

Palmdale, California

Indicators Report

by

The National Economic Education Delegation (NEED)

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Exploring the economics, demographics, and well-being of Palmdale and its residents through indicators.

This report was produced by the:

National Economic Education Delegation
271 Arias St.
San Rafael, CA 94903
415-336-5705
www.NEEDEcon.org
Contact: Jon@NEEDEcon.org

Executive Summary

Assessing the City with Indicators

About this Report

This report provides background or summary information for the city of Palmdale (the City) in the form of indicators.

Using this Report

Indicators are measures of various aspects of a regional economy. They help to provide an indication of the quality of life in a region and progress toward improving conditions in the local economy. This report focuses on indicators

for changing demographics, incomes, housing markets, commute patterns, and employment in Palmdale. These indicators are compared to Los Angeles County (the County) as a whole, a broader region where one is well defined, California, and the United States.

This report is vital for understanding trends in the underlying economy. It does not provide forecasts, but Rob Eyler and Jon Haveman at Economic Forensics and Analytics are available to provide them if that is of interest.

Topics Covered:

- **Demographics:** A detailed snapshot of Palmdale demographics is presented. This provides evidence on the size, age and sex, income and poverty status, race and ethnicity, housing status, living arrangements, education, health, and transportation choices of the population. Beyond the current population level, data on trends in local population growth, in comparison with other broader regions is presented, in both tabular and graphical form.
- **Employment Report:** Here, we provide a brief snapshot of employment and unemployment in Palmdale and how the City's experience differs from broader regions.
- **Income and Earnings:** Vital to understanding the prosperity of a city relative to its surrounding area is information on income and earnings. We provide a ranking of the City's income relative to all cities in California as well as growth relative to local regions. Inequality and poverty status are also important indicators for the level of equity in the community. We provide evidence of trends in both, not only for all residents, but also for children separately.
- **Housing:** This section provides evidence on the cost and availability of housing. Both median home values and rental costs are included, along with detailed information on home ownership, by age and income, in particular. Further, evidence is provided on the housing burden in the City, again, in comparison with other broader regions. We also provide evidence on the rate at which new buildings and units are permitted along with a broader housing picture. Finally, we provide evidence on the age of the housing stock in Palmdale, along with information on how long the City's residents have been in place.
- **Transportation:** Increasingly important, in the wake of the pandemic, is an understanding of the transportation patterns and choices of local residents. We provide detailed evidence on the proportion of residents who work from home and on the various transportation choices of those who head to the office. This information is also provided for those who work in Palmdale, but do not necessarily live in Palmdale.
- **Migration:** Population changes comes primarily through organic causes: births and deaths. Migration between regions also plays a significant role in population growth. A final section of the report provides evidence on migration into and out of the City.

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Demographics

Definition:

Data on the demographics of a city indicate the nature of the population, with a focus on age, gender, race and ethnicity, as well as household composition.

Why is it important?

The characteristics and growth of Palmdale's population are fundamental indicators of the city's growth potential.

A Demographic Snapshot

Statistic	2022	2019
POPULATION		
Population Estimate (#)	163,455.0	155,065.0
Veterans (#)	3,606.0	4,534.0
Foreign born persons (% , 5yr)	25.3	24.7
Population age 25+ (#)	103,762.0	92,436.0
AGE AND SEX		
Persons under 5 years (%)	6.4	7.1
Persons under 18 years (%)	26.5	29.1
Persons 65 years and over (%)	10.2	9.6
Female persons (%)	50.6	50.9
INCOME AND POVERTY		
Median household income (\$)	90,330.0	71,774.0
Per capita income in past 12 months (\$)	31,026.0	22,962.0
Persons in poverty (%)	12.0	13.5
Children age less than 18 in poverty (#)	6,833.0	8,564.0
Children age less than 18 in poverty (%)	16.0	19.3
RACE AND ETHNICITY		
White alone (%)	18.4	59.8
African American alone (%)	14.0	15.9
American Indian or Alaska Native alone (% , 5yr)	1.6	1.6
Asian alone (% , 5yr)	4.7	4.7
Native Hawaiian and Other Pacific Islander alone (% , 5yr)	0.2	0.4
Two or More Races (%)	25.4	
Hispanic or Latino (%)	64.9	60.4
White alone, not Hispanic or Latino (%)	12.9	18.2
HOUSING		
Housing units (#)	47,677.0	43,382.0
Owner-occupied housing units (%)	71.0	66.3
Median value of owner-occupied housing units (\$)	489,200.0	325,000.0
Median selected monthly owner costs-with a mortgage (\$)	2,229.0	1,825.0
Median selected monthly owner costs-without a mortgage (\$)	675.0	496.0
Median gross rent (\$)	1,711.0	1,411.0
FAMILIES AND LIVING ARRANGEMENTS		
Households (#)	45,574.0	41,538.0
Persons per household (#)	3.6	3.7
Living in same house 1 year ago, % of persons age 1+	90.6	91.3
EDUCATION		
High school graduate or higher, % of persons age 25+	77.0	75.8
Bachelor's degree or higher, % of persons age 25+	18.3	16.5
HEALTH		
With a disability, under age 65 years (#)	11,319.0	14,421.0
Persons without health insurance, under age 65 years (%)	7.1	6.8
LABOR FORCE		
In civilian labor force, persons age 16+ (%)	63.0	61.6
In civilian labor force, women age 16+ (%)	53.4	53.4
Employed, persons age 16+ (%)	56.8	55.6
Self employed (%)	10.4	7.4
TRANSPORTATION		
Mean travel time to work, workers age 16+ (Mins.)	40.2	42.9
Drive alone in private vehicle (%)	66.4	81.1
Using public transportation (%)	1.2	3.2
Worked from home (%)	10.3	2.9

Source: American Community Survey, Summary Files

Note: Data are from the 1-year files unless indicated by the notation 5yr.

Current Population

The data in these two tables and the following two graphs are from the CA Department of Finance (DOF). The DOF produces population estimates for geographies around California twice a year: January and July. As estimates for cities are only available in January, these two tables are based on the January data. The remaining figures are from the American Community Survey (ACS), provided annually by the U.S. Bureau of the Census.

Table 1. Population Change by Region
(Thousands, January to January)

Region	2023 Population	% Change		
		1 Year	3 Year	5 Year
City				
Palmdale	165,917	-0.66	5.74	5.16
County and Broader Regions				
Los Angeles County	9,761,210	-0.75	-3.69	-4.81
Southern California	21,794,548	-0.41	-2.24	-2.84
California	38,940,231	-0.35	-1.79	-2.01

Source: CA DOF; Calculations by National Economic Education Delegation

Figure 1: Population Growth (1)

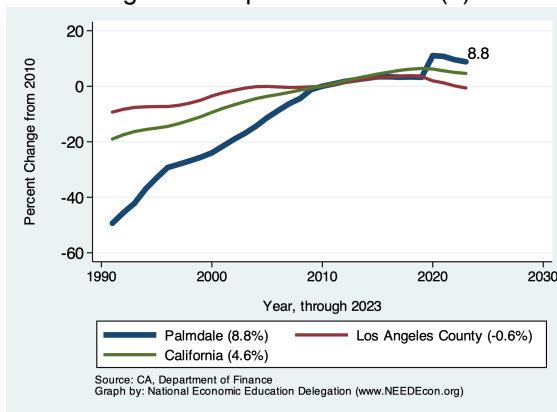


Figure 2: Population Growth (2)

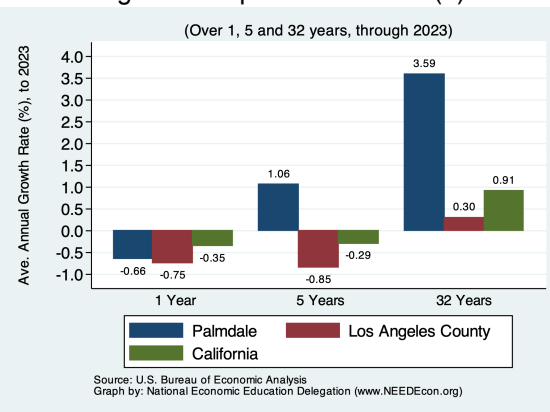


Figure 3: Population by Age - Detailed Age Categories

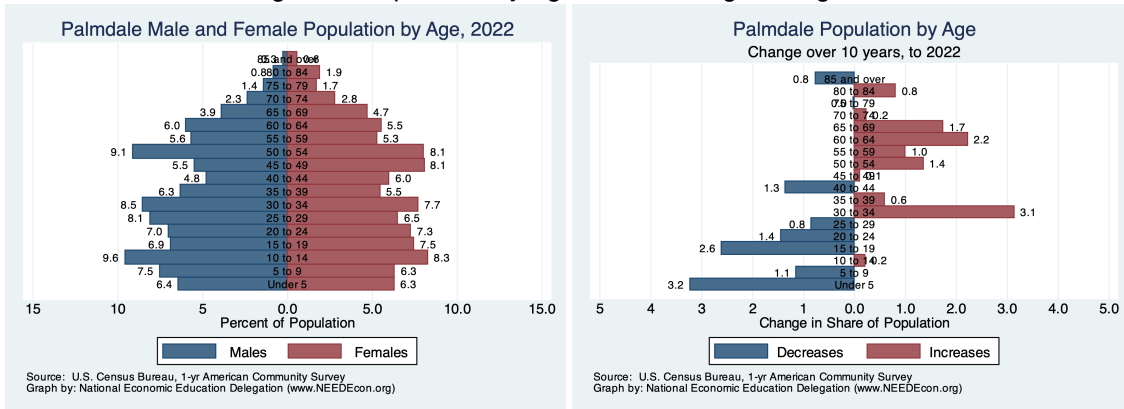


Figure 4: Population by Age - Broad Age Categories

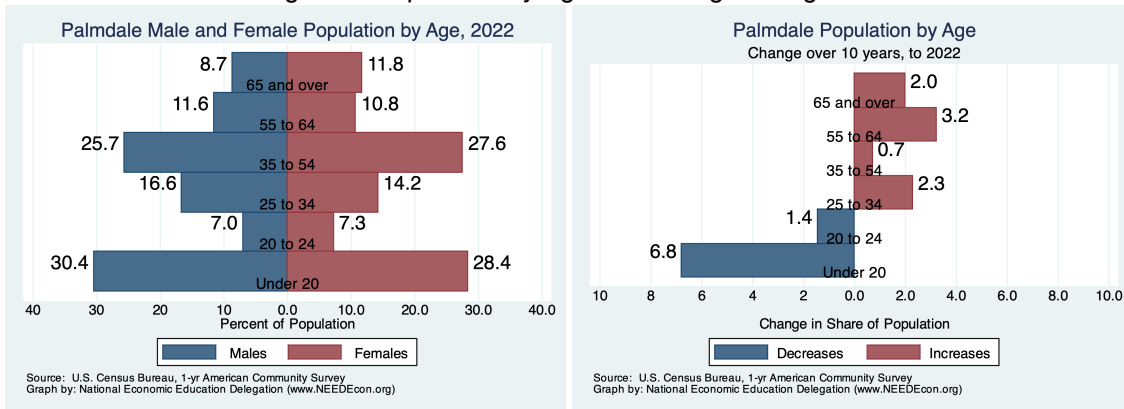


Figure 5: Population by Educational Attainment

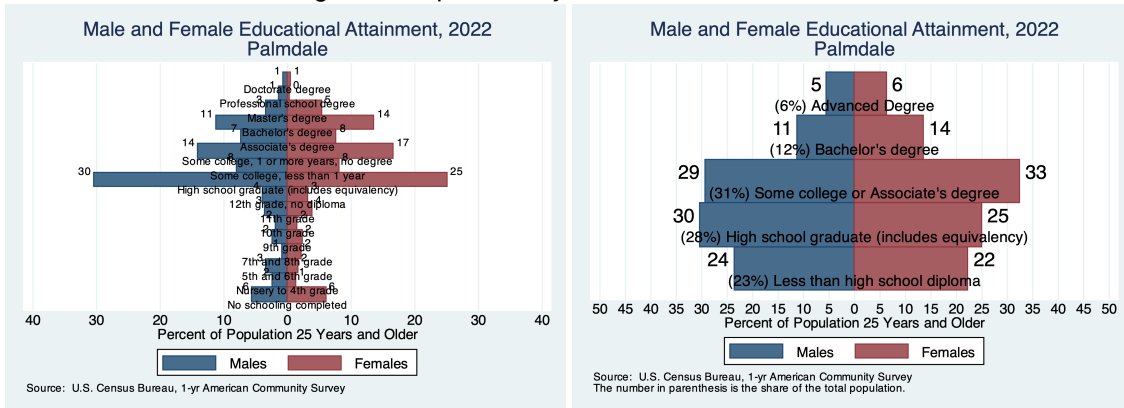


Table 2. County Population Change by City
(Thousands, January to January)

