101 corridor (Brisbane, Burlingame, Millbrae, San Bruno and South San Francisco). In 2014, the Survey was further expanded to include all Silicon Valley cities (adding Colma, Daly City, Half Moon Bay and Pacifica).
Data Source: City Planning and Housing Departments of Silicon Valley | Analysis: Silicon Valley Institute for Regional Studies

Of the 2,900 newly-approved affordable housing units in FY 2023-24, 655 (23%) were affordable to very low-income residents earning less than half of the area median income. Some additional units approved as “below market rate” may also end up being affordable to very low-income residents, as well.

In total, Silicon Valley cities had listed 32,900 low-income units among HUD Low-Income Tax Credit properties in service between 1987 and 2022 representing 8% of projects statewide;⁸⁴ more than half (56%) of these units were located in San Jose.

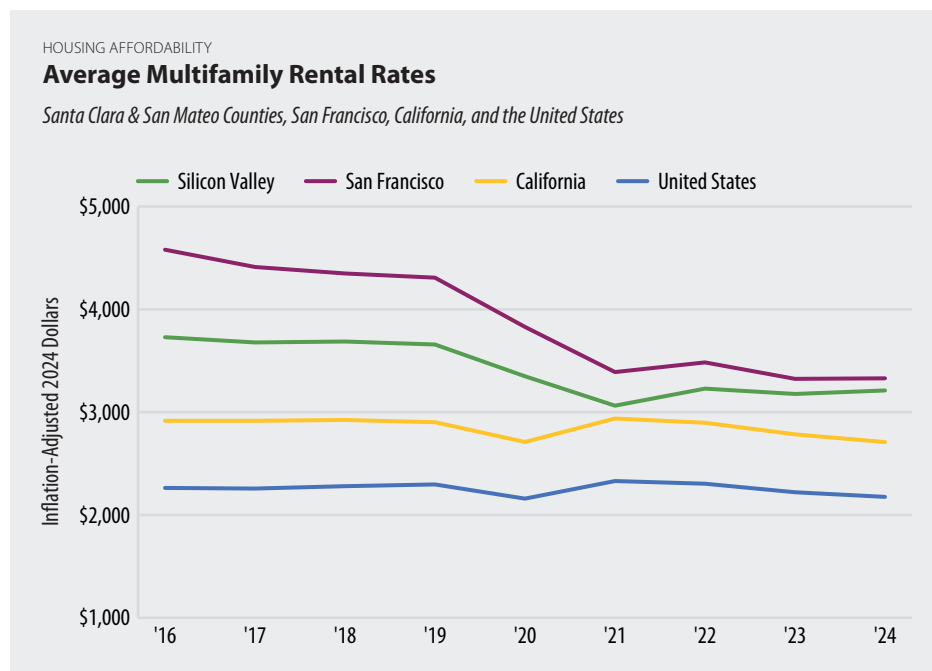
Silicon Valley cities and counties approved more new affordable housing units in the 2022-23 fiscal year (nearly 4,400) than during any other year on record,⁸³ representing 27% of all approved units that year. While this number came down slightly in FY 2023-24, regional approvals of new affordable housing remained relatively high in an historical context (at nearly 2,900 units, representing 23% of all newly approved units that year).

In 2023, the California Tax Credit Allocation Committee allocated state credits to 19 projects within the region, including 2,690 low-income units ranging from studios to 4-bedrooms, of which 41% were for very-low (<50% of the Area Median Income) or extremely-low (<20% of AMI) income residents.⁸⁵

The average monthly rental rate in multifamily housing (such as apartments and duplexes) was \$3,210 in Silicon Valley last year; San Francisco's average was 4% higher (\$3,330).

Household income gains for renters across Santa Clara and San Mateo counties have outpaced the rise of apartment rental rates since 2016.

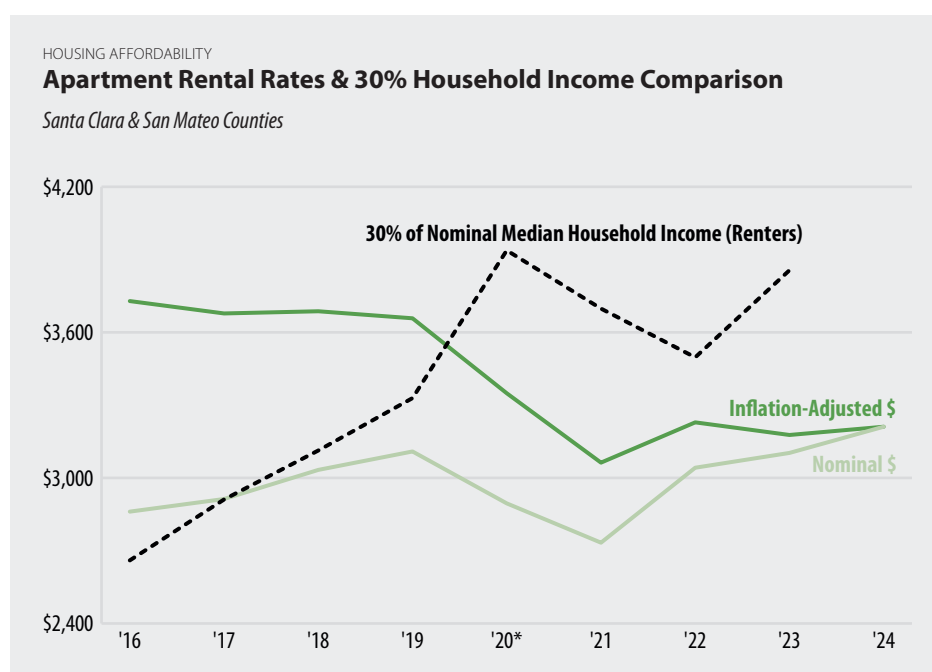
Percent Change in Inflation-Adjusted Multifamily Rental Rates		
	2023-24	2019-24
Silicon Valley	+1%	-12%
San Francisco	0%	-23%
California	-3%	-7%
United States	-2%	-5%



Data Source: CBRE | Analysis: CBRE, Silicon Valley Institute for Regional Studies

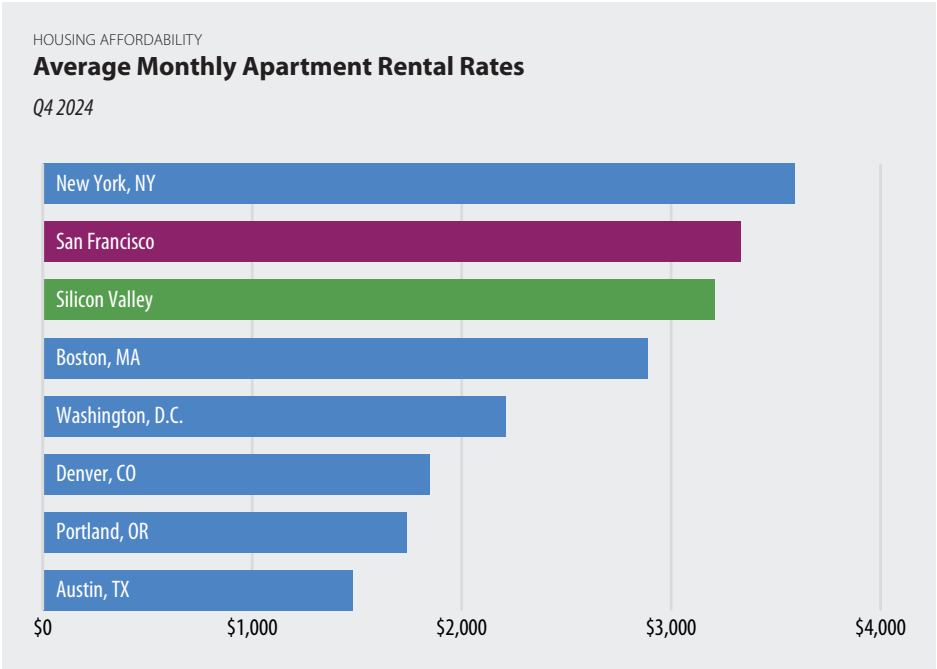
Median apartment rental rates in Silicon Valley rose by 1% in 2024 after adjusting for inflation; this compares to +/-0% in San Francisco, -3% in California, and -2% nationally.

A wage of at least \$55 per hour (or approximately \$115,300 annually) would be required in order to afford an average one-bedroom apartment in Silicon Valley and not be burdened⁸⁶ by housing costs; a two-worker household would require an average wage of \$28 per hour each (or \$57,600 annually per person).

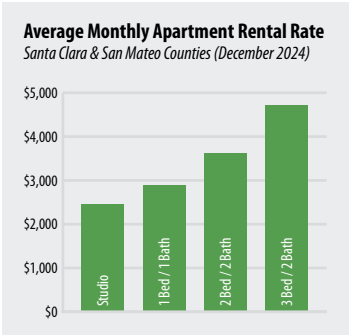


*2020 income based on U.S. Census Bureau American Community Survey 1-year estimates with experimental weights. | Data Source: CBRE; United States Census Bureau, American Community Survey | Analysis: CBRE; Silicon Valley Institute for Regional Studies

At the end of 2024, average Silicon Valley rental rates ranged from \$2,450 for a studio apartment to \$4,710 for a 3-bedroom/2-bath unit.



Data Source: CBRE | Analysis: CBRE; Silicon Valley Institute for Regional Studies



Average monthly apartment rental rates in Silicon Valley were lower in Q4 2024 than in places like San Francisco and New York City (by 11% and 4%, respectively), but much higher than in others (e.g., 74% higher than Denver, and 85% higher than Portland).

← Silicon Valley’s average apartment rental rates — in nominal dollars — were 3% higher in 2024 than pre-pandemic (2019); however, inflation over that time period was 18%, resulting in a net decline in inflation-adjusted rental rates.

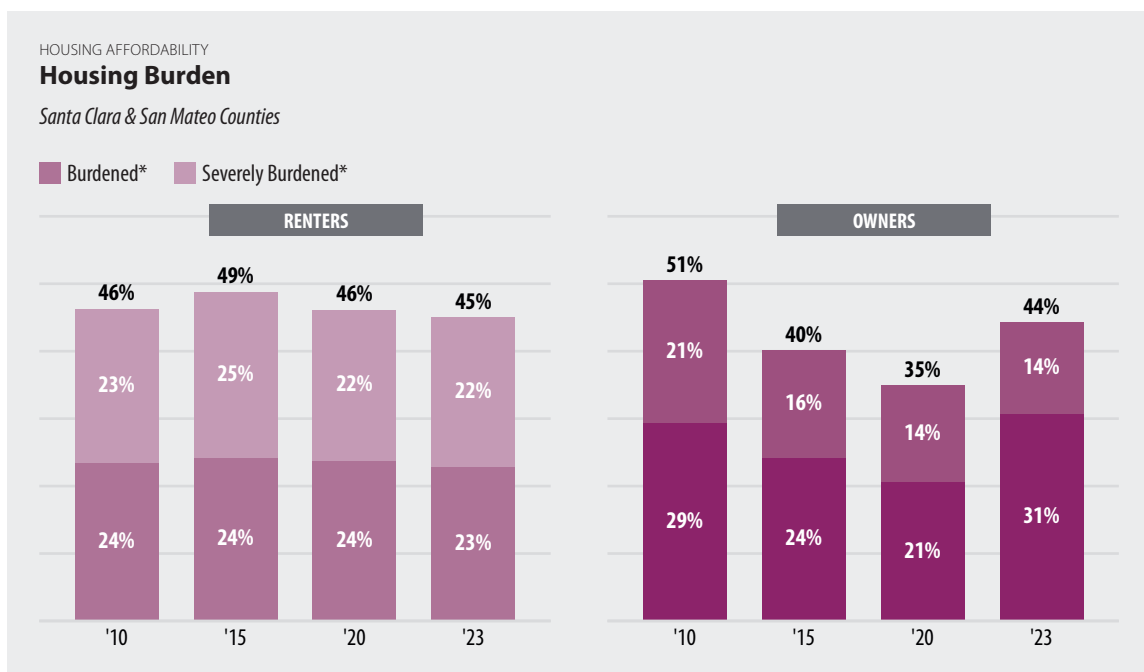
San Jose and San Francisco are the two most expensive major metropolitan regions in the country, based on median monthly housing costs in 2023 (and both have grown by +16% since 2019).

Median Monthly Housing Costs		
Top 10 United States Metropolitan Statistical Areas, California, and the United States 2023		
1	San Jose-Sunnyvale-Santa Clara, CA Metro Area	\$2,864
2	San Francisco-Oakland-Fremont, CA Metro Area	\$2,576
3	San Diego-Chula Vista-Carlsbad, CA Metro Area	\$2,350
4	Napa, CA Metro Area	\$2,327
5	Oxnard-Thousand Oaks-Ventura, CA Metro Area	\$2,282
6	Vallejo, CA Metro Area	\$2,192
7	Bridgeport-Stamford-Danbury, CT Metro Area	\$2,171
8	Santa Rosa-Petaluma, CA Metro Area	\$2,164
9	Boston-Cambridge-Newton, MA-NH Metro Area	\$2,159
10	Santa Cruz-Watsonville, CA Metro Area	\$2,128
	California	\$2,055
	United States	\$1,358

Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

While the share of renters burdened by housing costs in Silicon Valley is slightly lower than that of the nation as a whole (44% compared to 48%), the burden for Silicon Valley owners is higher (45%, compared to 37% across the country).

Four out of ten (45%) of Silicon Valley renters are burdened⁸⁷ by housing costs, spending more than 30% of their gross income on rent; 22% of renters spend more than half of their income on rent.



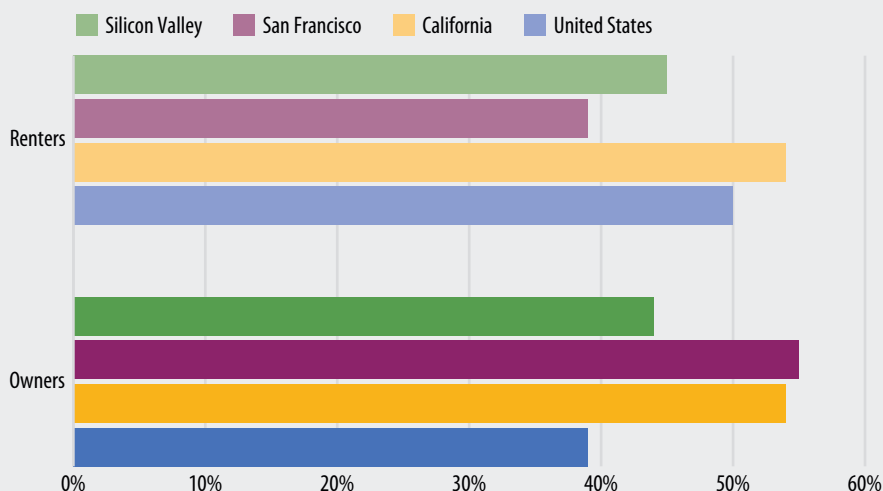
*share of households with housing costs >30% of gross income (>50% for severely burdened households)

Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

HOUSING AFFORDABILITY

Share of Households Burdened* by Housing Costs

Santa Clara & San Mateo Counties, San Francisco, California, and the United States | 2023



Four out of ten (45%) Silicon Valley households who rented in 2023 were burdened by housing costs, meaning they spent more than 30% of their gross income on rent. This compares to 39% in San Francisco, 54% in California, and 50% throughout the United States.

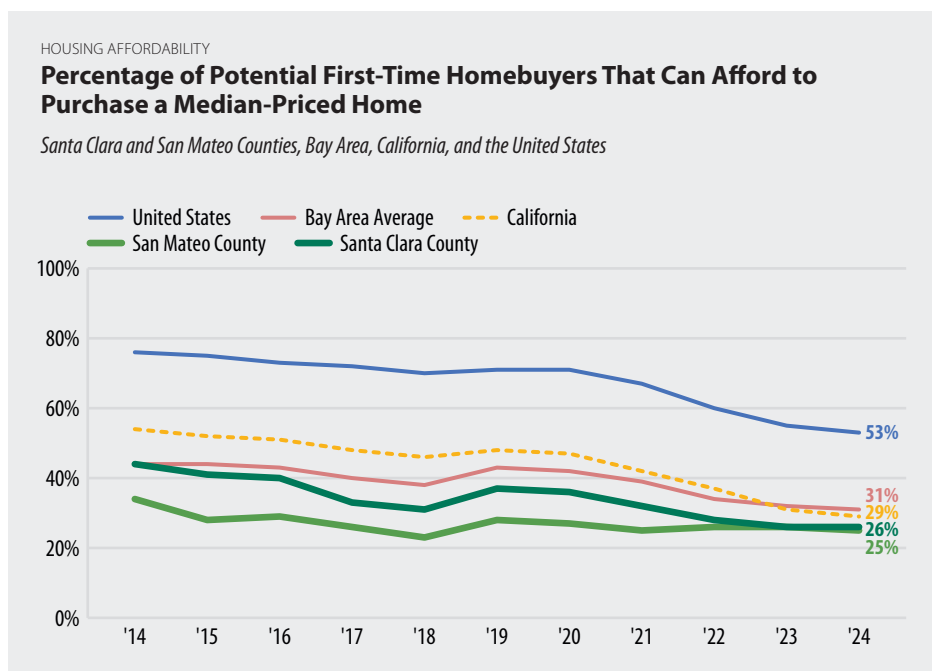
*share of households with housing costs >30% of gross income
Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

Between 2010 and 2020, the share of Silicon Valley homeowners burdened by housing costs fell 16 percentage points, likely due to the increasingly high bar of becoming a homeowner (with a more financially-select group able to purchase homes each year). Since 2020, however, the share of cost-burdened homeowners has grown significantly (+10 percentage points).

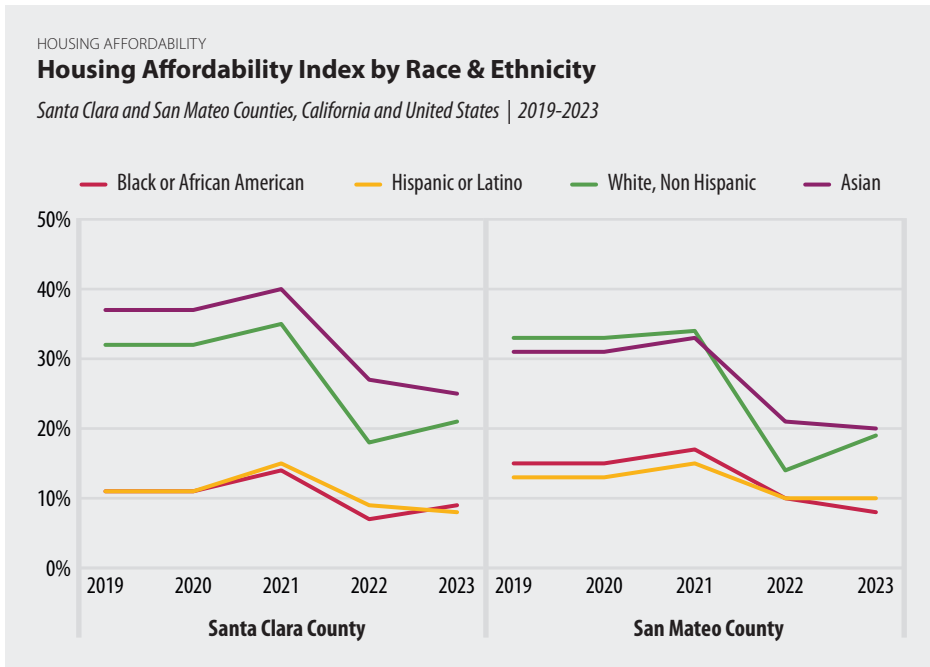
In 2024, the First-Time Buyer Housing Affordability Index declined from 32% to 31% in the Bay Area year-over-year and by 2 percentage points to 29% in the state overall. Because the Index is calculated based on the household income distribution, these declines indicate that rising home prices were outpacing income gains.

Only 25% of potential first-time homebuyers living in San Mateo County and 26% living in Santa Clara County can afford to purchase a median-priced home; this compares to 31% in the Bay Area overall, 45% in Sacramento, and 53% throughout the country.

While approximately one-quarter of residents can afford a median-priced home, the two counties may be even less affordable to those who currently live outside of the region including workers who commute from neighboring counties.



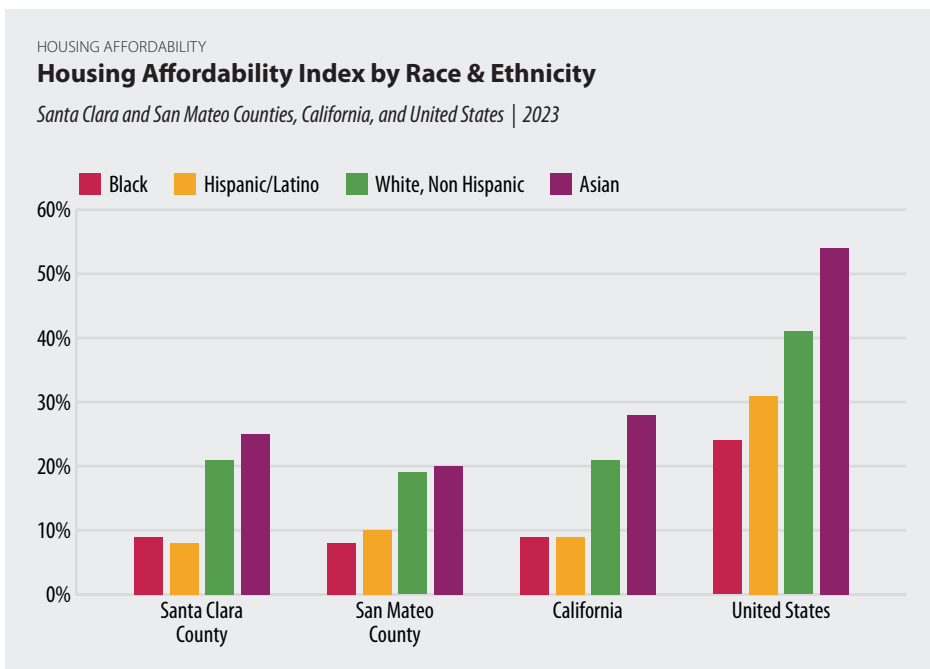
Data Source: California Association of REALTORS® | Analysis: Silicon Valley Institute for Regional Studies



Data Source: California Association of REALTORS® | Analysis: Silicon Valley Institute for Regional Studies

The affordability gap for Black or African American and Hispanic or Latino homebuyers remains wide in Silicon Valley and California. On the state level, 21% of White and 28% of Asian potential homebuyers could afford to purchase a median-priced home, compared to only 9% of Black or African American and Hispanic or Latino homebuyers.⁸⁸

Deep disparities in housing affordability exist across racial and ethnic groups in Silicon Valley. In Santa Clara County, 21% of White and 25% of Asian potential first-time homebuyers could afford to purchase a median-priced home in 2023. This compares to 9% of Black or African American and 8% of Hispanic or Latino potential homebuyers. These disparities are also evident in estimates for San Mateo County, the state, and the nation, although the latter has higher affordability rates.



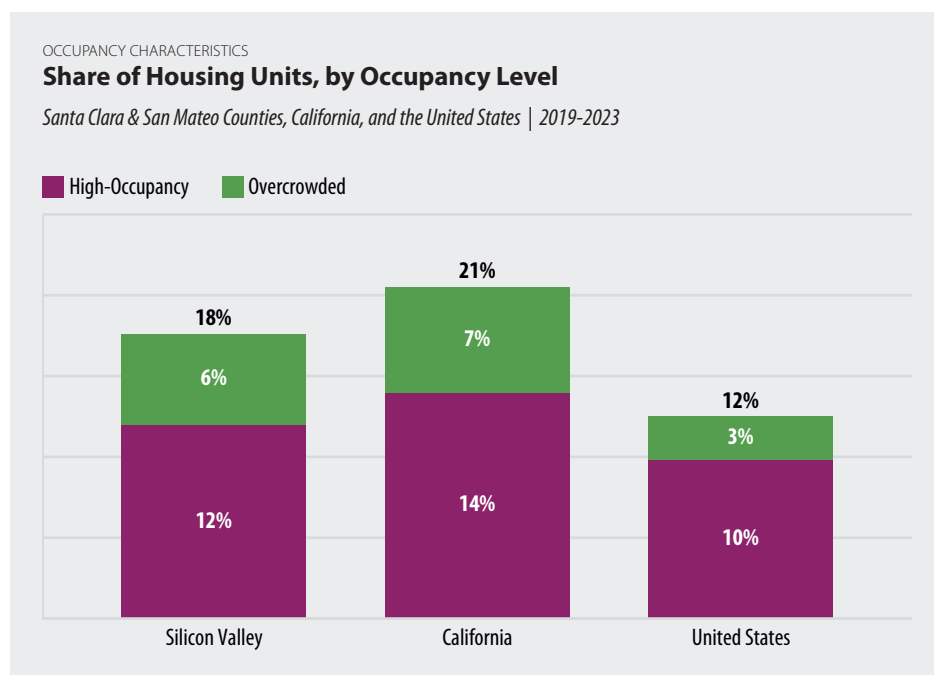
Data Source: California Association of REALTORS® | Analysis: Silicon Valley Institute for Regional Studies

Home affordability in Santa Clara and San Mateo counties improved slightly for all racial and ethnic groups from 2019 to 2021, but these improvements reversed sharply in 2022, falling below 2019 levels. While 2023 showed modest improvements in affordability for some groups, housing remains unattainable for most residents, with Black or African American and Hispanic or Latino communities facing particularly steep barriers to homeownership.

Silicon Valley and California have higher shares of units that house more than two people per bedroom (6% and 7%, respectively) than the United States as a whole (3%).

More than half (55%) of Silicon Valley's residential units meet occupancy standards. Twenty-seven percent are characterized by low occupancy and potential underutilization (with more than one bedroom plus a spare room per occupant/couple), while 18% are at high occupancy (with two or more people per bedroom, excluding couples).

One out of every sixteen Silicon Valley households is overcrowded, with more than two people to every bedroom; the majority (64%) of these units have 0-2 bedrooms.

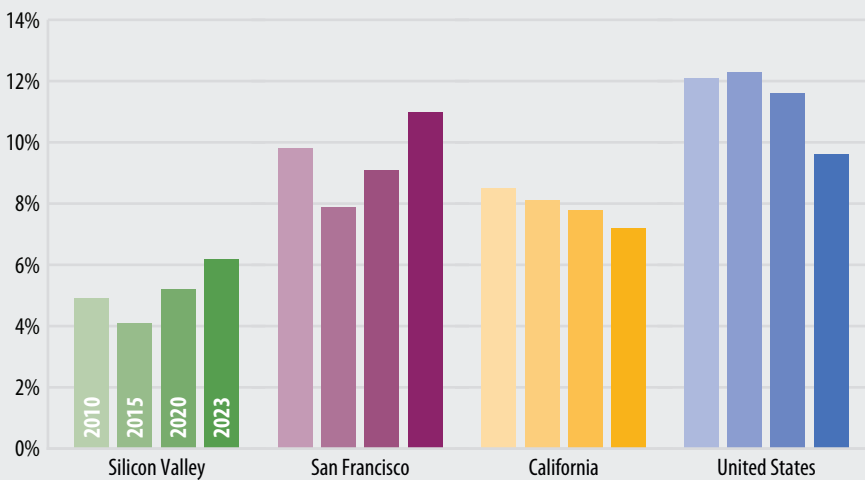


Data Source: United States Census Bureau, American Community Survey PUMS | Analysis: Silicon Valley Institute for Regional Studies

OCCUPANCY CHARACTERISTICS

Vacant Share of Housing Units

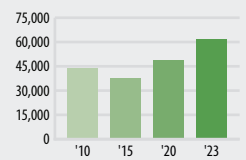
Santa Clara & San Mateo Counties, San Francisco, California, and the United States



Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

Number of Vacant Housing Units

Santa Clara & San Mateo Counties



The number of vacant units in Santa Clara and San Mateo counties was 40% higher in 2023 than in 2010.

Silicon Valley has approximately 61,400 vacant housing units containing a total of 116,000 bedrooms. Of these, 89% are not sold, rented, or otherwise reserved.

More than half (51%) of Silicon Valley's vacant housing units in 2023 were rentals; of these, 44% were available, while 7% were rented but not occupied.

Three out of every ten young adults (ages 18-34) in Silicon Valley live in their parental home.

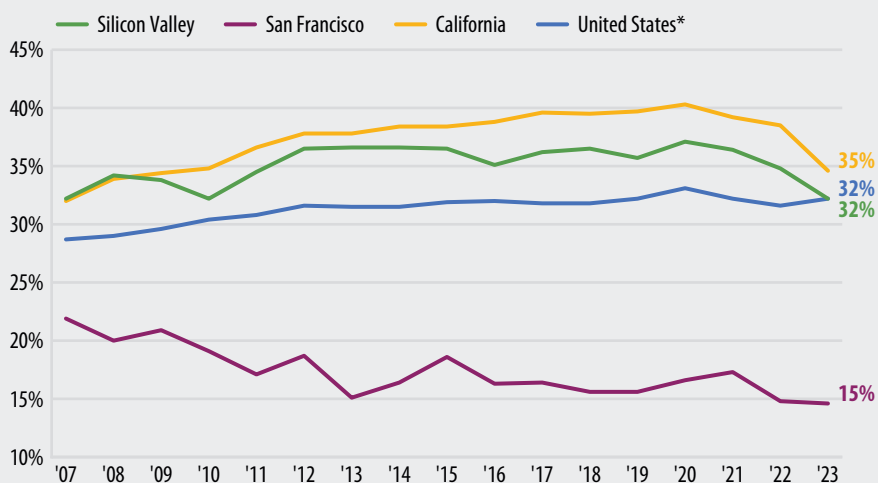
2020 marked a high point in the share of young adults (ages 18-34) living with their parent(s) in Silicon Valley, statewide, and nationally (at approximately 37%, 40%, and 33%, respectively).

The national peak — which was higher than any year in the dataset back to 1960 — was due to factors other than college students moving back home, as students living in dormitories were already counted as residing in their parents' households.

OCCUPANCY CHARACTERISTICS

Young Adults (Ages 18-34) Living With a Parent

Silicon Valley, San Francisco, California, and the United States

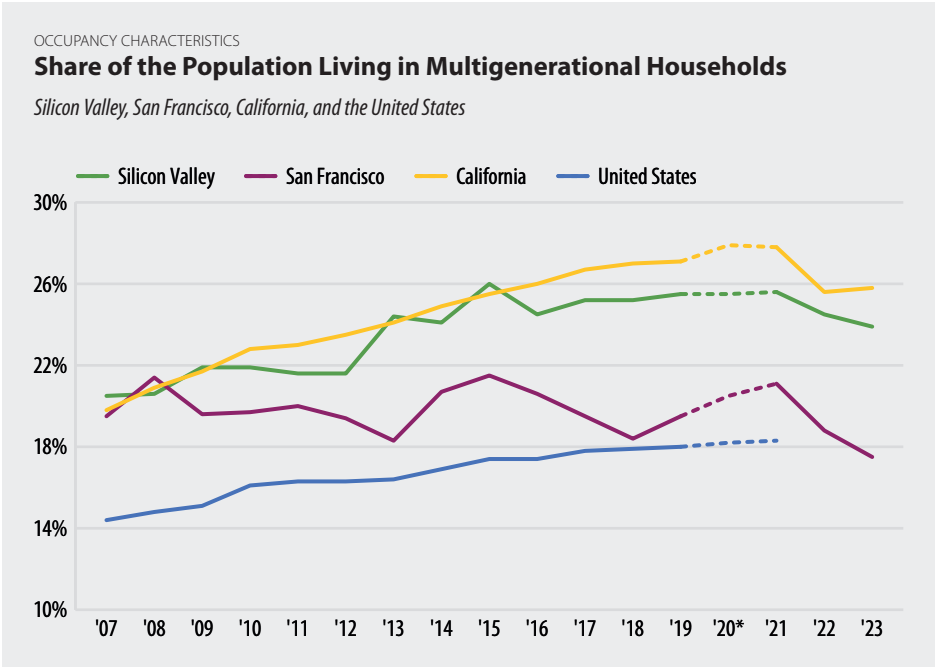


*U.S. estimate includes college students living in dormitories. | Note: Young Adults include residents ages 18 to 34, and only those who live with a parent who is the householder. Data Sources: IPUMS-USA, University of Minnesota; United States Census Bureau, Current Population Survey | Analysis: Silicon Valley Institute for Regional Studies; Kyle Neering

Silicon Valley experienced a decline in the share of young adults living with a parent in 2023 (down 3 percentage points year-over-year); similar declines were observed throughout the state and nation that year.

Nearly one-third (32%) of all Silicon Valley young adults ages 18-34 lived in their parental home in 2023; this compares to 15% in San Francisco, 35% in California as a whole, and 32% nationwide.⁸⁹

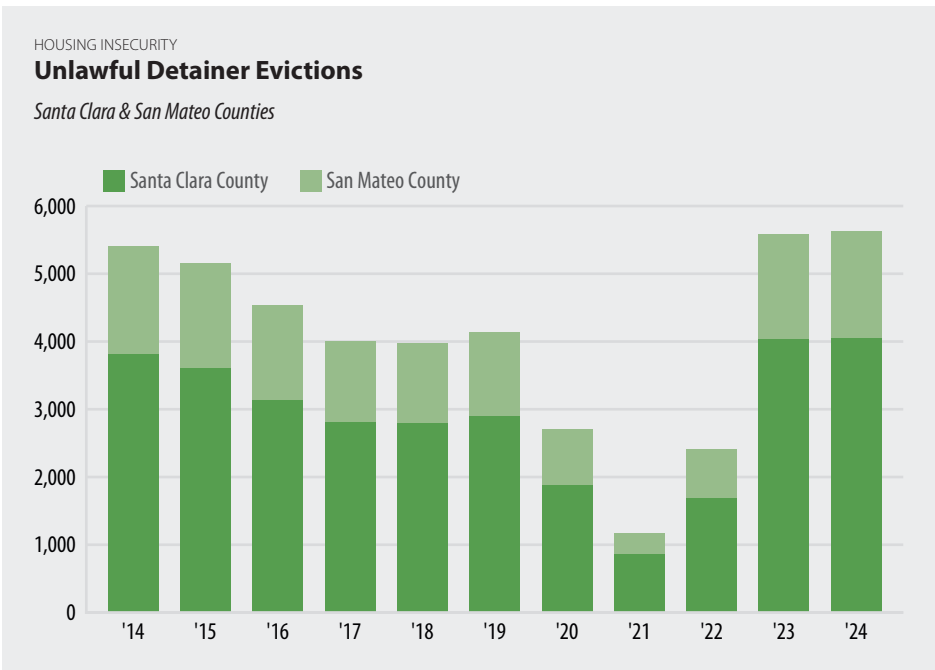
One out of four Silicon Valley residents lives in a multigenerational household; this share has been slowly rising over time, from one in five residents in 2007.



*2020 estimate from 1-year American Community Survey microdata with experimental weights. | Note: Multigenerational households include all households with two or more adult generations, where an adult is defined as age 25 and over. | Data Sources: IPUMS-USA, University of Minnesota; Pew Research Center | Analysis: Silicon Valley Institute for Regional Studies; Pew Research Center; Kyle Neering

Multigenerational households are more common in Silicon Valley (24% of residents in 2023) than in San Francisco (17%), where residents are more likely to live with non-family members.

Increases in Silicon Valley's multigenerational households over the past decade appear more closely linked to the influx of new residents from India and China and the number of resident divorcees than to monthly rental rates. While these early observations do not indicate causation, they do suggest the importance of cultural and situational impacts alongside economic factors.



Data Source: California Courts, The Judicial Branch of California | Analysis: Silicon Valley Institute for Regional Studies

Silicon Valley saw a substantial increase (+132%) in the total number of unlawful detainer evictions in Santa Clara and San Mateo counties in FY 2022-23 as a result of the end of the statewide moratorium on evictions on July 1, 2022. FY 2023-24 saw a slight increase in evictions (+1%) over the prior year (75% of which occurred in Santa Clara County).

Although San Francisco and California both saw a significant uptick in evictions in FY 2022-23 (+91% and +88%, respectively), San Francisco's number decreased by six percent in FY 2023-24 and California's remained stable at more than 4,000 evictions.

Across Santa Clara and San Mateo counties in 2024, an estimated 12,524 people experienced homelessness, with 68% living without shelter. While this unsheltered rate marked a 1 percentage point drop from the previous year — continuing a two-year downward trend — the region saw an uptick in youth homelessness, with more than 700 unaccompanied minors (under age 18) living without shelter, slightly higher than 2023 levels.

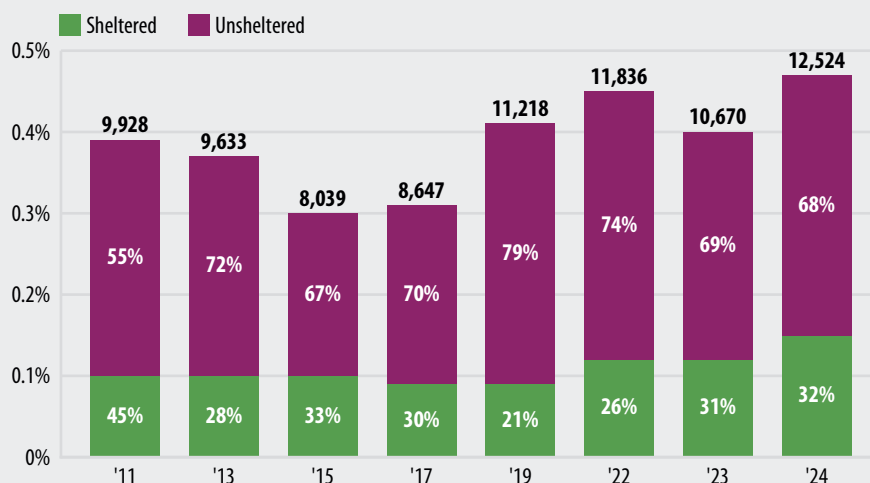
Nearly all residents of Santa Clara and San Mateo counties believe homelessness in the region has become a serious problem.⁹⁰

Each year, Continuums of Care (CoC)⁹¹ across the United States collect data on people experiencing homelessness who are staying in shelters. Every two years, CoCs also gather data on individuals who are unsheltered. The 2024 data revealed that among the unsheltered population, 23% were reported to have severe mental illness, 15% struggled with chronic substance abuse, 4% were survivors of domestic violence, and 2% were living with HIV/AIDS. Those who are sheltered have much lower incidence of these reported circumstances.

HOMELESSNESS

Unhoused Share of Total Population & Share Sheltered/Unsheltered

Santa Clara & San Mateo Counties

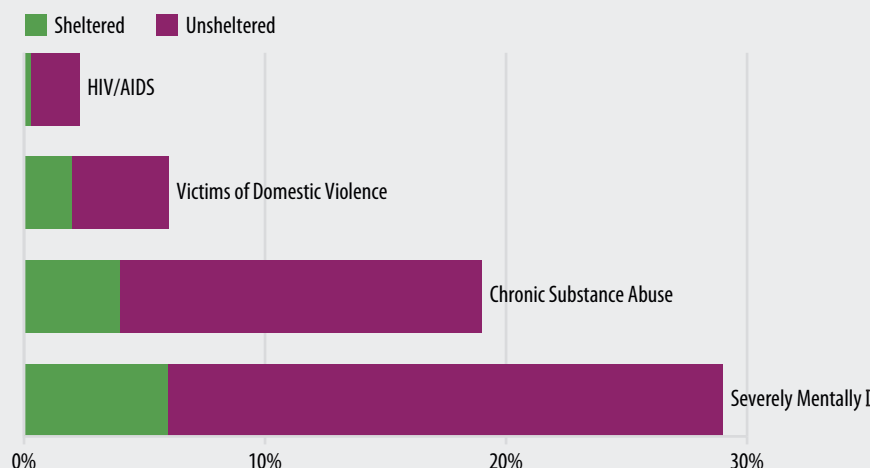


Data Sources: United States Department of Housing and Urban Development (HUD), Point-In-Time (PIT) Estimates by Continuum of Care; County of Santa Clara, Office of Supportive Housing; County of San Mateo Human Services Agency; California Department of Finance; California Department of Housing and Community Development | Analysis: Silicon Valley Institute for Regional Studies

HOMELESSNESS

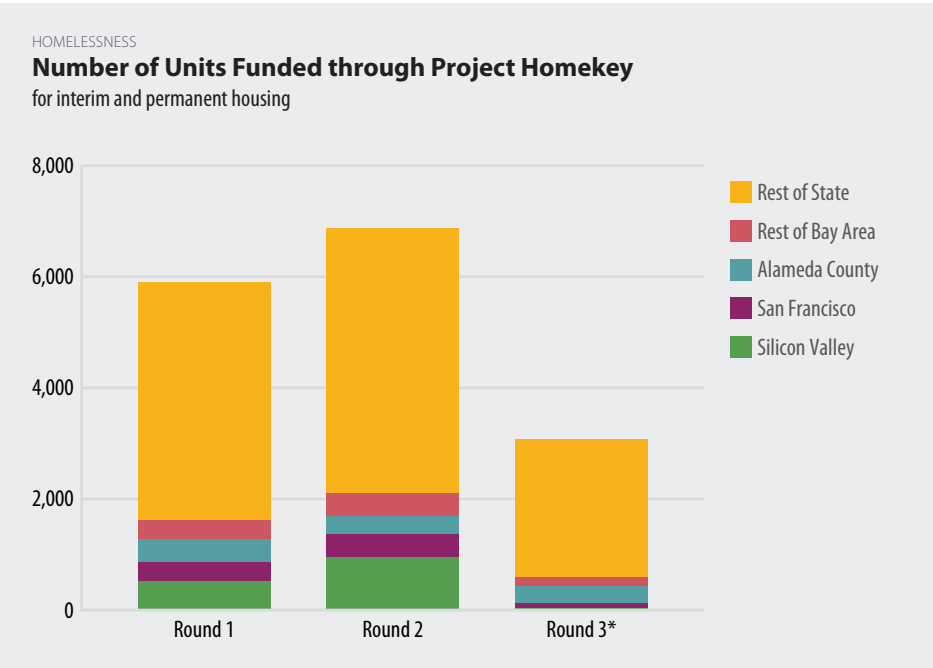
Share of Unhoused Population, by Other Reported Information

Santa Clara & San Mateo Counties | 2024



Note: The unsheltered population data for Santa Clara County are from 2023. | Data Sources: United States Department of Housing and Urban Development (HUD), Point-In-Time (PIT) Estimates by Continuum of Care; County of Santa Clara, Office of Supportive Housing; County of San Mateo Human Services Agency; California Department of Finance; California Department of Housing and Community Development | Analysis: Silicon Valley Institute for Regional Studies

Across the state, more than 15,800 units have been funded through Project Homekey.

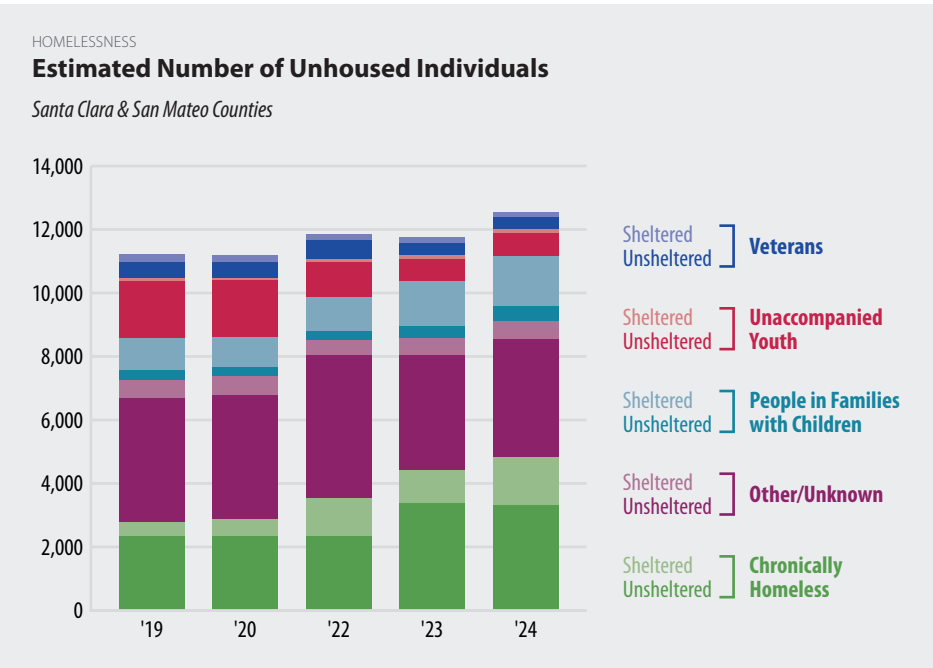


*As of 8/14/2024. | Data Sources: United States Department of Housing and Urban Development (HUD), Point-In-Time (PIT) Estimates by Continuum of Care; County of Santa Clara, Office of Supportive Housing; County of San Mateo Human Services Agency; California Department of Finance; California Department of Housing and Community Development
Analysis: Silicon Valley Institute for Regional Studies

In response to the disproportionate impact of the pandemic on those at risk for homelessness, federal Coronavirus Relief Funds, state General Funds, and philanthropic dollars were made available to local public agencies⁹² to repurpose motels, hotels, and other types of buildings for housing and housing assistance. Several local projects were funded during the first round of Project Homekey, and additional projects received funding in Round 2 and Round 3. In total, more than 1,500 units in Santa Clara and San Mateo counties had been funded as of August 2024.