City	2022	2023	% Change		
			Local	Southern California	California
Los Angeles County	9,834.5	9,761.2	-0.75	-0.41	-0.35
Los Angeles	3,802.7	3,766.1	-0.96		
Long Beach	460.2	458.2	-0.44		
Santa Clarita	229.0	230.7	0.71		
Glendale	192.9	191.3	-0.82		
Lancaster	174.6	173.4	-0.70		
Palmdale	167.0	165.9	-0.66		
Pomona	149.9	149.7	-0.12		
Torrance	144.3	143.1	-0.88		
Pasadena	137.8	137.0	-0.60		
Downey	112.1	111.3	-0.73		
West Covina	107.6	107.9	0.23		
El Monte	107.3	106.4	-0.84		
Inglewood	106.9	106.2	-0.64		
Burbank	105.0	104.5	-0.42		
Norwalk	101.8	101.2	-0.65		
Compton	94.3	93.7	-0.61		
South Gate	93.4	92.6	-0.78		
Carson	92.7	92.2	-0.60		
Santa Monica	91.7	91.7	-0.02		
Whittier	87.7	87.3	-0.47		
Hawthorne	86.5	85.7	-0.96		
Alhambra	81.6	81.3	-0.37		
Lakewood	80.9	80.2	-0.92		
Bellflower	77.6	76.9	-0.92		
Baldwin Park	70.8	70.4	-0.63		
Redondo Beach	69.1	68.4	-0.97		
Lynwood	66.6	66.2	-0.55		
Montebello	61.8	61.6	-0.26		
Pico Rivera	61.4	61.0	-0.77		
Gardena	60.1	59.8	-0.47		
Monterey Park	59.8	59.3	-0.90		
Arcadia	55.9	55.5	-0.74		
Diamond Bar	53.9	53.4	-1.03		
Huntington Park	53.8	53.3	-0.93		
Paramount	52.6	52.2	-0.72		
Glendora	51.6	51.2	-0.80		
Covina	50.7	50.4	-0.67		
Rosemead	50.1	50.0	-0.17		
Azusa	49.5	49.5	0.06		
La Mirada	48.4	47.9	-1.00		
Cerritos	48.4	47.9	-1.06		
Rancho Palos Verdes	41.5	41.0	-1.02		
Culver City	40.0	39.7	-0.73		
San Gabriel	38.7	38.5	-0.58		
Bell Gardens	38.8	38.4	-0.84		
Monrovia	37.8	37.5	-0.62		
La Puente	37.6	37.4	-0.63		
Claremont	37.0	36.8	-0.74		
Temple City	36.0	35.8	-0.55		
West Hollywood	34.9	34.8	-0.39		
Manhattan Beach	34.7	34.3	-1.24		
San Dimas	34.4	34.1	-0.95		
Bell	33.6	33.4	-0.72		
La Verne	32.3	32.1	-0.89		
Beverly Hills	31.9	31.7	-0.90		
Lawndale	31.2	30.9	-0.93		
Walnut	27.7	27.6	-0.61		
South Pasadena	26.4	26.3	-0.59		
Maywood	24.8	24.5	-0.94		
San Fernando	23.5	23.5	-0.20		
Calabasas	23.0	22.8	-0.99		
Duarte	21.4	22.8	6.60		
Cudahy	22.4	22.3	-0.52		
Lomita	20.3	20.1	-1.02		
La Canada Flintridge	20.1	19.9	-0.65		
Agoura Hills	19.8	19.8	-0.03		
South El Monte	19.6	19.5	-0.85		
Hermosa Beach	19.2	19.0	-0.98		
Santa Fe Springs	18.7	18.6	-0.88		
El Segundo	17.0	16.9	-0.67		
Artesia	16.2	16.1	-0.81		
Hawaiian Gardens	13.7	13.5	-0.94		
San Juan Capistrano	11.1	11.0	-0.90		
San Marino	12.3	12.2	-0.62		
Commerce	12.2	12.0	-1.64		
Signal Hill	11.5	11.4	-0.84		
Sierra Madre	10.9	10.8	-0.81		
Malibu	10.5	10.5	-0.21		
Rolling Hills Estates	8.5	8.4	-0.40		
Westlake Village	8.0	7.9	-1.25		

Figure 6: Population by Race/Ethnicity

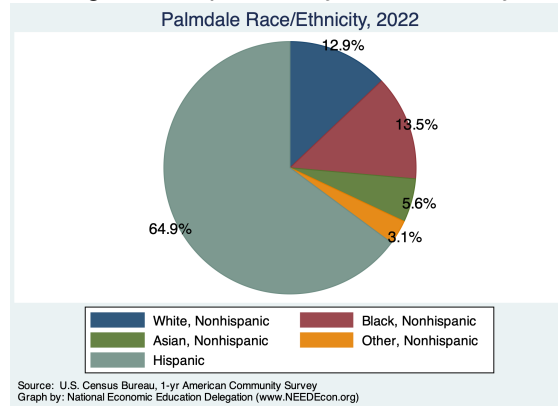
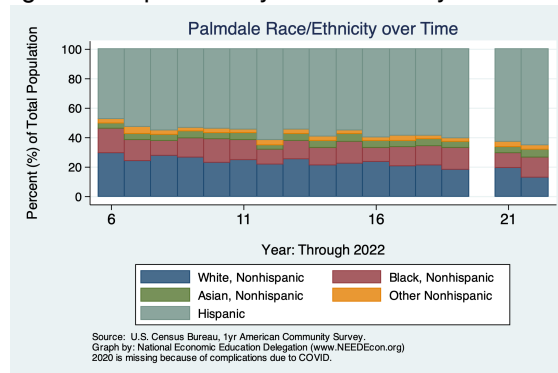


Figure 7: Population by Race/Ethnicity Over Time



Employment Report

Citywide Employment and Unemployment

Definition:

Each month, California's Employment Development Division (EDD) publishes an update on employment in California and in MSAs, counties, and cities all across the state. The report focuses primarily on non-farm employment, providing estimates of changes in em-

ployment by industry as well as unemployment in each region. Data for cities is limited to aggregate employment, labor force, and unemployment data. Those are reported below.

Why is it important?

Employment growth is a fundamental indicator of the health of an economy.

Table 3. Palmdale Summary for March, 2024

Category	Current Value	Change From:		
		Last Month	2 Months Ago	Last Year
Employment	8,924	-30	-53	-103
Labor Force	9,644	9	15	96
Number Unemployed	678	-4	21	97
Unemployment Rate	7.0	-0.0	0.2	0.9

Source: EDD, National Economic Education Delegation

Figure 8: Historical Employment and Unemployment - Last 12 Months

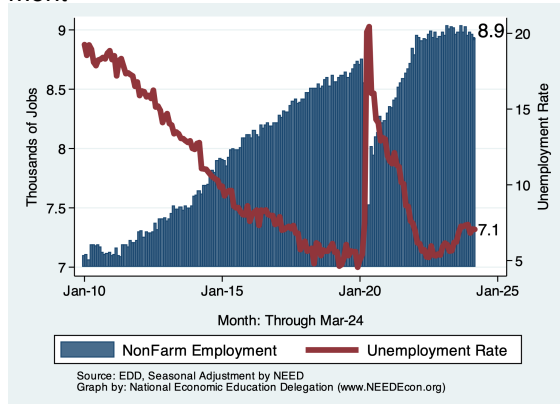


Figure 9: Employment and Unemployment - Last 12 Months

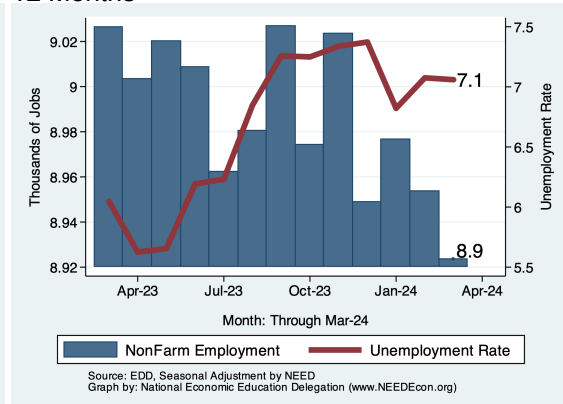


Figure 10: Relative Employment Growth Across Regions - since 2010

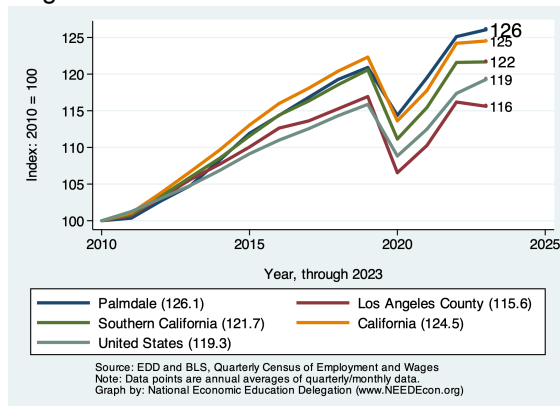
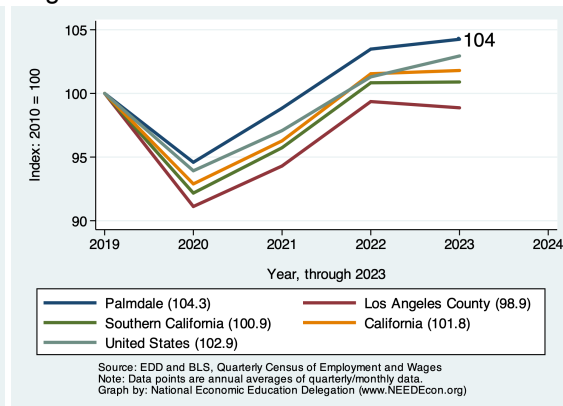


Figure 11: Relative Employment Growth Across Regions - since 2019



County Employment by Industry

California's Employment Development Division (EDD) does not regularly produce data on employment by industry for cities. However, we are able to report industry-level employment data for Los Angeles County. The following table provides the latest data for the County.

Table 4. Employment Growth by Industry in Los Angeles County for March, 2024

Industry	Employment	Share	Empl Growth	% Growth - Annualized Rate					
				Month	Qtr	6mo	1yr	3yr	5yr
Total Nonfarm	4,571,176	100.0	10,019.7	2.7	1.9	1.8	0.4	3.0	0.0
Total Private	3,980,116	87.1	10,298.0	3.2	1.8	1.7	0.2	3.1	0.1
Goods Producing	467,870	10.2	18.0	0.0	-2.8	-1.2	-0.8	0.4	-1.0
Mining, Logging and Construction	151,916	3.3	532.2	4.3	-5.0	-0.7	0.2	-0.0	0.2
Mining and Logging	1,600	0.0	0.0	0.0	0.0	0.0	-5.9	0.0	-3.2
Construction	149,974	3.3	383.7	3.1	-5.7	-1.3	0.3	0.0	0.3
Manufacturing	316,063	6.9	-223.5	-0.8	-2.1	-1.5	-1.4	0.5	-1.5
Durable Goods	190,266	4.2	126.6	0.8	-1.4	-0.8	-0.7	0.7	-1.1
Non-Durable Goods	125,955	2.8	-296.8	-2.8	-3.0	-2.5	-2.4	0.3	-2.2
Service Providing	4,101,400	89.7	9,377.4	2.8	2.1	2.0	0.6	3.4	0.2
Trade, Trans & Utilities	824,556	18.0	-680.6	-1.0	-1.1	-0.2	-0.3	0.7	-0.6
Wholesale Trade	198,134	4.3	-19.8	-0.1	-2.1	-1.6	-1.5	-0.4	-2.2
Retail Trade	406,837	8.9	88.1	0.3	-0.7	0.0	-0.2	1.3	-0.4
Trans & Warehousing	207,446	4.5	-739.7	-4.2	-0.3	0.8	0.6	0.5	0.9
Utilities	12,541	0.3	-4.9	-0.5	0.8	2.7	3.3	2.6	1.0
Information	178,723	3.9	2,431.1	17.9	3.5	0.4	-14.8	-2.7	-3.6
Financial Activities	210,643	4.6	-319.1	-1.8	4.2	0.5	-1.0	-0.2	-1.2
Finance & Insurance	122,234	2.7	82.9	0.8	1.2	-0.6	-1.2	-1.9	-2.0
Real Estate & Rental & Leasing	88,325	1.9	-180.4	-2.4	3.9	1.9	-0.8	2.5	-0.1
Professional & Business Svcs	646,393	14.1	1,136.2	2.1	2.2	-0.4	-1.9	1.5	-0.1
Prof, Sci, & Tech	312,951	6.8	-1,162.7	-4.4	-0.3	-1.1	-1.1	2.1	0.9
Admin & Support Svcs	258,283	5.7	2,442.0	12.1	8.3	0.7	-3.2	1.2	-1.0
Employment Svcs	96,576	2.1	1,117.0	15.0	12.8	-0.7	-8.1	-0.7	-2.2
Educational & Health Svcs	948,482	20.7	6,221.2	8.2	5.9	5.5	5.3	4.6	2.8
Education Svcs	147,023	3.2	1,208.1	10.4	9.5	8.0	7.8	7.3	2.1
Health Care & Social Assistance	801,869	17.5	5,246.7	8.2	5.6	5.2	4.9	4.1	2.9
Leisure & Hospitality	539,744	11.8	-335.7	-0.7	1.3	1.4	1.3	13.8	-0.1
Arts, Entertainment & Recreation	93,094	2.0	-469.8	-5.9	-6.6	-7.9	-3.9	19.4	-0.5
Accommodation & Food Svcs	444,463	9.7	-845.1	-2.3	-0.3	2.1	2.4	13.0	-0.1
Other Svcs	160,653	3.5	-27.8	-0.2	0.8	3.0	2.9	9.1	0.4
Government	590,364	12.9	72.7	0.1	3.1	2.0	1.9	2.4	-0.1
Federal	48,700	1.1	0.0	0.0	0.8	2.9	2.3	0.7	0.8
State	97,915	2.1	-158.6	-1.9	0.1	0.1	-0.1	3.5	1.1
Local	443,641	9.7	146.6	0.4	3.1	2.8	2.3	2.3	-0.4
County	103,766	2.3	109.3	1.3	1.0	-0.5	0.0	-1.0	-0.7
City	92,291	2.0	55.4	0.7	0.6	1.5	2.4	1.9	-0.4
Local Government Education	225,880	4.9	-153.1	-0.8	4.4	4.2	3.6	4.2	-0.4

Source: EDD, National Economic Education Delegation (NEED)

Some Employee Detail

Employed in Palmdale

Figure 12: Employment by Occupation

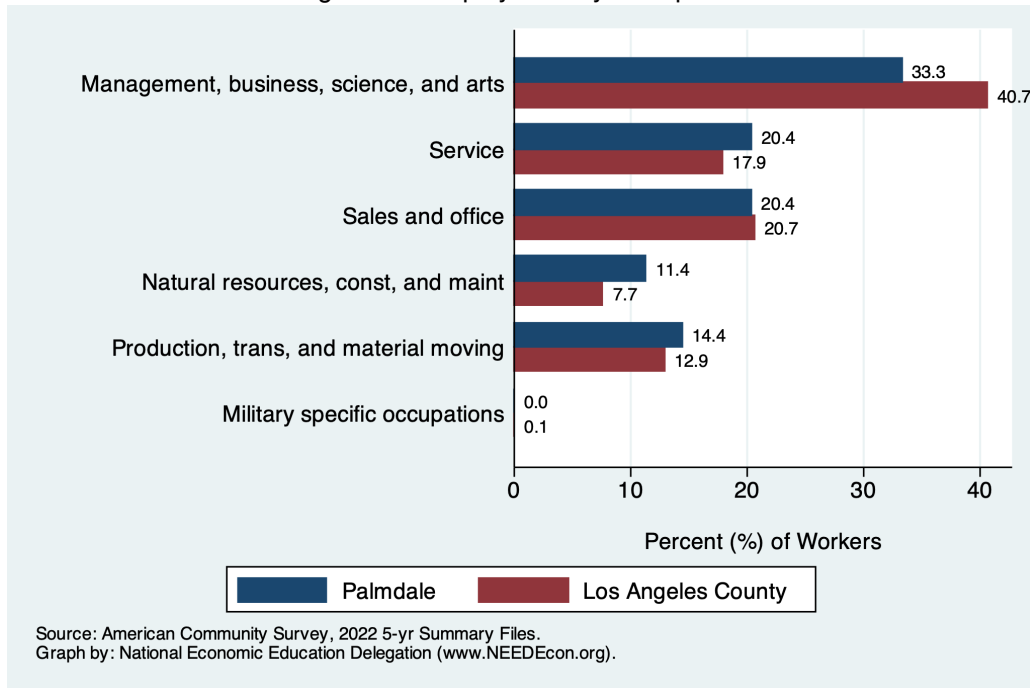


Figure 13: Employment by Industry

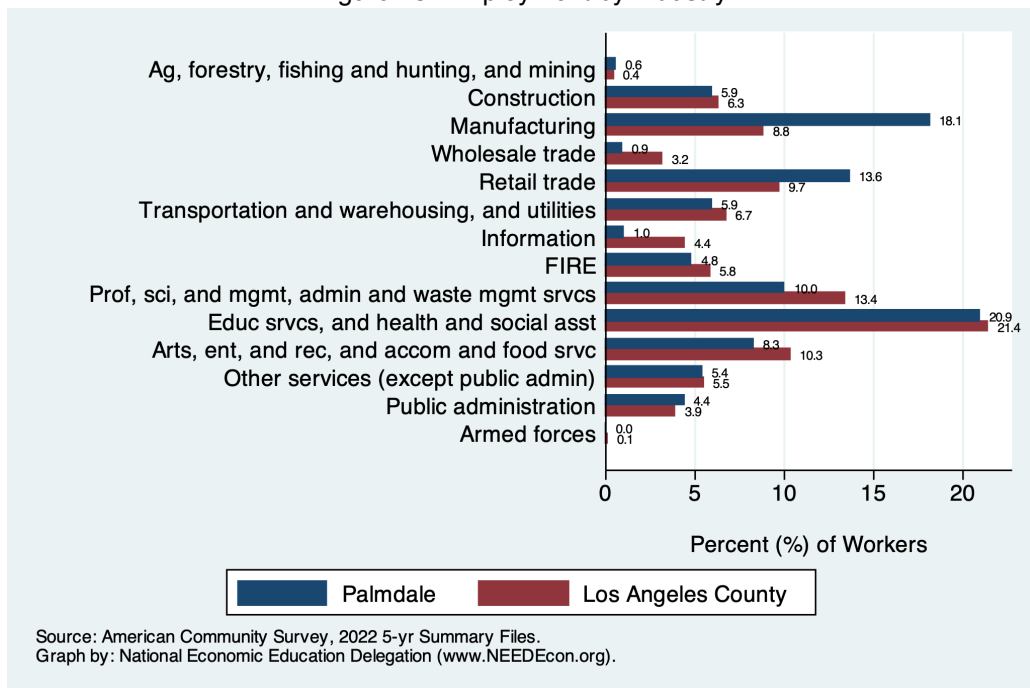
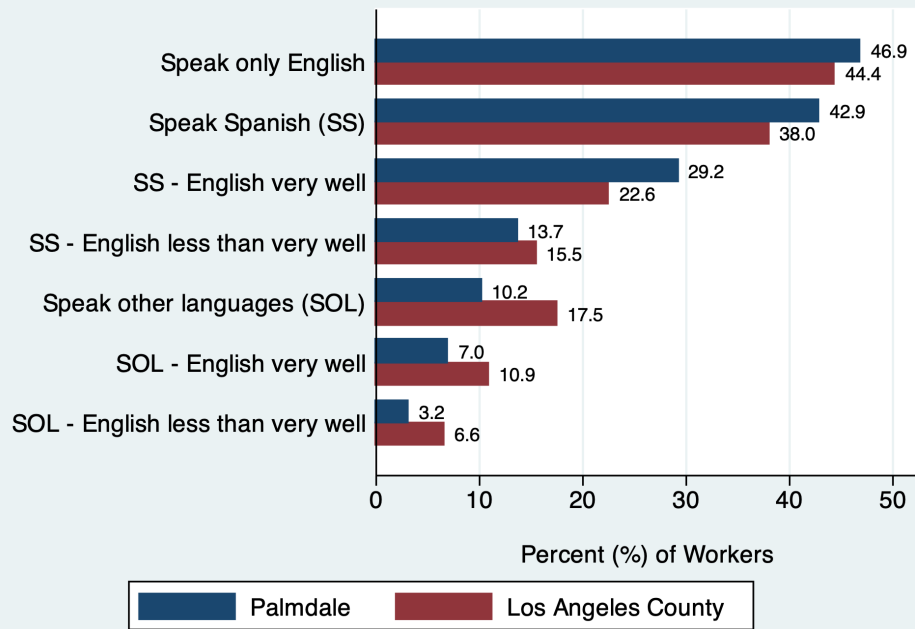
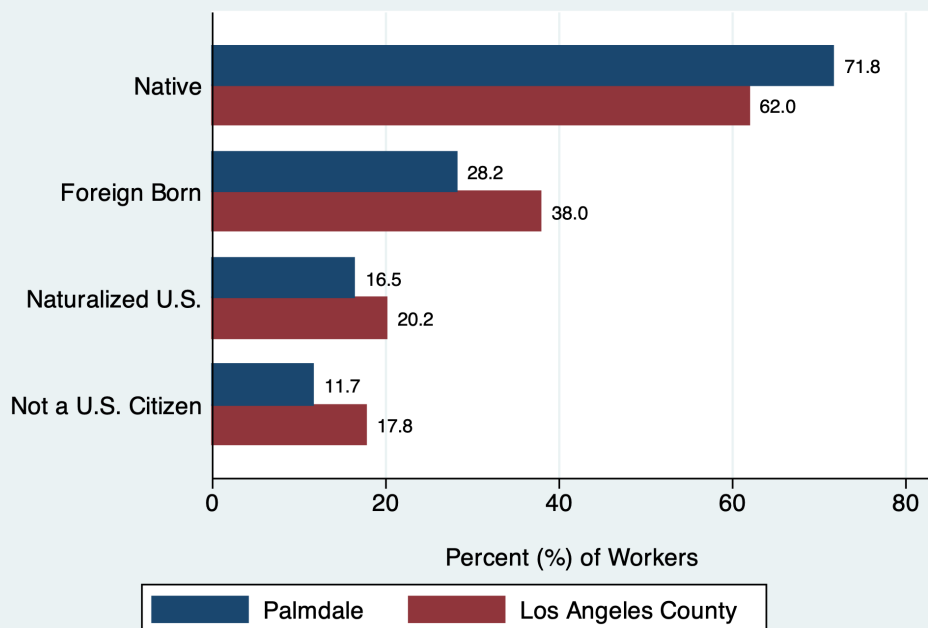


Figure 14: Language Spoken at Home



Source: American Community Survey, 2022 1-yr Summary Files.
 Graph by: National Economic Education Delegation (www.NEEDecon.org).

Figure 15: Citizenship



Source: American Community Survey, 2022 1-yr Summary Files.
 Graph by: National Economic Education Delegation (www.NEEDecon.org).

Employed Residents of Palmdale

Figure 16: Employment by Occupation

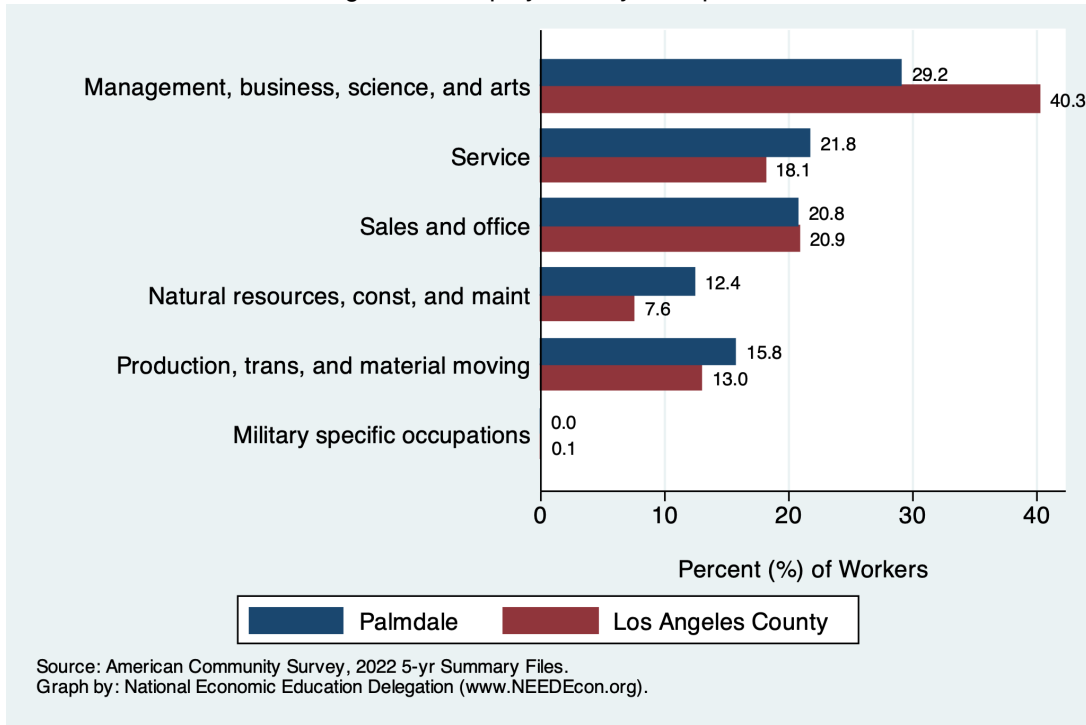


Figure 17: Employment by Industry

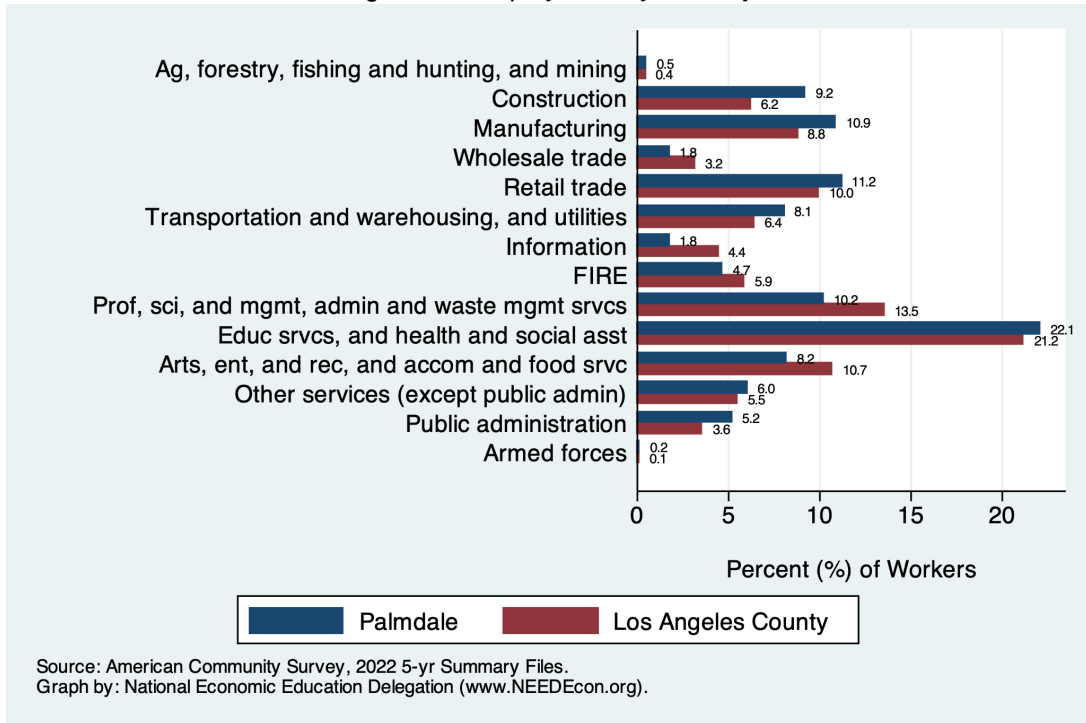
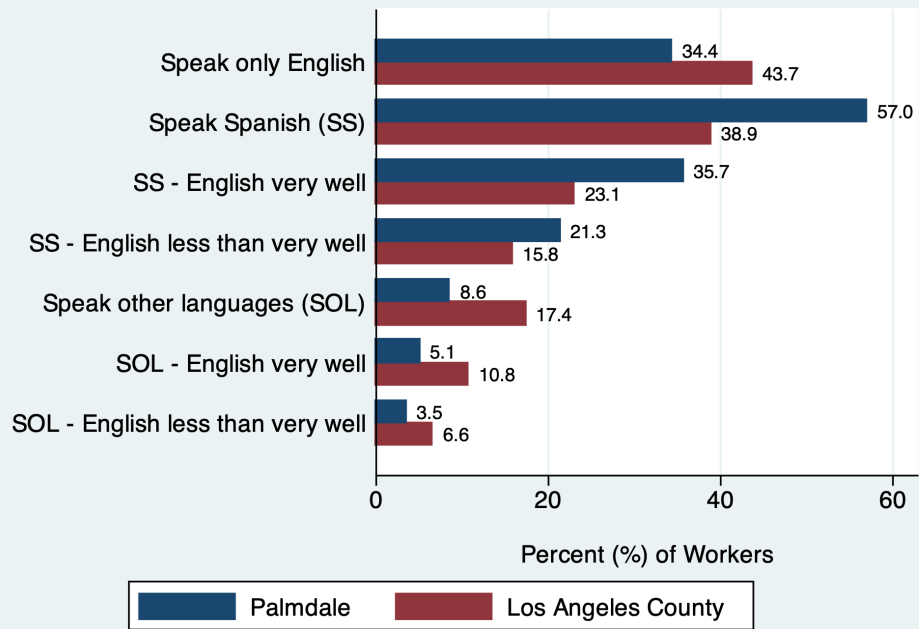
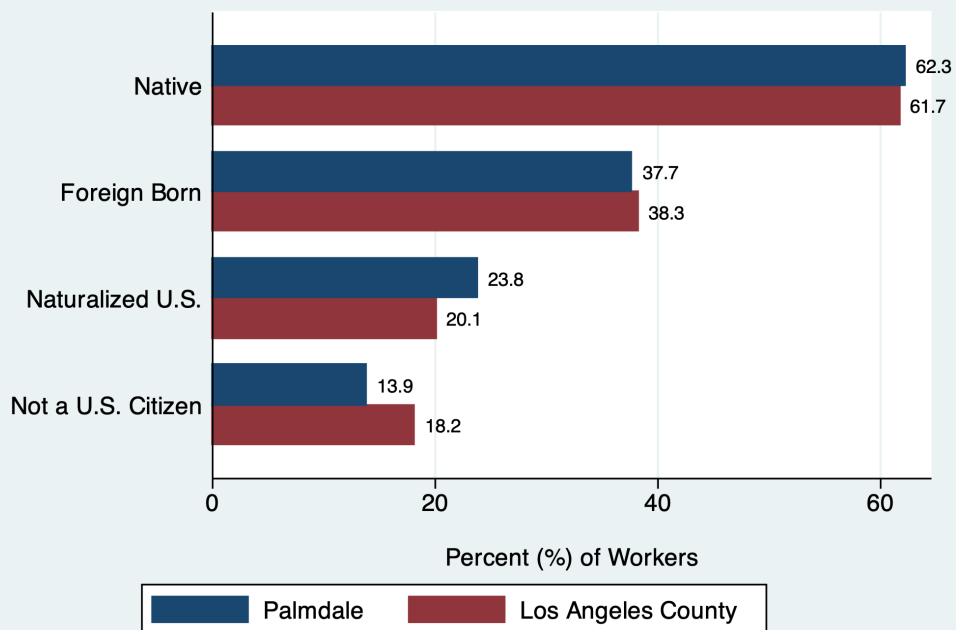