The number of chronically homeless individuals — those who have experienced homelessness for one year or more — has increased in Silicon Valley over the past five years (to nearly 4,800 people in 2024, 69% of whom were unsheltered). The number of sheltered families with children rose significantly over that period as well (+58%).

Youth and young adults⁹⁵ (707) accounted for 6% of the region’s unsheltered homeless population in 2024.



Data Sources: United States Department of Housing and Urban Development (HUD), Point-In-Time (PIT) Estimates by Continuum of Care; County of Santa Clara, Office of Supportive Housing; County of San Mateo Human Services Agency; California Department of Finance; California Department of Housing and Community Development | Analysis: Silicon Valley Institute for Regional Studies

Homelessness remains an issue for the region, the state, and the nation. In 2024, an estimated 771,400 people were experiencing homelessness throughout the country (the highest count ever recorded). Nationally, the increase stems largely from a range of factors including the challenging rental housing market, rising inflation, stagnating wages, and the effects of systemic racism.⁹³ Nearly all populations except veterans experienced record levels of homelessness, including people in families with children, an increase of 39% year-over-year.⁹⁴

WHAT ARE THE KEY FINDINGS?

Transportation in Silicon Valley has shifted significantly in recent years. Prior to the pandemic, the region experienced steady increases in vehicle miles traveled (VMT) on its freeways, with commuter driving during peak hours accounting for much of this growth. However, the onset of the pandemic led to drastic declines, with monthly VMT per capita dropping lower than any other year on record. While freeway usage has rebounded, it remains 4% lower than pre-pandemic levels.

The cost of transportation has become a growing concern for Silicon Valley residents. Gasoline prices in the Bay Area rose by 29% in 2022, and despite a slight 3% decrease the following year, they remained

25% above pre-pandemic levels. This has contributed to a 10% increase in overall transportation costs for Silicon Valley families, with the average annual cost for

Silicon Valley experienced a significant rise in the number of megacommuters.

a family of four reaching nearly \$10,200. In 2024, an estimated 65% of Bay Area residents believed transportation had become more difficult to afford.

Commuting patterns have also shifted, with the share of solo drivers declining from 75% pre-pandemic to 53% in 2020, and 52% in 2021 as remote work became

more prevalent. While this share has since increased to 64%, Silicon Valley experienced a significant rise in the number of megacommuters — those who travel

more than three hours daily to and from work. In 2023, 5% or 71,300 of Silicon Valley's commuters were megacommuters, representing a 37% year-over-year increase. These megacommuters have average commute times of 3 hours and 54

minutes daily (compared to just 54 minutes for other commuters) and are disproportionately Hispanic or Latino and Black or African American. The occupations with the highest propensity for megacommuting include firefighters, roofers, and plumbers.

While megacommuting rates have increased significantly since 2020, they

Continued on page 176

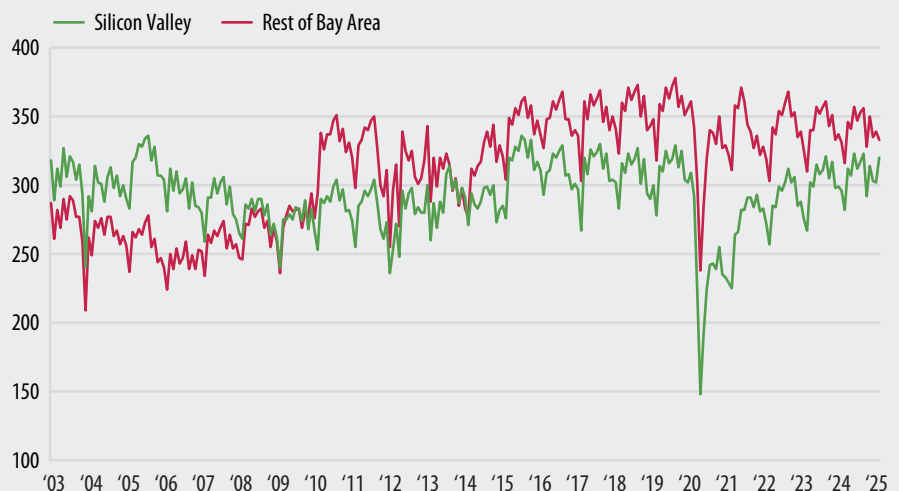
In 2024, Silicon Valley averaged approximately 3,700 total freeway miles driven per capita — 2% more than the prior year, and 1% below the 2019 (pre-pandemic) average.

Pandemic-related transportation declines throughout the region led to fewer freeway miles driven than any other time on record⁹⁶ in April 2020; statewide, monthly VMT per capita was reduced to levels not observed since 2006.

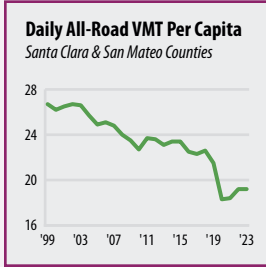
VEHICLE MILES TRAVELED

Monthly Freeway Vehicle Miles Traveled Per Capita

Santa Clara & San Mateo Counties, and Rest of Bay Area



Data Sources: Caltrans PeMS; California Department of Finance | Analysis: Silicon Valley Institute for Regional Studies

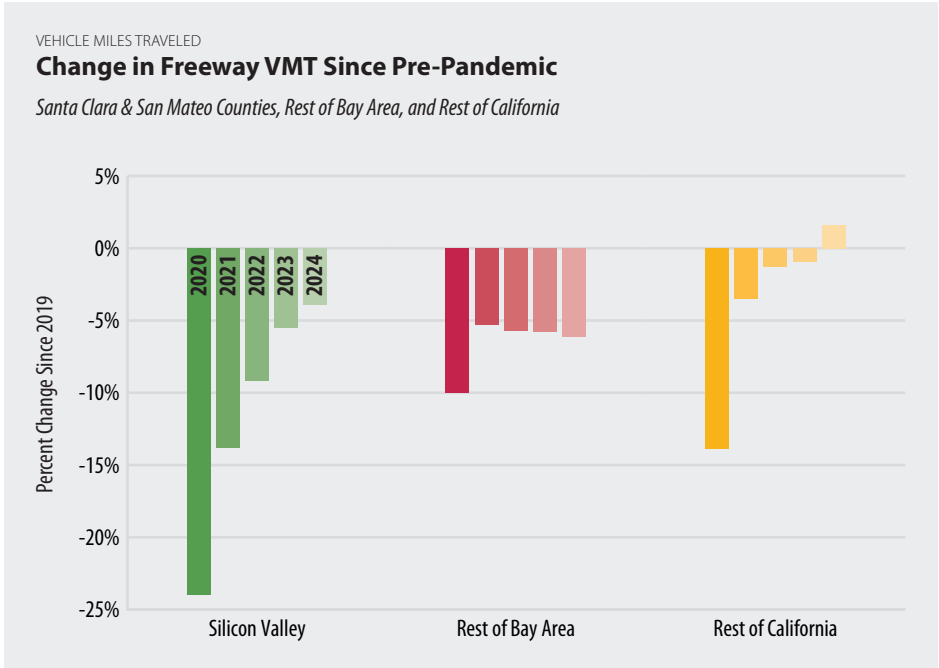


Data Sources: California Department of Transportation; California Department of Finance
Analysis: Silicon Valley Institute for Regional Studies

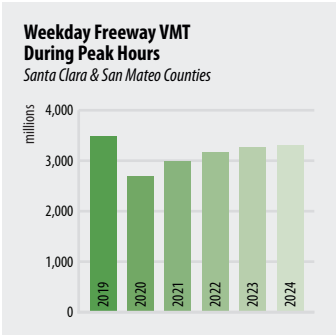
Silicon Valley vehicle miles traveled (VMT) on all types of roadways (not just freeways) was 19 miles per person per day in 2023.

While *freeway* vehicle miles traveled (VMT) increased steadily in Silicon Valley between 2011 and 2019, estimates of VMT per resident on all public roadways fell during that period from 24 miles per day in 2011 to less than 22 miles per day in 2019 — indicating that VMT increases were primarily commuter-driven.

The total number of Vehicle Miles Traveled (VMT) on Silicon Valley freeways was 4% lower in 2024 than pre-pandemic (2019) levels; this compares to 6% in the rest of the Bay Area, and 2% in the rest of the state. The region’s commuter driving — on weekdays during peak hours — has recovered nearly as quickly (remaining 5% below 2019 levels last year).



Note: Peak Hours include weekdays from 6-10 am and 3-7 pm, excluding holidays. Silicon Valley includes Santa Clara & San Mateo counties. | Data Sources: Caltrans PeMS; California Department of Finance | Analysis: Silicon Valley Institute for Regional Studies



Note: Peak Hours include weekdays from 6-10 am and 3-7 pm, excluding holidays. Silicon Valley includes Santa Clara & San Mateo counties.

Continued from page 174

remain well below pre-pandemic levels, with 39,700 fewer megacommuters in Silicon Valley in 2023 compared to 2019. This suggests the pandemic may have had a lasting impact on commuting patterns in the region.

WHY IS THIS IMPORTANT?

Adequate highway capacity and improved transportation options, both public and private, are important for the mobility of people and goods. Investments in public transportation and walking and bicycling infrastructure, along with improving automobile fuel efficiency and shifting from fossil fuels to electric vehicles, are important for meeting air quality and carbon emission reduction goals. Further, creating

safe conditions for active modes of transportation, such as biking and walking, is important for helping residents get around within the region as well as promoting healthy lifestyles and enhancing quality of life. These modes became especially critical during the pandemic, with many people looking for alternatives to indoor exercise and public transit.

Creating affordable housing close to jobs can cut or eliminate commutes. How much residents are driving their cars, how they commute, and changes in overall commuting behavior affect congestion on the region's roadways. Transportation-related injuries, including deaths, are significantly reduced with declines in regional vehicle miles traveled (VMT), an indicator of

collision exposure. And the amount of time wasted due to long commutes and traffic delays affects the everyday lives of residents — taking time away from work, participating in the community, and being with family and friends.

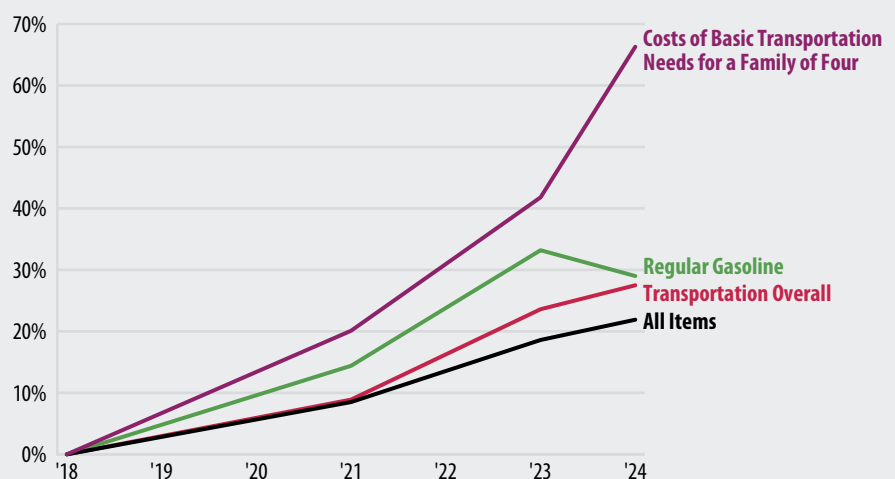
Silicon Valley's transportation costs rose by 10% in 2024, and an estimated 65% of residents⁹⁷ believed transportation was more difficult to afford than the prior year.

In 2024, transportation costs for a Silicon Valley family of four (approximately \$10,200 annually) were higher than in the Bay Area (\$9,400) or California overall (\$9,900).

TRANSPORTATION COSTS

Relative Change in Transportation Costs

Bay Area



Note: A family of four is based on a two-adult household. California represents a statewide county average. Costs for Regular Gasoline, Transportation, and All Items are from the Bay Area Consumer Price Index. | Data Source: Center for Women's Welfare, University of Washington; U.S. Bureau of Labor Statistics | Analysis: Silicon Valley Institute for Regional Studies

**Average Monthly Costs of
Transportation Needs**
for a Family of Four

	2018	2024	% Change
Silicon Valley	\$526	\$848	+61%
Bay Area	\$470	\$780	+66%
California	\$519	\$826	+59%

The cost of basic transportation needs for a Silicon Valley family of four (two adults and two children) was nearly \$10,200 per year in 2024 (\$848 per month).¹⁰⁰ If both adults worked minimum-wage jobs,¹⁰¹ that amount would equal approximately 15% of their gross household income.

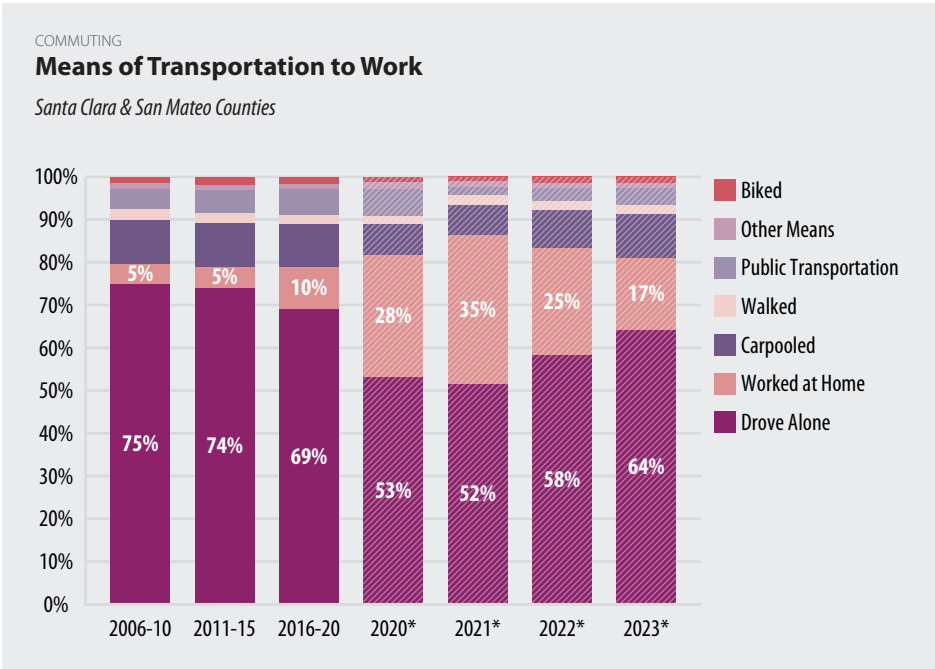
The cost of regular gasoline in the Bay Area increased by 29% in 2022 despite the highest national subsidies of petroleum products on record.⁹⁸ While costs came down slightly last year (-3%), prices for regular gasoline remained 25% above pre-pandemic levels⁹⁹ in December (compared to 22% for Transportation overall, and 16% for all Bay Area consumer goods and services combined).

Practical estimates of the most basic Bay Area transportation needs have risen more than twice as quickly (+66%) as the Bay Area consumer price average for Transportation overall (+27%) since 2018. While the former takes into account per-mile driving costs, insurance, fixed costs (excluding the car itself), and substitutes public for private transportation in San Francisco and Alameda counties, the latter is based on new vehicle prices and airfares in addition to gasoline and insurance.

Prior to the pandemic, three-quarters (75%) of Silicon Valley commuters drove alone to work; estimates for 2020 and 2021 indicate a drop to 53% and 52%, respectively, as many transitioned to remote work. In 2023, 64% of commuters drove to work alone (up from 58% in 2022).

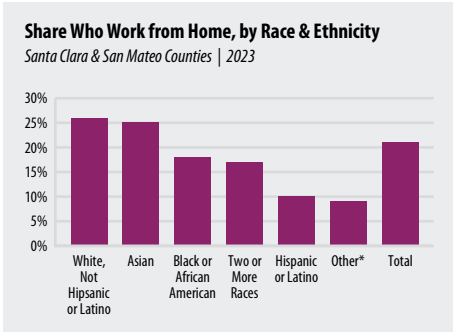
Public transportation's share of commuters increased for the second consecutive year, with a cumulative 2 percentage point increase since 2021. This increase translates to more than 25,600 additional riders who take public transportation to work on most days.

The share of workers ages 16+ who worked from home in 2023 was 17%, down from 25% in 2022. While this estimate represents an 8 percentage point drop from the prior year, it remains well above pre-pandemic averages (around 5%).

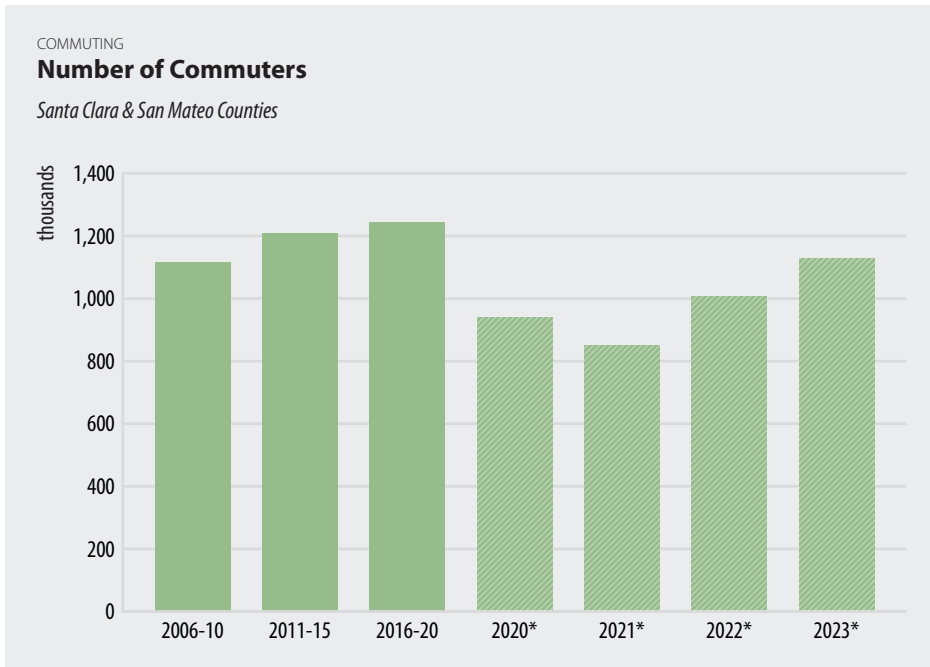


*2020-23 are from 1-Year American Community Survey Estimates (2020 with experimental weights) | Note: Other Means includes taxicab, motorcycle, and other means not identified separately within the data distribution. | Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

In 2023, a greater share of White, not Hispanic or Latino, and Asian workers (22% and 17%, respectively) worked from home compared to Black or African American (14%) and Hispanic or Latino (9%) workers.¹⁰²

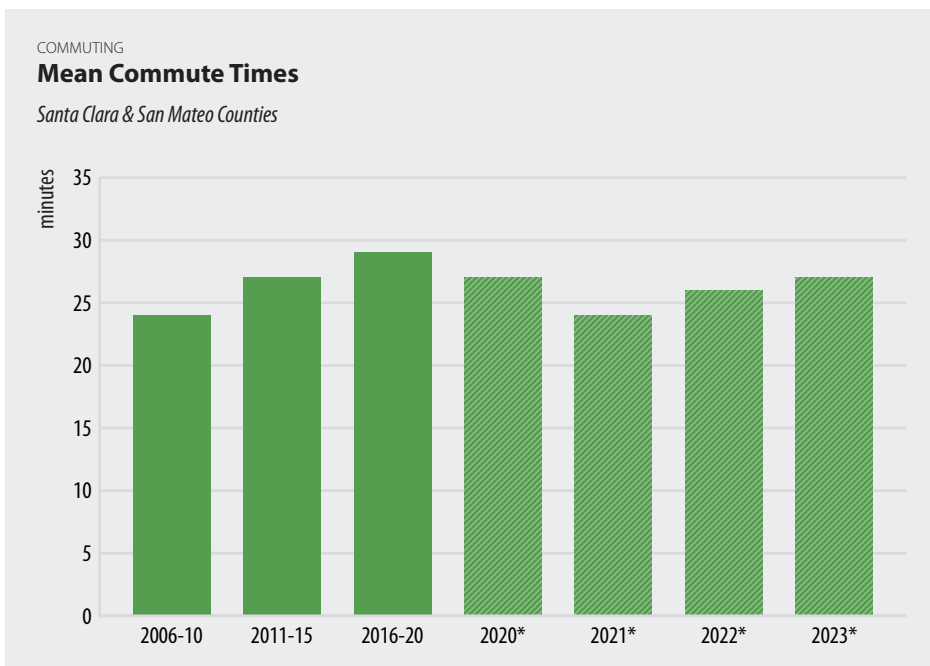


*Includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and Some Other Race



*2020-23 are from 1-Year American Community Survey Estimates (2020 with experimental weights) | Data Source: United States Census Bureau, American Community Survey
Analysis: Silicon Valley Institute for Regional Studies

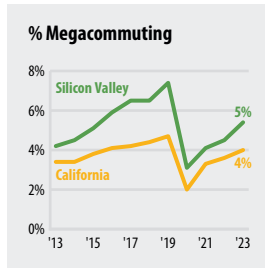
The number of commuters has been steadily rising since 2021 as more people transition back to in-person work. The total number of commuters in Santa Clara and San Mateo counties was 1.1 million in 2023, an increase of 33% since 2021.



*2020-23 are from 1-Year American Community Survey Estimates (2020 with experimental weights) | Data Source: United States Census Bureau, American Community Survey
Analysis: Silicon Valley Institute for Regional Studies

The average daily commute time in Silicon Valley increased from 48 minutes in 2021 to 54 minutes in 2023 — still below the pre-pandemic average of 59 minutes.

In 2023, Santa Clara and San Mateo county workers alone represented more than one in ten (11%) of the state's megacommuters (workers commuting more than three hours daily to and from work).

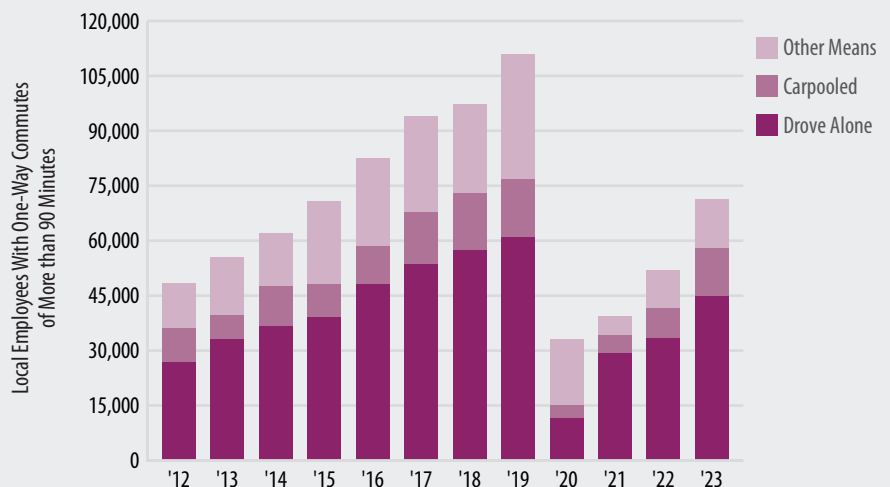


In 2023, 5% (71,300) of Silicon Valley's commuters traveled more than three hours daily to and from work. While this share was the same as the prior year, the total number of megacommuters rose by 19,300 (+37%) year-over-year.

Silicon Valley megacommuters are disproportionately Hispanic or Latino (34%, compared to 25% of all commuters) and Black or African American (7%, compared to 4% of all commuters). In contrast, Asian workers represent 42% of commuters but a relatively low share (30%) of megacommuters.

COMMUTING Megacommuters

Commuting into Santa Clara & San Mateo Counties



Note: 2020 estimate from 1-year American Community Survey microdata with experimental weights.
Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

Nearly two-thirds (63%) of Silicon Valley's megacommuters in 2023 drove to work alone. The remaining megacommuters either carpooled (18%), took a train or bus (16%), or commuted by other means (3%).

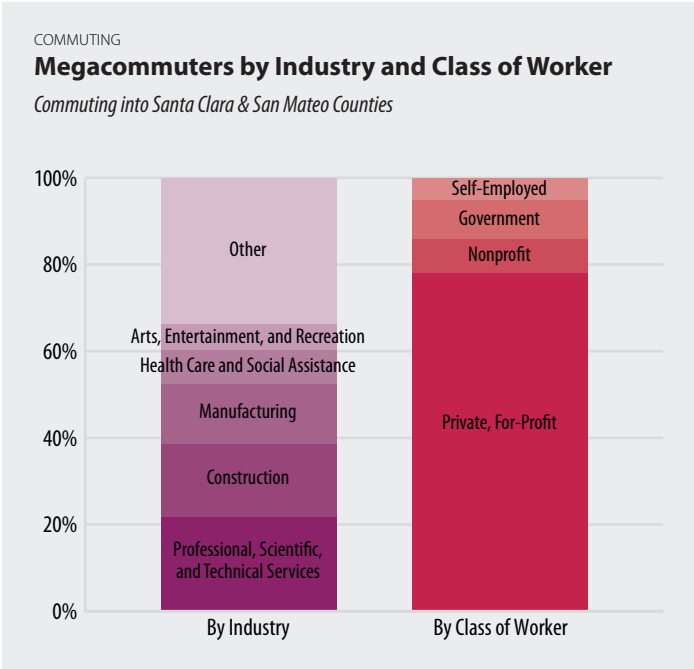
Nearly 1,900 Silicon Valley megacommuters in 2023 lived within the two-county region, but had long bus commutes of more than 90 minutes each way.

Workers commuting more than three hours daily to and from work in Santa Clara or San Mateo counties had an estimated average commute time of 3 hours and 54 minutes daily; this compares to 54 minutes daily for others.

Prior to the substantial changes in commuting patterns triggered by the onset of the pandemic in 2020, megacommuting rates into Silicon Valley had been steadily increasing since the beginning of the Great Recession economic recovery period (rising from 4% in 2010 to more than 7% in 2019).

While megacommuting has increased significantly since 2020, rates in 2023 remained well below pre-pandemic levels with 39,700 fewer making lengthy commutes to jobs in Silicon Valley (-36% since 2019), 101,800 fewer in the Bay Area (-37%), and 181,900 fewer throughout the state (-22%).

Approximately 40% of the region’s limited number of Mental Health And Substance Abuse Social Workers commute more than three hours daily to and from work.



Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

Top Occupations Among Silicon Valley Megacommuters 2023		
	Estimate	% Megacommuting
Software Developers	4,680	4%
Carpenters	2,040	23%
Plumbers, Pipefitters, and Steamfitters	1,620	29%
Roofers	900	38%
Construction Foremen / Field Supervisors	650	21%
Firefighters	570	44%

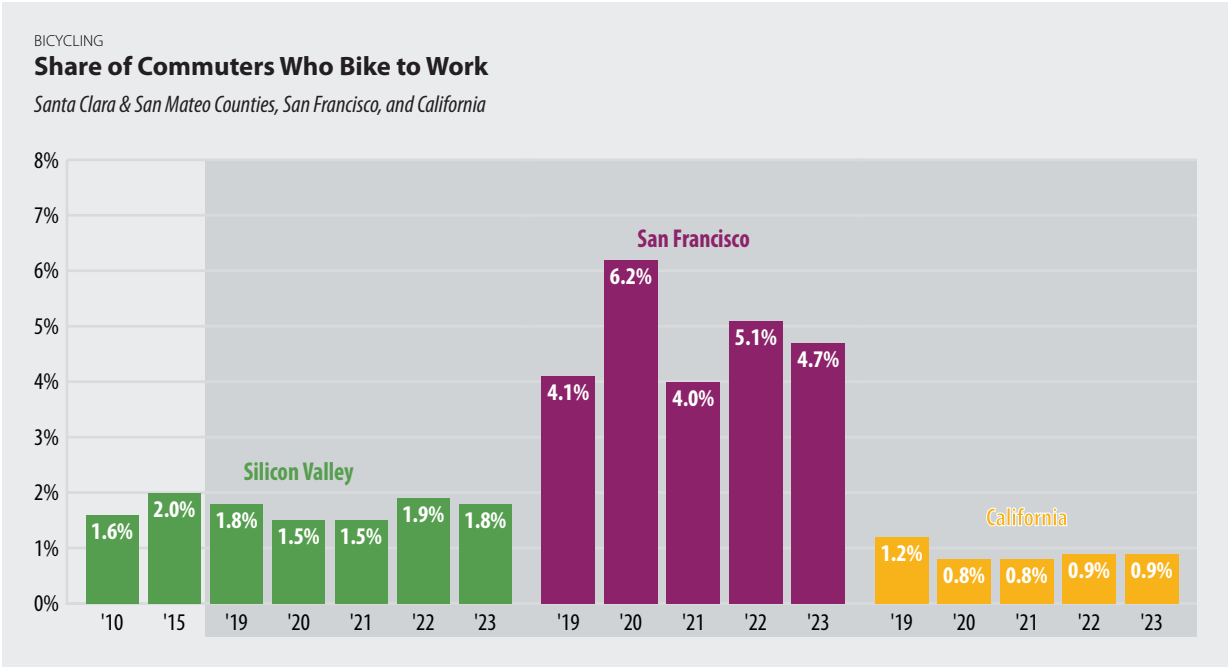
Among Silicon Valley’s occupations with the highest propensity to megacommute are Firefighters (44%), Roofers (38%), and Plumbers, Pipefitters, and Steamfitters (29%). Smaller occupational groups with similarly large shares include Sheet Metal Workers (64%), Aircraft Pilots and Flight Engineers (41%), Medical Secretaries and Administrative Assistants (45%), Credit Analysts (42%), and Transportation Security Screeners (53%).

Nearly 16,000 Professional, Scientific, and Technical Services workers megacommute to their jobs in Silicon Valley, while about 12,000 megacommuters work in Construction, and another 10,000 work in Manufacturing.

More than three-quarters (78%) of Silicon Valley’s megacommuters work for a private, for-profit employer.

Software Developers represent Silicon Valley’s occupational group with the largest number of megacommuters, with an estimated 4,680 in 2023; while this occupation represents the largest number, the share of Software Developers who megacommute is relatively low (at 4%).

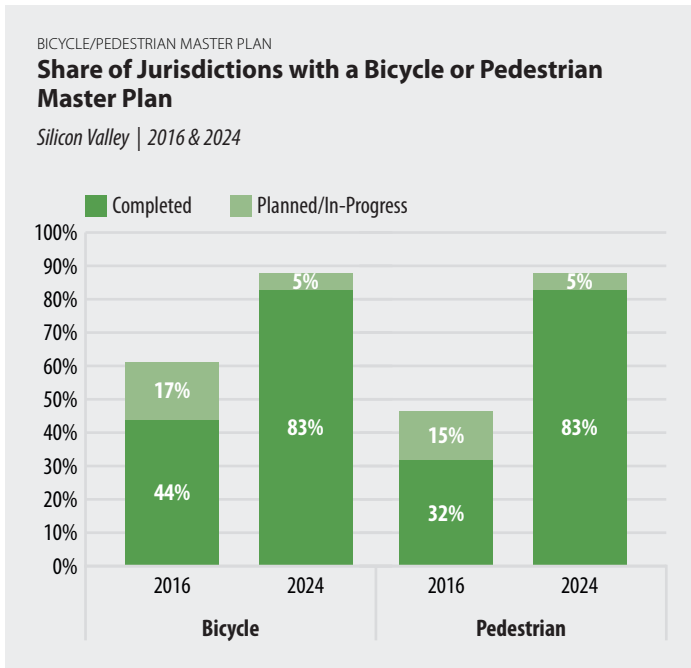
Number of Bicycle Commute Trips <i>Santa Clara & San Mateo Counties</i>		
2003	2023	% Change
18,572	39,698	114%



Note: Share excludes those who Work at Home. | Data Source: United States Census Bureau, American Community Survey | Analysis: Silicon Valley Institute for Regional Studies

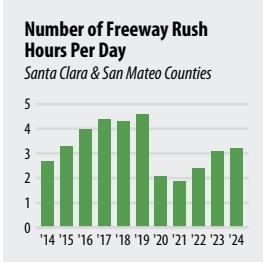
Although the long-term trend over the two decades leading up to the pandemic showed a doubling of the number of Silicon Valley residents who commuted by bicycle to work, in 2021 that number dropped to pre-2007 levels presumably due to more people working remotely. In 2023, more than 19,800 residents commuted to work by bike. This represents a decline of 8% from 2019, but an increase of 2% year-over-year. Compared to two decades ago, bicycle commute trips have increased by 114%.¹⁰³

Nationally, metro regions are the drivers of bicycling activity — this is particularly the case for metros located in milder climates and with established bicycle infrastructure. The San José metro area experienced as much as a 24% annual increases in bicycle trips between 2019 and 2022, and was ranked 79 out of 100 metro areas in terms of growth in bicycling. Comparatively, on the national level bicycle trips grew by an average annual rate of 37% between 2019 and 2022 (the most recent data year).¹⁰⁴

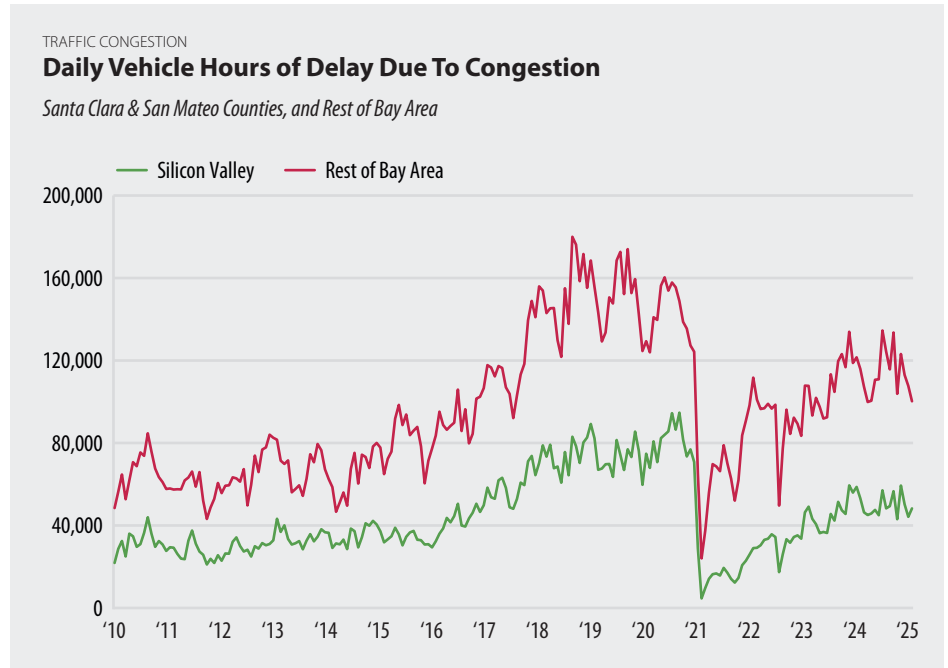


Note: Data includes all bicycle and pedestrian master plans created since 2011. | Data Source: Silicon Valley Cities & Counties
Analysis: Silicon Valley Institute for Regional Studies

More than 88% of Silicon Valley cities and counties have a Bicycle and Pedestrian Master Plan in place, in the planning stage, or in progress; this share is up from 61% in 2016.



In 2024, Silicon Valley commuters lost a total of 49,300 hours to congestion on regional freeways every day, representing a 2% increase from the prior year. Traffic also inched up across the rest of the Bay Area (+1%) and the state of California (+3%).



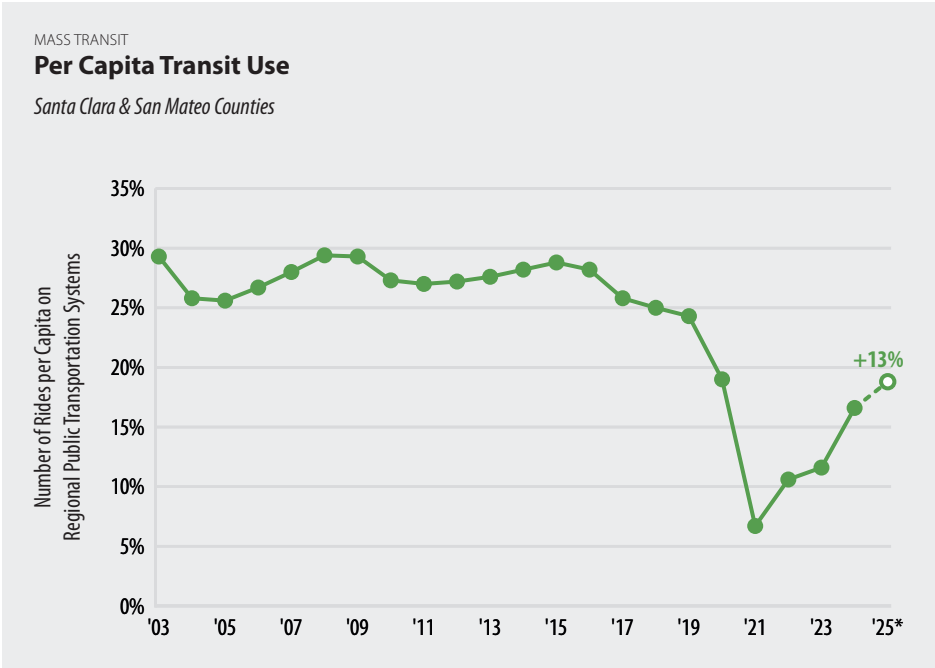
Data Source: Caltrans PeMS | Analysis: Silicon Valley Institute for Regional Studies

With the drastic decline in vehicle hours of delay from 2020 through 2023, the annual loss in regional productivity due to traffic delays may have been lessened by as much as \$8.1 billion over a four-year period.¹⁰⁵

Traffic came to an almost complete halt in the earliest months of the pandemic, falling 93% in Silicon Valley between February and April 2020. While traffic levels have steadily rebounded to ten times their pandemic-era low in April 2020, as of the beginning of 2025 they are still just 61% of 2019 levels.

More than three-quarters (78%) of Bay Area residents think traffic congestion is a serious issue in the region. Black or African American residents and those living in Alameda or Contra Costa counties are among the most likely to rate the issue as serious.¹⁰⁶

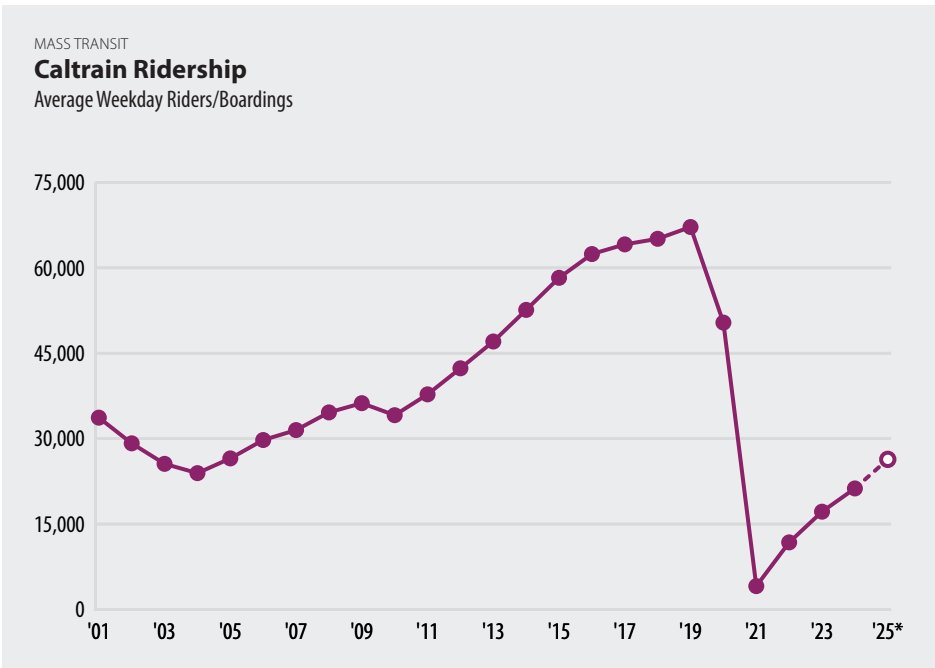
Total ridership on the region’s public transit systems – including Caltrain, SamTrans, VTA, and ACE Rail – has nearly recovered to pre-pandemic levels.¹⁰⁷



*estimated | Note: Transit data are in fiscal years. Regional per capita ridership is based on the populations of Santa Clara and San Mateo Counties combined. | Data Source: Altamont Corridor Express, Caltrain, SamTrans, Santa Clara Valley Transportation Authority, California Department of Finance | Analysis: Silicon Valley Institute for Regional Studies

Public transit ridership dropped to a fraction (35%) of pre-pandemic levels during the 2020-21 fiscal year; since then, ridership has more than doubled.¹⁰⁸

Silicon Valley’s public transit use per capita declined steadily for four years prior to the pandemic (from 29 to 34 rides per person per year), then fell dramatically by 22% year-over-year in 2019-20 and by another 65% the following year. By contrast, ridership has grown over the past four fiscal years, reaching an estimated 19 rides per person annually in FY 2024-25.



*Estimate based on data through November. | Note: Data are in fiscal years. | Data Source: Caltrain | Analysis: Silicon Valley Institute for Regional Studies

Average weekday ridership on Caltrain — which reached more than 67,000 daily in FY 2018-19 — dropped to a mere 4,100 in FY 2020-21 (a 94% decline). Ridership increased steadily over the following fiscal years, but remains at approximately 40% of pre-pandemic levels.¹⁰⁹

WHAT ARE THE KEY FINDINGS?

In the 2023-24 fiscal year, Silicon Valley continued its trend towards higher-density residential development, with 60% of cities and counties having medium to high-density planned or newly approved projects. Several cities, including Belmont, Burlingame, Mountain View, and Santa Clara, had particularly high average densities of newly approved units at around 37 dwelling units per acre.

The region also experienced a surge in the approval and permitting of accessory dwelling units (ADUs), with nearly 2,080 approved in the 2023-24 fiscal year alone.

In terms of transit-oriented development, the share of newly approved housing units located within walking distance of

public transit continued to increase, reaching 62%. On the non-residential side, the

Silicon Valley continued its trend towards higher-density residential development.

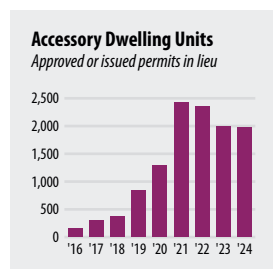
region experienced a 39% decline in the net square footage of approved development compared to the prior year. However, office space remained the dominant component, accounting for 69% of all newly approved non-residential projects, followed by light industrial (24%), commercial (4%), and institutional (3%) uses.

Silicon Valley also experienced a significant increase in planned hotel development,

with 101 hotels (and nearly 16,000 rooms) in various stages of planning as of the end of 2024. This represents almost double the amount of hotel development constructed over the past two decades, potentially indicating a growing demand for accommodations in the area.

WHY IS THIS IMPORTANT?

By directing growth to already-developed areas, local jurisdictions can reinvest in existing neighborhoods, increase access to transportation systems, and preserve the character of adjacent rural communities while reducing vehicle miles traveled and associated greenhouse gas emissions. Siting new commercial and residential developments near rail stations and major



Over the past nine years, Silicon Valley cities and counties approved (or issued building permits in lieu) approximately 11,690 accessory dwelling units (ADUs); in FY 2023-24 alone, nearly 2,000 ADUs were approved or permitted. Although ADUs may or may not be used as rental properties (and therefore may not directly expand housing availability), and are excluded from density calculations under state law,¹¹⁰ they were included in the regional density analysis as an indicator of housing inventory, thus contributing significantly to the region's precipitous rise in residential density of approved development.¹¹¹

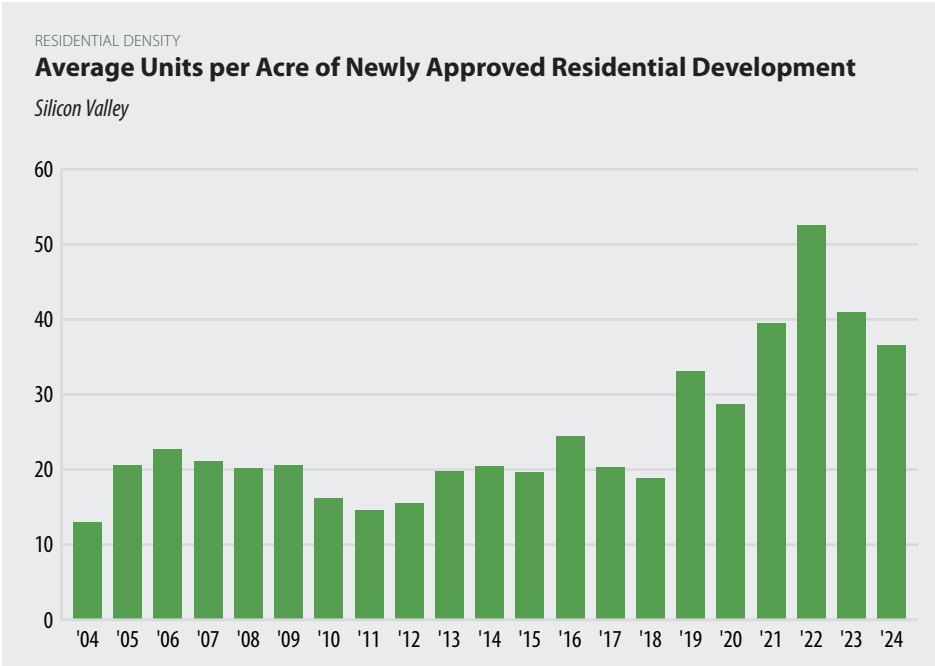
A recent study of ADU development in San José estimated that formal (legally-constructed) units represented only 22-25% of all accessory dwelling structures, a finding that aligns with the number of additional households reported by the U.S. Census Bureau.¹¹² If that estimate holds true across the region, the 11,690 ADUs approved and permitted throughout Silicon Valley since 2016 may be only a fraction of more than 20,000 ADUs actually constructed.

In FY 2023-24, the vast majority (88%) of ADUs approved were standalone projects, not part of the approval for a primary unit (main house).

bus corridors reinforces the creation of compact, walkable, mixed-use communities linked by transit. This helps to reduce traffic congestion on freeways, preserve open space near urbanized areas, and improve energy efficiency. By creating economically and socially diverse mixed-use communities, Silicon Valley gives workers alternatives to driving, increases

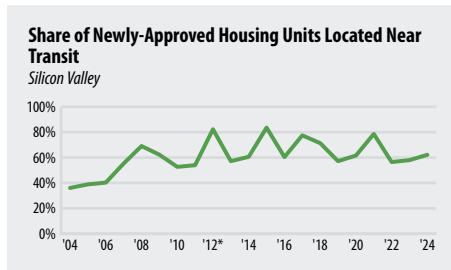
access to workplaces, and can positively impact neighborhood vitality. Adding accessory dwelling units provides leasing opportunities for residents (with potential income to buffer high ownership costs), and adds to the region's much-needed housing supply.

In the 2023-24 fiscal year, nearly two-thirds (60%) of Silicon Valley cities and counties had average densities of planned or newly approved residential development in the medium to high range (ten or more units per acre) while seven cities had average densities in the higher range of 40- to 80-units/acre, and four had average densities of 80+ units/acre — Belmont, Burlingame, Mountain View, and Santa Clara.



The average density of newly-approved residential units among Silicon Valley cities and counties remained relatively high in FY 2023-24 (at 37 dwelling units/acre), despite two years of decline from the record-high in FY 2021-22 (53 du/ac).

Note: Beginning in 2008, the Land Use Survey was expanded to include cities northward along the U.S. 101 corridor (Brisbane, Burlingame, Millbrae, San Bruno and South San Francisco). In 2014, the Survey was further expanded to include all Silicon Valley cities (adding Colma, Daly City, Half Moon Bay and Pacifica). Beginning in 2020, the residential density calculation included accessory dwelling units (ADUs) that were issued a building permit in lieu of a planning approval.
Data Source: City Planning and Housing Departments of Silicon Valley | Analysis: Silicon Valley Institute for Regional Studies



In FY 2023-24, the number of Silicon Valley housing units approved near transit (7,600) represented an 18% decline from the prior year (9,270 in FY 2022-23).

Silicon Valley housing units within walking distance of public transit represented 62% of all newly-approved residential units in FY 2023-24 — a share that has risen steadily over the past two decades (from 36% in 2004).

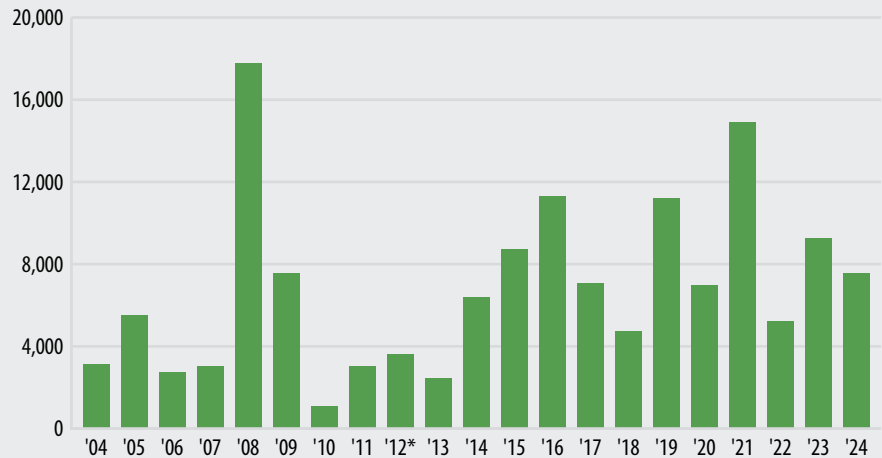
The net square footage of non-residential development approved (minus the amount of approved demolition) was 39% lower in FY 2023-24 than the prior year; the share approved near transit fell even more dramatically (~80% year-over-year).

Non-residential development approvals in FY 2023-24 totaled 11.0 million square feet across 124 different development sites, 27% of which were within walking distance of major public transit stations.

HOUSING NEAR TRANSIT

New Housing Units Approved Within 1/3 Mile of Rail Stations or Major Bus Corridors

Silicon Valley



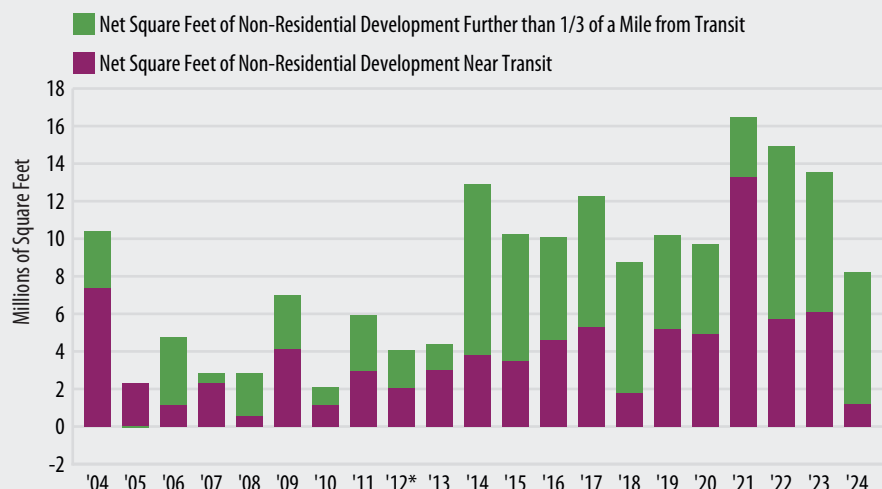
*Beginning in 2012, the definition of transit oriented development was changed from 1/4 mile to 1/3 mile. | Note: Beginning in 2008, the Land Use Survey was expanded to include cities northward along the U.S. 101 corridor (Brisbane, Burlingame, Millbrae, San Bruno and South San Francisco). | Data Source: City Planning and Housing Departments of Silicon Valley | Analysis: Silicon Valley Institute for Regional Studies

While approved non-residential development was spread throughout Silicon Valley, large shares were concentrated in South San Francisco (29% by square footage), San José (20%), Burlingame (18%), and San Bruno (14%).

NON-RESIDENTIAL DEVELOPMENT

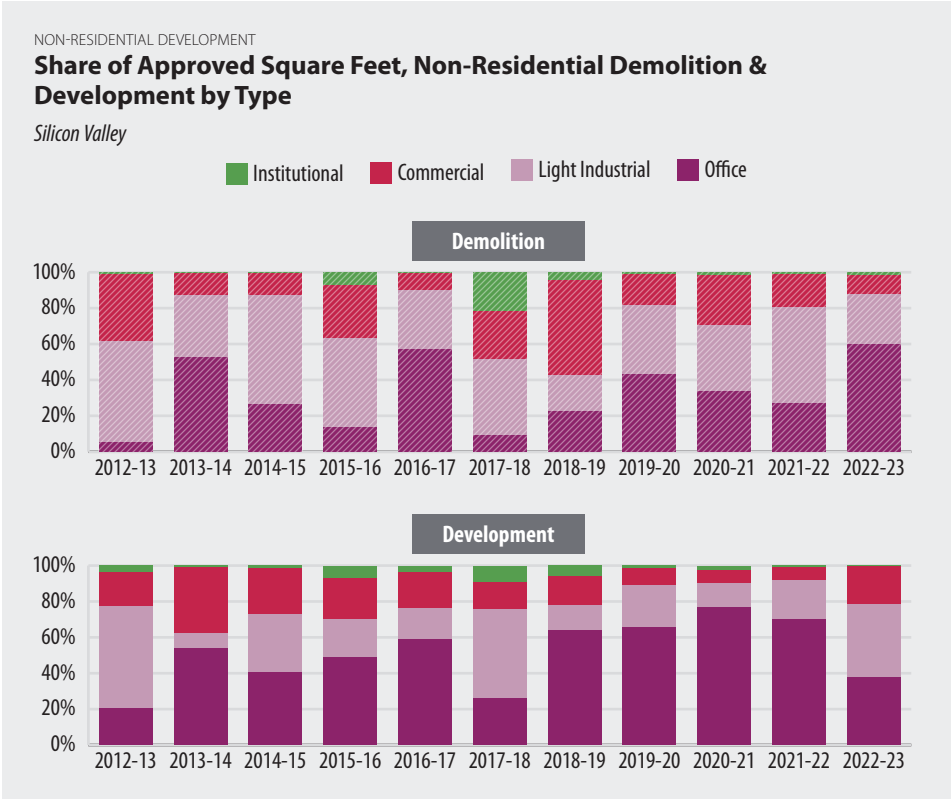
Net Non-Residential Development Approved, by Proximity to Transit

Silicon Valley



*Beginning in 2012, the definition of transit-oriented development has been changed from 1/4 mile to 1/3 mile. | Note: Beginning in 2008, the Land Use Survey was expanded to include cities northward along the U.S. 101 corridor (Brisbane, Burlingame, Millbrae, San Bruno and South San Francisco). In 2014, the Survey expanded to include all Silicon Valley cities (adding Colma, Daly City, Half Moon Bay, and Pacifica). In 2014, the Survey was expanded to include all Silicon Valley cities (adding Colma, Daly City, Half Moon Bay, and Pacifica). | Data Source: City Planning and Housing Departments of Silicon Valley | Analysis: Silicon Valley Institute for Regional Studies

If all non-residential development projects approved over the past decade had been developed as planned, the region would have added a net total (after subtracting demolition) of 114 million square feet of new office, light industrial, commercial, and institutional space. In reality, the amount built was closer to 72 million square feet (increasing the region’s rentable building area by approximately 60 million square feet), 50% of which was new Office.¹¹³



Data Source: City Planning and Housing Departments of Silicon Valley | Analysis: Silicon Valley Institute for Regional Studies

Over the past decade, Silicon Valley’s non-residential development has been heavily focused on new office space (56%), primarily replacing the existing inventory of older Office (31% of planned demolition), Light Industrial (43%), and Commercial (21%).

More than two-thirds (69%) of all Silicon Valley newly-approved non-residential development in FY 2023-24 was Office, while 24% was Light Industrial, 4% was Commercial, and 3% was Institutional.

Planned Hotel Development		
end of 2024, with year-over-year percent change		
	Hotels	Rooms
Santa Clara & San Mateo Counties	101 (-8%)	15,666 (-9%)
San Francisco	44 (-12%)	5,115 (-14%)
California	1,186 (-5%)	153,560 (-6%)

Data Source: Atlas Hospitality Group | Analysis: Silicon Valley Institute for Regional Studies

At the end of 2024, there were 101 hotels with nearly 16,000 rooms throughout Santa Clara and San Mateo counties in various stages of planning; while not all of these projects will necessarily be built, the total represents almost twice the amount developed over the past two decades.

Approximately 6% of Silicon Valley’s planned hotel development projects received planning approvals during the 2023-24 fiscal year.

The number of Silicon Valley and San Francisco hotel rooms in various stages of planning last year accounted for 12% of all planned hotel developments (and 14% of planned hotel rooms) throughout the state.

WHAT ARE THE KEY FINDINGS?

Silicon Valley has made significant strides in reducing its environmental impact. Silicon Valley's greenhouse gas emissions declined by an estimated 23% overall and 21% per capita between 2019 and 2024. The largest contributor to this decline was the reduction in electricity-related emissions due to cleaner generation sources. Transportation remained the largest source of emissions, accounting for 61% of Silicon Valley's estimated GHG emissions in 2024, despite a 21% decline in transportation-related emissions over the past five years.

Water consumption increased slightly by 2% in the 2023-24 fiscal year, reaching 98 gallons per person per day. However, this was only slightly higher than the record low

of 96 gallons per person per day reached during the prior year.

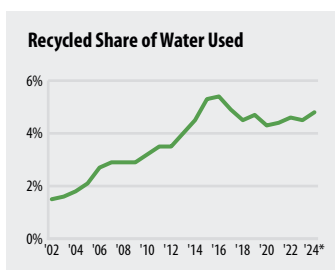
Solid waste disposal declined by 10% in Santa Clara and San Mateo counties and by 8% in the Bay Area overall. In 2023, the average amount of waste produced per resident in Silicon Valley was 4.1 pounds per person per day, significantly lower than the statewide average of 5.7 pounds per person per day. Food recovery efforts in the two-county region resulted in the recovery of approximately 22 million pounds of surplus food in 2023, equivalent to about 18.2 million meals.

WHY IS THIS IMPORTANT?

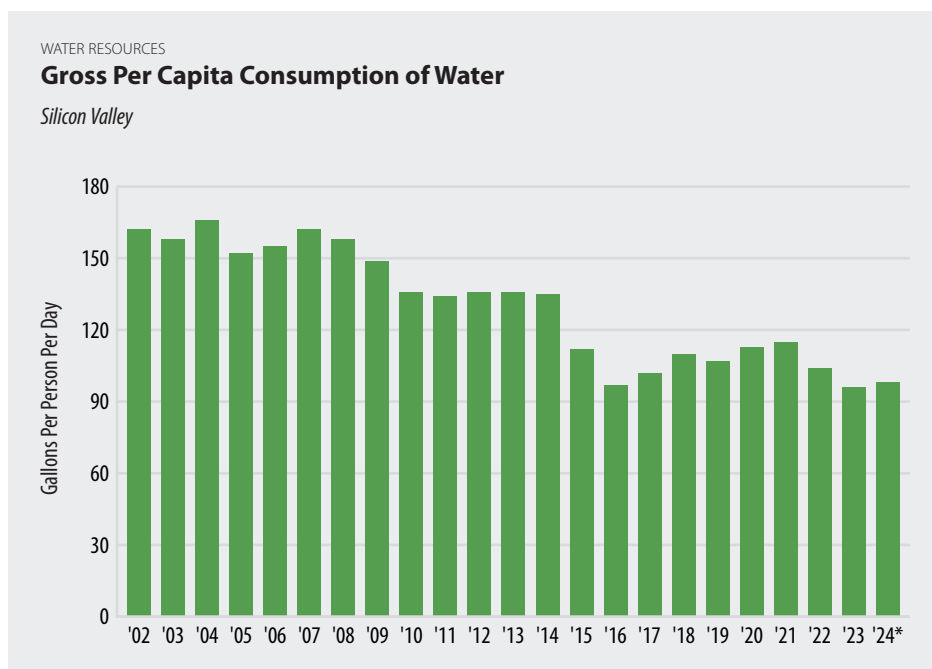
Environmental quality directly affects the health and well-being of all residents as well as the Silicon Valley ecosystem.¹¹⁴ The environment is affected by the choices that

residents make about how to live, how to get to work, how to purchase goods and services, where to build homes, their level of consumption of natural resources, and how to protect environmental resources.

Electricity and fuel use affect the environment by emitting greenhouse gasses (GHGs) and atmospheric pollutants from fossil fuel combustion — the extent of which must be drastically reduced in response to the climate crisis. Sustainable energy policies include increasing energy efficiency and the use of clean, renewable energy sources. For example, more widespread use of solar-generated power diversifies the region's electricity portfolio, increases the share of reliable and renewable electricity, and reduces GHGs and other harmful emissions. The region's relatively clean electricity



Silicon Valley's per capita water consumption reached a record low in 2023 at 96 gallons per person per day, then increased slightly (+2%) the following year.



*FY 2023-2024 data are preliminary. | Note: Data are in fiscal years. | Data Sources: Bay Area Water Supply & Conservation Agency (BAWSCA), Santa Clara Valley Water District, and Scotts Valley Water District | Analysis: Silicon Valley Institute for Regional Studies

has enabled the implementation of a variety of natural gas fuel-switching efforts, including programs that promote the use of heat pump water heaters and space heaters, induction cooktops, and swapping electricity for other gas-powered appliances. It also helps to advance electric vehicle adoption throughout the region, and enables efforts to achieve environmental, air-quality, and cost benefits with all-electric buildings.

Electricity productivity is a measure of the degree to which the region's production of economic value is linked to its electricity consumption, where a higher value indicates greater economic output per unit of electricity consumed. Electric vehicle infrastructure and adoption provide indicators on the extent to which Silicon Valley

residents are utilizing a cleaner transportation alternative to fossil fuel combustion.

Water consumption and the use of recycled water are particularly important indicators given the frequency of drought conditions in California, and the anticipated amplification of natural weather variability due to climate change.¹¹⁵ Local emissions and other contributing factors, such as wildfires, have an effect on regional air quality with potential health implications. Tracking resource consumption and material flows helps to better understand the impact of residents on their surroundings and the broader environmental costs of their everyday decisions, such as future emissions from landfills; in the case of surplus food, tracking the amount diverted from the waste stream

also provides a measure of repurposed food for human consumption within the regional community.

Efforts that reduce organic waste in landfills (and their associated greenhouse gas emissions) can also provide other benefits to the region. For example, both Santa Clara and San Mateo counties are working to recover edible surplus food from businesses and institutions as required by law (SB 1383). These efforts reduce food waste while enabling local service providers to better meet community needs. (Disclaimer: Santa Clara County's food recovery program is overseen by Joint Venture Silicon Valley's Food Recovery Initiative.)

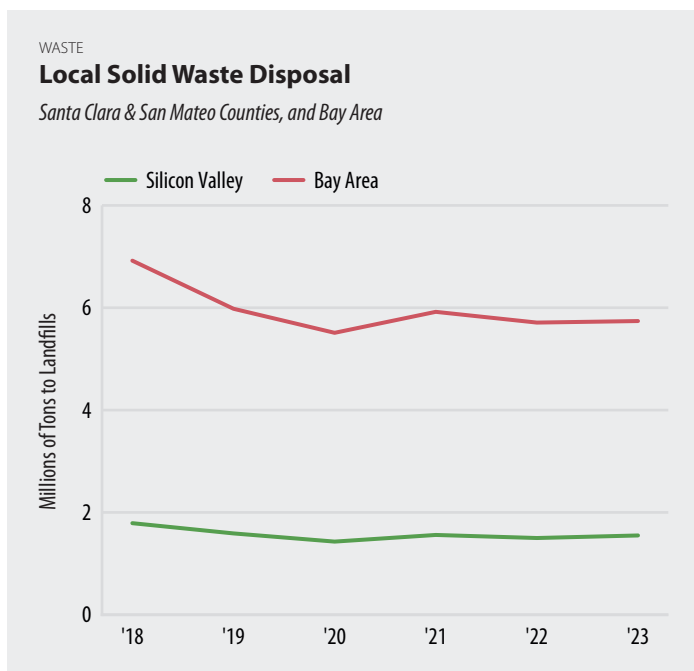
Per capita water use in Santa Clara and San Mateo counties increased by 2% year-over-year in FY 2023-24 to 98 gallons per person per day.

The share of recycled water used in Silicon Valley has remained relatively unchanged for the past decade at around 4.5%.

Per capita water consumption has been consistently lower in San Mateo County than in Santa Clara County; in 2024, it was 20 gallons per person per day lower.

Food recovery efforts in the two-county region resulted in the recovery of approximately 22 million pounds of surplus food in 2023, equivalent to about 18.2 million meals.

Solid waste disposal¹¹⁷ declined by 10% in Santa Clara and San Mateo counties and by 8% in the Bay Area overall in 2020; disposal rates remained slightly below pre-pandemic levels through 2023.



Data Source: CalRecycle | Analysis: Silicon Valley Institute for Regional Studies.

The average amount of waste produced per resident in Silicon Valley and San Francisco (4.1 and 3.4 pounds per person per day, respectively) remained significantly lower than statewide (5.7 pounds per person per day) in 2023.¹¹⁶

The amount of surplus food recovered in Silicon Valley is on the rise, with a boost during 2021 due to pandemic-related funding. Over the past five years, approximately 94 million pounds have been recovered from businesses and institutions across San Mateo and Santa Clara counties, diverted from the waste stream and repurposed for human consumption.

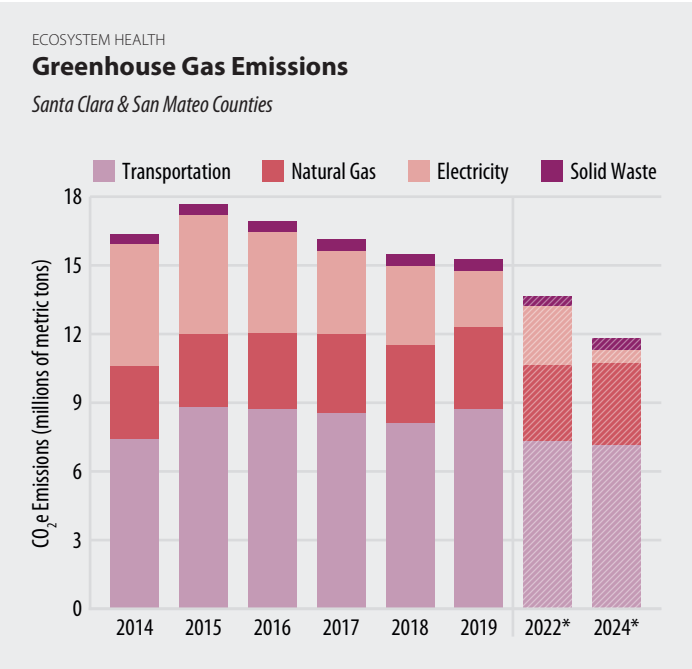


*estimated | Data Sources: Santa Clara County Food Recovery Program; County of San Mateo, Office of Sustainability | Analysis: Joint Venture Silicon Valley, Food Recovery Initiative; County of San Mateo, Office of Sustainability; Silicon Valley Institute for Regional Studies

In compliance with California Senate Bill 1383, local surplus food recovery is tracked through mandatory annual reporting by food recovery organizations and services, as well as by commercial edible food generators in Santa Clara County. In 2023, approximately 22 million pounds of food was recovered within the two-county region (equivalent to around 18.2 million meals).

In contrast to the downtrend of regional GHG emissions from other sources, those from natural gas usage increased slightly over the past five years (+0.6%) as a result of a slight uptick in Santa Clara County usage.

Greenhouse gas (GHG) emissions in Santa Clara and San Mateo counties declined by an estimated 23% overall and 21% per capita between 2019 and 2024. The largest contributor to this decline, by far, was the reduction in electricity-related GHG emissions due to cleaner generation resources.



*Estimates based on 2019 data and a variety of adjustment factors (see methodological notes). | Data Sources: The Climate Center; California Department of Transportation; California Department of Motor Vehicles; California Energy Commission; CalRecycle; Silicon Valley electricity providers (Peninsula Clean Energy, Silicon Valley Clean Energy, Palo Alto Utilities, Silicon Valley Power, Pacific Gas & Electric, and San Jose Clean Energy) | Analysis: Silicon Valley Institute for Regional Studies

Silicon Valley’s GHG emissions from transportation, electricity, and solid waste have declined significantly over the past several years. Cleaner electricity sources were the largest contributing factor to this downtrend.

Silicon Valley’s regional GHG emissions declined by approximately 690,000 metric tons/year over a five year period (2019-2024) — an amount equivalent to 206 wind turbines running for a year or the amount sequestered by 692,000 acres of U.S. forests.¹¹⁹

Percent Change in Greenhouse Gas Emissions <i>Santa Clara & San Mateo Counties</i> 2019-2024*	
CO ₂ e Emissions	-23%
Per Capita Emissions	-21%

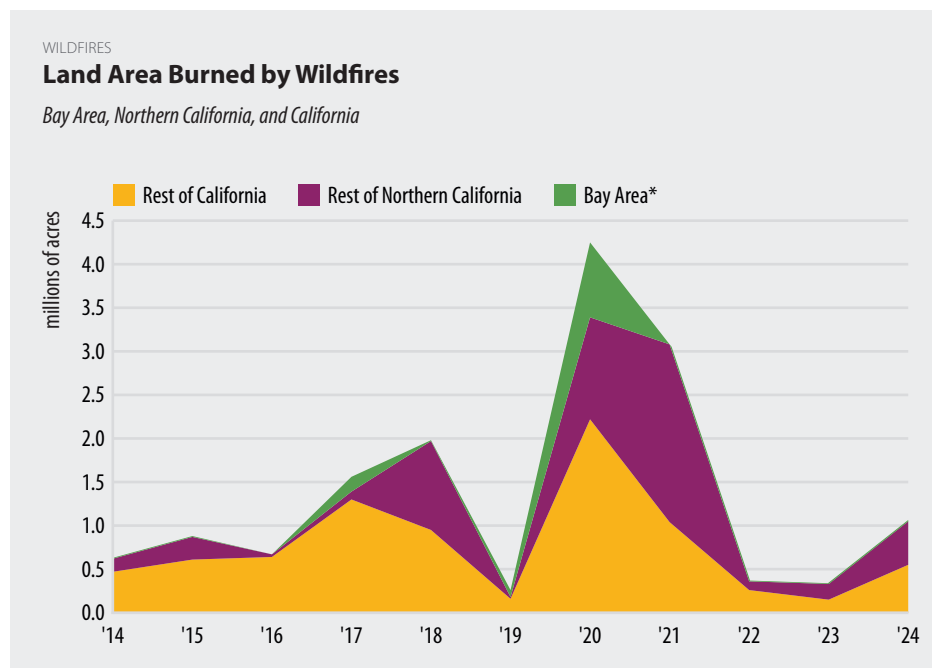
Transportation accounted for an outsized portion (61%) of Silicon Valley’s estimated GHG emissions in 2024, compared to 38% of statewide GHG emissions;¹¹⁸ however, emissions from the transportation sector have declined by 21% over the past five years due to the compound effects of reduced driving and electric vehicle adoption.

The reduction in overall regional GHG emissions since 2015 — largely due to cleaner electricity, among other contributing factors — resulted in an increase in the shares of emissions coming from other sources. Between 2015 and 2024, the share of regional GHG emissions from transportation increased by 11 percentage points (to 61% in 2024) despite a 21% decline in transportation-related emissions.

San Mateo County’s GHG emissions from electricity use fell by an estimated 94% between 2019 and 2024. This decline corresponds to a 94% reduction in emissions from power supplied mainly by the county’s Community Choice Energy program, Peninsula Clean Energy (along with a smaller contribution from PG&E’s bundled-service customers), coupled with a 5% decline in overall electricity use.

% Think Increasing Frequency of Wildfires and Extreme Weather are Serious Problems <i>Bay Area 2024</i>		
	Increasing Frequency of Wildfires	Extreme Weather
Women	84%	49%
Ages 18-34	78%	36%
College Degree	81%	45%
Democrats	84%	52%
Overall	80%	43%
Republicans	69%	20%

Data Source: Silicon Valley Poll (www.jointventure.org/svpoll)



*Data include all acreage for any fire that affected Bay Area counties, so acreage may extend to other parts of Northern California. | Data Source: CAL FIRE | Analysis: Silicon Valley Institute for Regional Studies

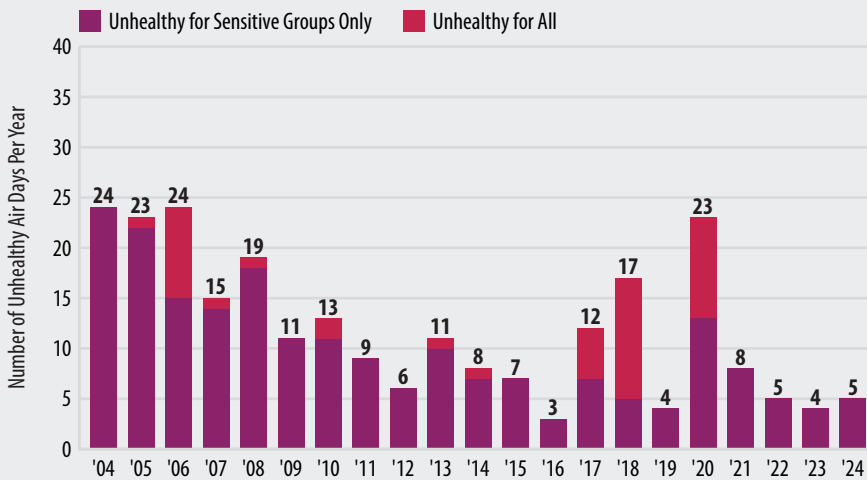
In 2024, Northern California saw 158 wildfires, an increase of more than 400% from 2023. Of these, 39 occurred in the Bay Area, including four in Santa Clara County. Though 2024 was an active wildfire season in terms of number, the total acreage burned in Northern California (500,000) was significantly lower than the two million burned in 2021. Statewide, more than one million acres were burned in 2024, marking an increase of more than 200% from 2023.

Bay Area Democrats (84%), Women (84%), and young adults ages 18 to 34 (78%) believe wildfires are a serious issue; however, these same groups are much less concerned about extreme weather, even though both fires and the frequency of extreme weather events have been linked to climate change by leading scientists with a “high degree of confidence.”¹²⁰

AIR QUALITY

Number of Unhealthy Air Days

Santa Clara & San Mateo Counties

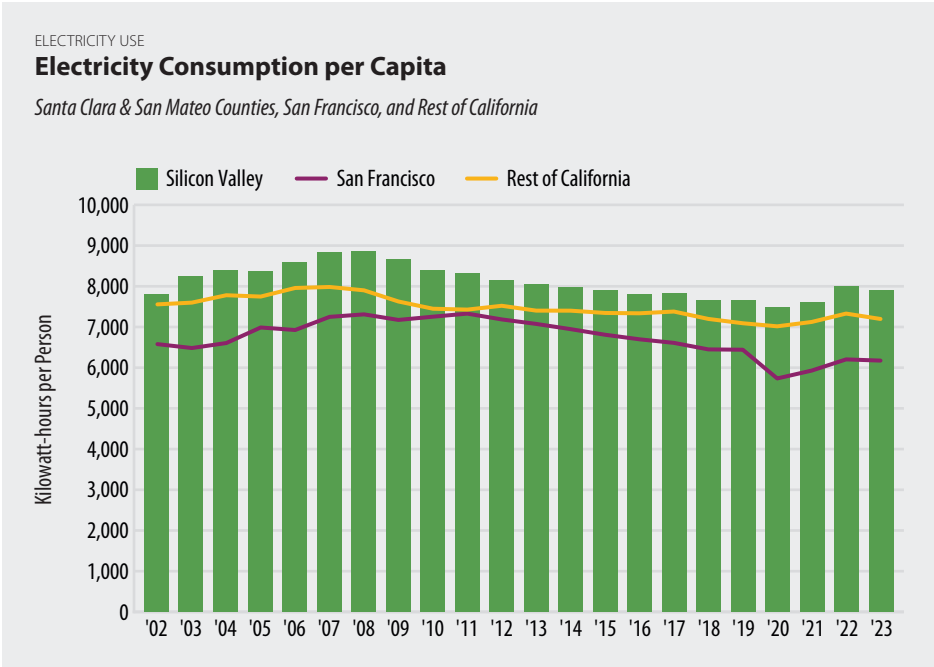
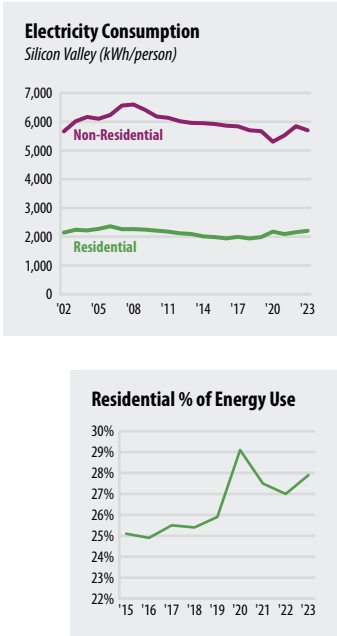


Note: 2024 data through 12/31/24. | Data Source: United States Environmental Protection Agency, Outdoor Air Quality Data | Analysis: Silicon Valley Institute for Regional Studies

Over the past four years, Silicon Valley has not experienced any *extremely* unhealthy air days (unhealthy days for the general population, regardless of sensitivities such as lung disease or age-related risk factors) out of a combined total of 22 unhealthy air days for sensitive groups.

The presence of predominantly healthy air days in 2024 is in stark contrast to 2020, during which there were 23 unhealthy air days (of which nearly half were extremely unhealthy, even for non-sensitive groups). The region had not experienced such a high number of unhealthy air days since 2006.

On a per capita basis, Silicon Valley uses 31% more electricity than San Francisco, and 12% more electricity than the rest of the state.



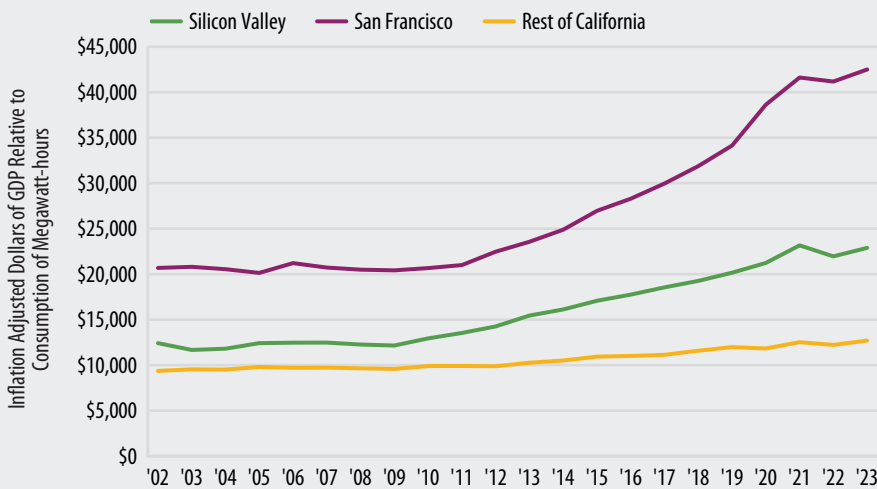
Data Sources: California Energy Commission; State of California, Department of Finance | Analysis: Silicon Valley Institute for Regional Studies

Residential energy use in Silicon Valley spiked by 10% in 2020, the highest year-over-year increase in two decades, and has remained at elevated levels ever since. Non-residential energy use dipped by approximately 7% the same year, but has since risen back to pre-pandemic levels as more employees have returned to their workplaces.

ELECTRICITY USE

Electricity Productivity

Santa Clara & San Mateo Counties, San Francisco, and Rest of California



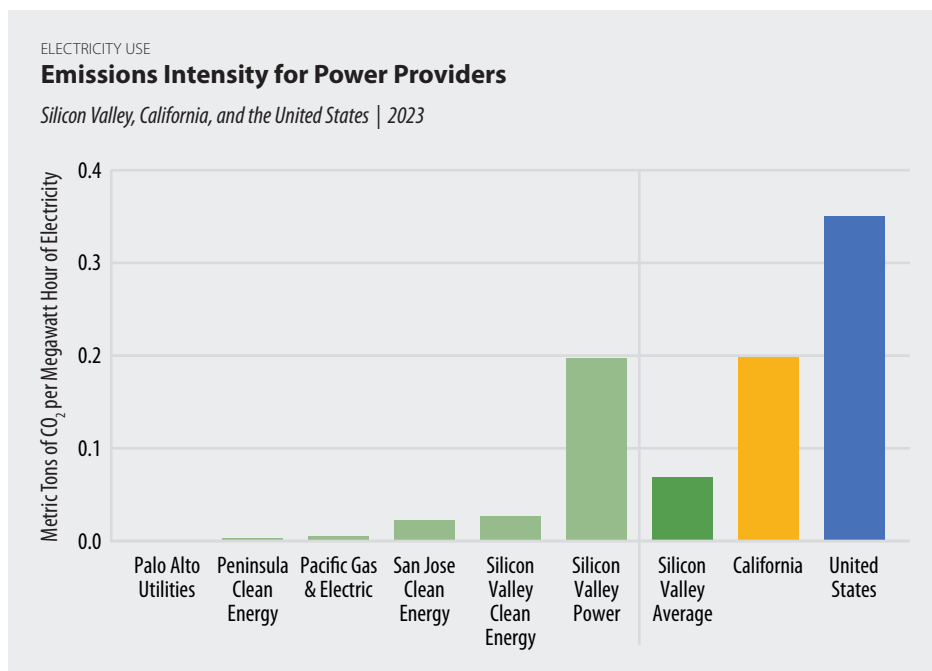
Data Sources: Moody's Economy.com; California Energy Commission; State of California, Department of Finance | Analysis: Silicon Valley Institute for Regional Studies

Compared to Silicon Valley, San Francisco electricity users consumed 23% less in 2023, and their electricity productivity — ratio of regional GDP to electricity use — was 86% higher.

While the rest of California's electricity productivity has remained relatively low over the past two decades, it has risen significantly in Silicon Valley and San Francisco since the start of the Great Recession economic recovery period (up 79% and 98%, respectively, between 2009 and 2023).

PG&E's emissions factor has declined by approximately 97% over the past decade.¹²¹ The utility now provides electricity that is much cleaner than both state and national averages, as well as several local providers.

The City of Palo Alto's municipal utility has been serving Palo Alto residents with 100% carbon-neutral electricity for more than a decade.¹²⁴ Likewise, City of Santa Clara residents have been provided 100% renewable electricity since 2018.¹²⁵



Note: California is for the CAMX eGrid Subregion, which encompasses most of the state. The United States is an average of all eGRID subregions. Silicon Valley average weighted based on total energy used by customers of each power provider. | Data Sources: Silicon Valley electricity providers (Peninsula Clean Energy, Silicon Valley Clean Energy, Palo Alto Utilities, Silicon Valley Power, Pacific Gas & Electric, and San Jose Clean Energy); The Climate Registry; Center for Resource Solutions; U.S. Environmental Protection Agency | Analysis: Silicon Valley Institute for Regional Studies

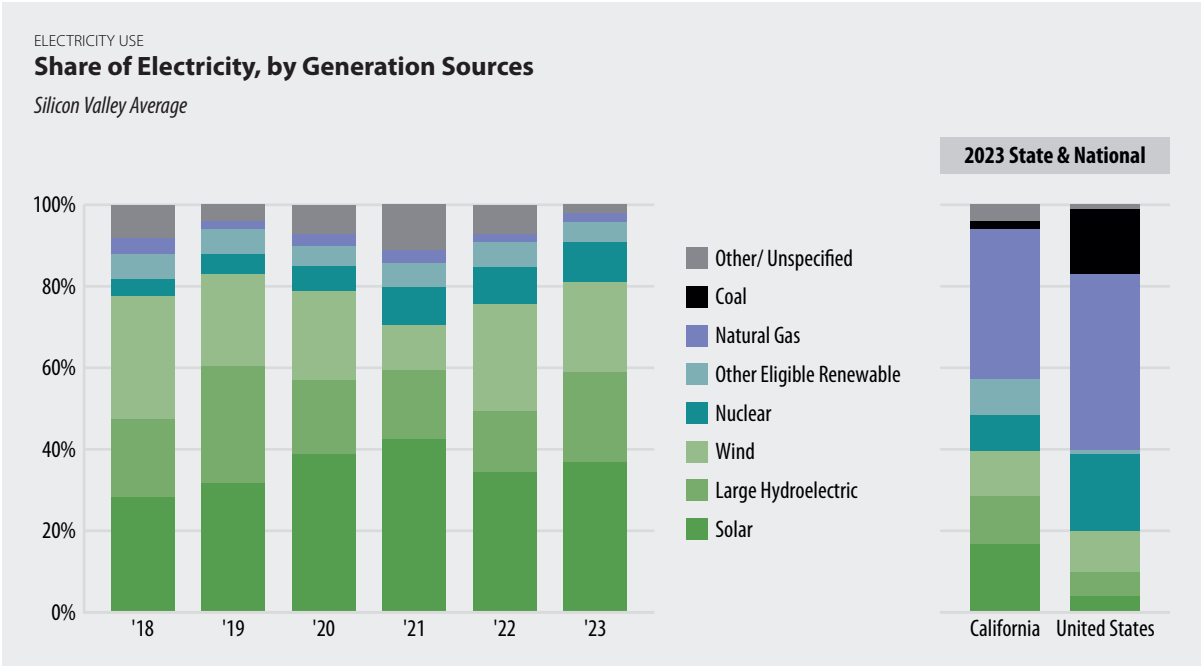
Silicon Valley's annual carbon dioxide emissions from retail electricity customers have declined by an estimated 87% since 2016, when the region began shifting to Community Choice Aggregation (CCA) programs.

The emissions intensity factors for several Silicon Valley electricity providers were high relative to the region's investor-owned utility (PG&E) in 2023. This is likely due to a combination of factors, including the exclusion of Large Hydroelectric as an eligible renewable resource by the state's Power Source Disclosure Program, as well as program allowances for load-serving providers to exclude some fossil fuel resources in their accounting.¹²³

Across all providers, electricity used by Silicon Valley customers carries a fraction of the greenhouse gas emissions intensity¹²² of the United States grid average.

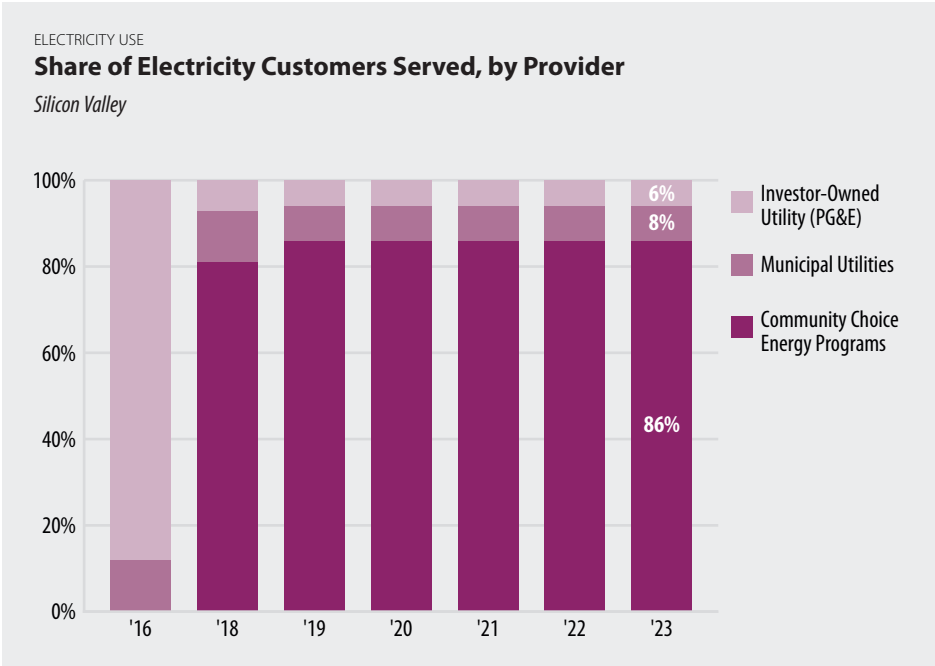
Among Silicon Valley’s electricity power plans available to residential and non-residential customers, the average share from renewable sources (74%) is more than double that of the national mix (34%).