Figure 18: Language Spoken at Home



Source: American Community Survey, 2022 1-yr Summary Files.
 Graph by: National Economic Education Delegation (www.NEEDecon.org).

Figure 19: Citizenship



Source: American Community Survey, 2022 1-yr Summary Files.
 Graph by: National Economic Education Delegation (www.NEEDecon.org).

Employed Residents vs Workers in Palmdale

Figure 20: Employment by Occupation

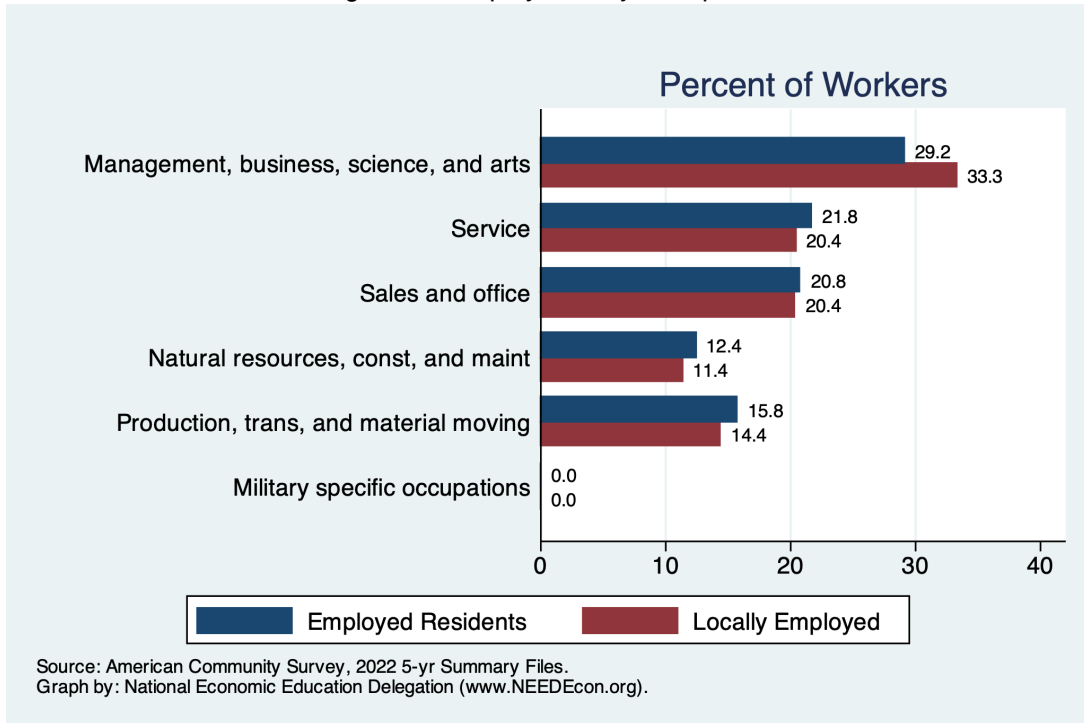


Figure 21: Employment by Industry

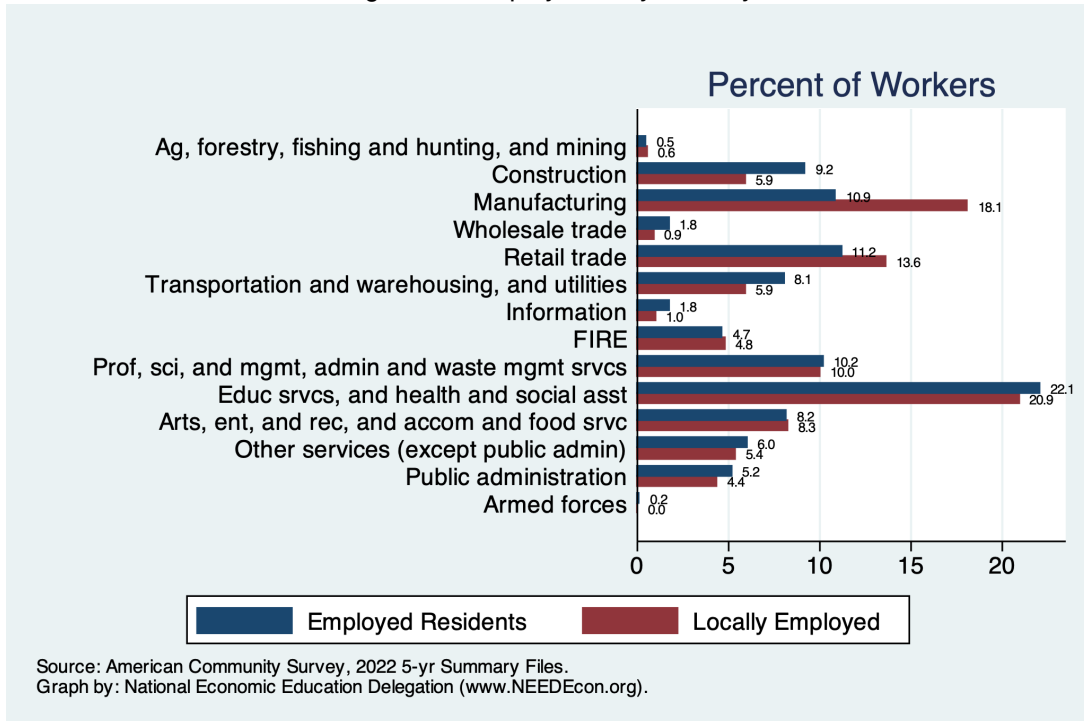


Figure 22: Language Spoken at Home

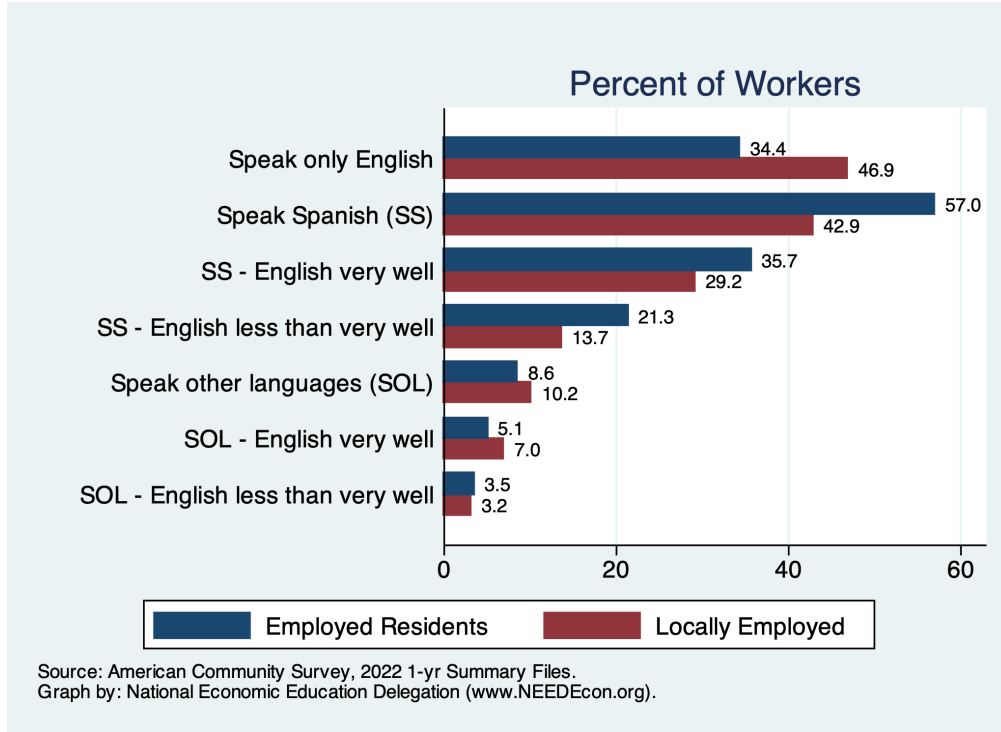
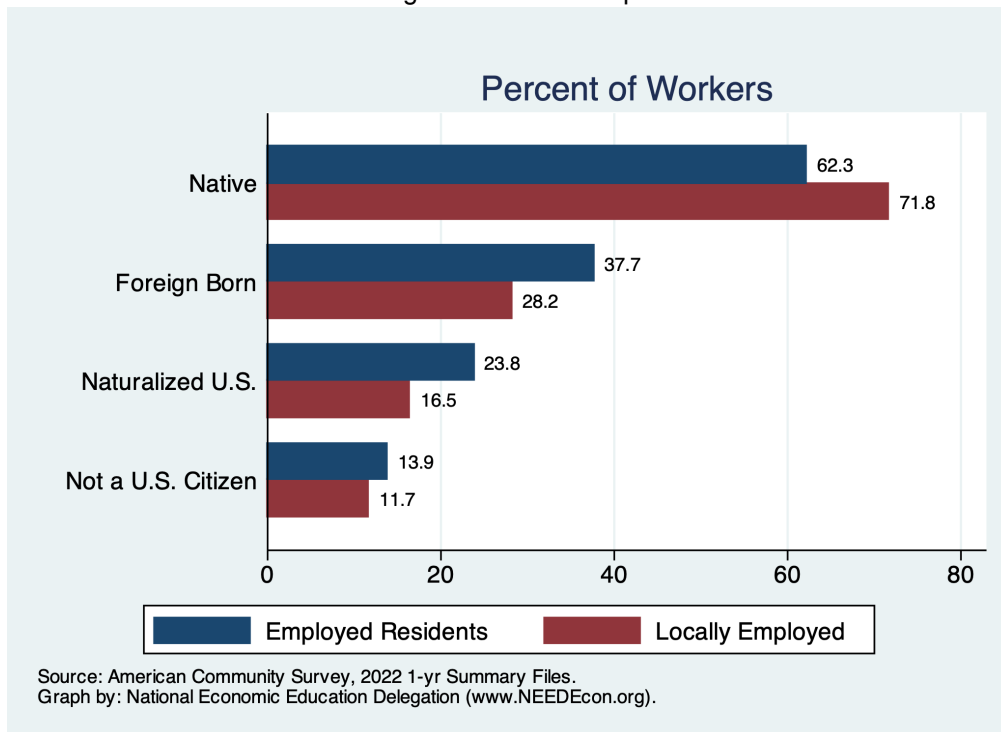


Figure 23: Citizenship



Income and Earnings

Per Capita Income Growth

Definition:

Per capita income is the average income per person in Palmdale. Personal income is the income received by, or on behalf of, all persons from all sources: from participation as laborers in production, from owning a home or unincorporated business, from the ownership of financial assets, and from government and business

in the form of transfer receipts. Noncash government benefits are not included.

Why is it important?

Income is the money that is available to persons for consumption expenditures, taxes, interest payments, transfer payments to governments and the rest of the world, or for saving. As such, it is an important indicator of economic well-being in a community.