While non-renewable sources comprised 26% of Silicon Valley’s power mix in 2023, they accounted for 54% of California’s (including 2% from coal) and 66% of the national average power mix (including 16% from coal).



Silicon Valley’s available electricity power plans, on average, consist of 37% solar, 22% wind generation, 22% large hydroelectric, 10% nuclear, and 5% from other eligible renewables.

Note: The Silicon Valley Average is an approximation (unweighted average of all power plans available to residential and non-residential customers). Carbon neutral power sourced from outside California is included in Unspecified sources for local providers. | Data Sources: California Energy Commission; U.S. Environmental Protection Agency; Silicon Valley electricity providers (Peninsula Clean Energy, Silicon Valley Clean Energy, Palo Alto Utilities, Silicon Valley Power, Pacific Gas & Electric, and San Jose Clean Energy) | Analysis: Silicon Valley Institute for Regional Studies



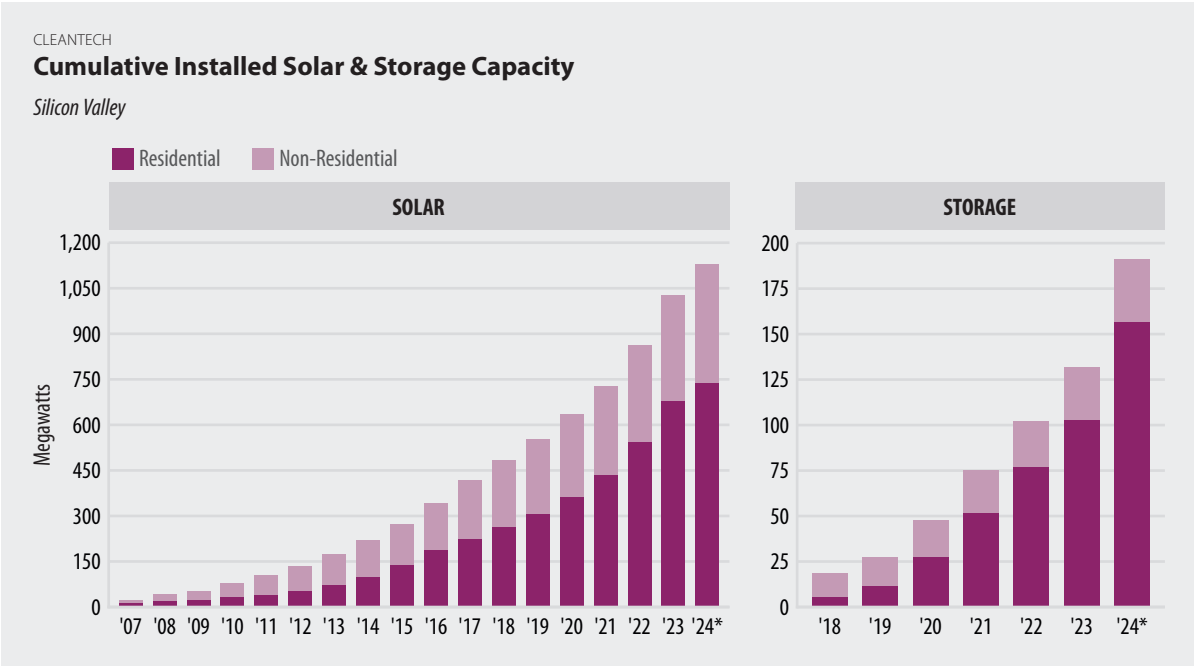
Note: Includes PG&E bundled (generation and delivery) service customers only. | Data Sources: Silicon Valley electricity providers (Peninsula Clean Energy, Silicon Valley Clean Energy, Palo Alto Utilities, Silicon Valley Power, Pacific Gas & Electric, and San Jose Clean Energy) | Analysis: Silicon Valley Institute for Regional Studies

Three Community Choice Aggregation (CCA) programs now serve 89% of Silicon Valley’s residential customers and 60% of non-residential customers,¹²⁶ Pacific Gas & Electric (PG&E), which served around 90% of customers throughout Santa Clara and San Mateo counties in 2016 — now provides bundled service, including energy plus transmission and distribution, to 6% overall (including 3% of residential and 31% of non-residential customers).

The total capacity of solar photovoltaic (PV) systems installed in Silicon Valley has increased exponentially over the past two decades — reaching a cumulative total of more than 1,100 MW in 2024.

The annual number of solar PV systems installed in Silicon Valley hit an all-time high of nearly 20,000 in 2023, then declined slightly in 2024 to 10,600 (-47%).

Silicon Valley energy storage interconnections, coupled with (non-export) solar PV systems, have increased significantly over the past several years. Prior to 2018, there were only 13 megawatts (MW) interconnected to the electrical grid; by 2024, that number had grown to more than 190 MW. Additionally, the region's storage systems participating in the California Self-Generation Incentive Program (SGIP) added another 69.9 MW.



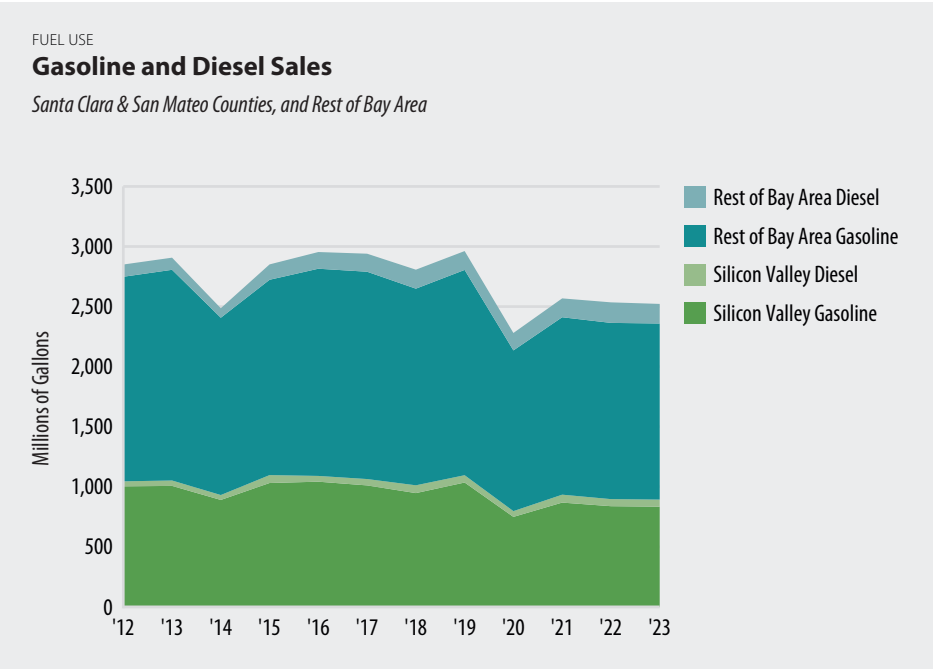
*2024 data are through June for the City of Palo Alto, November for PG&E, and December for Silicon Valley Power. | Note: Includes interconnected Net Energy Metered (NEM) / Net Billing Tariff (NBT) systems only. | Data Sources: Palo Alto Municipal Utilities; Silicon Valley Power; Pacific Gas & Electric | Analysis: Silicon Valley Institute for Regional Studies

Nearly all (98%) of the region's 132,500 solar PV systems are residential, accounting for 65% of the total installed capacity (1,100 megawatts).

Nearly 130,000 solar PV systems have been installed on residential rooftops throughout Silicon Valley, plus another 2,900 non-residential installations.

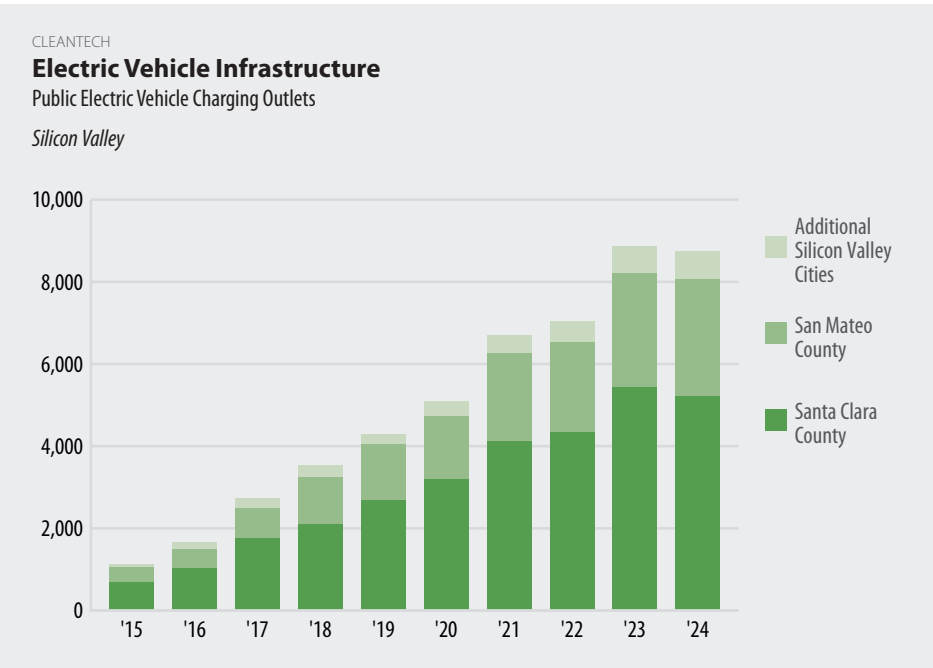
Based on the typical amount of sunshine and available rooftop space, solar systems installed on approximately 19% of Silicon Valley's available rooftops represent 8% of the region's technical potential for total rooftop solar PV system capacity.¹²⁷

From 2013 to 2023, retail gasoline and diesel sales declined in Silicon Valley (-15%) and the Bay Area (-12%), compared to a 1% increase in the state overall.



Data Source: California Energy Commission | Analysis: Silicon Valley Institute for Regional Studies

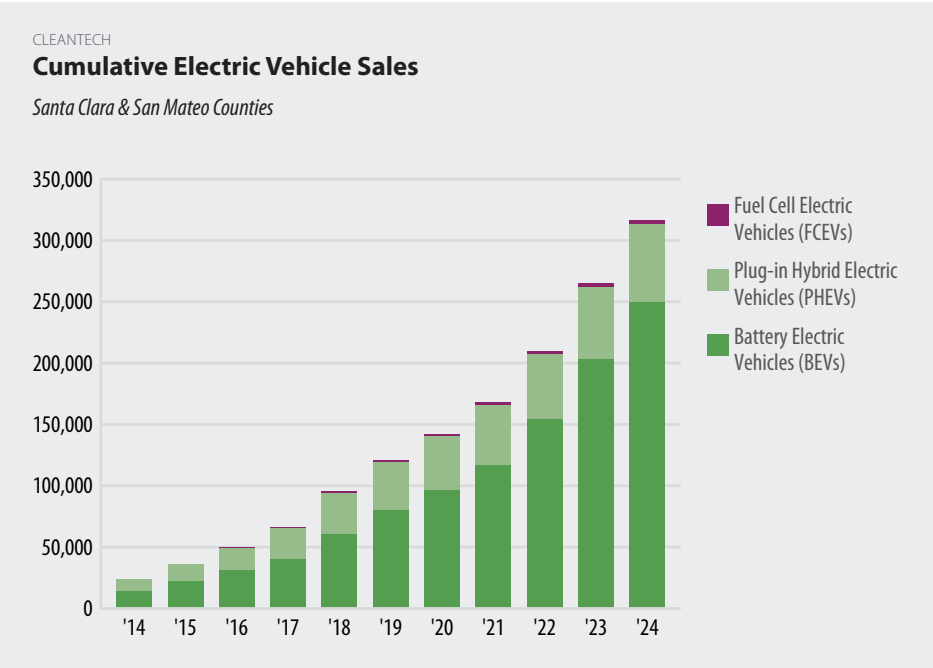
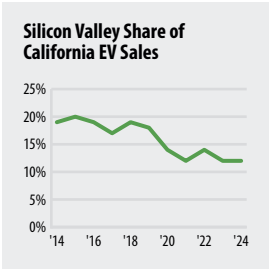
Silicon Valley remains 19% below pre-pandemic sales volumes of gasoline and diesel fuel; the Bay Area and California remain 13% and 6% below 2019 levels, respectively.



Data Sources: United States Department of Energy, Alternative Fuels Data Center; California Energy Commission | Analysis: Silicon Valley Institute for Regional Studies

The number of public electric vehicle (EV) charging outlets in Silicon Valley doubled between 2019 and 2023 (from 4,300 to 8,900), then declined slightly in 2024 (by 1%, to approximately 8,700).

By the end of 2024, more than 316,000 light-duty electric vehicles (EVs) had been sold in Santa Clara and San Mateo counties.



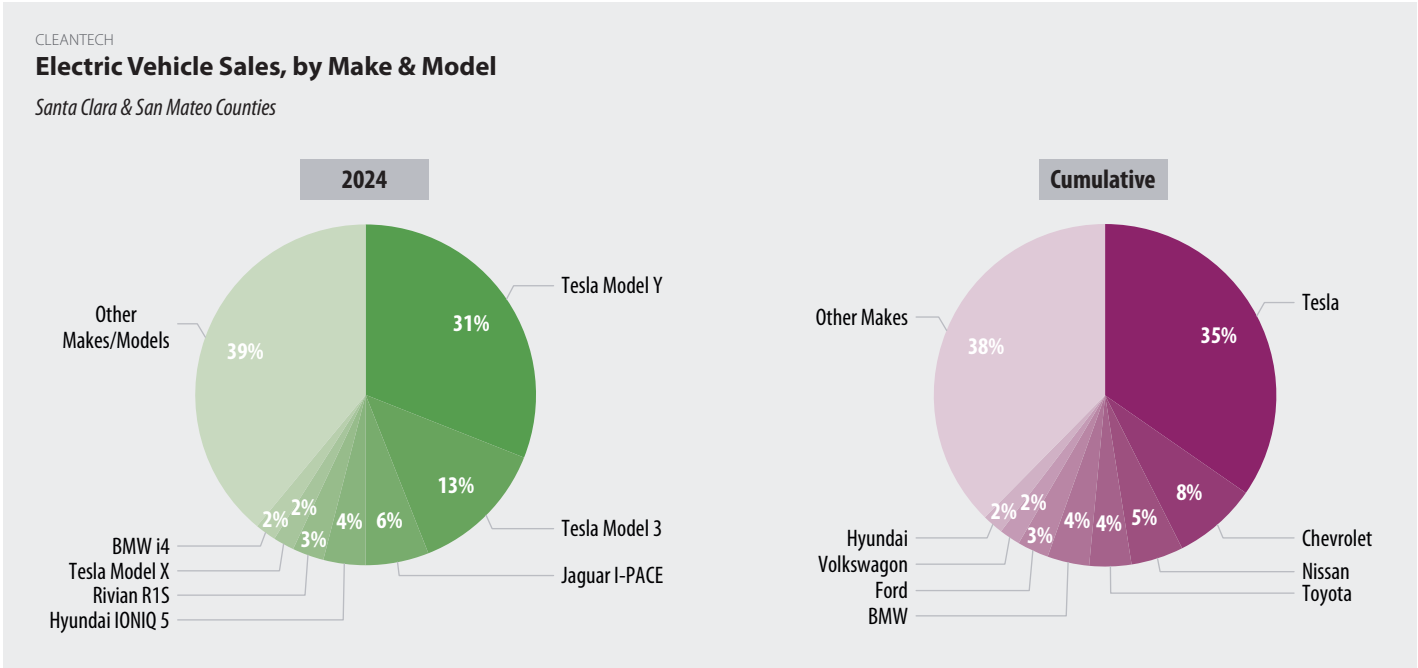
Data Source: California Energy Commission, Zero Emission Vehicle and Infrastructure Statistic | Analysis: Silicon Valley Institute for Regional Studies

Silicon Valley’s 2024 EV sales totaled nearly 51,700 — a 6% decrease compared to the previous year. Of these, 90% were Battery Electric Vehicles (BEVs), 10% were Plug-in Hybrid Electric Vehicles (PHEVs), and less than 1% were Fuel Cell Electric Vehicles (FCEVs).

The region’s share of statewide EV sales has declined significantly over the past decade, from 19% in 2014 to 12% in 2024.

In 2024, EVs represented 36% of all light-duty vehicle sales in Silicon Valley; this compares to 36% in San Francisco, and 25% statewide.

The car that dominated Silicon Valley's EV market share last year was the Tesla Model Y (with 31% of sales), followed by the Tesla Model 3 (13%).



Data Source: California Energy Commission, Zero Emission Vehicle and Infrastructure Statistic | Analysis: Silicon Valley Institute for Regional Studies

Nearly half of Silicon Valley's cumulative EV purchases through 2024 were sold by just three makers — Tesla (35%), Chevrolet (8%), and Nissan (5%).

WHAT ARE THE KEY FINDINGS?

Silicon Valley's public agencies are navigating a path back to financial stability after the initial challenges posed by the pandemic. After experiencing a 12% decline in expenses between 2020 and 2022, they increased by 7% in 2023. This suggests a gradual rebound in spending as the agencies recover from the initial budget tightening measures taken during the height of the pandemic.

Silicon Valley cities collectively experienced investment losses of \$224 million during the 2021-2022 fiscal year — the first time on record for the region — then

rebounded with investment gains of nearly \$209 million the following year. Despite the initial financial challenges, Silicon Valley

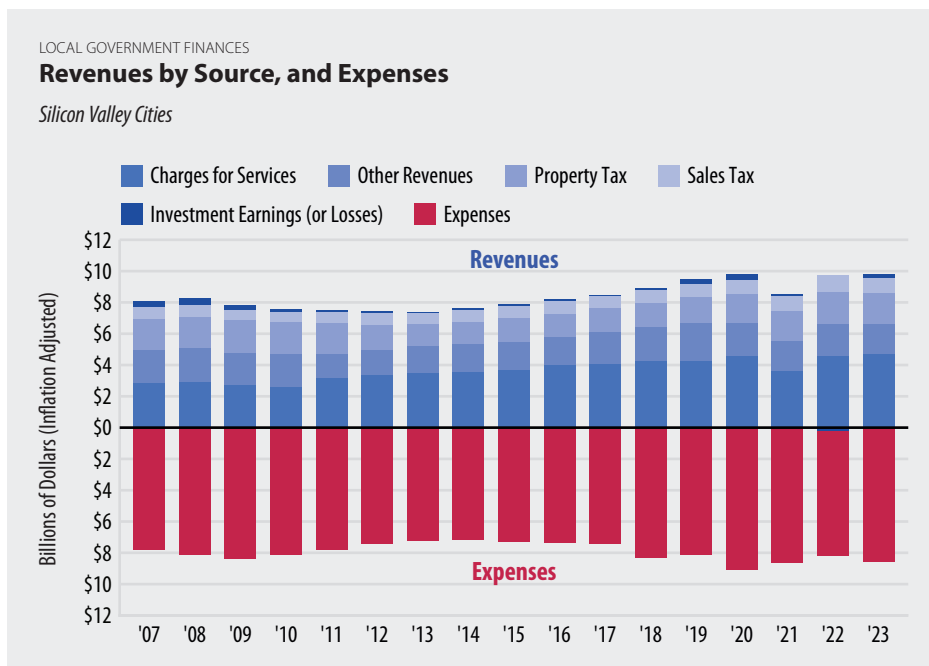
The average tenure for managers in the region is just four years.

cities demonstrated gains in fiscal health in the 2022-2023 fiscal year, with revenues exceeding expenses by nearly \$1.3 billion. The aggregate city capital net assets (assets minus debts) rose to more than \$20.2 billion

in the 2022-2023 fiscal year, which is also indicative of the agencies rebuilding their financial reserves after the pandemic.

In 2024, the region's cities and counties appointed five new managers, with one subsequently leaving the position later that year. The average tenure for managers in the region is just four years, which is lower than both the statewide average of 4.5 years and the national average of seven years. While some public agencies in Silicon Valley have experienced significantly less turnover — with seven out of 41 managers holding their positions for seven or more years — the average tenure for the other

While there are many factors affecting year-to-year changes in public agency revenues, expenses, and net position, the overall trend during the first two fiscal years of the pandemic was a tightening of budgets with declining expenses (-12% between 2020 and 2022, in nominal values). Expenses increased in 2023, however, by \$0.6 billion year-over-year (+7%).



Data Source: Silicon Valley Cities | Analysis: Silicon Valley Institute for Regional Studies

In aggregate, Silicon Valley cities lost money on their investments during the 2021-22 fiscal year, with losses totaling approximately \$224 million (in inflation-adjusted dollars) — stripping 2% off total revenues that year, and representing the first year on record with regional city-level investment losses.¹³³

Silicon Valley city revenues totaled \$9.8 billion in FY 2022-23, with 48% coming from Charges for Services, 20% from Property Tax, 10% from Sales Tax, and 2% from Investment Earnings.

34 managers is just over two years. This high level of turnover, with anywhere from three to 14 new or interim appointments in a typical year, represents a turnover rate ranging from 7% to 34% across the region's public agencies.

The representation of women in city and county manager positions in Silicon Valley is higher than the statewide and national averages, at 27%. However, this percentage has only increased by 5 percentage points over the past decade, indicating a need for further progress towards gender parity.

WHY IS THIS IMPORTANT?

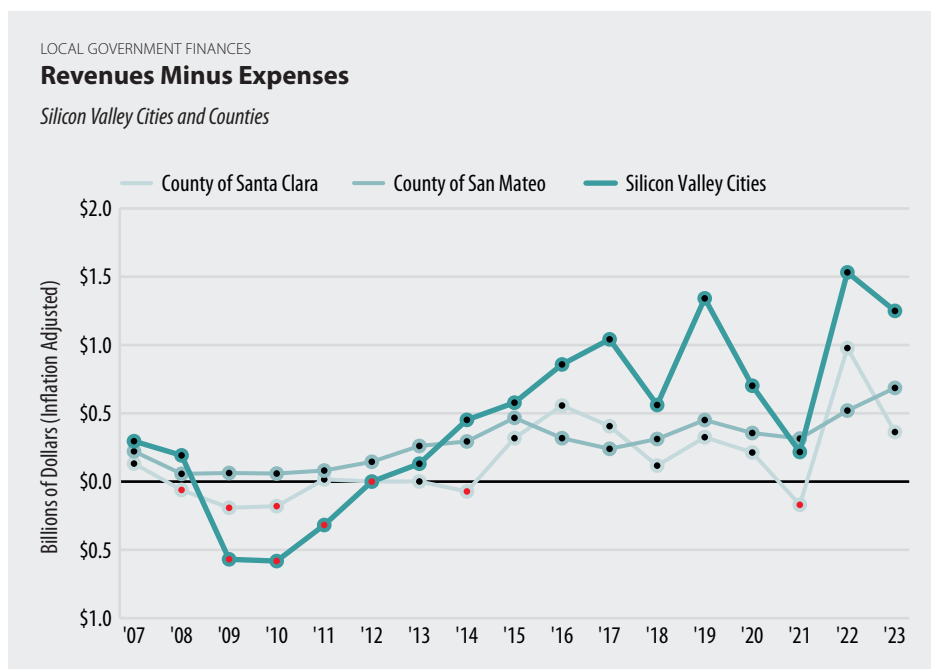
Many factors influence local government's ability to govern effectively, including the availability and management of resources, as well as staffing levels and retention.

Administrative turnover rates may affect working relationships and the retention of institutional memory, and have been tied to the effectiveness and cooperation with and among elected officials.^{128 129 130}

To maintain service levels and respond to a changing environment, local government revenue must be reliable. Property tax revenue is the most stable source of city government revenue, fluctuating much less over time than other sources, such as sales and other taxes. Since property tax revenue represents only about a quarter of all revenue, other revenue streams are critical in determining the overall volatility of local government funding.

The amount of public capital (assets minus debts) in relation to overall regional wealth can be indicative of the

government's ability to invest in infrastructure, which has been linked to distributive equity from both an economic and social perspective.^{131 132}



Data Source: Silicon Valley Cities and Counties | Analysis: Silicon Valley Institute for Regional Studies

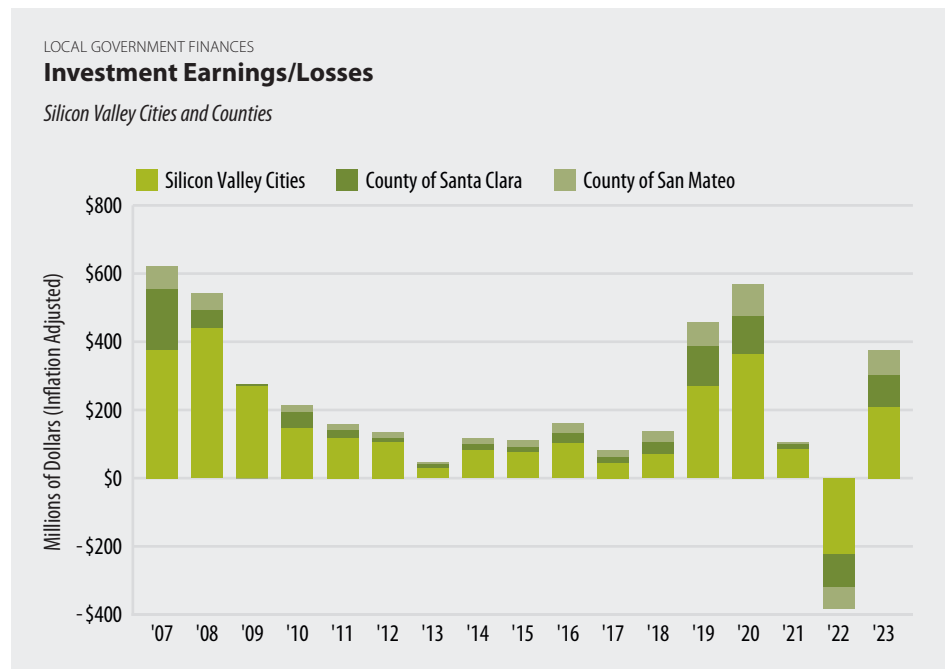
The collective revenues of Silicon Valley cities exceeded expenses by nearly \$1.3 billion in FY 2022-23, and by an historically large margin (\$1.5 billion) during the fiscal year prior.

In FY 2022-23, Silicon Valley's aggregate city capital (net assets minus debts) rose to more than \$20.2 billion. While this amount represents two times more than all 39 city revenues combined that year, the amount remains minuscule relative to the region's estimated residential liquid wealth (estimated at nearly \$936 billion that year).

City investment earnings rebounded in the 2022-23 fiscal year, with a collective gain of nearly \$209 million among Silicon Valley's cities.

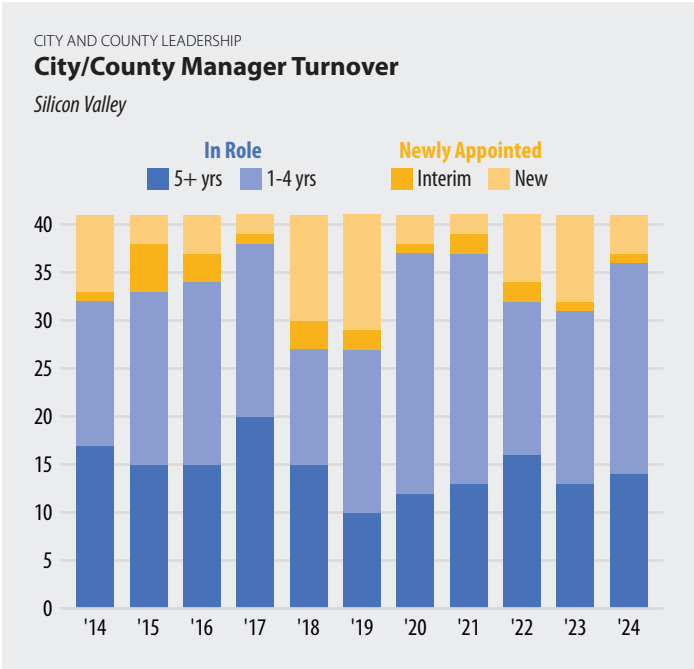
Silicon Valley cities collectively lost more than \$216 million in FY 2021-22 in investments, in nominal values. This was the first year on record indicating a negative investment earnings total for the region's cities as a whole.

Although the majority of Silicon Valley cities experienced investment losses in FY 2021-22, eight out of 39 cities reported gains (totaling \$21 million).

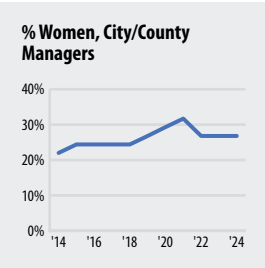


Data Sources: Silicon Valley Cities and Counties; State of California | Analysis: Silicon Valley Institute for Regional Studies

Some Silicon Valley public agencies have experienced significantly less turnover than others. Seven out of 41 city/county managers in 2024 had held their positions for seven or more years, with an average of more than 10 years; among the other 34, the average tenure was just over two years.



Note: Annual counts represent a snapshot in time, taken in August of each year.
Data Sources: Silicon Valley City and County Websites | Analysis: Silicon Valley Institute for Regional Studies



Less than one-third (27%) of Silicon Valley city and county managers are women. While this share is higher than the latest statewide (24%)¹³⁶ and national (19%)¹³⁷ estimates, it has increased by only 5 percentage points over the past decade and remains far from parity.

Silicon Valley cities and counties appointed five new managers in 2024, one of whom subsequently left the position (in September).¹³⁵

The region's city and county managers have served in their roles for an average of four years — a tenure lower than both the most recent statewide and national estimates (4.5 and seven years, respectively).¹³⁴

In a typical year, Silicon Valley cities and counties appoint anywhere from three to fourteen new (or interim) city or county managers, representing a turnover rate of 7-34%. In 2023, the turnover rate was 12% with five new managers out of 41.

WHAT ARE THE KEY FINDINGS?

Silicon Valley's political landscape has evolved in recent years, with subtle shifts in party affiliation and more significant changes in voter participation. The percentage of registered voters with no party affiliation declined to 26% in 2024 from its peak of 33% in 2018, while the share of registered Republicans remains at an historic low since 1970 (16%). Fifty-two percent of registered voters are Democrats, compared to 46% statewide. Voter registration for the 2024 presidential election reached 84% of eligible voters in

Silicon Valley, matching the statewide figure but representing a slight decline from 2020 (with an 85% registration rate).

Voter turnout and voting methods have

Local support for Donald Trump has steadily increased with each election.

also experienced significant changes. While mail-in voting reached a record high of 93% in November 2022, it decreased

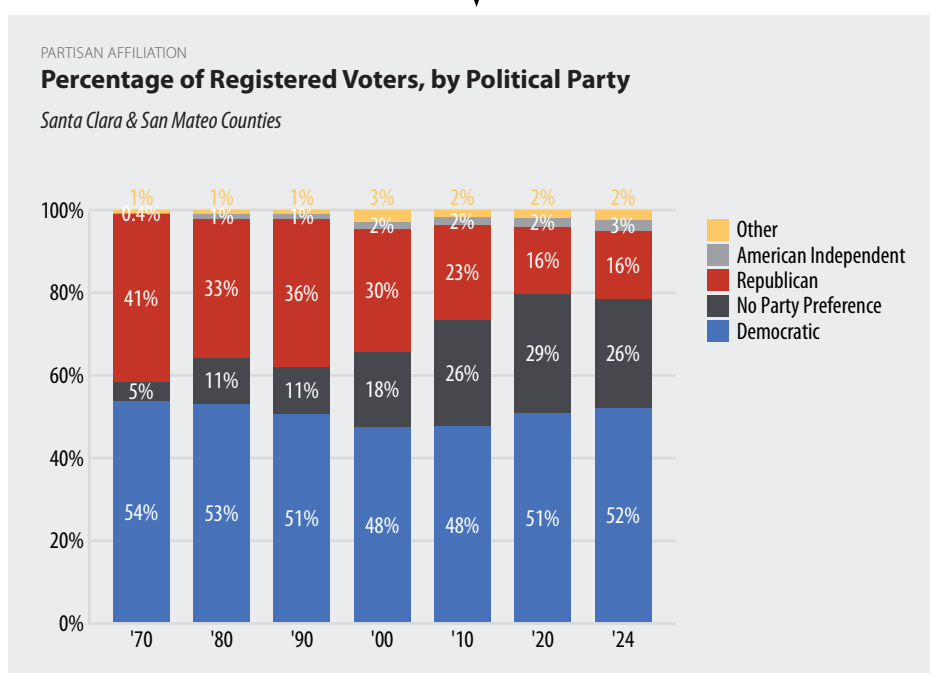
slightly to 88% for the 2024 presidential election. Overall turnout of eligible voters in Silicon Valley for the 2024 election was 62%, exceeding the statewide rate of 60%,

but marking a substantial decline from the historic 73% participation of 2020. Despite Kamala Harris winning decisively in Silicon Valley with 70% of the vote, local support for Donald Trump has steadily increased with each election, rising from 20% in 2016 to 24% in 2020, and 27% in 2024, reflecting a gradual shift in the region's political dynamics.

After a steady decline since 1970 to a near all-time low in 2023, the share of registered Republicans increased by 1 percentage point in the fall of 2024 (16.4%).

The share of Silicon Valley registered voters with no political party affiliation declined slightly to 26% from a historical high in 2018 (33%).

As of October 21, 2024, 52% of Silicon Valley voters were registered as Democrats (compared to 46% statewide).



Data Source: California Secretary of State, Elections Division | Analysis: Silicon Valley Institute for Regional Studies

WHY IS THIS IMPORTANT?

An engaged citizenry shares in the responsibility to advance the common good, is committed to place, and holds a level of trust in community institutions. Voter participation is an indicator of civic engagement and reflects community members' commitment to a democratic system, confidence in political institutions, and optimism about the ability of individuals to affect decision-making.

Share of Eligible Voters Who Registered

Santa Clara & San Mateo Counties, San Francisco, and California
General Elections

	2016	2020	2022	2024
Silicon Valley	75%	85%	81%	84%
San Francisco	79%	78%	75%	78%
California	78%	88%	82%	84%

Data Source: California Secretary of State, Elections Division
Analysis: Silicon Valley Institute for Regional Studies

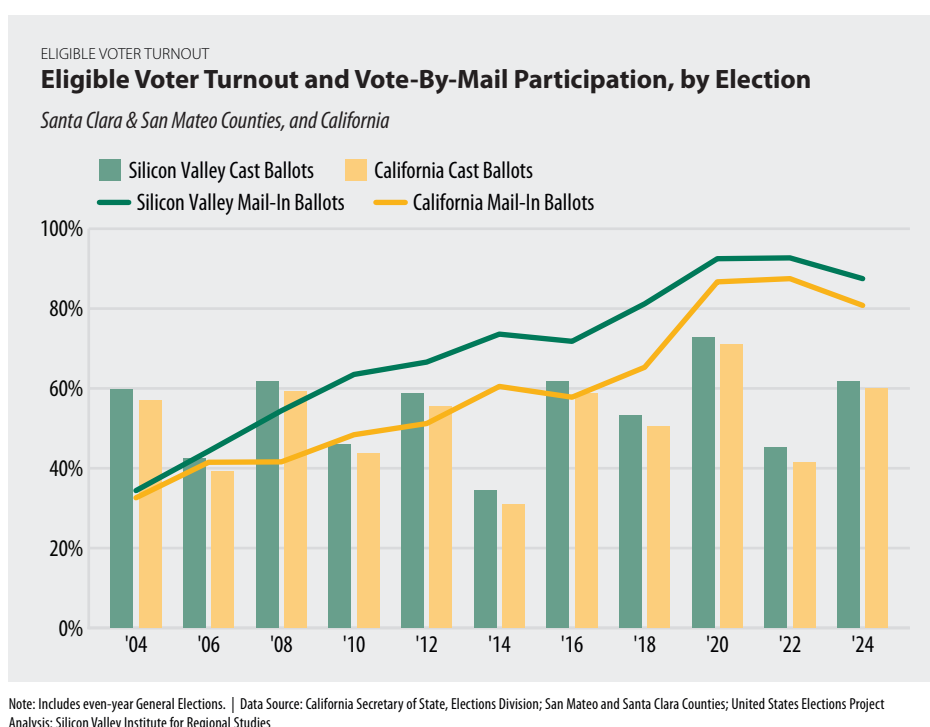
For the November 2024 presidential election, 84% of those who were eligible to vote in Silicon Valley were registered; this compared to 78% in San Francisco and 84% statewide.

Voter registration reached 85% of eligible voters before the 2020 presidential election, representing a 10 percentage point increase from 75% in 2016. This registration level declined by nearly 2 percentage points heading into the 2024 election.

In September 2021, Governor Newsom signed landmark elections legislation (Assembly Bill 37) that makes permanent the measure initiated during the pandemic to send vote-by-mail ballots to all registered voters in California.¹³⁸

Silicon Valley's 2024 presidential election turnout of 62% exceeded the California statewide rate (60%).

Within Silicon Valley, San Mateo County had a greater turnout (66%) than Santa Clara County (60%). These numbers marked a significant decline from the historic 2020 presidential election, when turnout reached 73% in Silicon Valley and 71% statewide. Levels in 2024 represented an 11 percentage point decline for both the region and the state. The 2020 election stands as a landmark year, recording the highest voter participation of any presidential election in the previous 50 years.

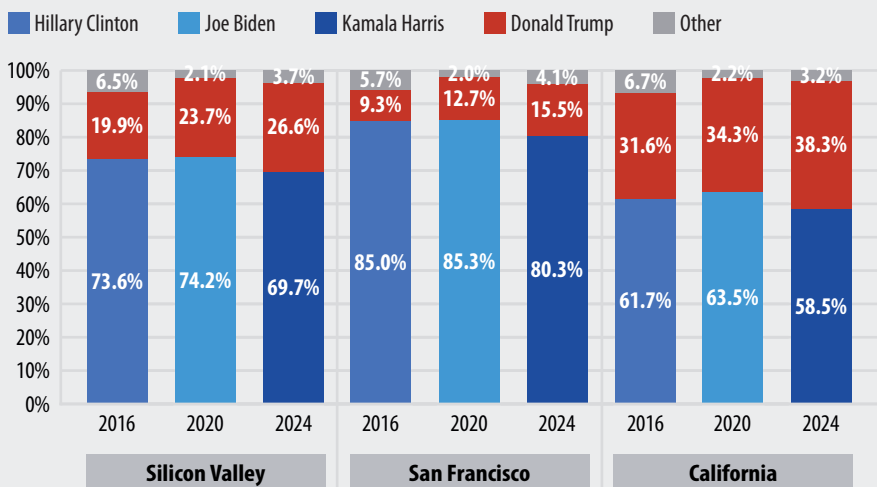


Silicon Valley's vote-by-mail rate reached an all-time high (93%) for the November 2022 elections; this compares to a statewide vote-by-mail rate that rose to 88%. The November 2024 presidential election saw a slightly reduced level of mail-in ballots (88%) as did the state (81%).

ELIGIBLE VOTER TURNOUT

Share of Votes in General Elections, by Presidential Candidate

San Mateo & Santa Clara Counties, San Francisco, and California



Data Sources: California Secretary of State, Elections Division; San Mateo and Santa Clara Counties; United States Elections Project | Analysis: Silicon Valley Institute for Regional Studies

In comparing the election results from 2016, 2020, and 2024, one candidate appears in all three elections. In Silicon Valley, Donald Trump received 20% of the vote in 2016, 24% in 2020, and 27% in 2024. Although Kamala Harris won decisively in Silicon Valley, San Francisco, the Bay Area, and California, Donald Trump gained support with each election across all of these regions and the state.

WHAT ARE THE KEY FINDINGS?

Silicon Valley has made significant progress toward gender equity in political representation, with women accounting for 48% of local elected officials in 2025. This share reflects a 12 percentage point increase since 2017, nearly matching both California's state legislature (49% female) and the region's population demographics. However, representation varies by age group, with women comprising only 40% of elected officials under age 45. Additionally, more than 81% of officials are ages 45 or older. While local elected offices are non-partisan in nature, the overwhelming majority in Silicon Valley are Democrats (76%, up from 72% in 2017), with a relatively small share of Republicans (10%).

Racial and ethnic representation in Silicon Valley's local elected officials has improved but remains uneven, with 22% identifying as

Representation varies by age group, with women comprising only 40% of elected officials under age 45.

Asian and 17% as Hispanic or Latino (up from 10% in 2017). Geographic disparities persist, with only 10% of cities and 25% of counties having any Black or African American elected officials. The judiciary has shown notable diversification over the past decade, with Asian representation increasing from 6% to 16% and Hispanic or Latino representation

from 7% to 9%, while the percentage of White judges declined from 71% to 58%. Women now make up 58% of Silicon Valley superior court judges, significantly higher than the statewide percentage (41%).

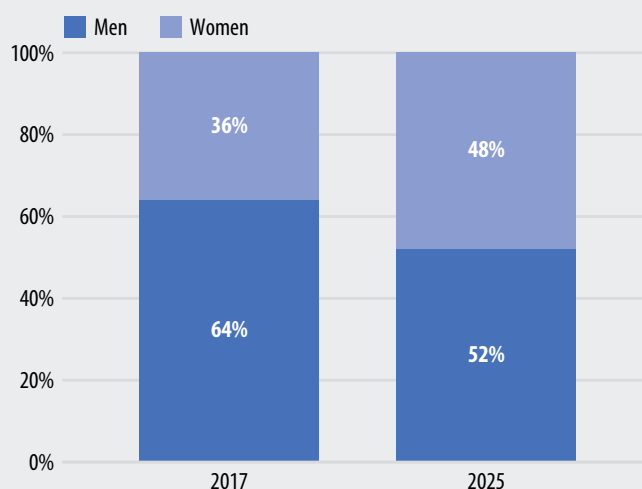
WHY IS THIS IMPORTANT?

Local government is the level of government closest to the people, yet there is little scholarship or reporting on the activities and identities of local elected officials. In many respects, local elected officials create the policies that are most influential on residents' daily lives; they also determine how local resources will be allocated. Leaders with a diverse set of lived experiences contribute firsthand knowledge when representing residents' needs

While Silicon Valley approached proportional representation by gender in 2024 (at 48%), the share of women was lower among those of peak childbearing or childrearing age. Only 40% (up from 26% in 2023) of the region's local elected officials below age 45 are women.

In 2025, the share of female local elected officials was near proportional representation (48%) with a gain of 12 percentage points since 2017. This compares to the record number (49%) of female legislators in the California Legislature at the beginning of the 2025-2026 two-year session.¹⁴⁰

REPRESENTATION
Share of Local Elected Officials, by Gender
Silicon Valley



Data Source: GrassrootsLab (www.grassrootslab.com); L2 Voter and Demographic Dataset, California Voter File
Analysis: Silicon Valley Institute for Regional Studies; GrassrootsLab

and concerns, particularly with respect to historically marginalized communities.

At the county level, the Board of Supervisors plays an important role across many areas including public health, health equity, and planning and development, and also serves as Registrar of Voters. Judges and justices, who are local elected officials, serve in the Superior Courts (also known as trial courts) in each county. They oversee the first level of court proceedings, whether civil or criminal, for cases that occur within local jurisdictions.

In Silicon Valley, each local elected official represents nearly 12,000 residents on average. Examination of local elected officials illustrates the extent to which Silicon Valley's constituency is represented and offers insight into the backgrounds that

may shape their decisions on behalf of our communities.

The composition of a region's local elected officials also yields insight into the future cohort of state and regional leadership.¹³⁹ If a given constituency is not cultivated at the local level, it is unlikely to improve its representation at the State and Federal levels.

Age Distribution of Elected Officials

Silicon Valley

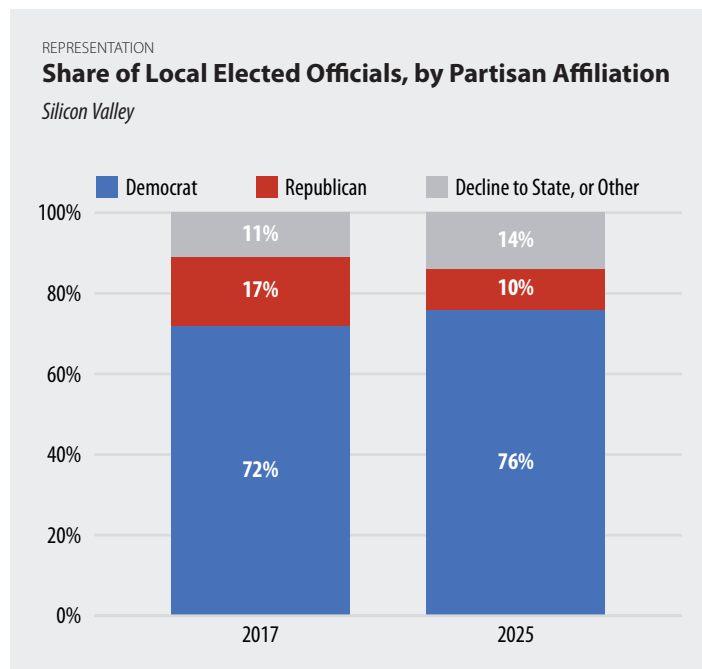
Age Range	2023	2025
<30	3%	2%
30-44	11%	16%
45-64	50%	49%
65 and over	36%	32%

More than 81% of local elected officials are 45 years of age or older (down 5 percentage points since 2023).

← In the newly sworn-in 119th Congress, 150 female senators and representatives (one more than in the previous Congress) make up 28% of voting members (+44% from a decade earlier). By contrast, women make up 51% of the national population.¹⁴¹

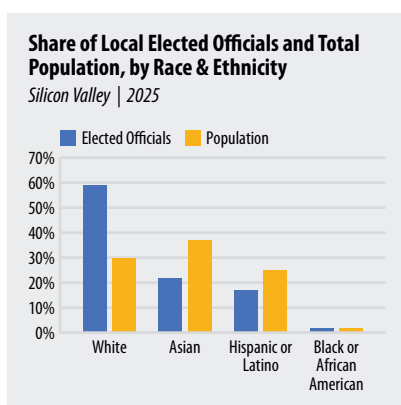
The majority of elected officials serving on City and Town Councils and County Boards of Supervisors in Silicon Valley are Democrats (76%, up from 72% in 2017).

10% of Silicon Valley's local elected officials are Republicans, compared to 16% of registered voters.

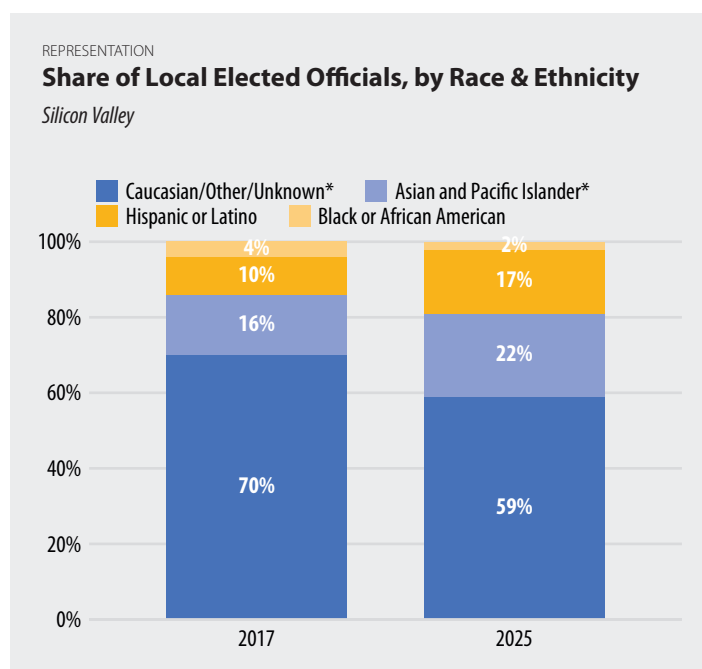


Data Source: GrassrootsLab (www.grassrootslab.com); L2 Voter and Demographic Dataset, California Voter File
Analysis: Silicon Valley Institute for Regional Studies; GrassrootsLab

The share of local elected officials identifying as Hispanic or Latino increased from 10% in 2017 to 17% in 2025.



Asian representation is relatively high in Silicon Valley, with 22% of local elected officials identifying as Asian compared to 37% of the population.¹⁴²

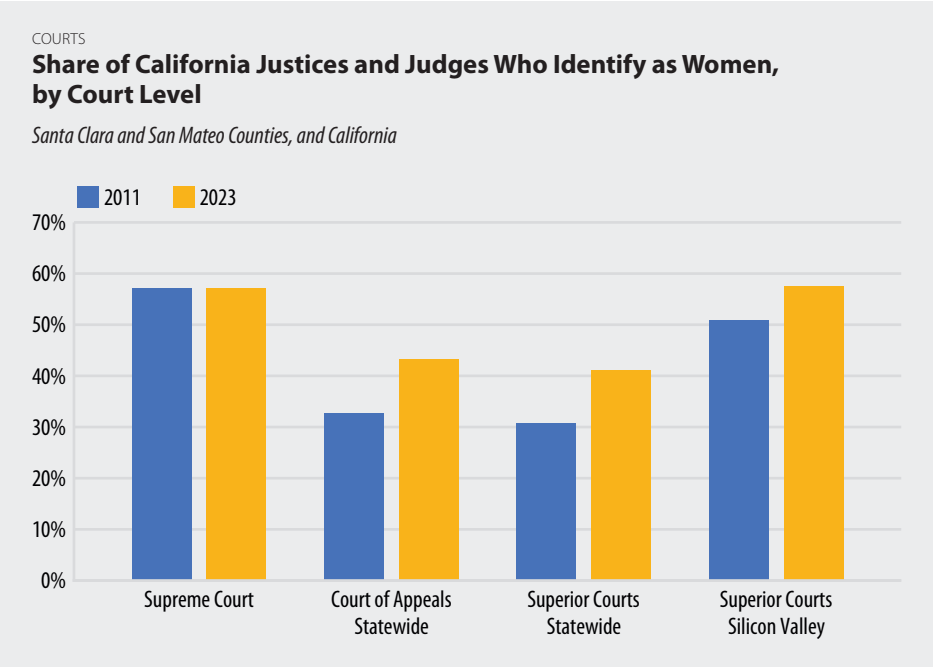


*In 2023 and 2025, these categories are White and Asian. | Note: Due to rounding, percentages for 2025 sum to greater than 100 percent.
Data Source: GrassrootsLab (www.grassrootslab.com); L2 Voter and Demographic Dataset, California Voter File | Analysis: Silicon Valley Institute for Regional Studies; GrassrootsLab

Representation by Share of Jurisdictions Share of Cities and Counties with at Least One Elected Official, by Race & Ethnicity <i>Silicon Valley, 2025</i>		
	Cities	Counties
White	95%	50%
Asian	54%	25%
Hispanic or Latino	46%	100%
Black or African American	10%	25%

Diversity in representation is unevenly distributed throughout the region. At the local municipal level, only 10% of cities and 25% of counties had a Black or African American elected official.

Women make up 58% of Silicon Valley superior court judges, compared to 41% of those throughout California.



Data Source: Judicial Council of California | Analysis: Silicon Valley Institute for Regional Studies

In 2023, there were 96 justices and judges serving Superior Courts, also known as trial courts, in San Mateo and Santa Clara counties,¹⁴³ reflecting a racial and ethnic breakdown that has shifted slightly over the past decade. Since 2011, the largest gains in judicial representation were for Asian (from 6% to 16%) and Hispanic or Latino (from 7% to 9%), with a corresponding decline in the share of White justices and judges (from 71% to 58%).

The overwhelming majority of local judges and justices in 2023 were White (58%), with Black or African American judges and justices accounting for 6%.

Share of Superior Court Judges, by Race & Ethnicity <i>Santa Clara and San Mateo Counties</i>			
	2011	2016	2023
Black or African American	6%	7%	6%
Hispanic or Latino	7%	9%	9%
Multiple and Other	9%	9%	10%
Asian	6%	10%	16%
White	71%	66%	58%

Note: Multiple and Other includes American Indian and Alaska Native, Pacific Islander, Some Other Race, and More than One Race.

APPENDIX A

Methodological notes for all charts and tables are included in this section. These notes are also accessible on the Silicon Valley Indicators online data hub (www.SiliconValleyIndicators.org) as well as in the public use data files.

PROFILE OF SILICON VALLEY

- **Area**

Land Area includes Santa Clara and San Mateo counties, Fremont, Newark, Union City, and Scotts Valley. Land Area data (except for Scotts Valley) are from the U.S. Census Bureau: State and County QuickFacts. Land area is based on current information in the TIGER* database, calculated for use with Census 2010. Scotts Valley data are from the Scotts Valley Chamber of Commerce.
- **Population**

Data for the Silicon Valley population come from the E-1: City/County Population Estimates with Annual Percent Change report by the California Department of Finance and are for Silicon Valley cities. Population estimates are for January 2024.
- **Jobs**

The total number of jobs in the city-defined Silicon Valley region for Q2 of 2024 was estimated by BW Research using data from the United States Bureau of Labor Statistics Quarterly Census of Employment and Wages, using Q1 2024 QCEW data and updated based on Q2 2024 reported growth and totals, and modified slightly by JobsEQ, which removes suppressions and reorganizes public sector employment.
- **Average Annual Earnings**

Data are from the California Employment Development Department and JobsEQ. Earnings include wages, salaries, profits, benefits, and other compensation, and are calculated by dividing total earnings by the number of jobs. Data for Silicon Valley include San Mateo and Santa Clara counties, and the Cities of Fremont, Newark, Scotts Valley, and Union City.
- **Foreign Immigration and Domestic Migration**

Data are from the California Department of Finance E-2 Population Estimates and Components of Change, and include San Mateo and Santa Clara Counties. Estimates for 2024 are preliminary. Net migration includes all legal and unauthorized foreign
- immigrants, residents who left the state to live abroad, and the balance of hundreds of thousands of people moving to and from California from within the United States.
- **Population by Age**

Data are from the United States Census Bureau, 2023 American Community Survey 1-Year Estimates. Silicon Valley includes Santa Clara and San Mateo counties.
- **Population by Place of Birth**

Data are from the United States Census Bureau, 2024 American Community Survey 1-Year Estimates, and include Santa Clara & San Mateo counties. The United States includes those born abroad of American parents. Oceania includes American Samoa, Australia, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, New Caledonia, New Zealand, Northern Mariana Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, Wallis, and Futuna.
- **Educational Attainment**

Data are from the United States Census Bureau, American Community Survey 2023 1-Year Estimates, and reflect the educational attainment of the population ages 25 years and over. Silicon Valley includes Santa Clara and San Mateo counties.
- **Industry Employment**

Data for employment by industry are estimates as of Q2 2024 from United States Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW), modified slightly by JobsEQ. Silicon Valley includes the city-defined region.

SNAPSHOT OF KEY TRENDS

- **Aggregate Regional Market Cap**

Stock market performance data include all public companies in Silicon Valley (Joint Venture's city-defined region) and San Francisco based on addresses from D&B Hoovers, cross-referenced with CB Insights and Crunchbase. The company list is based on presence within the region (which may or may not be the company headquarters) and includes those listed on the Nasdaq, NYSE, and NYSE American exchanges only. New regional IPOs are added on a monthly basis, excluding special purpose acquisition companies (SPACs). Company name, exchange, industry, share price (unadjusted), and market cap are from Polygon.io (and from IEX Cloud prior to 2024). Stock index prices are from TradingView. In the tables, points, share price, and market cap are updated as of the time listed on the sidebar. Historical data begin on February 19, 2020, and represent the unadjusted closing prices and aggregate market cap immediately prior to the first market-wide trading halt since 1997 (which occurred on February 20, 2020, and was also the first ever halt—or suspension of trading—of the "modernized" Market-Wide Circuit Breaker); subsequent trading halts across U.S. exchanges followed on March 9, 12, 16, and 18, 2020.
- **Jobs**

Data are from the U.S. Department of Labor Quarterly Census of Employment and Wages, and include jobs within the city-defined Silicon Valley region. See *Employment: Job Growth*.
- **Hunger**

See *Income & Wealth: Food Assistance Provided*.
- **Childcare Costs**

Childcare costs represent the annual costs of childcare at licensed care facilities, and are in nominal dollars. See *Early Education & Care: Childcare Costs*.
- **Commuting**

Data are from the United States Census Bureau, American Community Survey Public Use Microdata (PUMS). See *Transportation: Megacommuters*.
- **Population**

See *Talent Flows & Diversity: Population Change*.
- **Migration**

See *Talent Flows & Diversity: Foreign Immigration and Domestic Migration*.
- **Mental Health**

Young Adults include those ages 18-34; children are under age 18. See *Quality of Health: Mental Health*.
- **Wealth Inequality**

Wealth includes investable (liquid) assets such as cash in checking accounts, CDs, and retirement accounts. Billionaire public and private holdings are excluded. See *Income & Wealth: Wealth Inequality*.
- **Venture Capital**

Data are from PricewaterhouseCoopers/National Venture Capital Association MoneyTree™ Report, Data: CB Insights (Q4 2015-2016), Thomson Reuters (prior to Q4 2015); CB Insights (2017+). Includes all deals to companies located in the city-defined Silicon Valley region and/or San Francisco. See *Innovation & Entrepreneurship: Venture Capital*.
- **Remote Work**

2020 data include November through December. See *Employment: Remote Work*.
- **Chronic Absenteeism**

Silicon Valley includes the city-defined region. See *Preparing for Economic Success: Chronic Absenteeism*.
- **Artificial Intelligence**

See *Innovation & Entrepreneurship: (Venture Capital, Startups, Unicorns & Decacorns, and Mergers & Acquisitions)*.
- **Home Sales**

See *Housing: Home Sales*.
- **Minimum Wage**

See *Income & Wealth: Minimum Wage Ordinances & Income & Wealth: Average Annual Earnings*.
- **Income Gap**

Data are from the United States Census Bureau, American Community Survey 1-Year Estimates, and include Santa Clara and San Mateo counties. Household income was inflation-adjusted to 2023 dollars using the Bay Area consumer price index for all urban consumers from the Bureau of Labor Statistics. Percent change is relative to 2004.

PEOPLE

TALENT FLOWS AND DIVERSITY

- **Population Change**

Data are from the California Department of Finance E-2 and E-6 Population Estimates and Components of Change, and include San Mateo and Santa Clara Counties. Estimates for 2024 are preliminary. Natural Change equals births minus deaths. Net migration includes all legal and unauthorized foreign immigrants, residents who left the state to live abroad, and the balance of hundreds of thousands of people moving to and from California from within the United States. 2021-2024 data are from the December 2024 release; 2011-2020 data are from the December 2021 release; 2000-2010 data were updated with the revision released in December 2011; 1991-1999 data were updated with the revised historical data released February 2005.
- **Foreign Immigration and Domestic Migration**

Data are from the California Department of Finance E-2 and E-6 Population Estimates and Components of Change, and include San Mateo and Santa Clara Counties. Estimates for 2024 are preliminary. Net migration includes all legal and unauthorized foreign immigrants, residents who left the state to live abroad, and the balance of people moving to and from California from within the United States. 2021-2024 data are from the December 2024 release; 2011-2020 data are from the December 2021 release; 2000-2010 data were updated with the revision released in December 2011; 1991-1999 data were updated with the revised historical data released February 2005. The share of residents likely to remain in the Bay Area is from the 2024 *Silicon Valley Poll*, and includes those who responded that they "disagree" or "strongly disagree" to their likelihood of moving over the next few years. Democrats and Republicans include "leaners." Silicon Valley includes Santa Clara & San Mateo counties.
- **Domestic Outmigration Destinations**

Domestic migration data are from the United States Census Bureau, American Community Survey (ACS) 1-Year Public Use Microdata. Silicon Valley includes Santa Clara and San Mateo counties, and migration numbers between those two counties are not included. Domestic Outmigration is the gross outmigration (not net, which would subtract counterflow). The Monterey Bay Area includes Santa Cruz, San Benito, and Monterey Counties; the Sacramento Metro area includes Sacramento, Yolo, El Dorado, and Placer Counties; San Joaquin Valley includes San Joaquin, Kern, Kings, Stanislaus, Merced, Fresno, Madera, and Tulare Counties; Rest of Northern California includes Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Tuolumne, and Yuba Counties; Rest of Southern California includes Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, San Luis Obispo, and Ventura Counties; Seattle-Tacoma includes Grays Harbor, Island, King, Kitsap, Pierce, Skagit, Mason, San Juan, Snohomish, and Thurston Counties; the Greater Phoenix, AZ Area includes La Paz, Maricopa, Mohave, Pima, Pinal, Gila, Graham, Greenlee, Yavapai, and Yuma Counties; the Greater Portland, OR Area includes Multnomah, Clackamas, Columbia, Polk, Washington, and Yamhill Counties; the Dallas-Fort Worth, Texas Metro includes Collin, Dallas, Ellis, Hunt, Kaufman, and Rockwall Counties; New York City includes New York County (Manhattan), Kings County (Brooklyn), Bronx County (The Bronx), Richmond County (Staten Island), and Queens County (Queens); Las Vegas, NV includes Clark County; Greater Austin, Texas includes Bastrop, Caldwell, Hays, Travis, and Williamson Counties; Greater Boston, MA includes Bristol, Norfolk, Plymouth, Suffolk, Essex, Middlesex, and Worcester Counties; Greater Chicago, IL includes Cook, DuPage, Grundy, Kane, Kendall, Lake, McHenry, and Will Counties; the Salt Lake City, UT Metro Area includes Box Elder, Davis, Salt Lake, and Tooele Counties; the Washington, D.C. Metro area includes the District of Columbia, Maryland (Calvert, Charles, Frederick, Montgomery, Prince George's, and St. Mary's Counties), Virginia (Alexandria, Arlington County, Clarke County, Culpeper County, Fairfax County, Fairfax, Falls Church, Fauquier County, Fredericksburg, Loudoun County, Manassas, Manassas Park, Prince William County, Rappahannock County, Spotsylvania County, Stafford County, and Warren County), and West Virginia (Berkeley, Jefferson, Mineral, Hampshire, Hardy, Grant, Tucker, Pendleton, and Morgan Counties); Greater Denver, CO includes Denver, Arapahoe, Douglas, Elbert, Jefferson, Boulder, Broomfield, Weld, Adams, Clear Creek, and Gilpin Counties.

APPENDIX A

■ Population by Age

Data are from the United States Census Bureau, American Community Survey 1-Year Estimates. Silicon Valley includes Santa Clara and San Mateo counties. The Dependency Ratio compares the combined size of the population under the age of 15 and 65-and-older ("non-working age") to the working-age population (15-64 years old).

■ Population Share by Racial & Ethnic Composition

Data are from the U.S. Census Bureau, Decennial Census 1990, 2000, 2010, and 2020, and American Community Survey, 2023 5-Year Estimates. The 1990 Decennial Census race and ethnicity categories differ from subsequent years: American Indian and Alaska Native category was called American Indian, Eskimo, or Aleut; Asian and Pacific Islander were combined; Two or More Races was not a category. Silicon Valley data include Santa Clara and San Mateo counties. Multiple & Other includes American Indian and Alaska Native alone, Native Hawaiian and Other Pacific Islander alone, Some Other Race alone, and Two or More Races. White Alone, Black or African American Alone, Asian Alone, and Multiple & Other are not Hispanic or Latino. One or more race data include race alone and in combination with another race. The Diversity Index calculation for Silicon Valley utilized the formula from the U.S. Census Bureau 2020 Census: Racial and Ethnic Diversity Index by State (August 12, 2021), originally from Phillip Meyer and Shawn McIntosh, "The USA Today Index of Ethnic Diversity," International Journal of Public Opinion Research (Volume 4, Issue 1), 1992. The index is calculated as: $DI = 1 - (H^2 + W^2 + B^2 + AIAN^2 + Asian^2 + NHP)^2 + SOR^2 + MULTI^2$ where H is % Hispanic or Latino, W is % White alone, B is % Black or African American alone, AIAN is % American Indian and Alaska Native alone, Asian is % Asian alone, NHP is % Native Hawaiian and Other Pacific Islander alone, SOR is % Some Other Race alone, MULTI is % Two or More Races. Estimates for all races included in the calculation are not Hispanic or Latino. The Diversity Index (DI) indicates the probability that two people chosen at random will be from different racial and/or ethnic groups; a DI of zero indicates no diversity, whereas a DI of 1 indicates complete diversity (everyone is of a different race and/or ethnicity). The probabilities have been converted into percentages to make them easier to interpret.

■ Total Number of Births; Births Per 1,000 People

Data are from the California Department of Finance E-2 and E-6 Population Estimates and Components of Change, and include San Mateo and Santa Clara Counties. Years represent July to July estimates; data for 2024 are preliminary. 2021-2024 are from the 2024 release; 2011-2020 data are from the 2021 release; 2000-2010 data were updated with the revision released in 2011; 1991-1999 data were updated with the revised historical data released February 2005.

■ Foreign Born

Data for the population by nativity are from the United States Census Bureau, American Community Survey, 1-Year Estimates. Silicon Valley includes Santa Clara and San Mateo counties. Foreign born residents do not include those who were Born Abroad of American Parent(s). Historical estimates are from the United States Census Bureau, Decennial Census; 1852-53 estimate is from the Works Progress Administration, Inventory of the County Archives of California No. 44 Santa Clara County (San Jose) 1939 and History of San Mateo County, California (B.F. Alley, Publisher; 1883). Historical data for 1852-53 include Santa Clara County (1852), Half Moon Bay (<1860), and Redwood City (1856) only. Estimates for the foreign born share of employed residents over age 16 include those who are at work only. Tech Occupations include Computer & Mathematical, Architectural & Engineering occupations. In 2023, age ranges for each generation were defined as follows: Silent Generation (78-98), Baby Boomers (59-77), Gen X (43-58), Millennials (26-42), Gen Z (13-25), and Gen Alpha (0-12).

■ Immigration Status

Immigration Status is from the California Immigrant Data Portal (Data: IPUMS USA), a project of University of Southern California's Equity Research Institute (ERI), and includes the composition of the immigrant population by immigration status, race, ancestry and age group. Data represent a 2017-2021 average. Immigration status is estimated based on an approach developed by the Equity Research Institute.

■ Languages Spoken

Population data for Santa Clara and San Mateo counties, San Francisco, California, and the United States are from the United States Census Bureau, American Community Survey 1-Year Estimates. The population-based data are for ages five years and over. German includes other West Germanic Languages, French includes Haitian or Cajun, Tagalog includes Filipino, Slavic Languages include Russian, Polish, and other Slavic Languages, and Chinese includes Mandarin and Cantonese. The Hispanic or Latino Household data are from the United States Census Bureau, American Community Survey 1-Year Estimates. Other languages include Other Indo-European languages, Asian and Pacific Island languages, and Other Languages.

■ Educational Attainment

Data are from the United States Census Bureau, American Community Survey 2023 1-Year Estimates, and 2010, 2015, and 2020 5-Year Estimates, and Decennial Census for 1970, 1980, 1990, and 2000. Data reflect the educational attainment of the population ages 25 years and over. Bachelor's Degree or Higher includes adults ages 25 years and over whose highest degree received was either a bachelor's degree or a graduate degree. Multiple and other includes Two or More Races, Some Other Race,

Native Hawaiian and Other Pacific Islander, and American Indian and Alaska Native. White is not Hispanic or Latino. Silicon Valley includes Santa Clara and San Mateo counties.

■ Science and Engineering Degrees

Data are from the National Center for Education Statistics. Regional data for the Silicon Valley includes the following post-secondary institutions: Menlo College, University of Silicon Valley, University of San Francisco, University of California (Berkeley, Davis, Santa Cruz, San Francisco), Santa Clara University, San Jose State University, San Francisco State University, Stanford University, and Golden Gate University. Beginning with the 2015 data, California State University-East Bay, International Technological University, and Notre Dame de Namur University were added; for 2023 data, International Technological University was omitted due to lack of data. The academic disciplines include: computer and information sciences, engineering, engineering-related technologies, biological sciences/life sciences, mathematics, physical sciences and science technologies. Data were analyzed based on first major and level of degree (bachelor's, master's, or doctorate). The year listed represents the end of the school year (e.g., 2023 represents the 2022-2023 school year). Data for race and ethnicity includes the share of degrees where data was available; other includes American Indian, Alaska Native, Native Hawaiian or Other Pacific Islander.

■ Tech Talent in the Core Working Age Group, by Gender

Data are from the United States Census Bureau, American Community Survey 1-Year Estimates, and include civilian employed women ages 25-44 with a bachelor's degree or higher. Technical roles include Computer, Mathematical, Architectural, and Engineering occupations. Silicon Valley includes Santa Clara and San Mateo counties.

■ Tech Talent in the Core Working Age Group, by Race and Ethnicity

Data are from the United States Census Bureau, American Community Survey 5-Year Estimates and include adults in the core working age group (ages 25-44) with a bachelor's degree or higher, who are employed full-time (35 or more hours per week) in the private sector, and work in Computer, Mathematical, Architectural and Engineering occupations. Asian, Black or African American, and White include respondents who only listed one race; multiple and other includes Two or More Races, Some Other Race, American Indian/Native Alaskan, and Native Hawaiian/Other Pacific Islander. All races are not Hispanic or Latino.

■ Migration of Tech Talent in the Core Working Age Group

Data are from the United States Census Bureau, 2023 American Community Survey 1-Year Estimates. Data are for the counties associated with the cities listed, and include adults in the core working age group (ages 25-44) with a bachelor's degree or higher, who are employed full-time (35 or more hours per week) in the private sector, and work in Computer, Mathematical, Architectural and Engineering occupations and moved to that specific county within one year of responding to the survey.

■ Share of Employees in Silicon Valley's Largest Technology Companies by Gender

The twenty largest Bay Area tech employers are identified using LinkedIn. Employment numbers are from companies' EEO-1 consolidated reports; technical roles include the EEO-1 job classifications of Professional and Technical, and Leadership roles include Executive/Senior Officials and First/Middle Level Officials and Managers. Data for Tesla and LinkedIn were excluded from this analysis since EEO-1 reports could not be accessed. The overall regional workforce data by race and ethnicity are from the U.S. Census Bureau, 2023 American Community Survey 5-Year Estimates. Silicon Valley includes San Mateo and Santa Clara counties. Multiple and Other includes Some Other Race, Two or More Races, American Indian or Alaskan Native, and Native Hawaiian or Pacific Islander; all race data are not Hispanic or Latino.

■ Share of Employees in Silicon Valley's Largest Technology Companies by Race and Ethnicity

The twenty largest Bay Area tech employers are identified using LinkedIn. Employment numbers are from companies' EEO-1 consolidated reports; technical roles include the EEO-1 job classifications of Professional and Technical, and Leadership roles include Executive/Senior Officials and First/Middle Level Officials and Managers. Data for Tesla and LinkedIn were excluded from this analysis since EEO-1 reports could not be accessed. The overall regional workforce data by race and ethnicity are from the U.S. Census Bureau, 2023 American Community Survey 5-Year Estimates. Silicon Valley includes San Mateo and Santa Clara counties. Multiple and Other includes Some Other Race, Two or More Races, American Indian or Alaskan Native, and Native Hawaiian or Pacific Islander; all race data are not Hispanic or Latino.

■ Share of Residents in Technical Occupations with a Bachelor's Degree or Higher, by Place of Birth

Data are from the U.S. Census Bureau, American Community Survey 1-Year Estimates for 2023, and include all civilian employed workers who reside in San Mateo or Santa Clara counties, with a bachelor's degree or higher, who work in technical occupations (including Computer, Mathematical, Architectural, and Engineering occupations). Oceania includes At Sea.

ECONOMY

EMPLOYMENT

■ Total Number of Jobs and Percent Change over Prior Year

Data includes average annual employment estimates as of the second quarter for years 2001 through 2024 from the United States Bureau of Labor Statistics Quarterly Census of Employment and Wages, and includes the entire city-defined Silicon Valley region. Q2 of 2024 was estimated at the industry level by BW Research using Q1 2024 QCEW data and updated based on Q2 2024 reported growth and totals, and modified slightly by JobsEQ, which removes suppressions and reorganizes public sector employment.

■ Percent Change in Total Number of Jobs

Data are from the United States Bureau of Labor Statistics, Quarterly Census of Employment and Wages for Q2. The total number of jobs for Q2 2024 was estimated by BW Research using Q1 2024 data and Q2 reported growth, modified slightly by JobsEQ, which removes suppressions and reorganizes public sector employment.

■ Change in Employment, by Industry

Data include average annual employment estimates as of the second quarter from the United States Bureau of Labor Statistics Quarterly Census of Employment and Wages, and includes the entire city-defined Silicon Valley region. Data for Q2 of 2024 was estimated at the industry level by BW Research using Q1 2024 QCEW data and updated based on Q2 2024 reported growth and totals, and modified slightly by JobsEQ, which removes suppressions and reorganizes public sector employment.

■ Change in Employment at Startup Companies

Data for startup employment is from CB Insights and LinkedIn. Startup companies include those less than three years old as of December 2024 which have received Angel, seed, or early-stage (Series A) funding. Data for overall Silicon Valley employment represent average annual employment estimates as of second quarter from United States Bureau of Labor Statistics Quarterly Census of Employment and Wages. Silicon Valley includes the city-defined region.

■ Top 25 Silicon Valley Occupations

Data are from the United States Census Bureau, American Community Survey 1-Year Public Use Microdata. Silicon Valley includes Santa Clara & San Mateo counties. Engineers include Aerospace engineers, Biomedical and agricultural engineers, Chemical engineers, Civil engineers, Computer hardware engineers, Electrical and electronics engineers, Environmental engineers, Industrial engineers, including health and safety, Marine engineers and naval architects, Materials engineers, Mechanical

engineers, Petroleum, mining and geological engineers, including mining safety engineers, Other engineers, Electrical and electronic engineering technologists and technicians, Architectural and engineering managers, and Other engineering technologists and technicians, except drafters. Other Computer, Engineering, and Science Occupations include all remaining occupations within that category, as well as Computer and information systems managers. Teachers include Postsecondary teachers, Preschool and kindergarten teachers, Elementary and middle school teachers, Secondary school teachers, Special education teachers, Tutors, Other teachers and instructors, and Teaching assistants. Finance Specialists, Analysts, and Advisors include Financial managers, Management analysts, Accountants and auditors, Budget analysts, Credit analysts, Financial and investment analysts, Personal financial advisors, Credit counselors and loan officers, Tax examiners and collectors, and revenue agents, Tax preparers, and Other financial specialists. Food Preparation & Service Workers includes Food service managers, Chef and head cooks, First-line supervisors of food preparation and serving workers, Cooks, Food preparation workers, Bartenders, Fast food and counter workers, Waiters and waitresses, Food servers (nonrestaurant), Dining room and cafeteria attendants and bartender helpers, Dishwashers, Hosts and hostesses (restaurant, lounge, and coffee shop), First-Line Supervisors Of Food Preparation And Serving Workers, and Food preparation and serving related workers (all other). Production Workers include all Production occupations and Industrial Production Managers. Construction Specialists & Managers include Construction managers, Brickmasons, blockmasons, stonemasons, and reinforcing iron and rebar workers, Carpenters, Carpet, floor, and tile installers and finishers, Cement masons, concrete finishers, and terrazzo workers, Construction equipment operators, Drywall installers, ceiling tile installers, and tapers, Electricians, Glaziers, Insulation workers, Painters and paperhangers, Pipelayers, Plumbers, pipefitters, and steamfitters, Plasterers and stucco masons, Roofers, Sheet metal workers, Structural iron and steel workers, Solar photovoltaic installers, Helpers (construction trades), First-Line Supervisors Of Construction Trades And Extraction Workers, and Construction and building inspectors. Cashiers, Clerks, and Salespeople include Tellers, Cashiers, Counter and rental clerks, Parts salespersons, Door-To-Door Sales Workers, News And Street Vendors, And Related Workers, First-Line Supervisors Of Retail Sales Workers, First-Line Supervisors Of Non-Retail Sales Workers, and Retail salespersons. Janitors, Cleaners, & Groundskeepers include Janitors and building cleaners, Maids and housekeeping cleaners, Landscaping and groundskeeping workers, Tree trimmers and pruners, First-Line Supervisors Of Landscaping, Lawn Service, And Groundskeeping Workers, and Other grounds maintenance workers. Nurses include Registered nurses, Nurse anesthetists, Nurse practitioners, and nurse midwives, and Licensed practical and licensed vocational nurses. Material Movers include Laborers and freight, stock, and material movers (hand), Machine feeders and offbearers, Packers and packagers (hand), Stockers and order fillers, Refuse and recyclable material collectors, and Transportation, storage, and distribution managers. HR, Payroll, & Benefits Specialists include Compensation and benefits managers, Human resources managers, Human resources workers, Compensation, benefits, and job analysis specialists, Bookkeeping, accounting, and auditing clerks, Payroll and timekeeping clerks, and Human resources assistants except payroll and timekeeping. Home Health & Medical Aids include Home health aides, Personal care aides, Orderlies and psychiatric aides,

APPENDIX A

Occupational therapy assistants and aides, Physical therapist assistants and aides, and Pharmacy aides. Drivers include Bus drivers (school), Bus drivers (transit and intercity), Driver/sales workers and truck drivers, Shuttle drivers and chauffeurs, Taxi drivers, Motor vehicle operators (all other), and Locomotive engineers and operators. Other Education & Childcare Workers include Crossing guards and flaggers, Childcare workers, Educational, guidance, and career counselors and advisors, Education and childcare administrators, Archivists, curators, and museum technicians, Librarians and media collections specialists, Library technicians and Other educational instruction and library workers. Marketing & Advertising Specialists include Advertising and promotions managers, Marketing managers, Market research analysts and marketing specialists, and Advertising sales agents. Personal Care Workers include Supervisors of personal care and service workers, Barbers, Hairdressers, hairstylists, and cosmetologists, Manicurists and pedicurists, Skincare specialists, Other personal appearance workers, Exercise trainers and group fitness instructors, Recreation workers, and Personal care and service workers (all other). Lawyers, Judges, & Other Judicial Workers include Lawyers, and judges, magistrates, and other judicial workers, Judicial law clerks, Paralegals and legal assistants, Title examiners, abstractors, and searchers, and Legal support workers (all other). Physicians include Physicians, Surgeons, and Podiatrists. Automotive & Aircraft Technicians include Aircraft mechanics and service technicians Automotive body and related repairs, Automotive glass installers and repairers, Automotive service technicians and mechanics, Bus and truck mechanics and diesel engine specialists, Heavy vehicle and mobile equipment service technicians and mechanics, Small engine mechanics, and Miscellaneous vehicle and mobile equipment mechanics, installers, and repairers.

Total Employment, by Major Areas of Economic Activity; Innovation & Information Products and Services Jobs at the Region's Largest Tech Companies; Employment Levels Relative to Pre-Pandemic

Silicon Valley and San Francisco average annual employment estimates as of the second quarter from the United States Bureau of Labor Statistics Quarterly Census of Employment and Wages, and includes the entire city-defined Silicon Valley region. Silicon Valley includes the city-defined region. Data for Q2 of 2024 was estimated at the industry level by BW Research using Q1 2024 QCEW data and updated based on Q2 2024 reported growth and totals, and modified slightly by JobsEQ, which removes suppressions and reorganizes public sector employment. Community Infrastructure & Services includes Healthcare & Social Services (including state and local government jobs); Retail; Accommodation & Food Services; Education (including state and local government jobs); Construction; Local Government Administration; Transportation; Banking & Financial Services; Arts, Entertainment & Recreation; Personal Services; Federal Government Administration; Nonprofits; Insurance Services; State Government Administration; Warehouse & Storage; and Utilities (including state and local government jobs). Innovation and Information Products & Services includes Computer Hardware Design & Manufacturing; Semiconductors & related Equipment Manufacturing; Internet & Information Services; Technical Research & Development (Include Life Sciences); Software; Telecommunications Manufacturing & Services; Instrument Manufacturing (Navigation, Measuring & Electromedical); Pharmaceuticals (Life Sciences); Other Media & Broadcasting, including Publishing; Medical Devices (Life Sciences); Biotechnology (Life Sciences); and I.T. Repair Services. Business Infrastructure & Services includes Wholesale Trade; Personnel & Accounting Services; Administrative Services; Technical & Management Consulting Services; Facilities; Management Offices; Design, Architecture & Engineering Services; Goods Movement; Legal; Investment & Employer Insurance Services; and Marketing, Advertising & Public Relations. Other Manufacturing includes Primary & Fabricated Metal Manufacturing; Machinery & Related Equipment Manufacturing; Other Manufacturing; Transportation Manufacturing including Aerospace & Defense; Food & Beverage Manufacturing; Textiles, Apparel, Wood & Furniture Manufacturing; and Petroleum and Chemical Manufacturing (Not in Life Sciences). Tech Employment data by company are for July 2024. They are primarily estimates obtained from LinkedIn, supplemented by data from the Silicon Valley Business Journal and corporate filings such as EEO-1 reports as available, or estimates based on data closest in time to analyzed period. Employment and location from LinkedIn is self-reported and may include a range of professional affiliations, including non-salaried employees, contractors, or board members. U.S. regions represent LinkedIn-defined metro areas or 'greater' regions around a particular city. Tech companies currently included in analysis are (ranked by Bay Area headcount) Google, Apple, Meta, Amazon, Cisco, Tesla, Nvidia, Oracle, Salesforce, Intel, LinkedIn, Adobe, Applied Materials, Microsoft, Uber, Intuit, Gilead, Lockheed Martin, Western Digital, and HP Inc.

Remote Work

Data are from The Survey of Working Arrangements and Attitudes (SWAA), a monthly survey of between 2,500 to 10,000 U.S. residents, and represent the percent of full paid days spent working from home (i.e. 40% would represent 2 days working remotely out of 5 a day workweek). Respondents were between the age of 20 and 64 and earned at least \$10,000 in the prior year. Data are weighted to match the share of individuals in the U.S. Census Bureau's Current Population Survey across age, sex, educational attainment, and earnings level. Annual rates were calculated by taking a simple average of all months within the year, from November 2020 onward. Top 10 U.S. Regions represent the 10 largest Combined Statistical Areas (CSAs) as of July 2022; Rest of U.S. represent the 11th - 50th largest CSAs.

Labor Force Participation

Data are from the United States Census Bureau, American Community Survey 1-Year Estimates. Silicon Valley includes Santa Clara and San Mateo counties. The labor force participation rate for a particular demographic group is calculated as the number of employed workers plus those who are unemployed but looking for a job in that demographic group divided by the total civilian population in that group.

Monthly Unemployment Rate

Monthly unemployment rates are calculated using employment and labor force data from the Bureau of Labor Statistics, Current Population Statistics (CPS) and the Local Area Unemployment Statistics (LAUS). Rates are not seasonally adjusted. County-level and California data for November and December 2024 are preliminary, and county-level data for December are from the California Employment Development Department January 24, 2025 release.

Unemployment by Race & Ethnicity

Unemployed resident data are from the U.S. Census Bureau, American Community Survey 5-Year Estimates. Silicon Valley includes Santa Clara and San Mateo counties. The data include estimates of the number of unemployed persons in the civilian labor force by race and ethnicity for residents 16 years of age and older. White is not Hispanic or Latino. Data are limited to the household population and exclude the population living in institutions, college dormitories, and other group quarters.

Employees Affected by WARN-Reported Layoffs

Data is from the California Employment Development Department, Worker Adjustment and Retraining Notification (WARN) notices. Silicon Valley data includes layoffs in Santa Clara and San Mateo Counties, but excludes closures. Layoffs include those classified as permanent, temporary, or unknown, and are categorized by calendar year quarter of effective date. Layoffs include those that affect more than 50 employees by "covered establishments" (employing 75 employees) during any 30-day period. Tech industry layoffs were classified using the company's primary NAICS codes and with the assistance of artificial intelligence, and are generally defined as those from companies that develop, produce, or rely heavily on advanced technology, software, or digital platforms as a core part of their business.

Top U.S. Tech Talent Centers

Data are from the CBRE Research 2024 Scoring Tech Talent report. Scoring Tech Talent is a comprehensive analysis of labor market conditions, cost and quality in North America for highly skilled tech workers. The top 50 markets in the U.S. and Canada were ranked according to their competitive advantages and appeal to both employers and tech talent using data from the U.S. Bureau of Labor Statistics and other sources. Tech Talent includes the following occupation categories: software developers and programmers; computer support, database and systems; technology and engineering related; and computer and information system managers. Tech talent workers comprise 20 different occupations, which are highly concentrated within the high-tech services industry but are spread across all industry sectors. Using this definition, a software developer who works for a logistics or financial services company is included in the data. Only US markets with more than 50,000 tech jobs and positive 5-year growth rate in tech talent are shown.

Change in Employment at Largest Silicon Valley Tech Companies

Employment numbers are primarily estimates obtained from LinkedIn, supplemented by data from the Silicon Valley Business Journal and corporate filings such as EEO-1 reports as available, or estimates based on data closest in time to analyzed period. Employment and location from LinkedIn is self-reported and may include a range of professional affiliations, including non-salaried employees, contractors, or board members. U.S. regions represent LinkedIn-defined metro areas or 'greater' regions around a particular city. Data for each year represents December to January timeframe; midyear data represents June to August timeframe. Tech companies currently included in analysis are (ranked by Bay Area headcount) Google, Apple, Meta, Amazon, Cisco, Tesla, Nvidia, Oracle, Salesforce, Intel, LinkedIn, Adobe, Applied Materials, Microsoft, Uber, Intuit, Gilead, Lockheed Martin, Western Digital, and HP Inc.

INCOME & WEALTH

Per Capita Personal Income

Per capita income data are from the United States Department of Commerce, Bureau of Economic Analysis (BEA), last updated on November 14, 2024 with new statistics for 2023 and revised statistics for 2019-2022. Values are calculated using personal income data and population figures from the U.S. Census Bureau mid-year population estimates. Silicon Valley data include Santa Clara and San Mateo counties. All per capita income values have been inflation-adjusted and are reported in 2023 dollars using the Bay Area consumer price index for all urban consumers from the Bureau of Labor Statistics for Silicon Valley and San Francisco data, 2023 estimate based on data through October, the California consumer price index for all urban consumers from the California Department of Finance May Revision Forecast (April 2023) for California data, and the U.S. city average consumer price index for all urban consumers from the Bureau of Labor Statistics based on January through October data. The personal per capita income for the United States is derived from state and regional data (as opposed to National Income and Product Accounts data), which include all persons who reside in a state, regardless of the duration of residence, except for foreign nationals employed by their home governments in the United States. State personal income includes the income of resident foreign nationals working in the United States—including migrant workers—regardless of length of residency. It excludes the portion of income earned abroad by U.S. citizens living abroad for less than a year. It also excludes the earnings of federal civilian and military personnel stationed abroad and the property income received by the federal pension plans of those workers.

Per Capita Income by Race & Ethnicity

Data for Per Capita Income are from the United States Census Bureau American Community Survey 5-Year Estimates. All multi-year dollar-denominated data are inflation-adjusted by the U.S. Census using the All Items CPI-U-RS Annual Averages for each year in the multiyear time period to calculate a set of inflation adjustment factors. Adjustment factors for a time period are calculated as ratios of the CPI-U-RS Annual Average from the most recent year to the CPI-U-RS Annual Averages from each of the earlier years. The ACS values for each of the earlier years in the multiyear period are multiplied by the appropriate inflation adjustment factors to produce the inflation-adjusted values. These values are then used to create the multiyear estimates. The 2013 and 2018 5-Year Estimates were inflation-adjusted to 2023 dollars using the Bay Area consumer price index for all urban consumers from the Bureau of Labor Statistics for Silicon Valley data. Silicon Valley data include Santa Clara and San Mateo counties. Personal income is defined as the sum of wage or salary income, net self-employment income, interest, dividends, or net rental welfare payments, retirement, survivor or disability pensions; and all other income. Per capita income is derived by dividing the total income of all people 15 years old and over in a geographic area by the total population in that area. Income is not collected for people under 15 years old even though these people are included in the denominator of per capita income. This measure is rounded to the nearest whole dollar. Population data used to compute per capita values are from the United States Census Bureau, American Community Survey 5-Year Estimates. Data for per capita income of residents with a bachelor's or graduate degree by race and ethnicity are from the United States Census Bureau, American Community Survey 2023 1-Year Estimates. Multiple & Other includes Native Hawaiian & Other Pacific Islander Alone, American Indian & Alaska Native Alone, Some Other Race Alone and Two or More Races; White is not Hispanic or Latino.

Minimum Wage Ordinances

Data are from the U.C. Berkeley Labor Center, Inventory of U.S. City and County Minimum Wage Ordinances, by year enacted. Minimum wage ordinances are city-level policies that set a higher minimum wage than is required by the state.