Figure 24: Real Per Capita Income Ranking Among California Cities

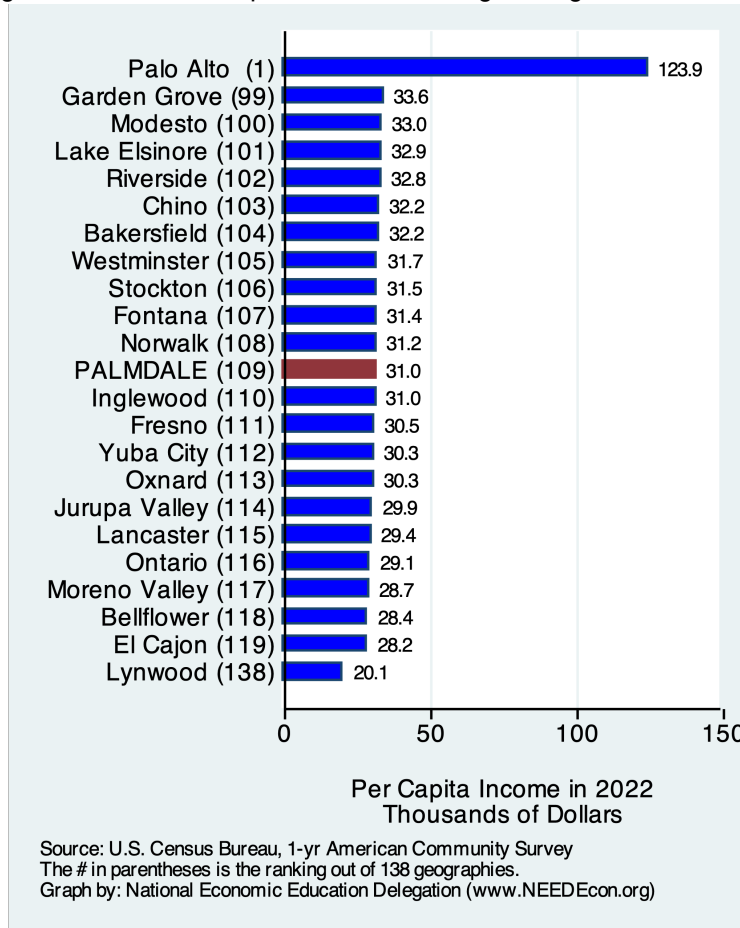
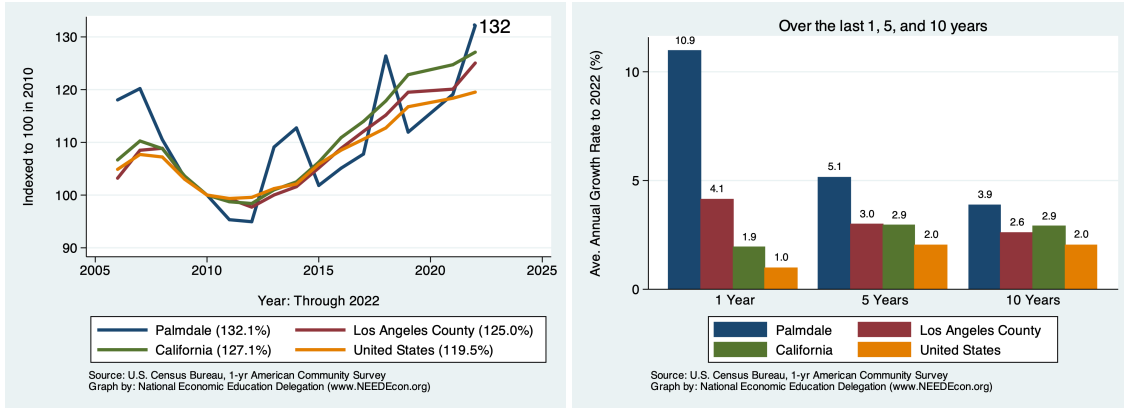


Figure 25: Regional Comparison of Growth over Time



Real Per Capita Income Ranking Among California Cities - w/Comparable Populations

Figure 26: Income Levels

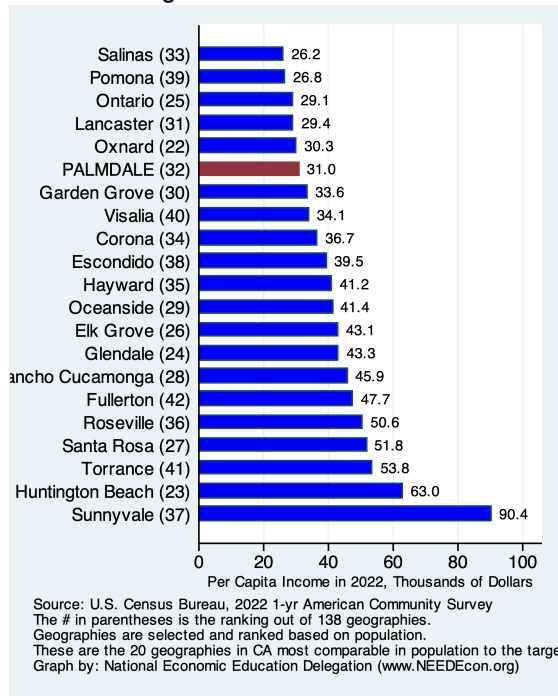
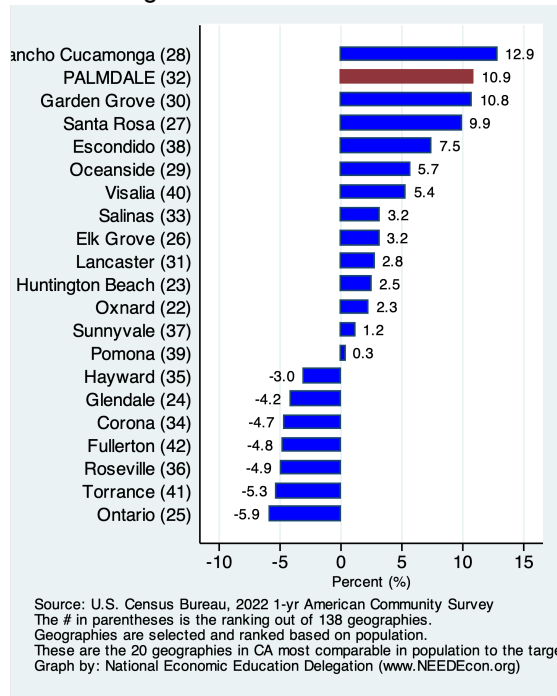


Figure 27: Growth over Time



Real Per Capita Income Ranking Among Cities in Los Angeles County

Figure 28: Income Levels

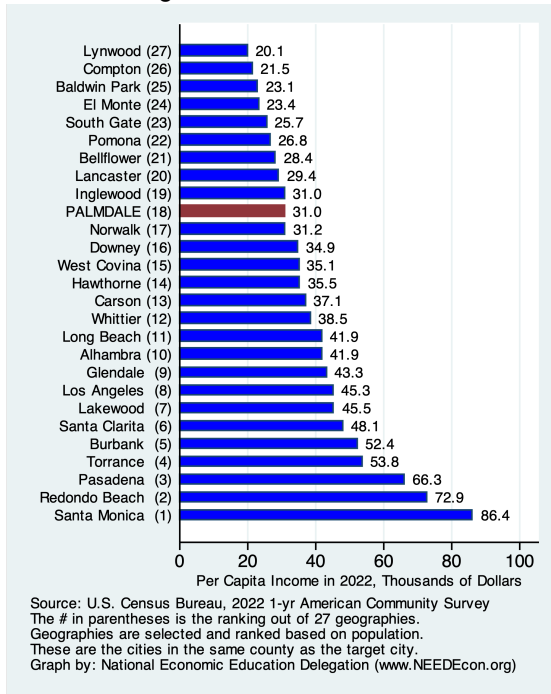


Figure 29: Growth over Time

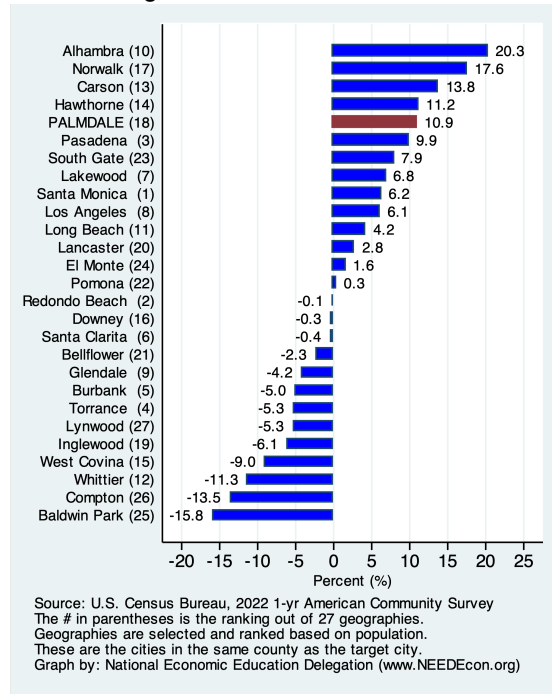
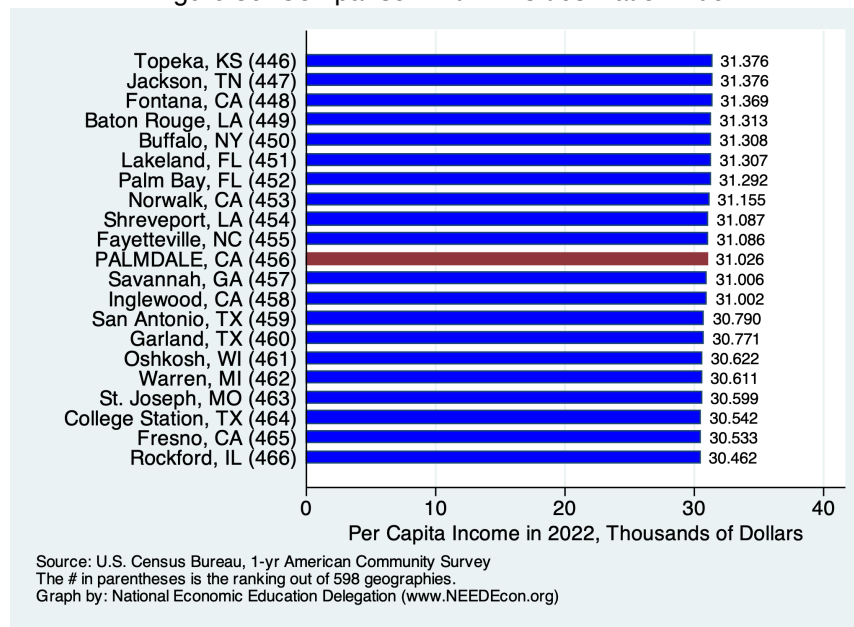


Figure 30: Comparison with All Cities Nationwide



Poverty and Inequality

Definition:

The local poverty rate provides an indication of the well-being of those at the bottom of the income distribution. The federal poverty rate measures the proportion of households in the region that are classified as living in poverty. Also included are measures of the extent to which the City's children are impoverished. Measures of the income distribution provide

further evidence on disparities in income in the region and how those disparities have changed over time.

Why is it important?

It is important to track measures of poverty and inequality to assess the extent of income disparities in the region, with an eye toward understanding how well the local economy is performing for all of its citizens.