Individual Median Income, by Educational Attainment

Data for Median Income by Educational Attainment are from the U.S. Census Bureau American Community Survey, 1-Year Estimates, and include the population 25 years and over with earnings. All income values have been inflation-adjusted and are reported in 2023 dollars using the Bay Area consumer price index for all urban consumers from the Bureau of Labor Statistics for Silicon Valley and San Francisco data, 2023 estimate based on data through October, the California consumer price index for all urban consumers from the California Department of Finance May Revision Forecast (April 2023) for California data, and the U.S. city average consumer price index for all urban consumers from the Bureau of Labor Statistics based on January through October data. Silicon Valley data includes Santa Clara and San Mateo counties. The 2023 value for those with a graduate or professional degree is the mean of the median incomes by gender by county because the combined two-county median income was not available. Data from the U.S. Census Bureau, American Community Survey for 2020 is considered experimental and is not included.

Average Annual Earnings

Data are from the California Employment Development Department and JobsEQ. Earnings include wages, salaries, profits, benefits, and other compensation, and are calculated by dividing total earnings by the number of jobs. Data for Silicon Valley include San Mateo and Santa Clara Counties, and the Cities of Fremont, Newark, Scotts Valley, and Union City.

Average Wages for Full-Time Workers, by Gender

Data are from the United States Census Bureau, American Community Survey Public Use Microdata (PUMS), and include all full-time (35 or more hours per week) workers over age 15 with earnings. Some College includes Less than 1 year of college; Some college, 1 or more years, no degree; Associate degree; Professional certification. Data for 2020 were not available. Silicon Valley data include Santa Clara and San Mateo counties.

Average Wages for Full-Time Workers, by Race and Ethnicity

Data are from the United States Census Bureau, American Community Survey Public Use Microdata (PUMS), and include all full-time (35 or more hours per week) workers over age 15 with earnings. Some College includes Less than 1 year of college; Some college, 1 or more years, no degree; Associate degree; Professional certification. Data for 2020 were not available. Silicon Valley data include Santa Clara and San Mateo counties.

Median Household Income

Data for Median Household Income are from the U.S. Census Bureau American Community Survey 1-Year Estimates. 2020 data are from the 2020 1-Year Public Use Microdata (PUMS) with experimental weights. Data for San Francisco for the year 2000 is from the Decennial Census. All income values have been inflation-adjusted and are reported in 2024 dollars using the Bay Area consumer price index for all urban consumers from the Bureau of Labor Statistics for Silicon Valley and San Francisco data, the California consumer price index for all urban consumers from the California Department of Finance May Revision Forecast (April 2024) for California data, and the U.S. city average consumer price index for all urban consumers from the Bureau of Labor Statistics. Silicon Valley data include Santa Clara and San Mateo Counties. Median household income for Silicon Valley from 2001 - 2005 was estimated using a weighted average based on the number of households for which income was determined.

APPENDIX A

■ Wealth

Data are modeled using a combination of several different datasets directly, and to underlie the assumptions utilized by the model. Silicon Valley includes Santa Clara and San Mateo counties. 2024 wealth segmentation data are from the Claritas Income Producing Assets Indicators model based on the Federal Reserve Survey of Consumer Finances, 5-Year data. Investable/Liquid assets (for segments below \$1 billion) include education/custodial accounts, individually-owned retirement accounts, stocks, options, bonds, mutual funds, managed accounts, hedge funds, structured products, ETFs, cash accounts, annuities, and cash value life insurance. Billionaire public and private holdings are excluded. Ultra High Net Worth (UHNW) households include those with net investable assets of \$30 million - \$1 billion, and were estimated using the number reported in Altrata's "2023 Spotlight: The Wealthy in San Francisco" (October 2023) for the San Francisco Bay Area, adjusted for each county and by the percent growth in UHNW households from the Altrata Billionaire Census, 2024. Billionaire data are from the Forbes Real-Time Billionaire List (as of 2/19/2025); billionaires listed as residing in the United States were researched individually, and were included in the Silicon Valley region if a city-defined Silicon Valley city/town was listed as a place of primary residence. The share of billionaire wealth that is liquid was estimated based primarily on the reported industry for each billionaire; estimated liquid share for women billionaires was utilized only for women not in the Technology industry. In cases where industries were unknown or mixed, asset allocation percentages were estimated by age category or using the overall average. Asset allocation percentages for Technology-focused, Banking & Finance-focused, Real Estate-focused billionaires, and Ultra High Net Worth (UHNW) households were for 2021 from Altrata's "2023 Spotlight: The Wealthy in San Francisco" (October 2023); allocation percentages for older billionaires (ages 70+), billionaires overall, and women billionaires were from the Altrata Billionaire Census, 2024. 2018 market sizing estimates from Phoenix Global Wealth Monitor were used to estimate the market size for \$10 million - \$1 billion. The distribution of wealth among households with less than \$25,000 in investable assets was calculated by applying the California statewide breakdown (U.S. Census Bureau, 2023 Survey of Income and Program Participation). The wealth segment labeled "<\$100,000" does not include the estimated share of households that are unbanked in order to avoid double-counting. Unbanked households were estimated using the weighted average share of unbanked households in Santa Clara and San Mateo counties from the data published by ProsperityNow (data year 2021). According to the FDIC National Survey of Unbanked and Underbanked Households 2021, more than 40% of survey respondents cited that they did not have enough funds to meet a bank's minimum opening deposit requirements; eight out of ten unbanked households were unbanked long-term. A comparison of the regional total wealth reported by Claritas and the total wealth calculated here (given the assumptions in this estimation methodology) supports the idea that the Claritas data does not include outlier households with wealth of \$30 million or more.

■ Income Inequality

Data are from the U.S. Census Bureau, American Community Survey Public Use Microdata (2005+) and the Decennial Census (1990 and 2000). Silicon Valley data include Santa Clara and San Mateo counties. The Absolute Gini Coefficient is an income-normalized value, determined by the product of the Relative Gini and the inflation-adjusted mean household income. The Relative Gini Coefficient indicates the degree to which incomes are concentrated. A Relative Gini of zero corresponds to no concentration, meaning that incomes that are the same across all households. A Relative Gini of 100 indicates that all income is concentrated in a single household. Figures between 0 and 100 indicate proximity to either endpoint. Income data used to calculate the Relative Gini Coefficient were inflation-adjusted to 2023 dollars using the Bay Area consumer price index for all urban consumers from the Bureau of Labor Statistics for Silicon Valley and Bay Area data, the California consumer price index for all urban consumers from the California Department of Finance May Revision Forecast (April 2023) for California data, and the U.S. city average consumer price index for all urban consumers from the Bureau of Labor Statistics. The Absolute Gini is scaled to equal the Relative Gini in 1990. The Intermediate Gini is the product of the Relative and Absolute Gini Coefficients. Data for 2020 are estimates from the American Community Survey 1-Year microdata with experimental weights.

■ Poverty Status

Data for the percentage of the population living in poverty are from the U.S. Census Bureau, American Community Survey (ACS) 1-Year Estimates; 2020 data are from the 2020 1-Year Public Use Microdata (PUMS) with experimental weights. Silicon Valley includes San Mateo and Santa Clara counties. Following the Office of Management and Budget's (OMB's) Directive 14, the Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If the total income for a family or unrelated individual falls below the relevant poverty threshold (e.g., household income of \$31,008 for a family of four in 2023), then the family (and every individual in it) or unrelated individual is considered in poverty.

■ Share Living Below Self-Sufficiency Standards

Data are from the Self-Sufficiency Standard for California, from the Center for Women's Welfare at the University of Washington School of Social Work (via Maven Collaborative). Silicon Valley data includes Santa Clara and San Mateo counties; Bay Area includes the 9-county region; California is a statewide county average. Developed by Dr. Diana Pearce, the Self-Sufficiency Standard defines the amount of income necessary to meet basic needs (including taxes) without public subsidies (e.g., public housing, food stamps, Medicaid or child care) and without private/informal assistance (e.g., free babysitting by a relative or friend, food provided by churches or local food banks, or shared housing). The family types for which a Standard is calculated range from one adult with no children, to one adult with one infant, one adult with one preschooler, and so forth, up to three-adult households with six teenagers. Asian/Pacific Islander, Black, and White are non-Hispanic or Latino. Lanix is the term used in the Self-Sufficiency Standard analyses corresponding to "Hispanic or Latino" in the U.S. Census Bureau survey data. 2024 data were based on the regional household compositions from the 2023 American Community Survey (ACS) 1-Year Public Use Microdata Sample (PUMS) by the U.S. Census Bureau and the Self-Sufficiency Standard for California 2024.

■ Self-Sufficiency Wages

Data are from the Self-Sufficiency Standard for California, from the Center for Women's Welfare at the University of Washington School of Social Work. Silicon Valley includes Santa Clara and San Mateo counties; Bay Area includes the 9-county region; California is a statewide county average. Developed by Dr. Diana Pearce, the Self-Sufficiency Standard defines the amount of income necessary to meet basic needs (including taxes) without public subsidies (e.g., public housing, food stamps, Medicaid or child care) and without private/informal assistance (e.g., free babysitting by a relative or friend, food provided by churches or local food banks, or shared housing). The family types for which a Standard is calculated range from one adult with no children, to one adult with one infant, one adult with one preschooler, and so forth, up to three-adult households with six teenagers.

■ Number of Meals Provided by Food Assistance Programs; Meals Distributed, by Source

Data for food assistance provided was compiled by Silicon Valley Institute for Regional Studies' Senior Fellow, Drew Starbird (Santa Clara University's Leavay School of Business) and Affiliated Researcher Isabelle Foster. Data include the largest sources of public and private food assistance in Santa Clara and San Mateo counties, including Senior Nutrition, Summer Meals, School Meals (Free and Reduced Price Breakfast and Lunch), P-EBT (Pandemic EBT), WIC (Women, Infants, and Children), Supplemental Nutrition Assistance Program (CalFresh, formerly Food Stamps), Child and Adult Care Food Program (CACFP), Second Harvest of Silicon Valley (Food Bank), and other sources. Data was obtained via publicly available digital resources, or provided directly by staff at Second Harvest of Silicon Valley, the California Department of Education, the California Department of Social Services, The Health Trust, Peninsula Volunteers, the San Mateo County Health Department, the County of Santa Clara Social Services Agency, the cities of Belmont, Daly City, East Palo Alto, Pacifica, and San Mateo, Self-Help for the Elderly, Meals on Wheels San Francisco, Peninsula Family Service/Fair Oaks Adult Activity Center, and Sourcewise Community Resource Solutions. Beginning in the 2019-20 fiscal year, Pandemic EBT (a new federal program administered at the state level by the California Department of Social Services), CACFP snacks, and CACFP Day Care Home (DCH) program meals were included. Also, in FY 2019-20 the costs were adjusted using the Regional Price Parity Index computed by the Bureau of Economic Analysis at the U.S. Department of Commerce. Caution should be used when comparing FY 2019-20 and subsequent data to that of previous years. San Mateo County Senior Nutrition was estimated for 2019-20 and 2020-21. There are an unknown number of smaller private, faith-based, community-based, mutual aid, and other efforts to serve community members experiencing food insecurity in Silicon Valley; therefore, the numbers reported represent a conservative estimate of the true availability of food assistance within the region.

INNOVATION & ENTREPRENEURSHIP

■ Patent Registrations

Patent data are provided by the United States Patent and Trademark Office and consist of Utility patents granted by inventor. Geographic designation is given by the location of the first inventor named on the patent application. Silicon Valley patents include only those filed by residents of the Silicon Valley city-defined region. Population estimates used to calculate the number of patents granted per 100,000 people were from the California Department of Finance, E-1: City/County Population Estimates with Annual Percent Change. 2024 data are through December 13. Data for the share of women inventors is by assignee location.

■ Productivity and Growth

GDP estimates the market value of all final goods and services. Value added per employee is calculated as gross domestic product (GDP) divided by the total employment. Data are from Moody's Economy.com. Employment estimates use historical data through 2021 (counties) and 2023 (California and U.S.) and forecasts updated on November/December 2024; GDP estimates use historical data through 2023 and forecasts updated on November/December 2024. All GDP values have been inflation-adjusted and are reported in 2024 dollars using the Bay Area consumer price index for all urban consumers from the Bureau of Labor Statistics for Silicon Valley and San Francisco data, 2024 estimate based on data through October, the California consumer price index for all urban consumers from the California Department of Finance May Revision Forecast (April 2024) for California data, and the U.S. city average consumer price index for all urban consumers from the Bureau of Labor Statistics based on January through October data.

■ Venture Capital Investment; Top Venture Capital Deals; Megadeals

Venture Capital data for 2000-2016 are from the MoneyTree™ Report from PricewaterhouseCoopers and the National Venture Capital Association, using data from Thomson Reuters (prior to Q4 2015) and CB Insights (beginning with Q4 2015). Data for 2017 and subsequent years are from CB Insights. 2024 data are through December 26. Silicon Valley includes the city-defined region. The share of California and U.S. venture capital and relative change since 2019 include Silicon Valley and San Francisco combined. All values have been inflation-adjusted and are reported in 2024 dollars using the Bay Area consumer price index for all urban consumers from the Bureau of Labor Statistics for Silicon Valley and San Francisco data, 2024 estimate based on data through October, the California consumer price index for all urban consumers from the California Department of Finance May Revision Forecast (April 2024) for California data, and the U.S. city average consumer price index for all urban consumers from the Bureau of Labor Statistics based on January through October data. Megadeal data for 2013-2016 are from Thomson ONE (accessed January 1, 2022); data for 2017 and subsequent years are from CB Insights (as of December 26, 2024). Silicon Valley includes the city-defined region. Megadeals include those over \$100 million each.

■ Unicorns & Decacorns

Unicorn and Decacorn data are from CB Insights as of 1/15/20, 12/31/21, 12/31/22, 10/31/2023, and 1/7/25. Unicorns include private companies with valuations of \$1 billion or more; Decacorns include private companies with valuations of \$10 billion or more. The count and total valuation of Unicorns are inclusive of Decacorns.

■ Venture Capital by Industry

Venture Capital by Industry Data are from the MoneyTree™ Report from PricewaterhouseCoopers and the National Venture Capital Association (with data from CB Insights) prior to 2019, and from CB Insights for 2019+. Greater Silicon Valley includes the San Jose-San Francisco-Oakland Combined Statistical Area. Industries include the following: Agriculture (all aspects of farming, including crop production and health, animal production and wellness, as well as machinery, products, and related activities), Automotive and Transportation (all elements of travel by air, automobile, train, trucking, and other forms of transportation; also addresses manufacturing, parts, and maintenance), Business Products and Services (All business needs and associated services: advertising, PR, HR, staffing, training records keeping, legal services, consulting, office supplies and furniture, information services, hardware, facilities, and more; also covers associated services like commercial printing, outsourcing, and packaging), Computer Hardware & Services (Physical computing devices and related services, though specifically not the software used on those machines; includes personal and business computers, networking equipment, leasing companies, peripherals, handhelds, servers, supercomputers, gaming devices, and IT services), Consumer Products and Services (all goods and services for personal use, not Business or Industrial, including but not limited to: appliances, automotive services, rentals, consumer electronics, clothes, home furnishings, jewelry, pet products, tobacco, toys and games), Electronics (Concerned mainly with electronic components like chips, semiconductors, switches, motors, testing equipment, and scientific instruments; also related manufacturing services), Energy and Utilities (energy production, distribution, and storage, including fossil fuels, renewables, electric power companies, companies focused on energy efficiency, as well as companies researching new energy sources or technologies), Environmental Services & Equipment (companies that deal with repairing damage after an environmental event has occurred or aim to help limit the negative ecological impact of an event or company; this includes environmental and energy consulting, hazardous waste services, recycling, cleanup, and solid waste), Finance (companies dealing with wealth in any form, including but not limited to: accounting, banking, credit and collections, investments, online payments companies, and lending), Food & Beverages (food and drink of all kinds: retail and wholesale, fresh ingredients, prepared and canned items, and foodservice, but not restaurants - see Leisure; also includes food safety, flavoring and condiments, alcoholic products, and distribution), Healthcare (all aspects of medical care and wellness: diagnosis, drug development and distribution, medical products and facilities, healthcare plans, and alternative treatments and elective procedures), Industrials (equipment and facilities that are neither commercial nor residential/consumer and all related applications; mainly concerned with materials, facilities, heavy machinery, and construction), Internet (online applications, but neither the hardware on which they are run nor the ISPs that make transactions possible; all ecommerce sites are included, as are webhosting services, browser software, online advertising, email, online communications platforms of all kinds, online learning, video, and more), Leisure (in-person entertainment like movie theaters, casinos, lodging, restaurants of all kinds, sporting events, gyms, and recreation facilities), Traditional Media (all forms of non-Internet entertainment that is also not in-person - see Leisure; includes film, video, music, publishing, radio, and television), Metals & Mining (companies involved with extracting raw materials from the earth and their processing; larger categories contained herein include aluminum, coal, copper, diamonds and precious stones, precious metals, and steel; additionally the brokering and distribution of these items), Mobile & Telecommunications (communications companies and associated technologies, from overarching categories like fiber optics, telecom equipment, infrastructure, towers, and RFID systems to applications like mobile software, mobile commerce, and the telecom companies that facilitate communication over their networks), Non-Internet/Mobile Retail (brick-and-mortar retail locations of all kinds: clothes, electronics, appliances, physical media, grocery, office supplies, and every other item purchased in person that is not a leisure activity - see Leisure), Risk & Security (Security services and products that operate primarily in the physical world and encompass personal protective equipment, security and surveillance equipment, security guard companies, consultants, and more), and Non-Internet/Mobile Software (Software not covered under "Mobile" or "Internet"; It can be hosted on a user's machine or accessed remotely and can be used for any application; in this category, the software itself is the user's primary concern, not the delivery method as in Internet and Mobile categories). Data for cleantech companies and companies in the cannabis industry are from CB Insights (as of February 6, 2025). Cleantech companies are determined using a variety of keywords focused on renewable energy, energy storage, energy management, environmental endeavors, decarbonization, climate change, electric vehicles, and energy efficiency. Companies in the cannabis industry include those relating to cannabis, marijuana, and CBD. All values have been inflation-adjusted and are reported in 2024 dollars using the Bay Area consumer price index for all urban consumers from the Bureau of Labor Statistics for Silicon Valley data, 2024 estimate based on data through October.

■ Angel Investment

Data are from CB Insights and include the entire city-defined Silicon Valley region, San Francisco, California, and the United States. The analysis includes all Angel rounds and seed stage investments that included at least one Angel investor (individual or Angel group). Dollar amounts include deals with disclosed financing data. Angel Deals are typically pre-seed and are not necessarily tied to equity. Data were extracted on January 6, 2025. Investment amounts have been inflation-adjusted and are reported in 2024 dollars using the Bay Area consumer price index for all urban consumers from the Bureau of Labor Statistics for Silicon Valley and San Francisco data, 2024 estimate based on data through October, the California consumer price index for all urban consumers from the California Department of Finance May Revision Forecast (April 2024) for California data, and the U.S. city average consumer price index for all urban consumers from the Bureau of Labor Statistics based on January through October data. Locations are by investee company location as (not the location of the investor); share of California and U.S. investments are by total dollar amounts (as opposed to the number of deals).

APPENDIX A

■ New Startup Companies Funded

Data for the total number of startup companies is from CB Insights and include companies less than three years old which received Angel, seed, or early-stage (Series A) funding in any particular year. Silicon Valley includes the city-defined region. Startup companies for 5-year periods include those founded and funded within that period, and represent a unique estimate of the number of startups. Data are as of December 17, 2024.

■ Startup Companies Founded by Women

The share of startups founded by women is from Crunchbase. Startups are defined as companies that have received at least one funding round with headquarters in the city-defined Silicon Valley region or in San Francisco. Share of startups founded by women is taken by dividing the number of startups where at least one founder was listed as female by the total number of startups. Share of startups founded by women may be slightly underestimated, as not all entries in Crunchbase include information on gender of founders.

■ Initial Public Offerings

Data are from Renaissance Capital. Locations are based on the corporate address provided to Renaissance Capital. Silicon Valley includes the city-defined region. Rest of California includes all of the state except Silicon Valley for 2007-2012, and all of the state except Silicon Valley and San Francisco for 2013 and subsequent years. Data include traditional IPOs and direct listings with a market cap of \$50 million or more; exclude Special Purpose Acquisition Companies (SPACs) and closed-end funds.

■ Mergers & Acquisitions

Data are from FactSet Research Systems, accessed January 29, 2025. Silicon Valley includes the city-defined region. Transactions include full acquisitions, majority stakes, minority stakes, club-deals and spinoffs. Silicon Valley and San Francisco deals include those involving one or more Silicon Valley or San Francisco company. Data for 2024 include completed and pending deals; prior years include completed deals only.

■ Nonemployer Firms

Data for firms without employees are from the U.S. Census Bureau, which uses the term 'nonemployers'. The Census defines nonemployers as a business that has no paid employees, has annual business receipts of \$1,000 or more (\$1 or more in the construction industries), and is subject to federal income taxes. Most nonemployers are self-employed individuals operating very small unincorporated businesses, which may or may not be the owner's principal source of income. Silicon Valley data include Santa Clara and San Mateo Counties.

COMMERCIAL SPACE

■ Commercial Space, Leasing, Vacancy, Rents, and Occupancy

Data are from JLL and represent the end of each annual period unless otherwise noted. Commercial space includes Office, Industrial, R&D, and Lab. The JLL statistical inventory and all related reports include Office, Flex/R&D, and Lab buildings above

SOCIETY

PREPARING FOR ECONOMIC SUCCESS

■ Graduation and Dropout Rates

Race and ethnicity were determined by the California Department of Education. Any student race/ethnicity pools containing 10 or fewer students were excluded in order to protect student privacy. All races are not Hispanic or Latino. Silicon Valley includes all students attending public high school in San Mateo and Santa Clara counties, as well as those in Scotts Valley Unified School District, New Haven School District, Fremont Unified School District, and Newark Unified School District. Dropout and graduation rates are four-year adjusted rates. The adjusted rates are derived from the number of cohort members who earned a regular high school diploma (or dropped out) by the end of year 4 in the cohort divided by the number of first-time grade 9 students in year 1 (starting cohort) plus students who transfer in, minus students who transfer out, emigrate, or die during school years 1, 2, 3, and 4. Years presented are the final year of a school year (e.g., 2023-2024 is shown as 2024). Dropout and graduation rates do not add up to 100% due to GED completions, those in the cohort who are still enrolled, and also due to suppressed data in some counties/districts for certain racial/ethnic groups. Due to the changes in the methodology for calculating the 2016-17 Adjusted Cohort Graduation Rate and subsequent years, the California Department of Education strongly discourages comparing the 2016-17 and subsequent years' Adjusted Cohort Graduation Rate with the cohort outcome data from prior years. All racial groups are not Hispanic or Latino. Prior to 2015, two or more races included those who did not report their race or ethnicity.

■ College Preparation

Students meeting UC/CSU requirements include all 12th grade graduates completing all courses required for University and/or California State University entrance. Race and ethnicity were determined by the California Department of Education. Any student race/ethnicity pools containing 10 or fewer students were excluded in order to protect student privacy. All races are not Hispanic or Latino. Silicon Valley includes all students attending public high school in San Mateo and Santa Clara counties, as well as those in Scotts Valley Unified School District, New Haven School District, Fremont Unified School District, and Newark Unified School District. Graduation rates are four-year adjusted rates. The adjusted rates are derived from the number of cohort members who earned a regular high school diploma (or dropped out) by the end of year 4 in the cohort divided by the number of first-time grade 9 students in year 1 (starting cohort) plus students who transfer in, minus students who transfer out, emigrate, or die during school years 1, 2, 3, and 4. Years presented are the final year of a school year (e.g., 2023-2024 is shown as 2024). Graduation rates do not add up to 100% due to GED completions, those in the cohort who are still enrolled, and also due to suppressed data in some counties/districts for certain racial/ethnic groups. Due to the changes in the methodology for calculating the 2016-17 Adjusted Cohort Graduation Rate and subsequent years, the California Department of Education strongly discourages comparing the 2016-17 and subsequent years' Adjusted Cohort Graduation Rate with the cohort outcome data from prior years. All racial groups are not Hispanic or Latino. Prior to 2015, two or more races included those who declined to specify a race or ethnicity.

■ School Attendance

Data are from the California Department of Education. Years presented are the final year of a school year (e.g., 2023-2024 is shown as 2024). The stability rate is based on the stability count, the number of students in the adjusted cumulative enrollment with a continuous enrollment of 245 consecutive calendar days at the same school without a disqualifying event, including truant, expelled, or unknown, with no subsequent enrollment. The adjusted cumulative enrollment is the total number of unduplicated primary and short-term enrollments with an enrollment start date within the academic year (July 1 to June 30). Silicon Valley includes all students attending public high school in San Mateo and Santa Clara counties, as well as those in Scotts Valley Unified School District, New Haven School District, Fremont Unified School District, and Newark Unified School District.

■ Chronic Absenteeism

Data are from the California Department of Education. Years presented are the final year of a school year (e.g., 2023-2024 is shown as 2024). Students are determined to be chronically absent if they were eligible to be considered chronically absent during the academic year (i.e., students who are expected to attend less than 31 instructional days at the selected entity or who were enrolled but did not attend the selected entity are not eligible to be considered chronically absent at that entity), and they were absent for 10% or more of the days they were expected to attend. Silicon Valley includes all students attending public school in San Mateo and Santa Clara counties, as well as those in Scotts Valley Unified School District, New Haven School District, Fremont Unified School District, and Newark Unified School District.

30,000 square feet in Santa Clara County (plus Fremont and Newark) and 20,000 square feet in San Mateo County, and all industrial developments above 10,000 square feet; any attached retail space is not included in total square footage. Silicon Valley data includes San Mateo County, Santa Clara County, and the Cities of Fremont and Newark. Bay Area data includes all San Francisco Bay Area Submarkets, including Silicon Valley, North Bay, Mid-Peninsula, and the East Bay including Alameda and Contra Costa Counties (less Fremont and Newark, which are included in the Silicon Valley submarket). The vacancy rate is the amount of unoccupied space, and is calculated by dividing the direct and sublease vacant space by the building base. The vacancy rate does not include occupied spaces presently being offered on the market for sale or lease. Average asking rents, where not noted as nominal, have been inflation-adjusted and are reported in 2024 dollars using the Bay Area consumer price index for all urban consumers from the Bureau of Labor Statistics for Silicon Valley and San Francisco data, 2024 estimate based data through August. Average office space asking rents are "Full Service Gross" (FSG), which is the monthly rental rate and includes common area maintenance fees, utility fees, and taxes/insurance fees. Industrial, R&D, and Lab asking rents are quoted as "triple net" (NNN), which is the monthly base rental rate in which common area maintenance fees, utility fees, and taxes/insurance fees are excluded. Near transit is defined as located within a 10-minute walk of a Caltrain, BART, or VTA station. Lease transactions include New to Market (tenant moves into a new market from another market), Relocation (tenant moves from one location to another in the same market), Renewal (tenant renews existing lease at current location), Expansion (when a tenant expands current premises to include new premises outside of its currently leased premises), Blend-and-extend (tenant's remaining lease term, usually one to three years, is extended and the current rental rate is "blended" with a newly negotiated one), and New lease (when it is unclear if the tenant is new to market, relocating, expanding, or renewing, to indicate that a new lease transaction has taken place). Beginning with the Q1 2021 data, the definition of a property as Office or Flex/R&D was altered to focus more on the structure of the building rather than the use. Apart from downtown areas, the El Camino and Sand Hill Road Corridors, and other office-only pockets, Office is now defined as any building with at least four stories in Santa Clara County (plus Fremont and Newark) and at least three stories in San Mateo County. Flex/R&D properties are defined as buildings with three or fewer stories in Santa Clara County (plus Fremont and Newark) and one to two stories in San Mateo County. As of Q4 2020, lab buildings were included as a separate category from R&D, and as of Q4 2021, lab space was available for Santa Clara County (plus Fremont and Newark). As of Q1 2021, owner-occupied buildings are included in JLL statistical inventory and reports. All the aforementioned changes resulted in shifts in the existing inventory and historical statistics that more accurately represent market dynamics in the region.

■ Hotel Development

Data are from the Atlas Hospitality Group annual California Hotel Development Surveys. Data for 2009-2013 were unavailable, as reports were not published due to lack of significant hotel development. New Hotels include those that opened within a given year. Rest of Silicon Valley includes Fremont, Newark, Union City, and Scotts Valley. Rest of Silicon Valley data not available prior to 2017.

■ Tech Company Presence

Data are from Colliers International Silicon Valley, and represent the aggregate amount of space owned or leased by six major tech tenants, including Amazon, Apple, Meta, Google, LinkedIn, and Netflix in the city-defined Silicon Valley region. Some space may be occupied or leased to other tenants. Data for LinkedIn may include space occupied by Microsoft employees.

■ Math Proficiency

Data for 2015-2024 are from the California Department of Education, California Assessment of Student Performance and Progress (CAASPP). Data for 2020-21 include a lower share of enrolled students with scores than typical (39% in Santa Clara and San Mateo Counties combined, compared to 97% in 2023-24); 2019-20 school year data was unavailable due to the suspension of CAASPP testing as a result of the COVID-19 pandemic. Data for American Indian or Alaska Native are not available in years 2022 to 2024 on the county level for privacy reasons (due to fewer than ten students receiving scores). Beginning with the 2013-14 school year, CAASPP became the new student assessment system in California, replacing the Standardized Testing and Reporting (STAR) system. The 2024 CAASPP Test Results are from tests administered in 2024. The share of eighth-graders meeting or exceeding the standard includes students who have made progress and met or exceeded the grade standard, and who appear to be ready for future coursework. Data for 2006 through 2013 are from the California Department of Education, California Standards Tests (CST) Research Files for San Mateo and Santa Clara counties, and California. In 2003, the CST replaced the Stanford Achievement Test, ninth edition (SAT/9). The CSTs in English-language arts, mathematics, science, and history-social science were administered only to students in California public schools. Except for a writing component that was administered as part of grade four and grade seven English-language arts tests, all questions were multiple-choice. These tests were developed specifically to assess students' knowledge of the California content standards. The State Board of Education adopted these standards, which specify what all children in California are expected to know and be able to do in each grade or course. Through the 2012-13 school year, the Algebra I CSTs were required for students who were enrolled in the grade/course at the time of testing or who had completed a course during the school year, including during the previous summer. In order to protect student confidentiality, no scores were reported in the CST research files for any group of ten or fewer students. The following types of scores are reported by grade level and content area for each school, district, county, and the state: Standard Exceeded (Level 4), Standard Met (Level 3), Standard Nearly Met (Standard 2), Standard Not Met (Standard 1), and are rounded to the nearest ones place.

■ Computer & Internet Access

Data for Silicon Valley include Santa Clara and San Mateo counties, and are from the United States Census Bureau, American Community Survey 5-Year Estimates. For the Share of Households Without Internet Access at Home, by Income Range table, low-income includes households with an annual income of less than \$35,000, and high-income households include those with an annual income of \$75,000 or more. Children include residents ages 18 and under. For the Share of Households with Computer and Broadband Internet, by Race & Ethnicity, Multiple and Other includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, Some Other Race, and Two or More Races. White is Not Hispanic or Latino.

■ Average Internet Speeds

Data were retrieved on January 31, 2025, and are from Measurement Lab (M-Lab). M-Lab is an open source project with contributors from civil society organizations, educational institutions, and private sector companies led by teams based at Code for Science & Society, New America's Open Technology Institute, Google, and Princeton University's PlanetLab. Speeds are represented in Network Diagnostic Tool (NDT), and are in Megabits per second. NDT is a diagnostic test that measures using a single TCP stream. The single stream "speed" metric doesn't measure link capacity, but rather how well a single TCP stream can take advantage of that capacity. Silicon Valley includes the city-defined region. Speed tests performed represents the number of download speed tests.

EARLY EDUCATION & CARE

■ Preschool Enrollment

Data for preschool enrollment are for San Mateo and Santa Clara counties, California, and the United States. The data are from the United States Census Bureau, American Community Survey 1-Year Estimates. Percentages were calculated from the number of children ages three and four that are enrolled in either public or private school, and the number that are not enrolled in school. Data for race and ethnicity are from the United States Census Bureau, American Community Survey 5-Year Estimates. Multiple and Other include American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, More than one race, and Some other race; White is not Hispanic or Latino. Lower-income is defined as below 200 percent of the federal poverty level (below \$60,000 for a family of four); higher-income is defined as above 501 percent of the federal poverty level (above \$150,000 for a family of four); the federal poverty level was \$30,000 for a family of four in 2023; income level is based on household income.

APPENDIX A

■ Transitional Kindergarten

Data are from the California Department of Education, Transitional Kindergarten Data, and include students enrolled at any point in the year in a public transitional kindergarten program. Years represent academic years (e.g., 2023 is the 2022–23 school year). Silicon Valley includes the city-defined region.

■ Special Education & Educational Accommodations

Special Education and Enrollment data are from the California Department of Education; Section 504 data are from the U.S. Department of Education, Office for Civil Rights. Silicon Valley includes Santa Clara & San Mateo counties. Data include the share of public school students enrolled in Special Education, as well as those receiving formal educational accommodations through Section 504 of the Rehabilitation Act of 1973, which requires schools to provide Free Appropriate Public Education (FAPE) to qualified students with a disability.

■ English Language Arts Proficiency

Data are from the California Department of Education, California Assessment of Student Performance and Progress (CAASPP). The 2023–24 school year CAASPP Test Results are from tests administered in 2024. The share of third-graders meeting or exceeding the standard includes students who have made progress, met or exceeded the grade standard, and appear to be ready for future coursework. Data for American Indian or Alaska Native were not available on the county level due to fewer than ten students receiving scores. Economically disadvantaged students include those who qualify for free or reduced-price school meals. Silicon Valley is defined as San Mateo and Santa Clara counties.

■ Average Annual Cost of Childcare

Monthly Costs of Childcare are reported in nominal values (not adjusted for inflation) and represent estimates based on available market rates; estimates are rounded to the nearest \$100. The Costs of Childcare are based on data from the 2003, 2014, 2018, 2021, 2023, and 2024 Self-Sufficiency Standards for California from the Center for Women's Welfare at the University of Washington School of Social Work (with a linear interpolation between data years). Silicon Valley represents an average of Santa Clara and San Mateo counties; Bay Area includes the 9-county region; California represents an unweighted California county average. Infants include children ages 0–2, Preschoolers (ages 3–5), and School-Aged Children (ages 6–12). Developed by Dr. Diana Pearce, the Self-Sufficiency Standard defines the amount of income necessary to meet basic needs (including taxes) without public subsidies (e.g., public housing, food stamps, Medicaid or childcare) and without private/informal assistance (e.g., free babysitting by a relative or friend, food provided by churches or local food banks, or shared housing). The Standard is based on the 85th percentile of the market rate and uses a weighted average based on attendance at family childcare providers and childcare centers. Relative Change in Childcare Costs & Consumer Price Index is relative to 2004; it includes Santa Clara and San Mateo counties, and the Bay Area Consumer Price Index. Annual Costs of Childcare for various family compositions do not include any multiple-child (sibling) discounts.

■ In-Home Childcare Costs

Data are from the Care.com Cost of Childcare Calculator (2024); Silicon Valley represents an unweighted average of the city-defined region. Costs are based on Care.com hourly rates offered in jobs posted by families seeking full-time child care. Monthly and annual cost estimates have been rounded to the nearest \$10.

ARTS & CULTURE

■ Economic Impacts of Arts & Culture Industries

Data are from IMPLAN. All amounts have been inflation-adjusted and are reported in 2023 dollars using the Bay Area consumer price index for all urban consumers from the Bureau of Labor Statistics. Local Government Tax Revenues include County, Sub-County General, and Sub-County Special Districts. IMPLAN categories used include those used in the creative economy as defined by ACPSA-Arts and Cultural Production Satellite Account in coordination with the BEA. Creative Economy Industries include Core (Specialized design services; Custom computer programming services; Advertising, public relations, and related services; Photographic services; Elementary and secondary schools; Junior colleges, colleges, universities, and professional schools; Performing arts companies; Independent artists, writers, and performers; Promoters of performing arts and sports and agents for public figures; and Museums, historical sites, zoos, and parks) and Supporting (Printing; Support activities for printing; Photographic film and chemical manufacturing; Pottery, ceramics, and plumbing fixture manufacturing; Other pressed and blown glass and glassware manufacturing; Glass product manufacturing made of purchased glass; Gypsum product manufacturing; Ornamental and architectural metal work manufacturing; Optical instrument and lens manufacturing; Nonupholstered wood household furniture manufacturing; Custom architectural woodwork and millwork; Jewelry and silverware manufacturing; Office supplies except paper manufacturing; Musical instrument manufacturing; Newspaper publishers; Periodical publishers; Book publishers; Directory, mailing list, and other publishers; Sound recording industries; Radio and television broadcasting; Cable and other subscription programming; Wired telecommunications carriers; Wireless telecommunications carriers except satellite; Internet publishing and broadcasting and web search portals; Video tape and disc rental; and Fitness and recreational sports centers). Core arts and cultural production industries are originators of ideas and content associated with the creation of arts and culture. Supporting industries produce and disseminate arts and cultural commodities. For more information on the Arts and Cultural Production Satellite Account, including an overview, concepts, and methodology, see the U.S. Bureau of Economic Analysis (BEA) and the National Endowment for the Arts (NEA) “U.S. Arts and Cultural Production Satellite Account, 1998–2012” (BEA Briefing, January 2015).

■ Nonprofit Arts Organizations

Data are from the Internal Revenue Service, Exempt Organizations Business Master File Extract. Silicon Valley includes the city-defined region. Arts Establishments include businesses and artists serving the community, and are defined by 44 North American Industrial Classification System (NAICS) codes representative of arts and culture based on the definition set forth in the Americans for the Arts Local Index, National Center for Charitable Statistics (NCCS) at the Urban Institute. Field Service Organizations includes the variety of nonprofit organizations who support arts organizations, providing technical assistance, professional membership, research, and resource development. They include Management & Technical Assistance; Professional Societies & Associations; Research Institutes and/or Public Policy Analysis; Single Organization Support; Fundraising and/or Fund Distribution; Nonmonetary Support Not Elsewhere Classified; Arts Council/Agency; and Arts Service Activities/ Organizations. Media Arts Organizations includes Media, Communications Organizations; Film, Video; Television; Printing, Publishing; and Radio. Performing Arts Organizations includes Performing Arts Organizations; Performing Arts Centers; Dance; Ballet; Theater; Music; Symphony Orchestras; Opera; Singing Choral; Music Groups, Bands, Ensembles; Commemorative Events; and County/Street/Civic/Multi-Arts Fairs and Festivals. Humanities & Heritage Organizations includes Cultural/Ethnic Awareness; Humanities Organizations; and Historical Societies and Related Activities. Collections-Based Organizations include Museum & Museum Activities; Art Museums; Children's Museums; History Museums; Natural History, Natural Science Museums; Science & Technology Museums; Libraries; Botanical Gardens and Arboreta; and Zoos and Aquariums. Arts Education Organizations include Arts Education Schools; and Performing Arts Schools.

■ Arts & Culture Degrees

Data on degrees conferred are from the National Center for Education Statistics. Regional data for the Silicon Valley includes the following post-secondary institutions: Stanford University, San Jose State University, University of San Francisco, University of California (Berkeley, Davis, Santa Cruz), Santa Clara University, San Francisco State University, California State University-East Bay, Notre Dame de Namur University, California College of the Arts, San Francisco Arts Institute, Academy of Art University, and Mills College. Degrees include bachelor's, master's or doctorate degree completions in Visual and Performing Arts, including Crafts/Craft Design, Folk Art and Artisanry; Dance; Design and Applied Arts; Drama/Theatre Arts and Stagecraft; Film/Video and Photographic Arts; Fine and Studio Arts; Music; Arts, Entertainment, and Media Management; and Visual and Performing Arts, Other. Data were analyzed based on first major. The year listed represents the end of the school year (e.g., 2023 represents the 2022–2023 school year). Population data used to calculate degrees conferred per 100,000 Santa Clara & San Mateo county residents are from the United States Census Bureau, American Community Survey 2023 1-Year Estimates.

■ Arts & Culture Employment

Data include annual industry employment data for the city-defined Silicon Valley region from the United States Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW) modified slightly by JobsEQ, which removes suppressions and reorganizes public sector employment. Data are for Q2 of each year. Q2 2024 was estimated at the industry level by BW Research using Q2 2024 reported growth and totals, and modified slightly by JobsEQ, which removes suppressions and reorganizes public sector employment. Arts, Entertainment, and Recreation industry jobs include NAICS 71: Independent Artists, Writers, and Performers; Performing Arts Companies; Promoters of Performing Arts, Sports, and Similar; Museums, Arts Galleries, Historical Sites, and Similar; Spectator Sports; Bowling Centers; Other Amusement, Gambling, and Recreation Industries.

■ Cultural Diversity

Universe of Arts Nonprofits was manually coded by SV Creates to capture mission statement and target audience. Organizations with specifically noted cultural targets were coded as cultural organizations. Traditional western European performing arts (symphony, ballet, theatre) were coded as Western European.

■ Sporting Event Home Game Attendance

Data for Sporting Event Home Game Attendance is from multiple sources, including the National Collegiate Athletic Association (NCAA), ESPN, WorldFootball.net, and The Baseball Cube, StatsBroadcast, Hockey Reference, Baseball Reference, as well as from the sports team websites themselves. Teams include the San Jose Sharks, San Jose Earthquakes, San Francisco 49ers, San Francisco Giants, San Jose Giants, San Jose Barracuda, Stanford Football, Stanford Basketball, Stanford Soccer, Santa Clara University Basketball, San Jose State Football, and San Jose State Basketball. The 2008 attendance estimate does not include San Jose Barracuda, as the franchise did not begin until 2015.

QUALITY OF HEALTH

■ Healthcare Coverage

Data for those with health insurance are from the U.S. Census Bureau, American Community Survey, 1-Year Estimates for the civilian non-institutionalized population. Silicon Valley data includes Santa Clara and San Mateo counties. 2020 data are from the 2020 1-Year Public Use Microdata (PUMS) with experimental weights.

■ Difficulty Paying Medical Bills

Data are from the UCLA Center for Health Policy Research, California Health Interview Survey (CHIS). The Bay Area includes the nine-county region. The share of adults who experienced difficulty paying medical bills are based on having any difficulty within the past 12 months.

■ Share in Very Good to Excellent Health

Data are from the UCLA Center for Health Policy Research, California Health Interview Survey (CHIS). Silicon Valley includes Santa Clara & San Mateo counties. The Share in Very Good to Excellent Health is based on survey respondents who answered Very Good or Excellent to “In general, would you say your health is excellent, very good, good, fair or poor?”

■ Adults Ever Diagnosed with Diabetes or Hypertension

Data are from the UCLA Center for Health Policy Research, California Health Interview Survey (CHIS). Silicon Valley includes Santa Clara & San Mateo counties. Data includes all adults who were ever diagnosed with high or borderline blood pressure (hypertension) or diabetes.

■ Asthma- and COPD-Related Emergency Department Visits

Data are from Tracking California's Data Explorer. Tracking California is a program of the Public Health Institute, in partnership with the California Department of Public Health and the Centers for Disease Control's (CDC) National Environmental Public Health Tracking Program. Silicon Valley data represent an unweighted average of Santa Clara & San Mateo counties combined. Asthma- and COPD-related emergency department visits are age-adjusted rates; COPD-related visits are of adults ages 25 and over. Data for American Indian / Alaska Native were suppressed; Native Hawaiian / Pacific Islander data had very small sample sizes.

■ Infant and Maternal Mortality Rates

Data for maternal mortality (2018–2023), infant mortality by race and ethnicity (2017–2022), and infant mortality rate (2007–2020) are from the United States Department of Health and Human Services (US DHHS), Centers of Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics (DVS), as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program, on CDC WONDER online database. Data for infant mortality rate for 2019–2024 are from the California Department of Public Health, Center for Health Statistics and Informatics, California Vital Data database (Cal-ViDa). Silicon Valley data include San Mateo and Santa Clara counties. Bay Area includes Santa Clara and San Mateo counties, Alameda County, Contra Costa County, Marin County, Napa County, San Francisco County, Sonoma County, and Solano County. Infant mortality is the death of an infant before his or her first birthday. The infant mortality rate is the number of infant deaths per every 1,000 live births. Data by race and ethnicity indicate the mother's race/ethnicity. Maternal mortality includes deaths due to a variety of causes related to pregnancy, childbirth, and the puerperium, and the rate is expressed as the number of deaths per 100,000 live births. Unless specified as Hispanic or Latino, all sub-population categories are not Hispanic or Latino. Births and deaths are based on place of residence.

■ Cesarean Section Rate

Cesarean Section delivery data are from the United States Department of Health and Human Services (US DHHS), Centers of Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics (DVS) Natality public-use data on CDC WONDER Online Database. Silicon Valley data include San Mateo and Santa Clara counties. Data by race and ethnicity are for Santa Clara and San Mateo counties, 2016–2023, and only includes First Birth, Low-Risk (excludes any births where one or more maternal risk factors were present), and births at term (gestational age was 37+ weeks). Other and Multiple includes American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, More than one race, and unknown. Other and Multiple, Asian, Black or African American, and White are all not Hispanic or Latino. Data by race and ethnicity are for First Birth and Low-Risk (includes births with no maternal risk factors present, a gestational age of 37 or more weeks, and head-down fetal presentation).

■ Mental Health

Data are from the UCLA Center for Health Policy Research, California Health Interview Survey (CHIS). Silicon Valley includes Santa Clara & San Mateo counties. Share Experiencing Psychological Distress is from a Kessler 6 (K6) scale self-assessment that assigns a scaled rating of psychological distress over the past 30 days. Psychological distress includes feeling nervous, hopeless, restless or fidgety, so depressed that nothing could cheer them up, feeling that everything is an effort, and/or feeling worthless. Young adults include those ages 18–34. The Share Seeking Help for Mental Health or Alcohol/Drug Issues includes “adults who felt they might need to see a professional for problems with emotions or drugs/alcohol.” The share of adults who sought help was determined from the reported shares who needed help and “sought it but did not receive treatment” and “sought it and received treatment” with the population estimates of adults (ages 18+) from the U.S. Census Bureau, American Community Survey (ACS) 1-Year estimates; 2020 ACS data using experimental weights.

■ Share of Deaths, by Cause

Data are from the State of California, Department of Public Health, California Vital Data (Cal-ViDa), accessed February 25, 2025. Silicon Valley includes Santa Clara and San Mateo counties. Deaths are by place of residence, not place of death. Leading causes of death include Accidents (unintentional injuries); Alzheimer's Disease; Assault (Homicide); Cerebrovascular diseases (Stroke); Chronic liver disease and cirrhosis (Liver Disease); Chronic Lower Respiratory Diseases; Diabetes mellitus (Diabetes); Diseases of heart (Heart Disease); Essential hypertension and hypertensive renal disease (Hypertension); Influenza & Pneumonia; Intentional self-harm (Suicide); Malignant neoplasms (Cancer); Nephritis, nephrotic syndrome and nephrosis (Kidney Disease); and Parkinson's Disease. COVID-19 deaths are confirmed COVID-associated deaths, by death date; 2023 COVID data are through December 19.

APPENDIX A

Average Life Expectancy at Birth

Data are from the United States of America: Institute for Health Metrics and Evaluation, Mortality Rates and Life Expectancy by County, Race, and Ethnicity 2000-2019 (estimates produced using data from the National Center for Health Statistics). Silicon Valley represents an average of Santa Clara and San Mateo counties. Life Expectancy at Birth is the value reported for the age cohort “<1 year” in 2019.

SAFETY

Crimes

Data is from the California Department of Justice, Office of the Attorney General, Interactive Crime Statistics. Violent Crimes include homicide, rape (including attempted rape), robbery, and aggravated assault. Data for Silicon Valley includes the city-defined Silicon Valley region. Population data used to calculate per capita rates are from the California Department of Finance E-4 Population Estimates. Property crimes include burglary, motor vehicle theft, and larceny-theft, as well as attempted burglary/theft. Arson is reported as a type of Property crime, although it is tracked separately by the California Department of Justice. The share of the population that thinks crime is a serious problem is from the 2024 *Silicon Valley Poll* (www.jointventure.org/svpoll) and includes those who responded that crime is a “very” serious problem; Republicans and Democrats include “leaners”.

Felony Offenses

Data are from the California Department of Justice OpenJustice data portal. Data for Silicon Valley includes San Mateo and Santa Clara Counties. Population data is from the California Department of Finance County Population Estimates. Juveniles include those under the age of 18; Adults include those 18 and older. Felony offenses include Violent, Property, Drug, Sex, and all other felony offenses. In November 2014, California voters passed Proposition 47 which reduced numerous state statutes from felonies to misdemeanors. Additionally, in November 2016, California voters passed Proposition 64 which legalized the possession and use of marijuana for individuals 21 years of age and older and reduced the offense degree for numerous state statutes. As a result, caution should be used when comparing felony and misdemeanor arrest data to prior years. Starting in 2021, the California Department of Justice arrest numbers started including transgender individuals in the male and female gender categories; however, arrest numbers for the non-binary gender category are not included in the data due to the small population size.

Gun Violence

Data is from the Gun Violence Archive, a not for profit corporation formed in 2013 to provide online public access to accurate information about gun-related violence in the United States. Data for Silicon Valley include the city-defined region. A Mass Shooting is defined as “four or more killed or injured in a single event [incident], at the same general time and location not including the shooter.” Beginning in December 2020, the data excludes the suspect from the total victims killed or injured. Population data used to calculate per capita rates are from the California Department of Finance E-4 Population Estimates and the U.S. Census Bureau.

Adults Feeling Safe

Data for feelings of safety are from the California Health Interview Survey (CHIS), which asked respondents “Do you feel safe in your neighborhood all of the time, most of the time, some of the time, or none of the time?” Feeling safe includes those who responded all or most of the time. Breakdown by percent Federal Poverty Level (FPL) includes <200%, 200-400%, and more than 400% (in 2023, the FPL for a family of four was \$30,000). All racial subgroups are not Hispanic or Latino.

Public Safety Officers

All data are from the California Commission on Peace Officer Standards and Training. The total number of Public Safety Officers accounts for all sworn full-time and reserve personnel, which may include (but is not limited to) Police Chiefs, Deputy Chiefs, Commanders, Corporals, Lieutenants, Sergeants, Police Officers, Detectives, Detention Officers/Supervisors, Sheriffs, Undersheriffs, Captains, and Assistant Sheriffs; it does not include Community Service Officers or other non-sworn (civilian) police department personnel. All city, county and school district departments in Silicon Valley are included. Data does not include California Highway Patrol officers. 2024 data were as of April 17, 2024. The San Mateo County Sheriff’s Office share of Silicon Valley public safety officers includes those serving Half Moon Bay, Millbrae, Portola Valley, San Carlos, and Woodside; the Santa Clara County Sheriff’s Department share of Silicon Valley public safety officers includes those serving Cupertino, Los Altos Hills, and Saratoga. Population data are from the California Department of Finance, E-4 Population Estimates for Cities, Counties, and the State.

PLACE

HOUSING

Homeownership Rates

Data are from the United States Census Bureau, American Community Survey 1-Year Estimates Public Use Microdata (PUMS). Homeownership rate represents the share of adults who own their home. Silicon Valley data include Santa Clara and San Mateo counties. Analysis assumes that married-couple households include two adult homeowners. Homeownership rates by generation are based on the age of the householder in 2023.

Homeownership Rates, by Race & Ethnicity

Data are from the United States Census Bureau, American Community Survey 5-Year Estimates Public Use Microdata (PUMS). Homeownership rate represents the share of adults who own their home. Silicon Valley data include Santa Clara and San Mateo counties. Analysis assumes that married-couple households include two adult homeowners. Race categories are alone or in combination with another race; all categories other than Hispanic or Latino are not-Hispanic or Latino. Hispanic or Latino includes any race.

Home Values, by Race & Ethnicity

Data are from Zillow Research, “Racial Disparities in Housing” (January 2024), and include the San Jose-Sunnyvale-Santa Clara MSA (source data for Home Values: Zillow and U.S. Census Bureau; source data for Home Purchase Downpayments: Zillow 2022 Consumer Housing Trends Report and 2023 Home Mortgage Disclosure Act). Home values are “typical” Zillow Home Value Indexes. The San Jose MSA is the San Jose-Sunnyvale-Santa Clara MSA, which includes Santa Clara and San Benito counties; the San Francisco MSA is the San Francisco-Oakland-Fremont MSA, which includes Alameda, Contra Costa, San Francisco, San Mateo, and Marin counties. 2024 data are as of August. Data for Pacific Islander were excluded because they were not available for the San Jose MSA.

Home Sales

Data are from the Santa Clara County Association of REALTORS® (SCCAOR) for Santa Clara County, San Mateo County Association of REALTORS® (SAMCAR) for San Mateo County data, California Association of REALTORS® for California data, and National Association of REALTORS® for United States data. Sale prices have been inflation-adjusted and are reported in 2024 dollars using the Bay Area consumer price index for all urban consumers from the Bureau of Labor Statistics for Silicon Valley and San Francisco data, 2024 estimate based on data through October, the California consumer price index for all urban consumers from the California Department of Finance May Revision Forecast (April 2024) for California data, and the U.S. city average consumer price index for all urban consumers from the Bureau of Labor Statistics based on January through October data.

Police Use of Force

Data are from the California Department of Justice, and track incidents in Santa Clara & San Mateo Counties that resulted in the discharge of a firearm or resulted in serious bodily injury or death to a civilian or officer. Injuries exclude those explicitly recorded as resulting from a preexisting condition. Population data by race and ethnicity used to calculate per capita values are from the U.S. Census Bureau, American Community Survey 1-Year Estimates (for 2017-2019, and 2021-2023) and 5-Year Estimates (for 2020). Racial and ethnic categories are mutually exclusive, consistent with Department of Justice reporting. Individuals classified as ‘Other’ include those identified as multi-racial or whose race/ethnicity was unknown.

Bicycle and Pedestrian Safety

Data are from the Statewide Integrated Traffic Records System (SWITRS) via the Transportation Injury Mapping System (TIMS) last updated as of December 17, 2024 and accessed on February 11, 2025, and only include those collisions in which an injury or fatality occurred. Data include the number of injuries and fatalities associated with bicycle crashes and pedestrian crashes; it is possible that some of the injuries were to drivers, passengers, or bystanders. 2023 data are provisional and subject to change.

PHILANTHROPY

Silicon Valley Community Foundation Donor-Advised Grants

Data are from the Silicon Valley Community Foundation and include donor-advised grants from 2015 through 2018 as of November 2018, and 2019 grants as of January 2021, 2020 grants as of January 2022, 2021, 2022, and 2023 grants as of January 2025. Data includes all donor-advised grants through the Silicon Valley Community Foundation, with the exception of a \$550 million grant in 2016 to the Chan Zuckerberg Biohub, Inc, and a \$25 million grant in 2021 to the Give Foundation. Annual totals also exclude grants to Stanford University (\$21 million in 2015, \$8.4 million in 2016, \$24.1 million in 2019, \$9.9 million in 2020, \$16.3 million in 2021, and \$18.9 million in 2022, and \$14.2 million in 2023) as well as to Santa Clara College (\$25 million in 2019, \$1.6 million in 2020, \$6.4 million in 2021, and \$5.5 million in 2022, and \$3 million in 2023), \$3.7 million to the Los Altos Community Foundation in 2019, and donations to various local Community Foundations (\$1.6 million in 2020, \$3 million in 2021, and \$4 million in 2022, \$3 million in 2023). Local organizations include those located in Santa Clara and San Mateo counties.

Local Giving by Top Corporate Philanthropists

Amounts include the total cash donations of the top 50 corporate philanthropists in Silicon Valley to local organizations, as self-reported to the *Silicon Valley Business Journal* and only including companies which chose to participate. The “2023 Book of Lists” included only the top 45 corporate philanthropists. Data are for the fiscal year.

Corporate-Advised Grants

Data for corporate advised-fund grants are from the Silicon Valley Community Foundation and include corporate-advised grants from 2015 through 2023. Silicon Valley includes Santa Clara & San Mateo counties; Rest of Bay Area includes Alameda, Contra Costa, Marin, Napa, San Francisco, Santa Cruz, Solano, and Sonoma counties.

Silicon Valley Community Foundation Discretionary Grants

Data are from the Silicon Valley Community Foundation and include discretionary grants from 2015 through 2019 (accessed January 14, 2021), 2020 (accessed February 5, 2022), 2021, 2022 and 2023 (accessed January 27, 2025). Bay Area includes the 9-county region. Silicon Valley includes Santa Clara & San Mateo counties.

Nonprofit Organizations

Data are from the IRS Business Master File (December 10, 2024), supported by Tax Exempt World dataset (updated December 1, 2024) and NCCS BMF dataset (retrieved November 2024). Data include all exempt 501(c)3 organizations whose Employer Identification Number (EIN) was registered in Santa Clara or San Mateo counties that were required to file a Form 990, did file within 36 months of December 2024, and reported \$100,000 or more in most recent revenues. National Taxonomy of Exempt Entities (NTEE) Major 12 codes that were missing from the IRS Business Master File were researched using Guidestar and other sources. Subregions were determined by zip code associated with each EIN (with Palo Alto 94303 noted as Santa Clara County, and East Palo Alto 94303 noted as San Mateo County). NTEE Major 12 expands 10 Major NTEE categories into 12 categories, separating Higher Education from other education organizations, and Hospitals from other health organizations. Data do not include fiscally sponsored projects, chapters of organizations with an EIN not registered in Silicon Valley, and several religious organizations not required to file Form 990. Donations to 501(c)3 organizations are generally tax-deductible, except in circumstances of testing for public safety (see [www.irs.gov/charities-non-profits/charitable-organizations/exemption-requirements-501\(c\)-organizations](http://www.irs.gov/charities-non-profits/charitable-organizations/exemption-requirements-501(c)-organizations)).

All-Cash Home Purchases

Data are from CoreLogic. Silicon Valley includes San Mateo and Santa Clara counties. Based on public property records, for transactions recorded in each period. Data reflect sales of all new and resale single-family detached houses, townhouses, apartments, cooperatives, condominiums, condos, mobile homes, and manufactured homes.

Residential Building

Data are from the U.S. Department of Housing and Urban Development’s Office of Policy Development and Research (PD&R) SOCDS Building Permits data. Silicon Valley includes Santa Clara and San Mateo counties. Data include the number of single-family and multifamily units included in building permits issued. Single-family housing units include fully-detached, semidetached (semiattached, side-by-side), row houses, and townhouses; attached units classified as single-family are separated from the adjacent unit by a ground-to-roof wall and do not share heating/air-conditioning systems or utilities. Multifamily housing includes duplexes, 3- to 4-unit structures, and apartment-type structures with five or more units.

Regional Housing Need Allocation (RHNA)

Data are from the California Department of Housing & Community Development, RHNA Progress Report (updated February 14, 2025), and include the number of new housing units for which Silicon Valley and Bay Area jurisdictions issued permits applying to the Regional Housing Needs Allocation 6th Housing Element Cycle: 2023 - 2031. The Regional Housing Need Allocation (RHNA) is the state-mandated process to identify the total number of housing units (by affordability level) that each jurisdiction must accommodate in its Housing Element. AMI stands for Area Median Income. Silicon Valley includes the city-defined region; Bay Area includes the 9-county region. Affordability levels indicated on the chart include Very Low Income (0-50% of the Area Median Income, AMI), Low Income (50-80% AMI), Moderate Income (80-120% AMI), and Above Moderate Income (120%+ AMI).

Newly Approved Affordable Housing Units

Data are from Joint Venture Silicon Valley’s annual land-use survey of all cities within Silicon Valley. The 35 cities/counties that provided planned affordable housing data for FY 2023-24 included Belmont, Brisbane, Burlingame, Campbell, Daly City, East Palo Alto, Foster City, Fremont, Gilroy, Half Moon Bay, Hillsborough, Los Altos Hills, Los Gatos, Millbrae, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Palo Alto, Redwood City, San Bruno, San Carlos, San Jose, San Mateo, San Mateo County, Santa Clara, Santa Clara County, Saratoga, Scotts Valley, Sunnyvale, Union City, Woodside. Most recent data are for fiscal year 2023-24 (July 2023 through June 2024). Affordable units are those units that are affordable for a four-person family earning up to 80% of the median income for a county. Cities use the U.S. Department of Housing and Urban Development’s (HUD) estimates of median income to calculate the number of units affordable to low-income households in their jurisdiction. Beginning in 2018-19, the total number of newly approved units included accessory dwelling units (ADUs) issued a permit in lieu of a planning approval.

APPENDIX A

■ Average Costs of Affordable Housing Construction

Data are from the California State Treasurer, California Tax Credit State Allocation Committee Staff Reports. Silicon Valley includes the city-defined region. Per Unit costs are "True Cash Cost Per Unit" (less fee waivers, seller carryback loans, and deferred developer fee); Per Square Foot costs are Construction Costs Per Square Foot. Costs reported are weighted averages of projects by number of affordable units. Costs are based on projects that applied for state or federal tax credits for affordable housing development. Affordable housing includes units with rental rates that are affordable to those earning less than 80% of the Area Median Income (AMI).

■ Average Multifamily Rental Rates

Data are from CBRE, and include average rental rates for multifamily housing (residential structures with more than one dwelling unit in the same building). Silicon Valley includes Santa Clara & San Mateo counties. Rental rates are rounded to the nearest \$10. They ...have been inflation-adjusted and are reported in 2024 dollars using the Bay Area consumer price index for all urban consumers from the Bureau of Labor Statistics for Silicon Valley and San Francisco data, 2024 estimate based on data through October, the California consumer price index for all urban consumers from the California Department of Finance May Revision Forecast (April 2024) for California data, and the U.S. city average consumer price index for all urban consumers from the Bureau of Labor Statistics based on January through October data. Silicon Valley average rental rates represent an unweighted average of Santa Clara and San Mateo County sub-markets; California rental rates are an average of all available CBRE California submarkets (San Jose, Los Angeles, Oakland, Orange County, Riverside, Sacramento, San Diego, San Francisco, and Ventura). Median Household Income for renters is from the United States Census Bureau, American Community Survey 1-Year Estimates, and includes Santa Clara & San Mateo counties.

■ Housing Burden

Data for owners' and renters' housing costs are from the United States Census Bureau, American Community Survey 5-Year (2010, 2015, and 2020) and 1-Year (2023) Estimates. This indicator measures the share of owners and renters spending 30% or more of their monthly household income on housing costs. Renter data are calculated percentages of gross rent to household income in the past 12 months. Owner data are calculated percentages of selected monthly owner costs to household income in the past 12 months. Owner data are solely based on housing units with a mortgage; Renters data are based on the share of those who pay rent. According to the U.S. Department of Housing and Urban Development, housing costs greater than 30% of household income pose moderate to severe financial burdens.

■ Percentage of Potential First-Time Homebuyers That Can Afford to Purchase a Median-Priced Home

Data are from the California Association of Realtors' (CAR) First-time Buyer Housing Affordability Index, which measures the percentage of households that can afford to purchase an entry-level home in California based on the median price of existing single family homes sold from CAR's monthly existing home sales survey. Beginning in the first quarter of 2009, the Housing Affordability Index incorporates an effective interest rate that is based on the one-year, adjustable-rate mortgage from Freddie Mac's Primary Mortgage Market Survey. Bay Area represents an average among the nine counties (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties).

■ Housing Affordability Index, by Race and Ethnicity

Data are from the California Association of Realtors' (CAR) Housing Affordability Index by Ethnicity and include the percentage of households that can afford to purchase a median-priced, single-family home in Santa Clara and San Mateo counties, California, and the United States by race and ethnicity.

■ Housing Units, by Occupancy Level

Data are from the United States Census Bureau, American Community Survey 5-Year Estimates Public Use Microdata (for High/Low-Occupancy Households). Silicon Valley includes Santa Clara and San Mateo Counties. The share of high-occupancy housing units is calculated by determining the total number of housing units (excluding group quarters) with fewer than one bedroom per person, with the exception of married/unmarried couple households in which the couple is presumed to share a room. Overcrowded is defined as units with less than 1 bedroom for every two people. The share of Low-Occupancy housing units includes those that have more than one bedroom per person plus an extra "spare" room, excluding couples who share a room (and may also have a spare room).

■ Vacant Housing Units

Data are from the United States Census Bureau, American Community Survey 5-Year Estimates for 2010, 2015, and 2020, and 1-Year Estimates for 2023 (via Social Explorer). Silicon Valley includes Santa Clara and San Mateo counties. Vacant units exclude those for migrant workers.

■ Multigenerational Households

Data are from the United States Census Bureau, American Community Survey 1-Year Estimates, using the University of Minnesota Population Center IPUMS for Silicon Valley, San Francisco, and California. Silicon Valley data include the city-defined region. Data for the United States are from the Pew Research Center report by Richard Fry (July 2022) using data from the Annual Social and Economic Supplement of the Current Population Survey (CPS). The definition of multigenerational households used for this analysis goes beyond the Census Bureau's traditional definition, and includes all households with two or more adult generations, where an adult is defined as age 25 and over. The definition is modeled after the methodology developed by the Pew Research Center, published in a report entitled "In Post-Recession Era, Young Adults Drive Continuing Rise in Multi-Generational Living" by Richard Fry and Jeffrey Passel, July 2014. In the definition used, a multigenerational household includes those with two adult generations (a parent or parent-in-law and adult child/children, where either generation is the head of household), three generations (parent or parent-in-law, adult child/children, grandchildren), skipped generations (grandparents living with grandchildren where no parent is present), and more than three generations. Due to the use of different survey data and the possible slight differences between the methodology used by the Pew Research Center and the Silicon Valley Institute for Regional Studies, caution should be used in comparing the Silicon Valley, San Francisco, and California estimates to those for the United States as a whole.

■ Young Adults Living With a Parent

Silicon Valley, San Francisco, and California data are from the United States Census Bureau, American Community Survey 1-Year Estimates, using the University of Minnesota Population Center IPUMS. Silicon Valley data include the city-defined region. Young Adults include residents ages 18 to 34, and only those who live with a parent who is the householder (not including parents who live with their young adult children, where the child is the householder). United States data are from the United States Census Bureau, Current Population Survey Historical Living Arrangements of Adults using data from the Current Population Survey, Annual Social and Economic Supplements. Since the United States estimate is based on CPS data, the U.S. estimate of Young Adults Living With a Parent counts unmarried college students living in dormitories as living in their parental home.

■ Homelessness

Data for San Mateo County (Daly City/San Mateo County Continuum of Care (CoC)) and Santa Clara County (San Jose/Santa Clara City and County CoC) are from the Homeless Populations and Subpopulations Reports submitted annually to the United States Department of Housing and Urban Development (HUD). HUD requires CoCs to provide a count of the sheltered unsheltered population every year, and the unsheltered unsheltered population every two years. The population share was calculated using January 1 population estimates from the California Department of Finance, E-4 Historical Population Estimates for Cities, Counties, and the State. Number of Units Funded through Project Homekey are from the State of California Department of Housing & Community Development, Project Homekey funding rounds 1 through 3 as of August 14, 2024.

■ Evictions

Data are from the California Courts, The Judicial Branch of California, Court Statistics Report (CSR) Dashboard, and include unlawful detainer filings by fiscal year (July through June) with the most recent data for fiscal year 2023-24. According to the CSR, an unlawful detainer is "an action involving the possession of real property by a commercial or residential tenant whose original entry was lawful but whose right to the possession has terminated." Silicon Valley is defined as Santa Clara and San Mateo counties.

TRANSPORTATION

■ Freeway Vehicle Miles Traveled

Freeway Vehicle Miles Traveled (VMT) data are from Caltrans PeMS (Performance Measurement System), which collects, filters, processes, aggregates, and examines traffic data from the Caltrans network of roadway traffic sensors. Data include California State Freeways only (not all state highways). Silicon Valley includes Santa Clara and San Mateo Counties. Rest of Bay Area includes the rest of the 9-County San Francisco Bay Area. California Department of Finance's E-4 Population Estimates were used to compute per-capita values. Peak Hours include weekdays from 6-10 am and 3-7 pm, excluding holidays.

■ Daily All-Road VMT Per Capita

Daily All-Road VMT is from the California Department of Transportation Highway Performance Monitoring System (HPMS), a national level highway information system that includes data on the extent, condition, performance, use and operating characteristics of the nation's highways. Various roadway types are used to calculate VMT. The HPMS contains administrative and extent of system information on all public roads, while information on other characteristics is represented in HPMS as a mix of universe and sample data for arterial and collector functional systems. California Department of Finance's E-4 Population Estimates were used to compute per-capita values.

■ Transportation Costs

Bay Area Transportation Costs are from the U.S. Bureau of Labor Statistics Bay Area Consumer Price Index, CPI by Expenditure Category (for Regular Gasoline, Transportation overall, and All Items). The CPI calculation for Transportation costs are inclusive of new vehicles, airline fares, gasoline, and motor vehicle insurance. The Silicon Valley and Bay Area Costs of Basic Transportation Needs are from the 2018, 2021, 2023, and 2024 Self-Sufficiency Standards for California from the Center for Women's Welfare at the University of Washington School of Social Work. Silicon Valley represents an average of Santa Clara and San Mateo Counties; Bay Area includes the 9-county region; California represents an unweighted California county average. A family of four is based on a two-adult household. Percent change is relative to 2018. Developed by Dr. Diana Pearce, the Self-Sufficiency Standard defines the amount of income necessary to meet basic needs (including taxes) without public subsidies (e.g., public housing, food stamps, Medicaid or child care) and without private/informal assistance (e.g., free babysitting by a relative or friend, food provided by churches or local food banks, or shared housing). The Standard assumes private transportation (a car) in counties where less than 7% of workers commute within the county by public transportation. Only Alameda County and San Francisco are calculated using public transportation costs in the 2021 and 2023 Standards. Private transportation costs are based on the average costs of owning and operating a car, and are inclusive of per-mile driving costs, auto insurance, and fixed costs (excluding the cost of the car itself). It is understood that the car(s) will be used for commuting five days per week, plus one trip per week for shopping and errands. In addition, one parent in each household with young children is assumed to have a slightly longer weekday trip to allow for "linking" trips to a daycare site. Costs are described as transportation "needs" because they do not represent the average amount of money spent on transportation, but rather the cost of basic transportation needs based on family type and county of residence.

■ Means of Commute; Mean Travel Time to Work

Data are from the United States Census Bureau, American Community Surveys (ACS), 5-Year Estimates for 2010, 2015, and 2020 via Social Explorer; 2020 data are from ACS Public Use Microdata (2020 using experimental weights), and 2021, 2022, and 2023 data are from ACS 1-Year Estimates. Data are for workers 16 years old and over residing in Santa Clara and San Mateo counties commuting to the geographic location at which workers carried out their occupational activities during the reference week whether or not the location was inside or outside the county limits. The data on employment status and journey to work relate to the reference week; that is, the calendar week preceding the date on which the respondents completed their questionnaires or were interviewed. This week is not the same for all respondents since the interviewing was conducted over a 12-month period. The occurrence of holidays during the relative reference week could affect the data on actual hours worked during the reference week, but probably had no effect on overall measurement of employment status. People who used different means of transportation on different days of the week were asked to specify the one they used most often, that is, the greatest number of days. People who used more than one means of transportation to get to work each day were asked to report the one used for the longest distance during the work trip. The categories, "Drove Alone" and "Carpool" include workers using a car (including company cars but excluding taxicabs), a truck of one-ton capacity or less, or a van. The category "Public Transportation," includes workers who used a bus or trolley bus, streetcar or trolley car, subway or elevated, railroad, or ferryboat, even if each mode is not shown separately in the tabulation. The category "Other Means" includes taxicab, motorcycle, and other means that are not identified separately within the data distribution. Percentages may not add up to 100% due to rounding. Total Commuters and mean travel time to work excludes those who Worked At Home. Race and ethnicity data are from the 2023 ACS 5-Year Estimates. Other includes American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, and Some Other Race.

■ Megacommuters

Data are from the United States Census Bureau, American Community Survey 1-Year Estimates, Public Use Microdata (PUMS). Silicon Valley data include commuters who work in San Mateo or Santa Clara counties. Megacommuters include workers ages 16 or older with one-way commutes of more than 90 minutes; analysis excludes those working from home. California megacommuters are based on place of residence, and thus may include those who are commuting out of state. 2020 data are from the 2020 1-Year Public Use Microdata (PUMS) with experimental weights. Analysis by occupation excludes Other Managers due to unspecificity of the type/function of those employees.

■ Bicycle Commuters

Data are from the United States Census Bureau, American Community Survey 1-Year Estimates, and include workers 16 years old and over residing in Santa Clara and San Mateo counties commuting to the geographic location at which workers carried out their occupational activities during the reference week whether or not the location was inside or outside the county limits. The data on employment status and journey to work relate to the reference week; that is, the calendar week preceding the date on which the respondents completed their questionnaires or were interviewed. This week is not the same for all respondents since the interviewing was conducted over a 12-month period. The occurrence of holidays during the relative reference week could affect the data on actual hours worked during the reference week, but probably had no effect on overall measurement of employment status. Bicyclists include people who biked to work as their most common means of commute (the greatest number of days per week) and/or for the longest distance during the work trip (if they used more than one means of transportation to get to work each day). The number of commute trips is estimated as the number of commuters multiplied by two (assuming each commuter has one two-way commute).

■ Share of Jurisdictions with a Bicycle or Pedestrian Master Plan

Data include cities within the city-defined Silicon Valley region, and Santa Clara and San Mateo counties. Data include all bicycle and pedestrian master plans that were created since 2011, and were approved, planned or in-progress as of December 2024.

■ Daily Vehicle Hours of Delay Due To Congestion

Data are from Caltrans PeMS (Performance Measurement System) which collects, filters, processes, aggregates, and examines traffic data from the Caltrans network of roadway traffic sensors. Data include California State Freeways only (not all state highways). Silicon Valley includes Santa Clara & San Mateo Counties. Rest of Bay Area includes the rest of the 9-County San Francisco Bay Area. The reported traffic delays data are based on the detector coverage and health at the time that the data was collected by PeMS. Accordingly, actual traffic delays experienced in each county may be higher than those reported. One vehicle hour of delay reflects one vehicle stuck in traffic for one hour. Delay refers to speeds less than 60 miles per hour.

■ Per Capita Transit Use

Estimates are the sum of annual ridership on the light rail and bus systems in Santa Clara and San Mateo Counties (from SamTrans and Santa Clara Valley Transportation Authority), and rides on Caltrain and Altamont Corridor Express (ACE). Data does not include paratransit, such as SamTrans' Redi-Wheels program. The California Department of Finance E-4 Population Estimates were used to compute per-capita values. FY 2023-24 ridership estimated using FY 2023-24 year-to-date ridership numbers (annual estimate based on data through September for Caltrain and SamTrans, October for VTA, and November for ACE). FY 2024-25 per capita ridership calculated using 2024 population estimates.

APPENDIX A

■ Caltrain Ridership

Caltrain data through FY 2019 are from the Annual Passenger Counts report, and include average weekday daily ridership (through FY 2016) and average mid-weekday daily ridership (FY 2017+). Data for FY 2020 and subsequent years are from board meeting agendas. Years indicate the end of the fiscal year (e.g., 2018 includes data for FY 2017-18). FY 2024-25 ridership based on data through November 2024.

LAND USE

■ Residential Density

Data are from Joint Venture Silicon Valley's annual land-use survey of all cities within Silicon Valley. The 31 cities/counties included in the FY 2023-24 Residential Density analysis included Belmont, Brisbane, Burlingame, Campbell, Colma, Cupertino, Daly City, East Palo Alto, Foster City, Fremont, Gilroy, Half Moon Bay, Hillsborough, Los Altos, Los Altos Hills, Los Gatos, Menlo Park, Millbrae, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Newark, Pacifica, Palo Alto, Portola Valley, Redwood City, San Bruno, San Carlos, San Jose, San Mateo, San Mateo County, Santa Clara, Santa Clara County, Saratoga, Scotts Valley, South San Francisco, Sunnyvale, Union City, and Woodside. Other cities/counties were not included because they either did not respond to the survey or they left the acreage question blank. Most recent data are for fiscal year 2023 (July 2023 through June 2023). Residential density was calculated as the average residential density of the participating cities/counties for each year. Beginning with FY 2014-15 the residential density calculation included accessory dwelling units (ADUs), and starting in 2018-19 they also included ADUs that were issued a building permit in lieu of a planning approval.

■ Housing Near Transit

Data are from Joint Venture Silicon Valley's annual land-use survey of all cities within Silicon Valley. The 34 cities/counties included in the FY 2023-24 Housing Near Transit analysis were Belmont, Brisbane, Burlingame, Campbell, Daly City, East Palo Alto, Foster City, Fremont, Gilroy, Half Moon Bay, Hillsborough, Los Altos, Los Altos Hills, Los Gatos, Millbrae, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Palo Alto, Redwood City, San Bruno, San Carlos, San Jose, San Mateo, San Mateo County, Santa Clara, Santa Clara County, Saratoga, Scotts Valley, South San Francisco, Sunnyvale, Union City, and Woodside. Most recent data are for fiscal year 2024 (July 2023 through June 2024). The numbers of new housing units within one-third mile of transit are reported directly for each of the cities and counties participating in the survey. Places with one-third of a mile of transit are considered "walkable" (i.e., within a 5- to 10-minute walk for the average person). Transit-oriented data prior to 2012 is reported within one-quarter mile of transit.

■ Non-Residential Development

Data are from Joint Venture Silicon Valley's annual land-use survey of all cities within Silicon Valley. Most recent data are for fiscal year 2024 (July 2023 through June 2024). The amounts of commercial development within one-third of a mile of transit are reported directly for each of the cities and counties participating in the survey. Places with one-third of a mile of transit are considered "walkable" (i.e., within a 5- to 10-minute walk for the average person). Transit-oriented data prior to 2012 is reported within one-quarter mile of transit. The 32 cities/counties included in the FY 2023-24 Non-Residential Development Approvals analysis were Belmont, Brisbane, Burlingame, Campbell, Daly City, East Palo Alto, Foster City, Fremont, Gilroy, Half Moon Bay, Hillsborough, Los Gatos, Millbrae, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Palo Alto, Redwood City, San Bruno, San Carlos, San Jose, San Mateo, San Mateo County, Santa Clara, Santa Clara County, Saratoga, Scotts Valley, South San Francisco, Sunnyvale, Union City, and Woodside.

■ Planned Hotel Development

Data are from the Atlas Hospitality Group annual California Hotel Development Surveys. Planned hotels are in various stages, and have not necessarily received planning approvals. Silicon Valley includes Santa Clara and San Mateo counties.

ENVIRONMENT

■ Water Resources

Data were provided by Santa Clara Valley Water District (SCVWD) for Santa Clara County, Scotts Valley Water District (SVWD) for Scotts Valley data, and Bay Area Water Supply & Conservation Agency (BAWSCA) for member agencies servicing San Mateo County and Alameda County Water District, which services the Cities of Fremont, Union City, and Newark. These agencies include Brisbane/GVMD, Estero, Burlingame, Hillsborough, CWS - Bear Gulch, Menlo Park, CWS - Mid Peninsula, Mid-Peninsula, CWS - South SF, Millbrae, Coastside, North Coast, Redwood City, Daly City, San Bruno, East Palo Alto, and Westborough. Cordilleras serves residents in San Mateo County, but is not a BAWSCA member and therefore was not included in this analysis. Data for FY 2023-24 are preliminary. Population figures used to calculate per capita values include the population served by each water agency, and are provided by the agencies directly. Total water consumption figures are the sum of all retailer numbers, and do not include consumption by private well-owners in the SCVWD data; some consumption for urban agriculture may be included, but the amount is negligible. In the BAWSCA data, the small number of agricultural users in the service area are treated as a class of commercial user and so are included in the consumption figures. Scotts Valley Water District does not serve agricultural customers, so total water consumption figures used to compute both the per capita consumption and the recycled percentage of total water used are the same. The year listed represents the fiscal year (e.g., 2022 represents the 2021-2022 fiscal year).

■ Local Solid Waste Disposal

Data for Local Solid Waste Disposal are from the CalRecycle Landfill Tonnage Reports by County. Silicon Valley includes San Mateo and Santa Clara counties. Bay Area includes the 9-county region. Data represent waste disposal, not production/origin. Population data are from the California Department of Finance.

■ Surplus Food Recovered from Businesses & Institutions

2019-2021 estimated; 2022+ data based on reporting. The data reflect self-reported values related to compliance with California Senate Bill 1383 (SB 1383), which took effect in 2022. SB 1383 sets goals for decreasing the disposal of organic waste in landfills in order to reduce greenhouse gas emissions. The edible food recovery provisions require that many larger businesses and institutions throughout the state—including supermarkets, food service providers, wholesalers/distributors, restaurants, hotels, schools, large events and event venues, and more—recover the maximum amount of surplus edible food and donate it to make it available to people in need. Santa Clara County data are from the Food Recovery Initiative of Joint Venture Silicon Valley in its role in administering the Santa Clara County Food Recovery Program. Figures for 2019-2021 derive from an online capacity survey of food recovery organizations conducted in 2021. The 2021 figure represents an estimate based on Jan-Aug 2021. Figures for 2022 and later derive from annual reporting by food recovery organizations headquartered in Santa Clara County. San Mateo County data are from the County of San Mateo Office of Sustainability and are based on amounts reported by local businesses/ institutions (2019-2021) and by food recovery organizations headquartered in San Mateo County (2022 and later). Food recovery organizations must report their total pounds recovered to the county in which they are headquartered, but it is important to note that the figures don't necessarily reflect the geography where food donors are located. Most notably, the large volume of food recovery performed by Second Harvest of Silicon Valley shows up in the Santa Clara County figures, despite some of that food having been recovered from food donors in San Mateo County.

■ Greenhouse Gas Emissions

Greenhouse Gas (GHG) Emissions include those from both mobile and stationary sources, taking into account emissions associated with electricity and fuel use, transportation, and solid waste; data do not include GHG emissions from agriculture, or from goods/services consumed within the region). Data for 2014-2019 are from Jack Gilchrist & Ann Hancock, "San Francisco Bay Area Greenhouse Gas Emission Trends for 2014 – 2019" (The Climate Center, 2021). Calculations made by The Climate Center utilized a variety of data points, originating from sources such as the Metropolitan Transportation Commission's Vital Signs, California Department of Transportation, California Energy Commission, The Climate Registry, California Energy Commission, and the California Energy Commission. GHG emissions for 2022 and 2024 were estimated using 2019 data, adjusted for San Mateo and Santa Clara counties (separately) using adjustment factors for each emissions category (electricity, natural gas,

transportation, and solid waste). For emissions associated with electricity use, the change in electricity use from the California Energy Commission (and PG&E) and the change in the average emissions factor of local electricity providers (Peninsula Clean Energy, Silicon Valley Clean Energy, Palo Alto Utilities, Silicon Valley Power, Pacific Gas & Electric, and San Jose Clean Energy) were utilized. Other adjustment factors included the change in natural gas consumption from the California Energy Commission (for emissions associated with natural gas) and PG&E, the change in vehicle miles traveled (VMT) from the California Department of Transportation, as well as the change in the share of non-electric vehicles registered within each county from California Energy Commission (for emissions associated with transportation) and the California Department of Motor Vehicles, and the change in waste disposal from CalRecycle (for emissions associated with solid waste). Emissions associated with transportation and electricity use were adjusted using two adjustment factors rather than one; that was done because both categories are becoming cleaner over time (due to cleaner power sources and electric vehicles accounting a larger share of VMT).

■ Wildfires

Data are from the California Department of Forestry and Fire Protection (CAL FIRE) wildfire activity statistics and events data. Silicon Valley includes San Mateo and Santa Clara counties; Rest of Bay Area includes Alameda, Contra Costa, Marin, Napa, San Francisco (although there is no State Responsibility Area located within San Francisco), Solano, and Sonoma counties; Rest of Northern California includes Amador, El Dorado, Butte, Humboldt, Del Norte, Lassen, Modoc, Mendocino, Nevada, Yuba, Placer, Santa Cruz, Shasta, Trinity, Siskiyou, Lake, Tehama, and Glenn Counties. Rest of California (not including Rest of Northern California or Bay Area) data include those managed by CAL FIRE and other partner agencies. The 2024 fire data are from the 2024 fire season all incident data. The share of Bay Area residents that think the increasing frequency of wildfires and/or the impacts of climate change are serious problems are from the 2024 Silicon Valley Poll, and include those who responded that it is an "extremely serious" or "very serious" problem. Remote workers include those who work remotely all, most, or some of the time. Democrats and Republicans include "leaners."

■ Air Quality

Data are from the United States Environmental Protection Agency, Outdoor Air Quality Data, and include Santa Clara and San Mateo counties. Unhealthy days are based on an Air Quality Index (AQI) of >100 for sensitive groups, and >150 for the general population in one or both of the two counties. The AQI includes Air Quality Index (AQI) for all AQI pollutants including carbon monoxide, ozone, particulate matter, nitrogen dioxide, sulfur dioxide, and lead. The PM2.5 monitoring network was phased in between 1999 and 2001 in most areas, so earlier years do not include PM2.5 (a type of particulate matter).

■ Electricity Consumption and Productivity

Electricity Consumption data is from the California Energy Commission. Silicon Valley includes Santa Clara and San Mateo Counties. Per capita values were computed from the California Department of Finance's E-4 Population Estimates. Gross Domestic Product (GDP) estimates the market value of all final goods and services; GDP data is from Moody's Economy.com. GDP values have been inflation-adjusted and are reported in 2023 dollars using the Bay Area consumer price index for all urban consumers from the Bureau of Labor Statistics for Silicon Valley and San Francisco data, and the California consumer price index for all urban consumers from the California Department of Finance May Revision Forecast for California data.

■ Emissions Intensity for Power Providers; Share of Electricity Customers Served, by Provider; Share of Electricity, by Generation Sources

Emissions data are from PG&E (2022 preliminary emissions factor and December 2023 bundled customer counts), other Silicon Valley electricity providers (2023), the U.S. Environmental Protection Agency's Emissions & Generation Resource Integrated Database (eGRID) subregion CAMX for California (2023, encompasses most of California), and the eGRID national average for the United States (2023). The Silicon Valley average represents a weighted average based on total energy used by customers of each power provider; usage for Silicon Valley Clean Energy is based on budgeted annual totals. The analysis does not include Direct Access (DA) electricity customers. PG&E's emissions factor is from The Climate Registry's Utility-Specific Emission Factors. PG&E customer counts were from publicly available data on PG&E's website (including bundled customers only) and are for December. Aside from PG&E, other emissions intensities and customer counts were provided directly by Silicon Valley's energy providers. In Silicon Valley, all electricity consumers receive power sourced by either PG&E (an investor-owned utility), one of the two municipal utilities (Silicon Valley Power in the City of Santa Clara, or Palo Alto Utilities), or one of the locally-controlled public agencies sourcing clean electricity. These community choice energy options are relatively new to the region, and include Silicon Valley Clean Energy which serves 13 communities in Santa Clara County; Peninsula Clean Energy which serves 20 San Mateo County cities, the unincorporated portion of the county, and (as of 2022) Los Banos in Merced County; and San Jose Clean Energy, serving residents and businesses in San Jose. The remaining Silicon Valley communities outside of the two counties are served by Monterey Bay Community Power (Scotts Valley) and East Bay Community Energy (Fremont and Union City); Newark opted out of joining the community choice energy program and thus remains served by PG&E. Neither Monterey Bay Community Power or East Bay Community Energy are included in this analysis, although bundled PG&E customers in Fremont, Newark, Union City, and Scotts Valley are included. The three locally-controlled public-agency electricity providers in Santa Clara and San Mateo Counties have served customers since October 2016 (Peninsula Clean Energy), April 2017 (Silicon Valley Clean Energy), and February 2019 (San Jose Clean Energy). Data for the share of electricity by generation sources are from Power Content Labels, primarily accessed through the California Energy Commission's Power Source Disclosure Program for Silicon Valley providers (and also from the providers' websites). California and U.S. generation by source are from the U.S. Environmental Protection Agency (EPA) Emissions & Generation Resource Integrated Database (eGRID) fuel mix. Unspecified Power is defined as "electricity that has been purchased through open market transactions and is not traceable to a specific generation source." Carbon neutral power sourced from outside California is also included as Unspecified.

■ Solar and Storage Installations

Data are from Palo Alto Municipal Utilities, Silicon Valley Power, and Pacific Gas & Electric, and include the entire city-defined Silicon Valley region. Years listed correspond to when the systems were interconnected. The category Non-Residential includes Commercial, Non-Profit, Government, Industrial, Utility, Military, and Educational. Cumulative installed solar capacity does not include installations prior to 1999. All systems included in the analysis are Net Energy Metered (NEM, including RES-BCT and Virtual Net Energy Metering) / Net Billing Tariff (NBT) and Non-Export PV. PG&E data are from the California Solar Statistics, which publishes all IOU solar PV NEM/NBT interconnection data per CPUC Decision (D)14-11-001. Energy storage data for PG&E includes net-energy metered systems only. 2024 data are through June for Palo Alto Utilities, December for Silicon Valley Power, and November for PG&E.