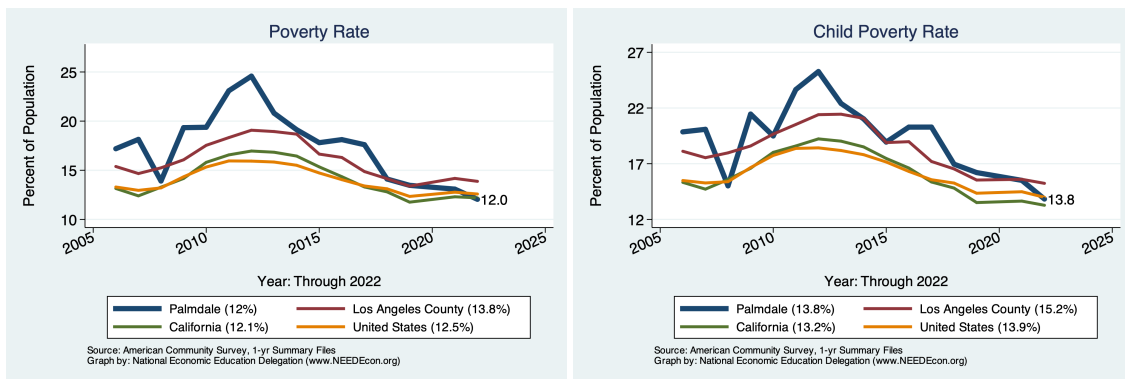


Figure 31: Inequality

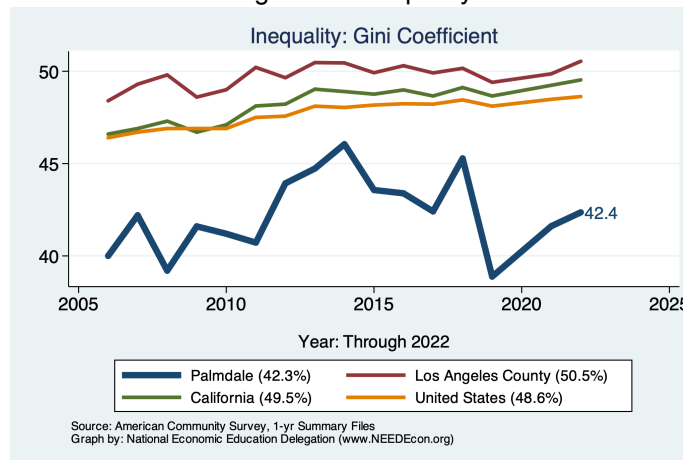


Figure 32: Shares Across the Income Distribution

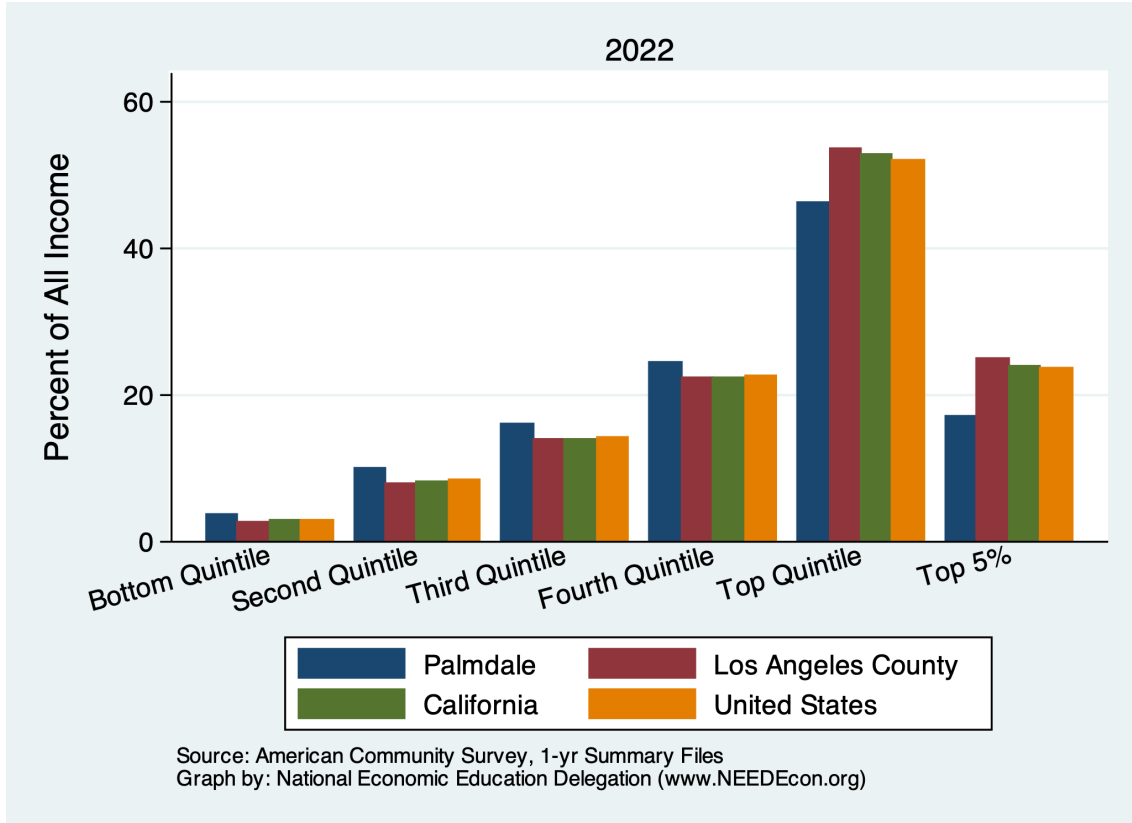
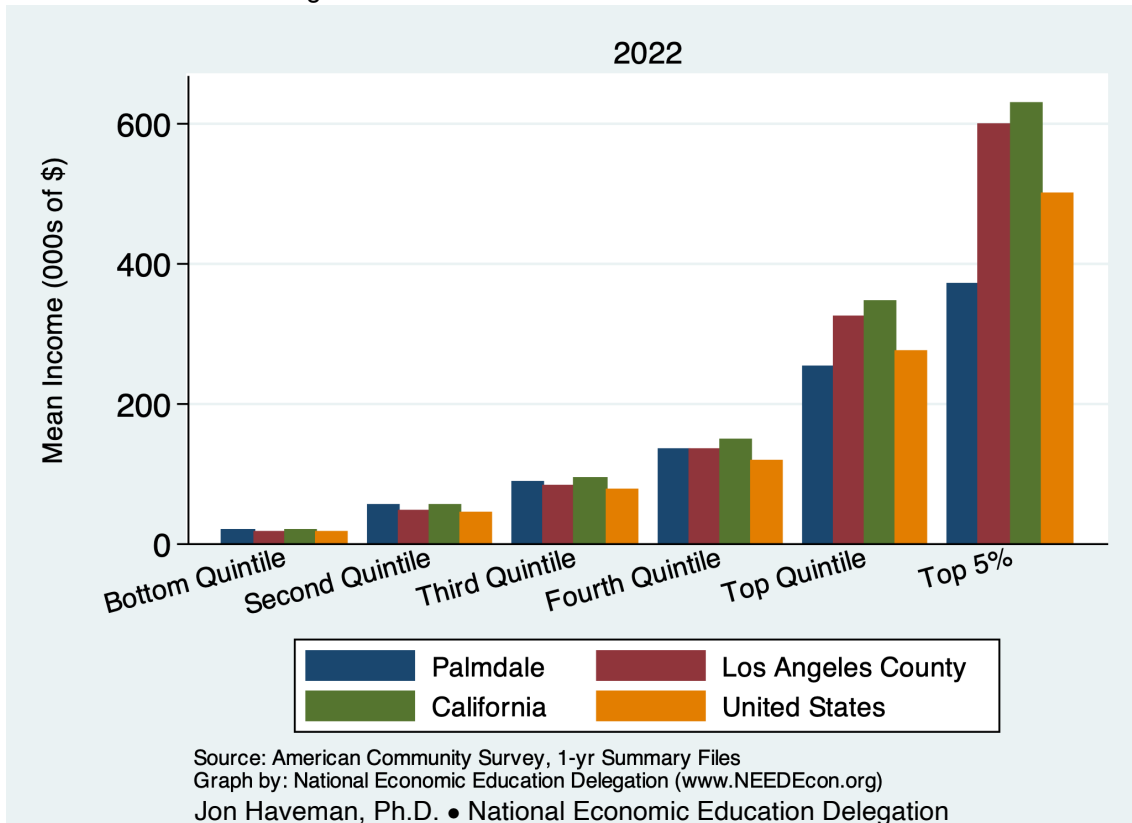


Figure 33: Means Across the Income Distribution



Housing

Housing Costs and Affordability

Definition:

Housing costs are measured in several different ways. First, we provide evidence on the evolution of median home prices, median rental price, and finally through evidence on the housing burden in the city and comparison regions. Housing burden is defined as a household needing to commit more than 30% of their household income toward housing costs. The median value is the amount in the middle. Fifty

percent of units are above the median and 50 percent are below.

Why is it important?

Housing is one of three fundamental necessities, along with food and clothing. A measure of the cost of housing is an integral part of the measurement of the cost of living in a specific community. This is particularly true in cities and regions throughout the Bay Area, where housing costs are high relative to income.

Cost of Housing in Palmdale and Broader Regions

Figure 34: Median Home Prices

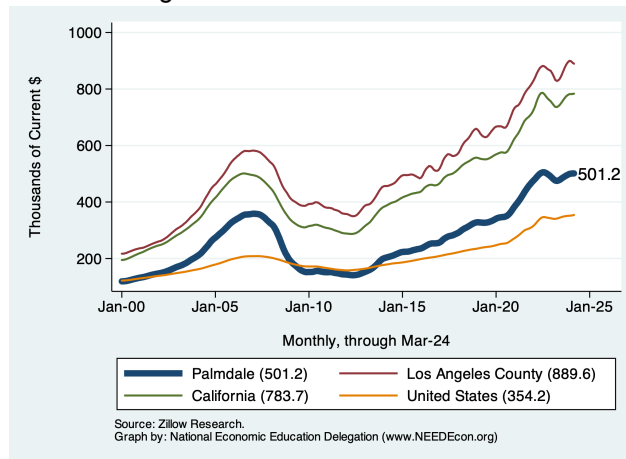
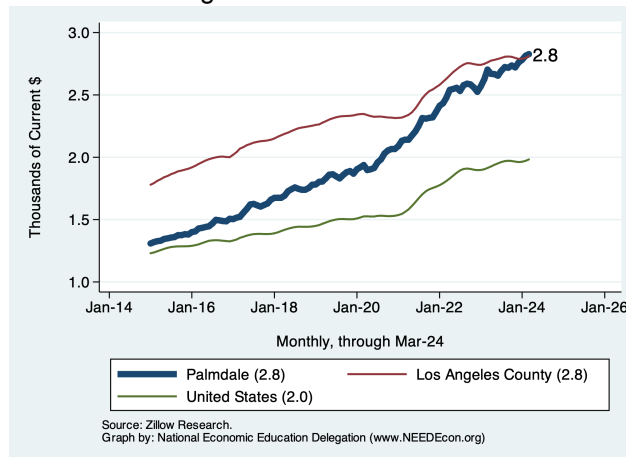


Figure 35: Median Rents



Housing Ownership in Palmdale and Broader Regions

Figure 36: Home Ownership Rates

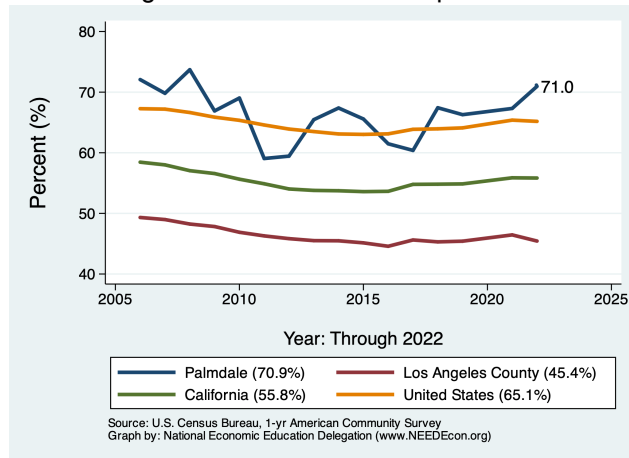


Figure 37: Home Ownership by Age

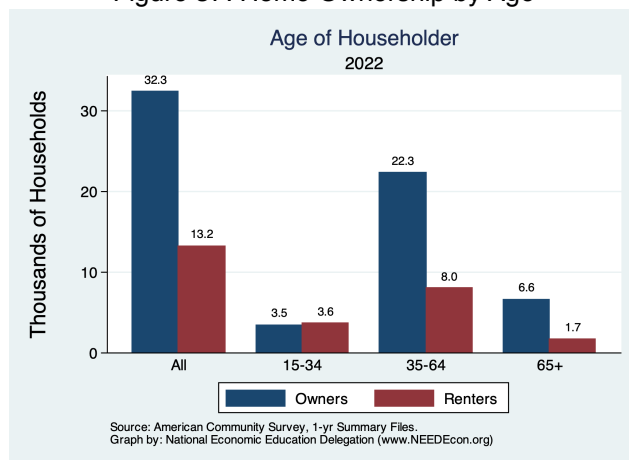


Figure 38: Income by Tenure

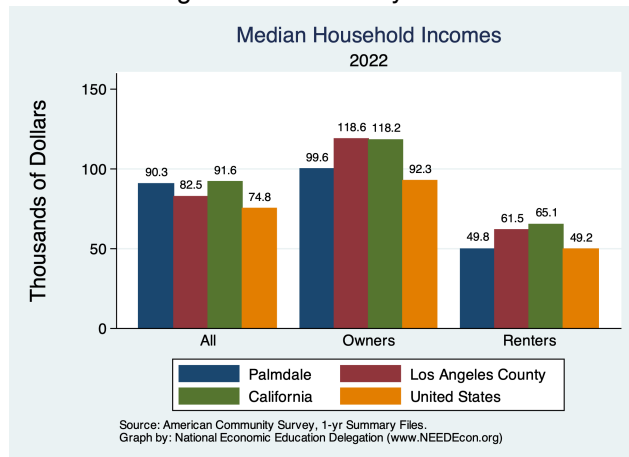


Figure 39: Income Distribution by Tenure

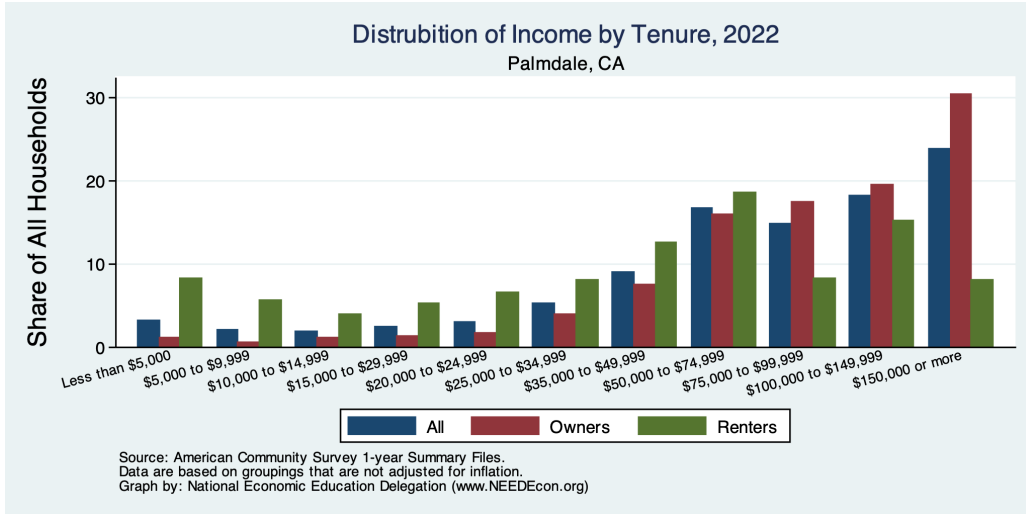


Figure 40: Income Distribution of Home Owners

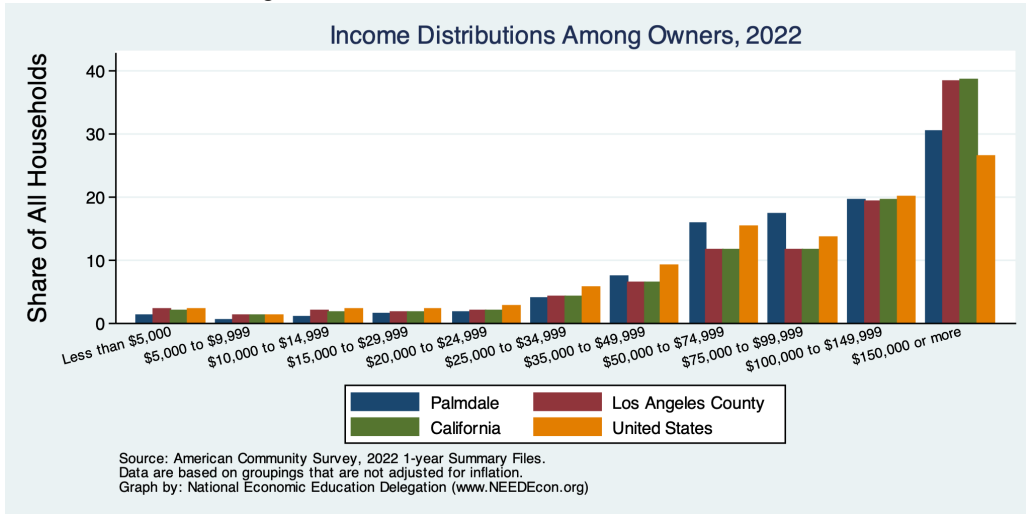
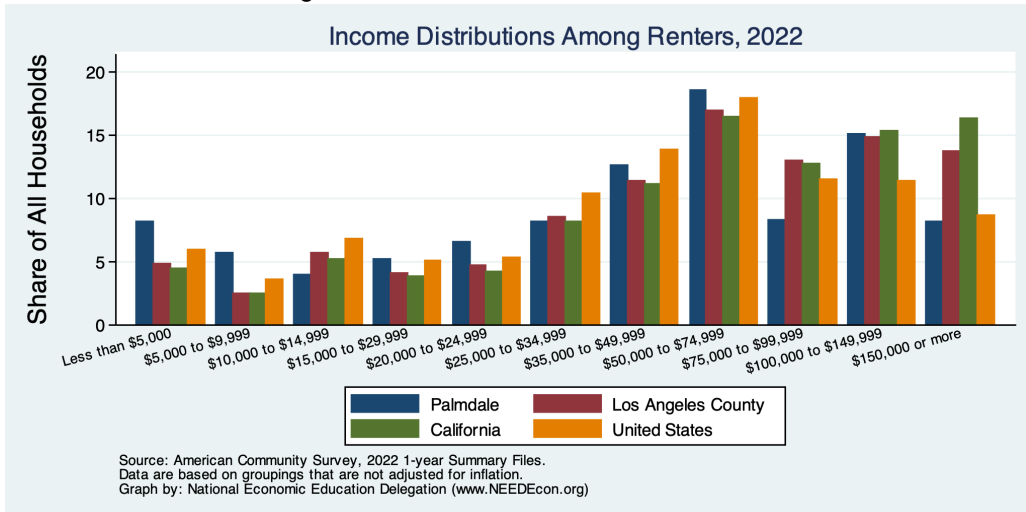