■ Fuel Use

Data are from the California Energy Commission, 2023 California Annual Retail Fuel Outlet Report Results (CEC-A15) Spreadsheets, accessed February 14, 2025. Gasoline and diesel sales are estimated by the CEC using Board of Equalization gasoline sales totals and Energy Commission diesel sales determinations (which account for both taxable and non-taxable sales of diesel). Staff uses a statistical procedure known as "bootstrapping" to estimate the population characteristics of the unreported and unknown stations. Since large chain operators are easier to notify and collect information from, the estimated population station characteristics are weighted to match independent owners and smaller station chains in order to account for unreported stations. 2012-2023 data are not directly comparable to other years since an improved methodology was used, but the CEC estimates that they are within 5 percent compared to the previous methodology.

■ Electric Vehicle Infrastructure

Data for public electric vehicle stations and outlets are from the U.S. Department of Energy, and include the city-defined Silicon Valley region. Annual data are point-in-time counts, typically as of November or December.

■ Electric Vehicle Sales

Vehicle sales data are from the California Energy Commission Zero Emissions Vehicle and Infrastructure Statistics through 2024, and include Santa Clara and San Mateo Counties. Electric vehicles include battery electric, plug-in hybrid, and hydrogen fuel cell.

APPENDIX A

GOVERNANCE

LOCAL GOVERNMENT ADMINISTRATION

■ Local Government Finances

Data were obtained from the audited annual financial reports from the Counties of Santa Clara and San Mateo, and cities within the city-defined Silicon Valley region. Reports included Annual Comprehensive Financial Reports, Comprehensive Annual Financial Reports, Annual Financial Statements for the Year End, Annual Financial Reports, Basic Financial Statements Reports, and Annual Basic Financial Statements Reports. Due to unavailability of data at the time of analysis, budgeted amounts were used for Portola Valley (FY 2020-21, FY 2021-22, and FY 2022-23) and Colma (FY 2021-22); FY 2022-23 totals are missing data for Brisbane and Union City. Data for City Finances include both Government and Business-Type Activities (where applicable). Whenever possible, data were obtained from the following year's report (e.g., the 2010 report for 2009 figures) because following-year reports sometimes reflect revisions/corrections. Years represent the end of the Fiscal Year (e.g., 2019 data are for FY 2018-19). All amounts have been inflation-adjusted and are reported in 2023 dollars using the Bay Area consumer price index for all urban consumers from the Bureau of Labor Statistics for Bay Area data, and the California consumer price index for all urban consumers from the California Department of Finance May Revision Forecast (April 2024) for California data. Values are significant to the nearest \$1 million due to rounding in the financial reports. Revenues Minus Expenses is reported before Transfers or Extraordinary Items. Other Revenues include any revenue other than Property Tax, Sales Tax, Investment Earnings, or Charges for Services. Other Revenues may include the following (as categorized by the various cities in Silicon Valley): Incremental Property Taxes; Public Safety Sales Tax; Business tax; Municipal Water System Revenue; Waste Water Treatment Revenue; Storm Drain Revenue; Transient occupancy tax Business, Hotel & Other Taxes; Property transfer tax; Property Taxes In-Lieu; Vehicle license in-lieu fees or Motor Vehicle In-Lieu; Licenses & Permits; Utility Users Tax; Development impact fees; Franchise fees; Franchise Taxes Franchise & Business Taxes; Rents & Royalties; Net Increase (decrease) in Fair Value of Investments; Equity in Income (losses) of Joint Ventures; Miscellaneous or Other Revenues; Cardroom Taxes; Fines and Forfeitures; Other Taxes; Agency Revenues; Interest Accrued from Advances to Business-Type Activities; Use of Money and Property; Property Transfer Taxes; Documentary Transfer Tax; Unrestricted/Intergovernmental Contributions in Lieu of Taxes; Gain (loss) of disposal of assets.

■ City/County Manager Turnover

The annual count of city/county managers is a snapshot in time, taken in August of each year since 2013 from individual city and county websites. Data include Silicon Valley cities, as well as the counties of Santa Clara and San Mateo. Percent Women includes managers whose gender expression is feminine (e.g., uses she/her pronouns and/or feminine prefixes).

CIVIC ENGAGEMENT

■ Partisan Affiliation

Data are from the California Secretary of State, Elections Division. Silicon Valley data are for Santa Clara and San Mateo counties. Other includes Green, Libertarian, Natural Law, Peace & Freedom/Reform, and Other. No Party Preference was formerly called Declined to State.

■ Eligible Voter Turnout and Absentee Voting

Data are from the Counties of Santa Clara and San Mateo, the U.S. Elections Project, and the California Secretary of State, Elections Division. The eligible population is determined by the Secretary of State using Census population data provided by the California Department of Finance. Eligible Voter Turnout and Vote-By-Mail Voting includes data for the even-year November General Elections. The Share of Votes by Presidential Candidate is for the 2024 General Election. Silicon Valley includes Santa Clara and San Mateo counties. The Bay Area includes the 9-County region. Other includes Robert F. Kennedy Jr., Jill Stein, Chase Oliver, Claudia De la Cruz, and Peter Sonski.

■ Share of Eligible Voters Who Registered

Registration data are from the California Secretary of State, Elections Division. The eligible population is determined by the Secretary of State using Census population data provided by the California Department of Finance.

REPRESENTATION

■ Local Elected Officials

The 2025 data are from the L2 Voter and Demographic Dataset, which includes demographic and voter history tables for all 50 states and the District of Columbia. The California data is from the California Demographic table as of October 30, 2024. The dataset is built from publicly available government voter registration and election participation records. Voter registration and election participation data are augmented by demographic information from outside data sources. All data before 2022 are from the GrassrootsLab Grassfire Directory (www.grassrootslab.com), a unique and comprehensive database that closely tracks, updates and categorizes local jurisdictions, elected officials, and key staff members in California cities, counties, and school districts. Silicon Valley includes the city-defined region. Local elected officials include any person elected through a city-wide or county-wide election to represent at either the Municipal, Mayoral or Supervisorial level. Elected officials include all newly-elected or re-elected officials in 2024, and all incumbent officials. Race or ethnicity of elected officials is based on publicly available documentation that those officials self-identify with a particular racial/ethnic group (those identifying as Arab are included in White). Other party affiliation includes American Independent, Green, Libertarian, Natural Law, Peace & Freedom/Reform, and Other. Local elected officials included 227 Councilmembers, Mayors, and County Supervisors in 2025 (Councilmembers in all 39 Silicon Valley cities across Santa Clara, San Mateo, Alameda, and Santa Cruz counties, the 10 County Supervisors for Santa Clara and San Mateo Counties, the District 2 Supervisor for Alameda County, and the District 5 Supervisor for Santa Cruz County).

■ Trial Court Justices and Judges

Data reflect responses from justices and judges that were active and serving on the bench as of December 31 of the data year (2011, 2016 and 2023). The tables do not include demographic information for justices that were appointed but not yet confirmed, nor for judges that were appointed but had not yet taken their oaths of office as of December 31 of the data year. Race and ethnicity sub-population descriptions were adapted from the definitions used by the U.S. Census Bureau in the 2020 Decennial Census. Multiple and Other includes American Indian and Alaskan Native, Native Hawaiian and Other Pacific Islander, Some Other Race and More than One Race. Gender data for judges and justices includes all three court levels within the California court system including the California Supreme Court, six Court of Appeal districts, and 58 Superior Courts - one in each county.

ENDNOTES

- 1 Manuel Pastor, Rhonda Ortiz, Marlene Ramos, and Mirabai Auer. *Immigrant Integration: Integrating New Americans and Building Sustainable Communities*. University of Southern California Program for Environmental and Regional Equity (PERE) & Center for the Study of Immigrant Integration (CSII) Equity Issue Brief. December 2012.
- 2 Margaret O'Mara. *The Code: Silicon Valley and the Remaking of America*, pp. 83–84. Penguin Press, 2019.
- 3 California immigrants contributed \$391 billion to the U.S. economy through their local, state, and federal taxes in 2018, in addition to contributions through their spending (California Immigrant Data Portal, Data Summaries, accessed 2/7/22).
- 4 Population for Santa Clara and San Mateo Counties currently available from the California Department of Finance includes 78 years of data, going back to 1947.
- 5 Based on available data from the California Department of Finance, which goes back to 1991.
- 6 Note that estimates of gross (and net) outmigration using U.S. Census Bureau, American Community Survey 1-Year Estimates (calendar-year data) and those from the California Department of Finance (DOF) Estimates (fiscal-year data) are offset by a six month period; additionally, there are differences in estimation methodologies, as well as increased temporal variability and magnitude of change in recent years.
- 7 The U.S. Office of Management and Budget (OMB) requires federal agencies to use a minimum of two ethnicities in collecting and reporting data: Hispanic or Latino and Not Hispanic or Latino. OMB defines “Hispanic or Latino” as a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.
- 8 Second half 2024 growth rates, as reported by the California Employment Development Department (EDD) for July through November.
- 9 Based on Q2 2024 plus second half data using 2024 growth rates for Santa Clara and San Mateo Counties, as reported by the California Employment Development Department (EDD) for June through November.
- 10 This share is an estimate. It represents the number of local employees (typically residents) at the region's six largest tech companies, by regional headcount, divided by the regional employment total (local industry employees, who may or may not live within the region).
- 11 The California Employment Development Department (EDD) Worker Adjustment and Retraining Notification (WARN) data are not comprehensive of all layoffs and only include “covered establishments” which employ at least 75 people and layoffs that affect more than 50 people during any 30-day period. Notices prior to March 2020 may not include all planned layoffs due to the Governor's issuance of Executive Order N-31-20 on March 4 of that year, which temporarily suspended the 60-day notice requirement in the WARN Act.
- 12 Includes software developers and programmers; computer support, database and systems; technology and engineering related; and computer and information system managers — all of which are highly concentrated within the high-tech services industry but are spread across all industry sectors.
- 13 U.S. Bureau of Labor Statistics and National Center for Educational Statistics (via CBRE Research, Scoring Tech Talent 2024)
- 14 According to self-reported data on LinkedIn.
- 15 California Legislative Information, Senate Bill No. 1162.
- 16 Goda, T., & Torres García, A. (2019). *Inequality and Property Crime: Does Absolute Inequality Matter?* International Criminal Justice Review, 29(2), 121–140.
- 17 Includes income received on a regular basis before taxes. United States Census Bureau, American Community Survey and Puerto Rico Survey, 2023 Subject Definitions: “Total income” is the sum of the amounts reported separately for wage or salary income; net self-employment income; interest, dividends, or net rental or royalty income or income from estates and trusts; Social Security or Railroad Retirement income; Supplemental Security Income (SSI); public assistance or welfare payments; retirement, survivor, or disability pensions; and all other income.
- 18 The Bureau of Economic Analysis personal income estimates include “nonprofit institutions serving individuals, private noninsured welfare funds, and private trust funds” in addition to individuals.
- 19 Joint Venture Silicon Valley, *2024 Silicon Valley Poll* (www.jointventure.org/svpoll).
- 20 Based on data from the United States Census Bureau, 2022 American Community Survey 1-Year Estimates. Minimum wage earners for the purposes of this analysis included those earning less than the highest regional minimum wage ordinance in December 2022 (\$17.10 per hour in Mountain View and Sunnyvale), annual average wages and assuming a 40-hour work week year-round (\$35,568 per year). Workers included full-time (35+ hours per week) civilian, employed persons ages 16 and older.
- 21 Utilizing measures that account for changes in the actual (monetary) income gap between the highest- and lowest-earning households.
- 22 Bandyopadhyay, S. (2018). The absolute Gini is a more reliable measure of inequality for time dependent analyses (compared with the relative Gini). *Economics Letters*, 162, 135–139.
- 23 Based on food industry demand by household income in Santa Clara & San Mateo counties (IMPLAN 2023).
- 24 Thomas Goda, Chris Stewart, & Alejandro Torres García. (2016). “Absolute Income Inequality and Rising House Prices.” *Documentos de Trabajo CIEF*.
- 25 Based on the *Forbes* Real-Time Billionaire List (as of 2/19/2025)
- 26 Altrata, *Billionaire Census 2024*.
- 27 The World Bank, GDP by Country (2023).
- 28 World Inequity Lab, World Inequality Database (2023).
- 29 U.S. Census Bureau, Poverty Thresholds for 2023 by Size of Family and Number of Related Children Under 18 Years.
- 30 Based on 2022 data from the American Community Survey, 1-year estimates (data available at <https://siliconvalleyindicators.org/data/economy/income/income-adequacy>)
- 31 For instance, in 2023 Silicon Valley households that were most likely to live below Self-Sufficiency were those headed by limited English-speaking Hispanic or Latino householders (70%), those without a high school diploma (74%), and families with four or more children (70%). Data available at www.SiliconValleyIndicators.org.
- 32 A living wage is defined as “sufficient to provide the necessities and comforts essential to an acceptable standard of living” and has been in use to mean “a subsistence wage” since 1817. (*Merriam-Webster.com*, 2023)
- 33 The California minimum wage was \$16 per hour in 2024. That year, 20 out of Silicon Valley's 39 cities had minimum wage ordinances, which ranged from \$16.62 to \$18.75 per hour.
- 34 From July 2019 through July 2024, based on the California Department of Finance population estimates.
- 35 The federal Pandemic Electronic Benefits Transfer (P-EBT) program provided families who would have typically received Free- and Reduced-Price School Meals with an EBT card and supplemental funding to purchase food at most grocery stores, farmer's markets, or online to replace missed school meals.
- 36 Based on July population estimates from the California Department of Finance.
- 37 U.S. Patent & Trademark Office, PatentsView (based on data through September 24, 2024).
- 38 Based on locations in “Innovation Patterns Across Locations and Technology” (USPTO PatentsView, 2024).

ENDNOTES

- 39 Based on information from the U.S. Bureau of Labor Statistics, “Career Outlook, Working in a Gig Economy” (May 2016), and Robert Fairlie, “The Great Recession and Entrepreneurship Public Policy Working Paper” (Kauffman-RAND Institute for Entrepreneurship, January 2011).
- 40 California Public Utilities Commission, Broadband Funding Programs.
- 41 Brion Economics, Santa Clara County Early Care and Education Facilities Study Final Report (May 2024).
- 42 California Department of Social Services and California Department of Education, Rate and Quality Workgroup Final Report (August 15, 2022).
- 43 Assembly Bill 22 provides for free Universal Transitional Kindergarten California for all four-year-olds by 2025–26 school year. (<https://www.santacalarausd.org/Page/65>)
- 44 Silicon Valley Special Education enrollment includes all students with an active Individualized Education Plan (IEP) as of the first Wednesday in October, 2022. Enrollment data were accessed via DataQuest on May 30, 2024 (data: California Department of Education, Special Education Enrollment by Program Setting, 2022–23). Statewide, one out of every seven students (13.6%) had an IEP in 2022–23.
- 45 California Department of Education, Special Education – CalEdFacts (www.cde.ca.gov/sp/se/sr/cef-speded.asp).
- 46 Calculated using the Number and percentage of public school students with disabilities served solely under Section 504 of the Rehabilitation Act of 1973 by state: School Year 2020–21 from the U.S. Department of Education, Office for Civil Rights. Silicon Valley includes San Mateo and Santa Clara counties.
- 47 U.S. Department of Education, Office for Civil Rights, Free Appropriate Public Education for Students With Disabilities: Requirements Under Section 504 of The Rehabilitation Act of 1973 (<https://www2.ed.gov/about/offices/list/ocr/docs/edlfe-FAPES04.html>).
- 48 Sanchez, M., et al (2010). “Processes and challenges in identifying learning disabilities among students who are English learners in three New York State districts.” REL Northeast & Islands Regional Educational Laboratory at Education Development Center, Inc. via Jarice Butterfield, “Meeting the Needs of English Learners (ELs) with Disabilities Resource Book.” SELPA Administrators of California (revised 2017).
- 49 Data for Santa Clara & San Mateo Counties, 2022–23 school year.
- 50 United States Department of Agriculture (USDA), Food and Nutrition Service, Child Nutrition Programs Income Eligibility Guidelines, School Year 2023–24. <https://www.fns.usda.gov/cn/fr-020923>
- 51 Based on the University of Washington, Center for Women’s Welfare, Self-Sufficiency Standard for California (2024).
- 52 U.C. Berkeley Labor Center, *California City and County Minimum Wage Rates (January 2024)*.
- 53 According to the Economic Policy Institute 2021 Report “Setting higher wages for child care and home health care workers is long overdue” (data from the 2018–2020 U.S. Census Bureau, Current Population Survey Annual Social and Economic Supplement), less than 21% of childcare workers received employer-sponsored health insurance coverage compared to 52% of workers in the United States overall.
- 54 National data from the Care.com 2025 Cost of Care Report.
- 55 Black, Indigenous and People of Color (BIPOC). Cultural categories considered BIPOC include all categories with the exception of Eastern and Western European, Religious, and LGBTQ+ groups.
- 56 Tracking California, *Public Health Institute* (2025).
- 57 California Department of Health, Hypertension & Health Equity Issue Brief 2017.
- 58 Juanita J. Chinn, Iman K. Martin, and Nicole Redmond, “Health Equity Among Black Women in the United States.” *Journal of Women’s Health* (Vol. 30, No. 2, Special Issue Articles, Pages: 212–219). Published Online: 25 November 2020.
- 59 Boerma, Ties, et al. “Optimizing cesarean section use 1: Global epidemiology of use of and disparities in cesarean sections.” *The Lancet*, Volume 392 (October 13, 2018).
- 60 Average annual incomes are from the U.S. Census Bureau, 2023 American Community Survey 1-Year Public Use Microdata, and include single adults (not necessarily a parent) with children present in the household (not necessarily a related child) for the nine-county Bay Area and California overall.
- 61 United States Department of Health and Human Services, Centers for Disease Control, National Center for Health Statistics, “National Health Interview Survey Early Release Program”. <https://www.cdc.gov/nchs/data/nhis/earlyrelease/insur202412.pdf>
- 62 United States Central Intelligence Agency (CIA), The World Factbook.
- 63 World estimates are from the UN Inter-agency Group for Child Mortality Estimation: UNICEF, WHO, World Bank, UN DESA Population Division. Accessed February 21, 2025.
- 64 Rates in the region’s hospitals range from 18% to 29%. California Health Care Foundation, Advancing Black Health Equity in California, Birth Equity (<https://www.chcf.org/program/healthequity/advancing-black-health-equity/birth-equity/>)
- 65 Latoya Hill, et. al. Kaiser Family Foundation, “Racial Disparities in Maternal and Infant Health: Current Status and Efforts to Address Them” (November 4, 2024).
- 66 Including 11 birthing centers throughout the city-defined Silicon Valley region, according to data compiled by The Leapfrog Group (www.hospitalsafetygrade.org) for Fall 2024 as part of The Leapfrog Hospital Safety Grade public service effort to drive “quality, safety, and transparency in the U.S. health system.”
- 67 United States Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics. Births in the United States, 2023.
- 68 United States Department of Health and Human Services, Office of Disease Prevention and Health Promotion, Healthy People 2030 (<https://health.gov/healthypeople/objectives-and-data>).
- 69 Drakulich, K., J. Robles, E. Rodriguez-Whitney, and C. Pereira. 2023. “Who Believes That the Police Use Excessive Force? Centering Racism in Research on Perceptions of the Police.” *Journal of Research in Crime and Delinquency* 60 (1): 112–164–164
- 70 Alexa Cortes Culwell and Heather McLeod Grant. “The Giving Code: Silicon Valley Nonprofits and Philanthropy.” *Open Impact*, 2016.
- 71 Jonathan Meer, David Miller, and Elisa Wulfsberg. “The Great Recession and charitable giving.” *Applied Economics Letters*, 2017.
- 72 Local donor-advised grants through the Silicon Valley Community Foundation totaled \$138.7 million in 2023 (as accessed at <https://www.siliconvalleycf.org/impact/grants-catalog> on January 27, 2025). The \$118.7 million to community-based organizations in 2023 excludes grants to Stanford University, Santa Clara College, Stanford Health Care, and various grants to community foundations.
- 73 The National Philanthropic Trust, *The 2024 DAF Report*.
- 74 The *Book of Lists* provided data for 45 corporate philanthropists in 2023 where in previous years the list consisted of the top 50 corporate philanthropists. From self-reported data cash donations.
- 75 Excludes disbursements not categorized under “discretionary” (such as those directed by staff and board members).
- 76 Includes active nonprofit organizations include those with revenues of \$100,000+ which were required to (and did) submit Form 990s within the past 36 months.
- 77 Based on the most recent IRS 990 form filed with the IRS within the past three years.

ENDNOTES

- 78 The top five include Stanford Health Care 227, Lucile Salter Packard Children's Hospital at Stanford, the Board of Trustees of the Leland Stanford Junior University, Silicon Valley Community Foundation, and K18N Foundation; the remainder of the top 20 include San Andreas Regional Center, President - Board of Trustees Santa Clara College, Electric Power Research Institute Inc, SRI International, Second Harvest Silicon Valley, Pacific Clinics, North East Medical Services, SETI Institute, Satellite Healthcare Inc, Rocketship Education, Packard Children's Health Alliance, Lucile Packard Foundation for Children's Health, Planned Parenthood Mar Monte Inc, The Harker School, and LifeMoves.
- 79 Mason, Kate E., Emma Baker, Tony Blakely, and Rebecca J. Bentley. "Housing affordability and mental health: Does the relationship differ for renters and home purchasers?" *Social Science & Medicine*. October 2013, Vol. 94, p91-97.
- 80 Pollack, Craig Evan, Beth Ann Griffin, and Julia Lynch, "Housing Affordability and Health Among Homeowners and Renters." *American Journal of Preventive Medicine* (Volume 39, Issue 6). December 2010, Pages 515-521.
- 81 California Department of Public Health, Office of Health Equity Healthy Communities Data and Indicators Project "Housing Overcrowded Narrative" (October 1, 2020).
- 82 Of projects located in the city-defined Silicon Valley region for which an application for state and/or federal tax credits was submitted to TCAC.
- 83 Back to 1998.
- 84 U.S. Department of Housing and Urban Development, Low-Income Housing Tax Credit Property Data (1987-2022). Accessed February 23, 2025.
- 85 California Tax Credit Allocation Committee (TCAC), 2023 Annual Report.
- 86 According to the U.S. Department of Housing and Urban Development, housing costs greater than 30% of gross household income pose moderate to severe financial burdens.
- 87 According to the U.S. Department of Housing and Urban Development, housing costs greater than 30% of household income pose moderate to severe financial burdens.
- 88 California Association of Realtors, 2023 *Housing Affordability by Ethnicity Report*, April 11, 2024.
- 89 National estimate includes college students living in dormitories.
- 90 2024 *Silicon Valley Poll* (www.jointventure.org/svpoll).
- 91 Continuums of Care (CoC) are local planning bodies responsible for coordinating the full range of homelessness services in a geographic area.
- 92 By the California Department of Housing & Community Development.
- 93 U.S. Department of Housing and Urban Development (HUD), 2024 Annual Homeless Assessment Report, December, 2024.
- 94 Ibid.
- 95 Including youth (under age 18) and young adults (ages 18-24) without a parent or guardian.
- 96 At least 17 years, the length of the Caltrans Freeway Performance Measurement System monthly VMT dataset.
- 97 Based on the 2024 *Silicon Valley Poll*. Joint Venture Silicon Valley (www.jointventure.org/svpoll).
- 98 Approximately \$537 billion in 2022 according to the Fossil Fuel Subsidy Tracker (Organisation for Economic Co-operation and Development & International Institute for Sustainable Development).
- 99 In December 2024, compared to February 2020.
- 100 For a two-adult household sharing one car and only driving to work and school/daycare plus one errand per week.
- 101 At the 2024 statewide minimum wage (\$16/hour), assuming year-round full-time work.
- 102 These same disparities are observed in the larger 5-year American Community Survey sample for 2019 to 2023. The United States Census Bureau, American Community Survey is administered to 3.5 million addresses across the U.S. throughout a calendar year.
- 103 Assuming bicycle commuters ride to and from work.
- 104 StreetLight Data, Inc., *Bike Boom or Bust? Metro & Statewide U.S. Bicycle Activity Trends* (<https://www.streetlightdata.com/research-reports/>).
- 105 In 2023 dollars, based on annual estimates of labor productivity (\$139 per employee per hour in 2023, \$1141 per employee per hour in 2022, \$151 in 2021, \$141 in 2020, and \$128 in 2019). Productivity losses due to time spent in traffic were estimated at as much as \$3.8 billion lost in 2019 to \$1.3 billion in 2020, \$1.5 billion in 2021, \$1.8 billion in 2022, and \$2.5 billion in 2023.
- 106 According to the 2024 *Silicon Valley Poll*. Joint Venture Silicon Valley (www.jointventure.org/svpoll).
- 107 Estimated total ridership for the 2024-25 fiscal year, in aggregate, is 4% below that of FY 2019-20.
- 108 Based on estimated FY 2024-25 ridership using data through November (Caltrain, SamTrans, and ACE), October (VTA).
- 109 Based on the estimated FY 2024-25 average weekday ridership, using data through November 2024.
- 110 California Government Code, §65852.2, subd. (a)(1)(C)
- 111 ADUs do not count toward density calculations according to state law in order to prevent violation of General Plan density limits. Note that state law with regard to ADUs changed significantly as of January 1, 2021 – mid-way through the 2020-21 fiscal year. The changes included, but were not limited to, the approval/permitting process and the rental/leasing of ADUs.
- 112 Jo, N., Vallebuena, A., Ouyang, D., & Ho, D. E. (2024). Not (Officially) in My Backyard: Characterizing Informal Accessory Dwelling Units and Informing Housing Policy With Remote Sensing. *Journal of the American Planning Association*, 91(1), 30–45.
- 113 Estimate of total commercial space delivered to the Silicon Valley market over the past decade is from the JLL inventory (see notes in Appendix A, Commercial Space Development) for Q3 2014 through Q2 2024, and includes the entire city-defined Silicon Valley region except Union City and Scotts Valley.
- 114 Studies have quantified the importance of the ecosystem services provided by the region's natural capital to the health of the economy including clean air, water quality and supply, healthy food, recreation, storm and flood protection, tourism, science and education. "Healthy Lands & Healthy Economies: Nature's Value in Santa Clara County" (Open Space Authority and Earth Economics, 2014) found that each year, Santa Clara County's natural and working lands provide a stream of ecosystem services to people and the local economy that range in value from \$1.6 billion to \$3.9 billion.
- 115 California's Fourth Climate Change Assessment, "San Francisco Bay Area Region Report" (January 2019).
- 116 CalRecycle's reporting system for waste production changed in 2020 from the Disposal Reporting System (DRS) to the Recycle and Disposal Reporting System (RDRS). Both systems receive data from permitted facility operators.
- 117 Disposal data include waste which may have been generated outside the region.
- 118 California Air Resources Board, 2022 GHG Emissions Inventory (Emissions by Scoping Plan Category).
- 119 U.S. Environmental Protection Agency, Greenhouse Gas Equivalencies Calculator (updated December 2024).
- 120 Seneviratne, S.I., X. Zhang, M. Adnan, W. Badi, C. Dereczynski, A. Di Luca, S. Ghosh, I. Iskandar, J. Kossin, S. Lewis, F. Otto, I. Pinto, M. Satoh, S.M. Vicente-Serrano, M. Wehner, and B. Zhou, "2021: Weather and Climate Extreme Events in a Changing Climate." In *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1513–1766.

ENDNOTES

- 121 Based on the preliminary emissions factor for 2023 in PG&E's Power Source Disclosure Report (filed with the CEC in 2024).
- 122 The emissions rate of carbon dioxide equivalent relative to energy use.
- 123 Given certain criteria are met. California Energy Commission, Power Source Disclosure Program, "Modification of Regulations Governing the Power Source Disclosure Program – Effective May 4, 2020."
- 124 City of Palo Alto, "Utilities At a Glance" (FY 2020).
- 125 Silicon Valley Power, 2023 Power Content Label webpage (accessed February 2025).
- 126 With electric generation services; Pacific Gas & Electric serves community choice customers with transmission and distribution services.
- 127 Google Project SunRoof, Data Explorer (2021)
- 128 Lee, I. W. & Lee, Y. (1994). City Manager Turnover Revisited: Effects of the Institutional Structure and Length of Tenure on City Manager Turnover. *Urban Affairs Review*, 57(2), 552-582–582.
- 129 Watson, D. J., & Hassett, W. L. (2003). Long-Serving City Managers: Why Do They Stay? *Public Administration Review*, 63(1), 71–78.
- 130 Mani, B. G. (2014). Determinants of a City Manager's Tenure in Office: The Person, Job, Municipality, and Election System. *SAGE Open*, 4(1).
- 131 Calderón, C., Servén, L., & World Bank. (2014). "Infrastructure, growth, and inequality: An overview." Washington, D.C.: World Bank.
- 132 In Alvaredo, F., In Chancel, L., In Piketty, T., In Saez, E., & In Zucman, G. (2018). *World inequality report 2018*.
- 133 The dataset goes back to FY 2006-07.
- 134 National estimate from Douglas J. Watson and Wendy L. Hassett, "The 20-Year Manager: Factors of Longevity" (ICMA, 2015). State estimate from the "2023 California City Manager Survey: A Profile of the Profession," (Rose Institute of State and Local Government, Claremont McKenna College for the California City Management Foundation; March 2023).
- 135 Town of Portola Valley release, "Upcoming Interim Town Manager Contract" (January 3, 2025).
- 136 Estimate for 2023. Rose Institute of State and Local Government, Claremont McKenna College for the California City Management Foundation, "2023 California City Manager Survey: A Profile of the Profession" (March 2023).
- 137 Estimate for 2020. Atcheson, J. (2022, February 1). SheLeadsGov: ICMA's Continuing Dedication to Advancing Women in the Profession. *Public Management*, 104(2), 22.
- 138 California Legislative Information, 9/28/2021.
- 139 For example, in 2015, 58% of California Senators and Assemblymembers had previously served in local government – in the Assembly alone, 67% of members were former local government officials. This means that broadly, more than half of the California State legislature is comprised of former local elected officials.
- 140 California Legislative Women's Caucus. <https://womenscaucus.legislature.ca.gov/>
- 141 Jackson, A. "Women account for 28% of lawmakers in the 119th Congress – unchanged from the last Congress" (2025). Pew Research Center.
- 142 The population share that identifies as Asian alone is 37%; 39% of the population is Asian alone or in combination with another race.
- 143 California has 58 trial or superior courts, one in each county. The number of justices and judges in each trial court is determined by the State Legislature. Superior court judges serve six-year terms and are elected by county voters on a nonpartisan ballot at a general election during even-numbered years. Vacancies occurring during those terms — due to retirements, deaths, or other departures — are filled through appointment by the Governor.

APPENDIX B - Silicon Valley

	EMPLOYMENT Q2 2024	PERCENT OF TOTAL SILICON VALLEY EMPLOYMENT	PERCENT CHANGE		
			2010- 2024	2019- 2024	2023- 2024
TOTAL EMPLOYMENT	1,717,403	100.0%	33%	1%	0%
COMMUNITY INFRASTRUCTURE & SERVICES	871,204	50.7%	33%	3%	3%
HEALTHCARE & SOCIAL SERVICES ¹	226,127	13.2%	82%	27%	5%
RETAIL	118,435	6.9%	-4%	-12%	-2%
ACCOMMODATION & FOOD SERVICES	128,803	7.5%	29%	-7%	0%
EDUCATION ¹	135,518	7.9%	41%	3%	7%
CONSTRUCTION	78,397	4.6%	59%	-5%	-2%
LOCAL GOVERNMENT ADMINISTRATION ²	50,930	3.0%	16%	8%	6%
TRANSPORTATION	36,968	2.2%	15%	-6%	6%
BANKING & FINANCIAL SERVICES	20,347	1.2%	22%	2%	-1%
ARTS, ENTERTAINMENT & RECREATION	22,703	1.3%	26%	14%	10%
PERSONAL SERVICES	14,195	0.8%	14%	-20%	3%
FEDERAL GOVT. ADMINISTRATION	9,500	0.6%	-42%	-12%	-5%
NONPROFITS	9,434	0.5%	-6%	-6%	3%
INSURANCE SERVICES	9,476	0.6%	23%	9%	2%
STATE GOVERNMENT ADMINISTRATION ²	2,990	0.2%	14%	7%	2%
WAREHOUSING & STORAGE	5,198	0.3%	125%	84%	32%
UTILITIES ¹	2,183	0.1%	-20%	9%	-1%
INNOVATION AND INFORMATION PRODUCTS & SERVICES	488,363	28.4%	57%	8%	1%
COMPUTER HARDWARE DESIGN & MANUFACTURING	189,549	11.0%	72%	4%	1%
SEMICONDUCTORS & RELATED EQUIPMENT MANUFACTURING	44,324	2.6%	-7%	3%	3%
INTERNET & INFORMATION SERVICES	87,223	5.1%	252%	11%	0%
TECHNICAL RESEARCH & DEVELOPMENT (INCLUDES LIFE SCIENCES)	51,964	3.0%	57%	31%	1%
SOFTWARE	33,459	1.9%	53%	3%	-4%
TELECOMMUNICATIONS MANUFACTURING & SERVICES	12,228	0.7%	-37%	-20%	-4%
INSTRUMENT MANUFACTURING (NAVIGATION, MEASURING & ELECTROMEDICAL)	23,498	1.4%	26%	37%	0%
PHARMACEUTICALS (LIFE SCIENCES)	16,555	1.0%	30%	13%	20%
OTHER MEDIA & BROADCASTING, INCLUDING PUBLISHING	5,523	0.3%	-37%	-30%	-1%
MEDICAL DEVICES (LIFE SCIENCES)	8,019	0.5%	27%	15%	-6%
BIOTECHNOLOGY (LIFE SCIENCES)	15,519	0.9%	157%	32%	2%
I.T. REPAIR SERVICES	501	0.0%	-81%	-63%	-3%
BUSINESS INFRASTRUCTURE & SERVICES	260,924	15.2%	19%	-4%	-4%
WHOLESALE TRADE	57,378	3.3%	0%	-4%	-1%
PERSONNEL & ACCOUNTING SERVICES	36,955	2.2%	8%	6%	-12%
ADMINISTRATIVE SERVICES	30,495	1.8%	52%	-6%	0%
FACILITIES	24,917	1.5%	6%	-14%	-14%
TECHNICAL & MANAGEMENT CONSULTING SERVICES	21,791	1.3%	9%	-10%	-5%
MANAGEMENT OFFICES	19,864	1.2%	26%	-30%	-4%
DESIGN, ARCHITECTURE & ENGINEERING SERVICES	22,587	1.3%	36%	5%	-4%
GOODS MOVEMENT	15,907	0.9%	60%	17%	-3%
LEGAL	10,240	0.6%	5%	-9%	-8%
INVESTMENT & EMPLOYER INSURANCE SERVICES	18,237	1.1%	94%	25%	10%
MARKETING, ADVERTISING & PUBLIC RELATIONS	2,553	0.1%	2%	-23%	-5%
OTHER MANUFACTURING	57,464	3.3%	-1%	-5%	-4%
PRIMARY & FABRICATED METAL MANUFACTURING	12,516	0.7%	-14%	-17%	-10%
MACHINERY & RELATED EQUIPMENT MANUFACTURING	12,633	0.7%	15%	-6%	-4%
OTHER MANUFACTURING	12,251	0.7%	39%	14%	-6%
TRANSPORTATION MANUFACTURING INCLUDING AEROSPACE & DEFENSE	9,002	0.5%	-22%	-2%	5%
FOOD & BEVERAGE MANUFACTURING	7,387	0.4%	-13%	-12%	0%
TEXTILES, APPAREL, WOOD & FURNITURE MANUFACTURING	3,449	0.2%	19%	0%	-1%
PETROLEUM AND CHEMICAL MANUFACTURING (NOT IN LIFE SCIENCES)	225	0.0%	-76%	-37%	43%
OTHER	39,448	2.3%	-19%	-46%	-31%

Data Sources: U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages; JobsEQ | Analysis: BW Research

1. Includes government jobs (state and local).

2. Excludes government jobs in Healthcare & Social Services, Education, and Utilities.

APPENDIX B - San Francisco

	EMPLOYMENT Q2 2024	PERCENT OF TOTAL SAN FRANCISCO EMPLOYMENT	PERCENT CHANGE		
			2010- 2024	2019- 2024	2023- 2024
TOTAL EMPLOYMENT	704,397	100.0%	29%	-7%	-3%
COMMUNITY INFRASTRUCTURE & SERVICES	409,497	58.1%	27%	-5%	-1%
HEALTHCARE & SOCIAL SERVICES ¹	109,342	15.5%	125%	19%	3%
RETAIL	32,681	4.6%	-15%	-28%	-6%
ACCOMMODATION & FOOD SERVICES	67,477	9.6%	3%	-22%	-1%
EDUCATION ¹	44,406	6.3%	-1%	-11%	1%
CONSTRUCTION	22,037	3.1%	64%	3%	-5%
LOCAL GOVERNMENT ADMINISTRATION ²	29,617	4.2%	22%	4%	3%
TRANSPORTATION	19,283	2.7%	140%	8%	-5%
BANKING & FINANCIAL SERVICES	12,825	1.8%	-15%	-30%	-15%
ARTS, ENTERTAINMENT & RECREATION	17,177	2.4%	26%	2%	3%
PERSONAL SERVICES	8,382	1.2%	27%	-18%	-3%
FEDERAL GOVT. ADMINISTRATION	8,503	1.2%	-21%	-11%	1%
NONPROFITS	13,976	2.0%	30%	0%	2%
INSURANCE SERVICES	7,299	1.0%	-28%	-18%	-10%
STATE GOVERNMENT ADMINISTRATION ²	9,420	1.3%	18%	23%	2%
WAREHOUSING & STORAGE	463	0.1%	53%	141%	-26%
UTILITIES ¹	6,609	0.9%	49%	43%	-1%
INNOVATION AND INFORMATION PRODUCTS & SERVICES	113,039	16.0%	188%	3%	-6%
COMPUTER HARDWARE DESIGN & MANUFACTURING	59,747	8.5%	259%	5%	-9%
SEMICONDUCTORS & RELATED EQUIPMENT MANUFACTURING	85	0.0%	9%	38%	-33%
INTERNET & INFORMATION SERVICES	29,343	4.2%	646%	-2%	0%
TECHNICAL RESEARCH & DEVELOPMENT (INCLUDES LIFE SCIENCES)	2,942	0.4%	172%	9%	-16%
SOFTWARE	7,120	1.0%	220%	47%	1%
TELECOMMUNICATIONS MANUFACTURING & SERVICES	2,036	0.3%	-48%	-35%	-10%
INSTRUMENT MANUFACTURING (NAVIGATION, MEASURING & ELECTROMEDICAL)	2,433	0.3%	3899%	27%	-16%
PHARMACEUTICALS (LIFE SCIENCES)	177	0.0%	-22%	-59%	-30%
OTHER MEDIA & BROADCASTING, INCLUDING PUBLISHING	7,020	1.0%	-23%	-9%	-2%
MEDICAL DEVICES (LIFE SCIENCES)	198	0.0%	79%	33%	-19%
BIOTECHNOLOGY (LIFE SCIENCES)	1,892	0.3%	10%	5%	1%
I.T. REPAIR SERVICES	48	0.0%	-50%	-64%	-13%
BUSINESS INFRASTRUCTURE & SERVICES	157,116	22.3%	25%	-11%	-4%
WHOLESALE TRADE	10,842	1.5%	14%	-31%	-8%
PERSONNEL & ACCOUNTING SERVICES	17,943	2.5%	14%	-11%	1%
ADMINISTRATIVE SERVICES	15,200	2.2%	24%	-3%	-10%
FACILITIES	13,300	1.9%	17%	-19%	-9%
TECHNICAL & MANAGEMENT CONSULTING SERVICES	21,913	3.1%	81%	-5%	-5%
MANAGEMENT OFFICES	14,613	2.1%	0%	-38%	-10%
DESIGN, ARCHITECTURE & ENGINEERING SERVICES	14,942	2.1%	44%	1%	0%
GOODS MOVEMENT	7,646	1.1%	99%	13%	38%
LEGAL	14,464	2.1%	7%	2%	0%
INVESTMENT & EMPLOYER INSURANCE SERVICES	19,282	2.7%	22%	20%	-2%
MARKETING, ADVERTISING & PUBLIC RELATIONS	6,971	1.0%	4%	-27%	-14%
OTHER MANUFACTURING	5,764	0.8%	-8%	-17%	-19%
PRIMARY & FABRICATED METAL MANUFACTURING	320	0.0%	-46%	-42%	-26%
MACHINERY & RELATED EQUIPMENT MANUFACTURING	274	0.0%	399%	11%	26%
OTHER MANUFACTURING	1,052	0.1%	49%	9%	-20%
TRANSPORTATION MANUFACTURING INCLUDING AEROSPACE & DEFENSE	727	0.1%	25%	103%	-29%
FOOD & BEVERAGE MANUFACTURING	2,328	0.3%	27%	-27%	-8%
TEXTILES, APPAREL, WOOD & FURNITURE MANUFACTURING	1,005	0.1%	-58%	-39%	-33%
PETROLEUM AND CHEMICAL MANUFACTURING (NOT IN LIFE SCIENCES)	58	0.0%	-25%	243%	1%
OTHER	18,980	2.7%	-63%	-49%	-17%

ACKNOWLEDGMENTS

This report was prepared by Rachel Massaro (Vice President & Director of Research), Daniel Wessler (Senior Researcher), and Heidi Young (Senior Researcher) at Joint Venture Silicon Valley and the Silicon Valley Institute for Regional Studies.

Contributing authors and researchers include Institute Affiliated Researchers Kelly Costa, Isabelle Foster, Jon Haveman, Trenton Marlar, Derek Ouyang, Drew Starbird, Ryan Young, and Steven Ross. Stephen Levy of the Center for Continuing Study of the California Economy provided ongoing support and served as senior economic advisor.

Jill Jennings created the report's layout and design; Heidi Rodeback served as copy editor.

We gratefully acknowledge the following individuals and organizations that contributed data, time, and expertise:

Altamont Corridor Express (ACE)	Palo Alto Municipal Utilities
Association of Bay Area Governments (ABAG)	Peninsula Clean Energy
Atlas Hospitality Group	Peninsula Family Service/Fair Oaks Adult Activity Center
Bay Area Water Supply & Conservation Agency	Peninsula Volunteers
BW Research	Pew Research Center
California Department of Education	Polygon.io
California Department of Public Health	Renaissance Capital
California Department of Social Services	SamTrans
California Employment Development Department (EDD)	San José Clean Energy
California Energy Commission	San Mateo County Health Department
California Health Interview Survey (CHIS)	Santa Clara County Food Recovery Program
CBRE Research	Santa Clara Valley Transportation Authority
CB Insights	Santa Clara Valley Water District
Center for Inclusive Democracy, USC Sol Price School of Public Policy	Scotts Valley Water District
Center for Women's Welfare, University of Washington	Second Harvest of Silicon Valley
County of San Mateo, Office of Sustainability	Self-Help for the Elderly
City/County Association of Governments (C/CAG) of San Mateo County	Senior Coastsiders
Cities and Counties of Silicon Valley	Silicon Valley Clean Cities
Claritas	Silicon Valley Clean Energy
Colliers International Silicon Valley	Silicon Valley Community Foundation
County of Santa Clara, Social Services Agency	Silicon Valley Council of Nonprofits
Embold Research, a division of Change Research Inc.	Silicon Valley Food Recovery
JLL	Silicon Valley Power
Jon Haveman, Marin Economic Consulting	Sourcewise Community Resource Solutions
Jordan Raney	SVCcreates
Judicial Council of California	The Climate Center
Kyle Neering	The Health Trust
Lukas Lopez-Jensen	The Mercury News & Bay Area News Group
Meals on Wheels San Francisco	Thrive Alliance
Metropolitan Transportation Commission	unBox
	United States Patent and Trademark Office
	Vir Bhutani

Generous funding for this report was provided by:

City/County Association of Governments (C/CAG) of San Mateo County

The David & Lucile Packard Foundation

The Gordon & Betty Moore Foundation

Silicon Valley Community Foundation


Wilson Sonsini Goodrich & Rosati Foundation

Joint Venture Silicon Valley

Established in 1993, Joint Venture Silicon Valley is a joint undertaking by the region's leaders across every major sector (business, government, labor, academia, philanthropy, and community-based non-profits). The organization provides data, research and analysis through the Institute for Regional Studies; it also convenes stakeholders and decision makers to take up the findings of the research, develop shared priorities, and take collaborative action. For more information, visit www.jointventure.org.



P.O. Box 720010
San Jose, California 95172
(408) 577-2255
institute@jointventure.org
www.jointventure.org

 Joint Venture Silicon Valley, 2025

This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0).
To view this license, visit <https://creativecommons.org/licenses/by/4.0/>

Copyright © 2025 Joint Venture Silicon Valley, Inc. All rights reserved.