Figure 41: Income Distribution of Renters



Housing Burden in Palmdale and Broader Regions

Figure 42: Home Owners w/ A Mortgage

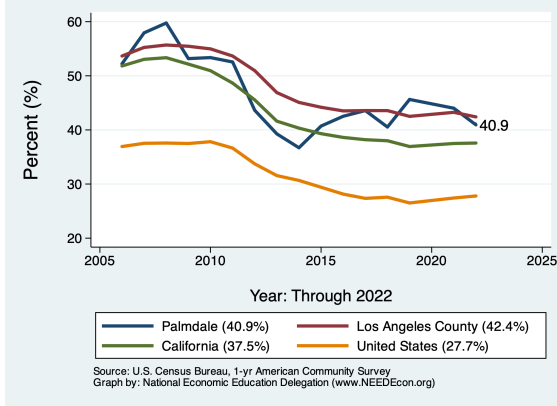


Figure 43: Home Owners w/o A Mortgage

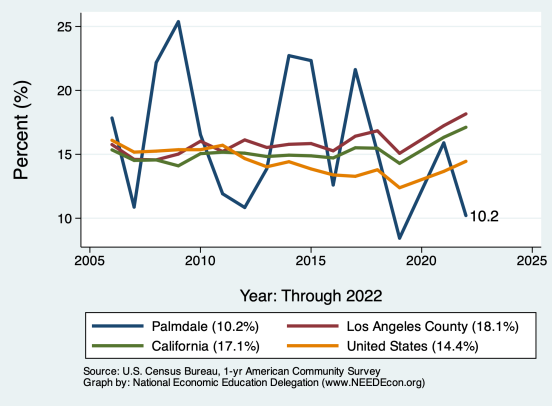


Figure 44: Renters

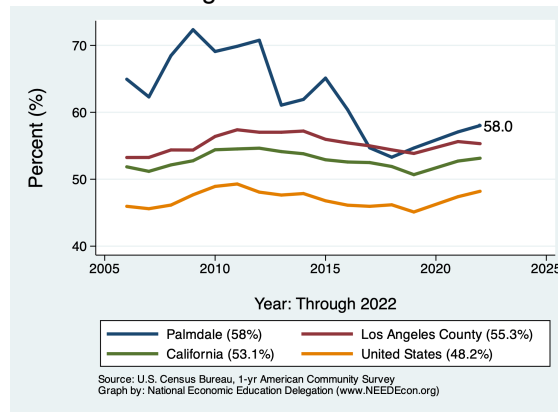
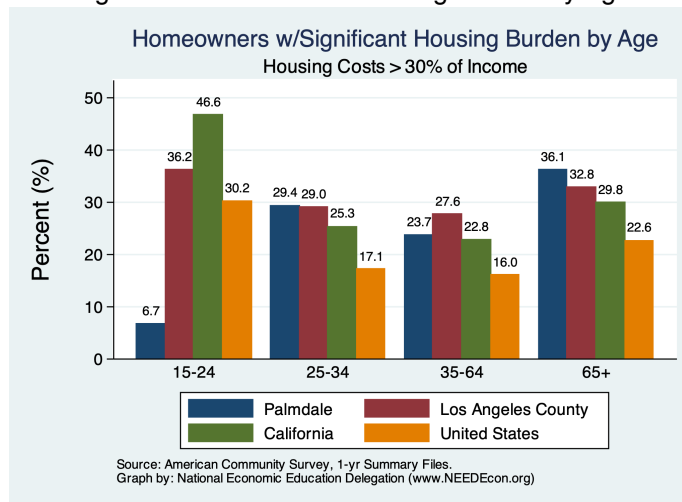


Figure 45: Homeowner Housing Burden by Age



Housing Picture

Definition:

Housing costs are measured in several different ways. First, we provide evidence on the evolution of median home prices, median rental price, and finally through evidence on the housing burden in the city and comparison regions. The median value is the amount in the middle. Fifty percent of units are above the median and 50 percent are below.

Why is it important?

In areas where the rate of population growth exceeds the rate of housing growth, this is likely to reflect a tightening housing market. A tightening housing market will also likely be reflected in lower vacancy rates and higher occupancy rates. It may also be reflected in higher numbers of people per household.

Table 5. Housing Market Indicators

Indicator	2023	2019	2010	% Change from	
				2019	2010
Total Population	165,917.0	157,117.0	152,750.0	5.6	8.6
Total # of Homes	50,094.0	47,210.0	46,544.0	6.1	7.6
# Occupied Units	48,751.0	43,866.0	42,952.0	11.1	13.5
Persons per Household	3.4	3.6	3.6	-5.0	-4.3
Vacancy Rate (%)	2.7	7.1	7.7	-62.2	-65.3

Source: CA DOF; Calculations by the National Economic Education Delegation

Figure 46: Housing Growth

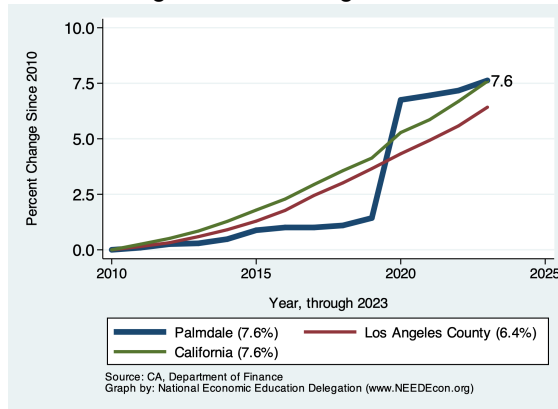


Figure 47: Persons per Household

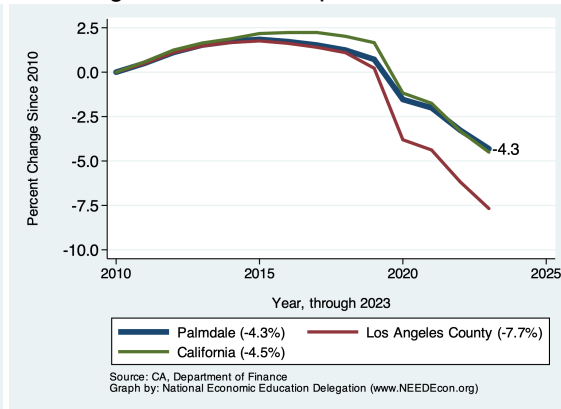


Figure 48: Vacancy Rates

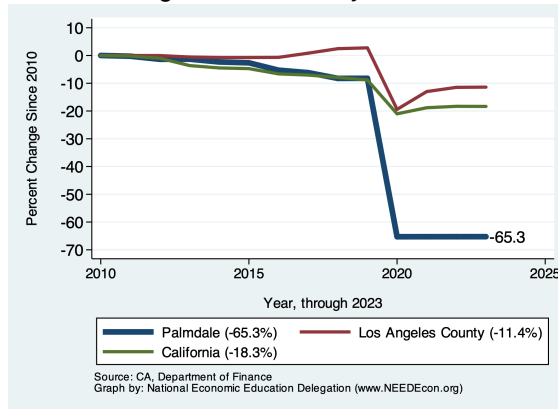
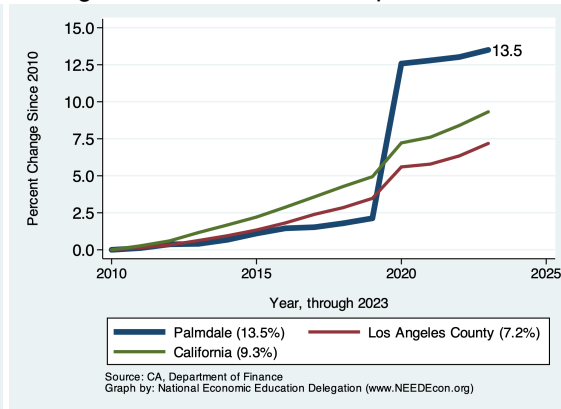


Figure 49: Number of Occupanied Units



Trends in the Growth of Housing by Housing Type

Figure 50: Single Detached Homes

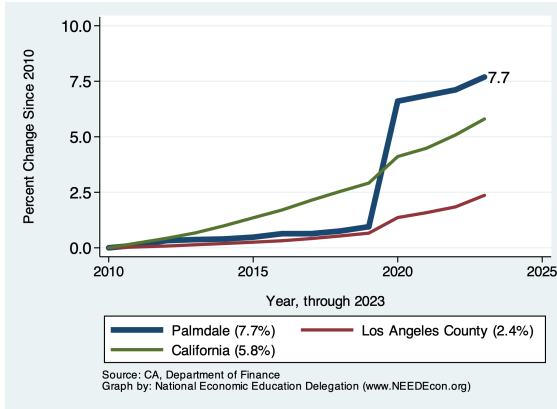


Figure 51: Single Attached Homes

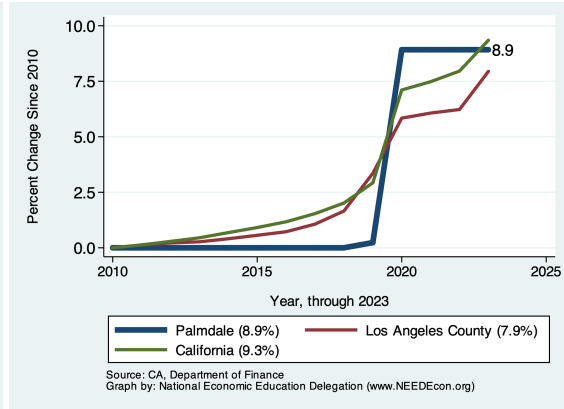


Figure 52: Housing in Buildings with Two to Four Units

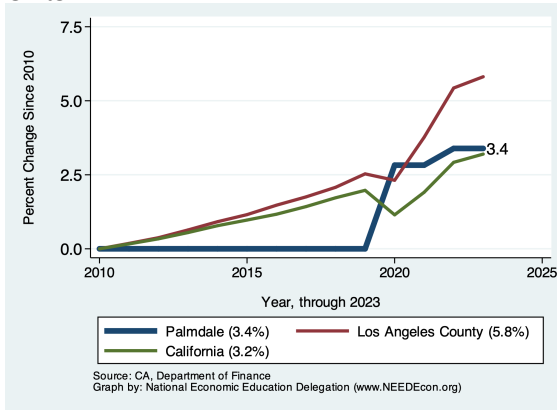
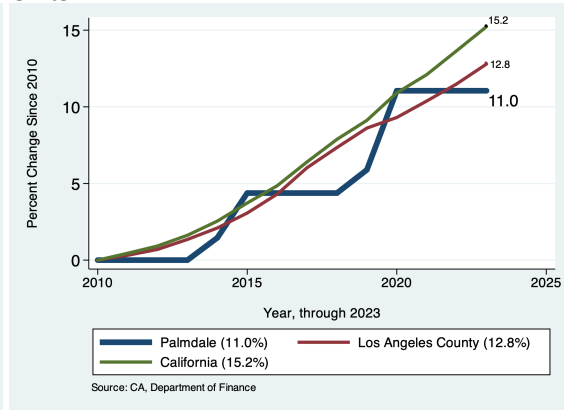


Figure 53: Housing in Buildings with Five or More Units



Vintage of Residential Housing

Why is it important?

This section provides evidence on the year in which residential housing in Palmdale was built. We break it down into owned versus rented residences and provide a comparison across Los Angeles County and broader regions. A sense of the age of housing in a region provides an indication of the urgency with which a region might pursue additional hous-

ing. As the housing stock ages, an urgency with which renovations and rebuilds are permitted might result. All things equal, more recently constructed housing will be more likely to meet current codes and standards. Remodeling of existing units will be more desirable when existing units are, on average, older.

Figure 54: Distribution of Housing Construction

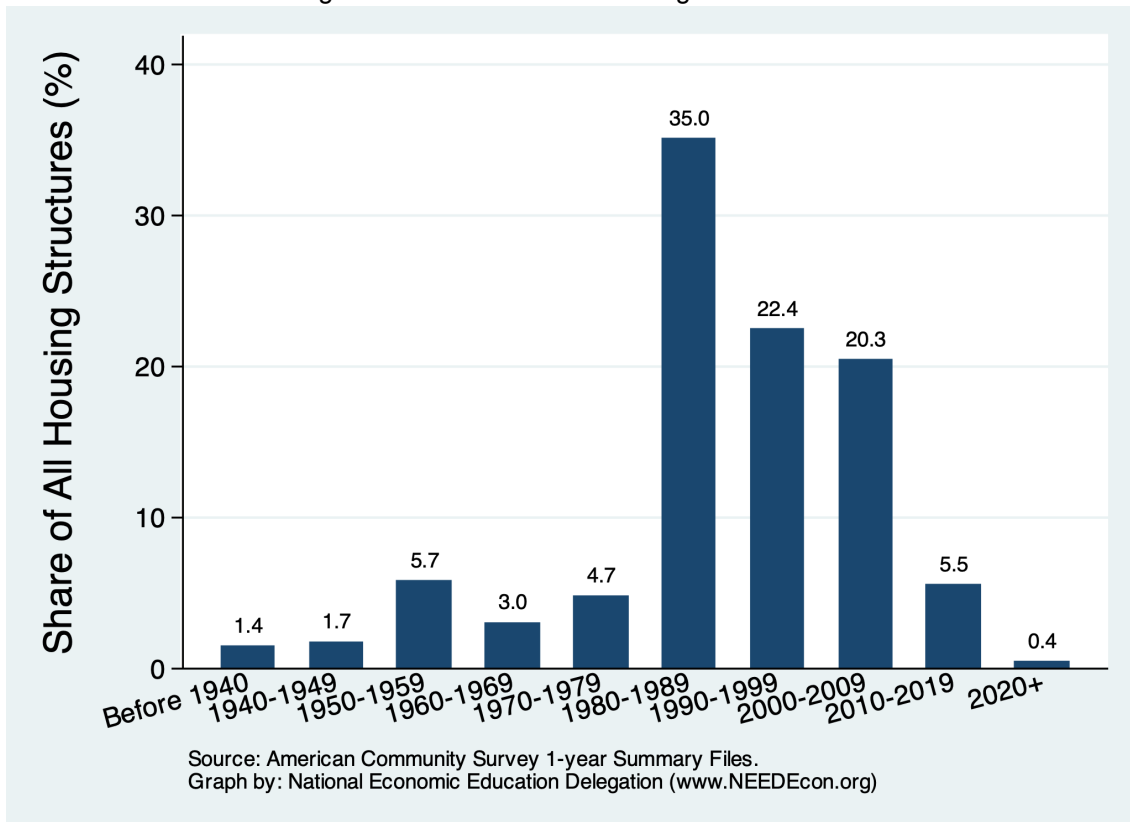


Figure 55: Housing Vintage across Regions

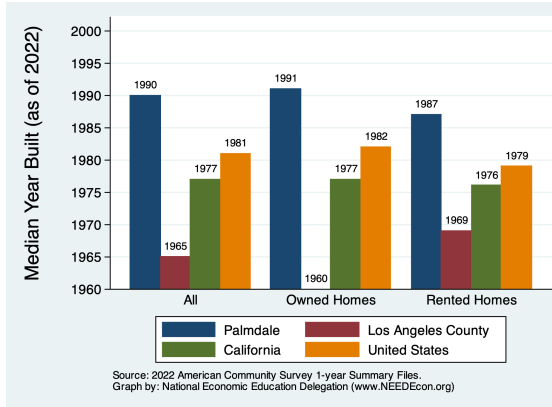


Figure 56: Housing Vintage by Tenure

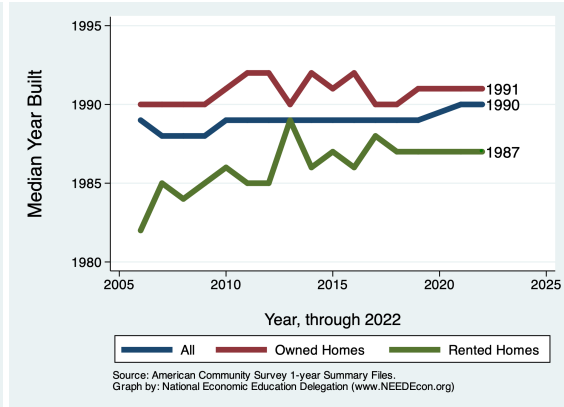


Figure 57: Vintage of Owned Residences

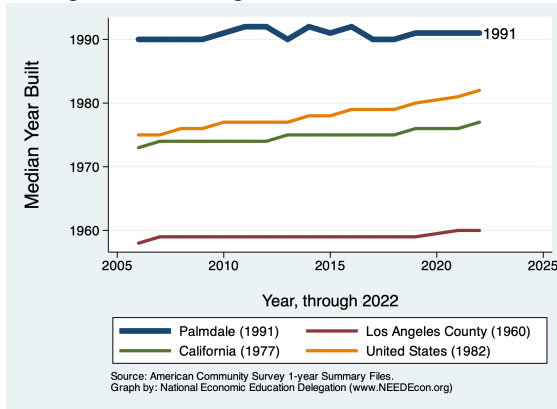


Figure 58: Vintage of Rented Residences

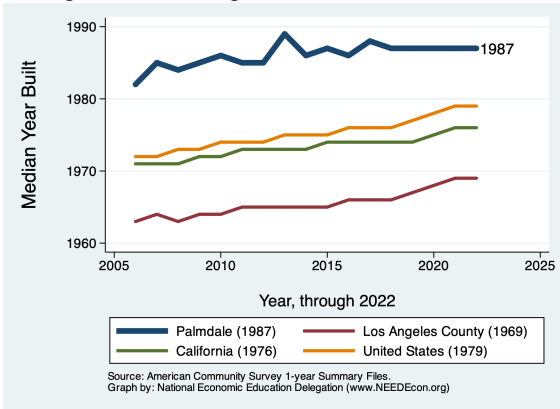
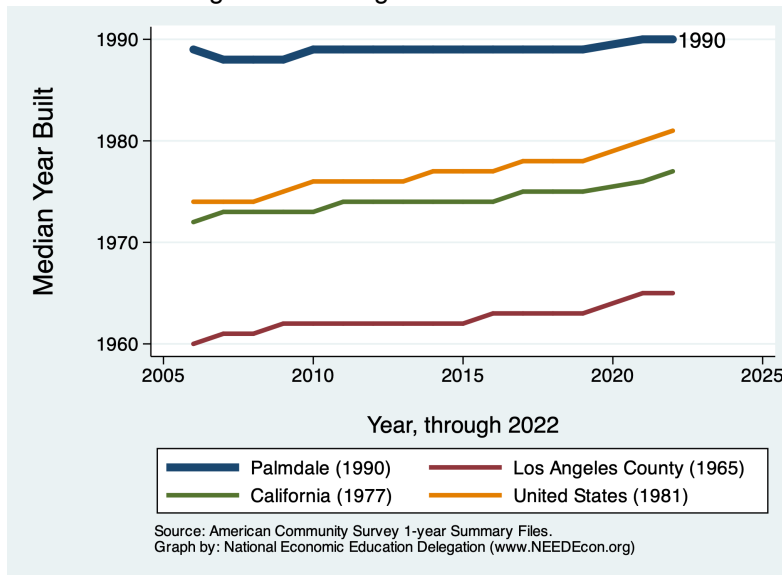


Figure 59: Vintage of All Residences



Occupation of Residential Housing

Why is it important?

The duration of residence in a city is important for developing future policies regarding growing the local population. If a region is highly mobile, evidenced by most residences having

been recently occupied, a city might propose policies to reduce that mobility, or ask why the mobility happens. Policies could be put in place to either reduce or increase migration.

Figure 60: Year Current Occupant Moved In

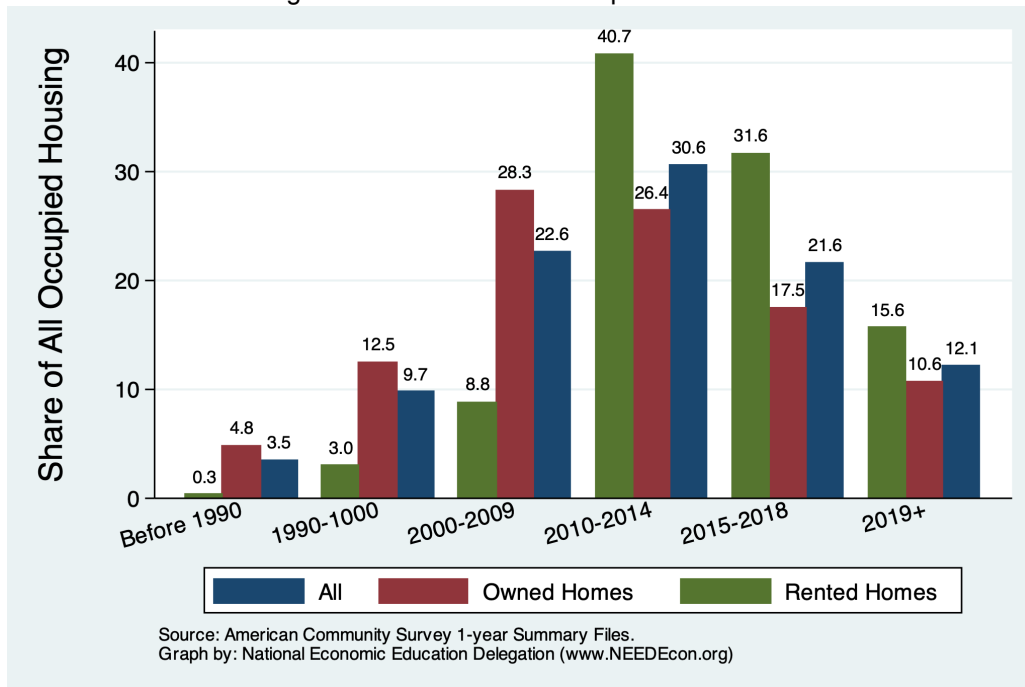


Figure 61: Year Occupied by Current Residents across Regions

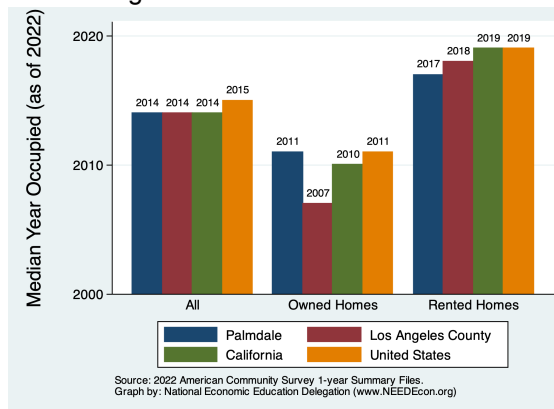


Figure 62: Year Occupied by Current Residents by Tenure

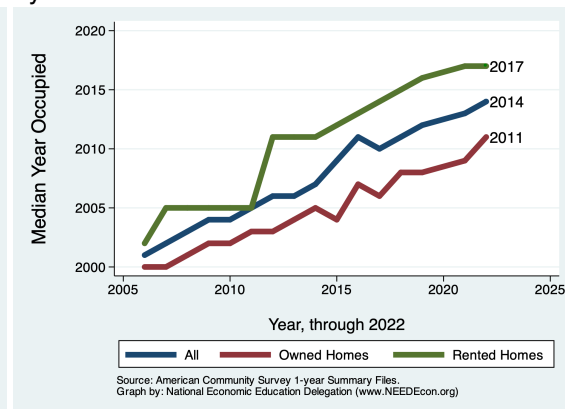


Figure 63: Year Occupied by Current Residents for Owned Housing

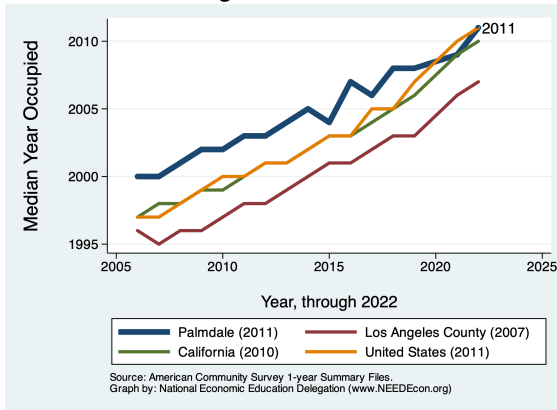


Figure 64: Year Occupied by Current Residents for Rented Housing

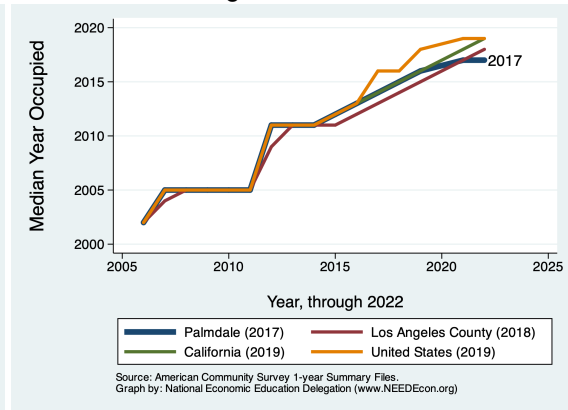
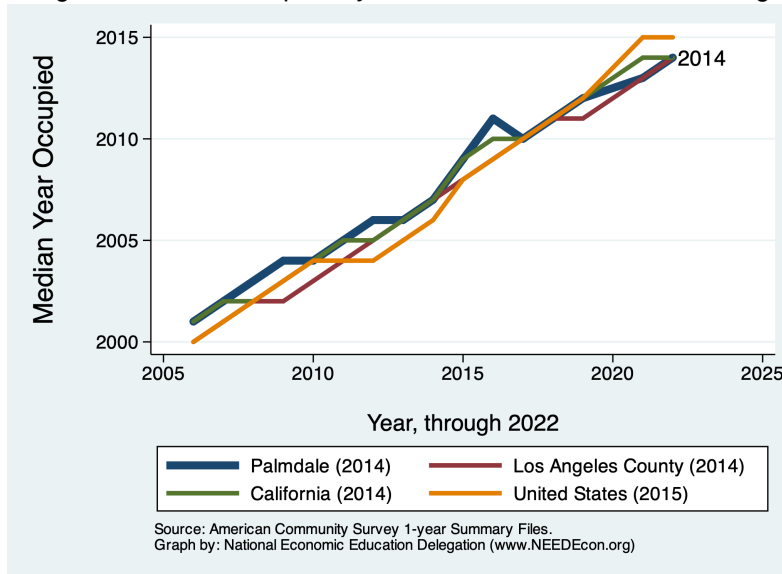


Figure 65: Year Occupied by Current Residents for All Housing



Residential Permitting

Definition:

This indicator provides evidence on the number of residential buildings that are permitted for construction each year. Permit data for Palmdale is compared with data from Los Angeles County as a whole and broader regions. The statistic provided scales the number of permits by population. This is done to facilitate comparisons across regions.

Why is it important?

Building permits are the best indicator available of new units coming on the market. In order for a region's population to grow and flourish, new residential properties must be added to the existing stock. Building, both in the City and in the County more generally, is an indication of the extent to which new residences accommodate new residents or are affecting prices through increased supply.

Palmdale - Ranking Among Comparables

Figure 66: Number of Units Permitted - Nationwide Comparables (Rank)

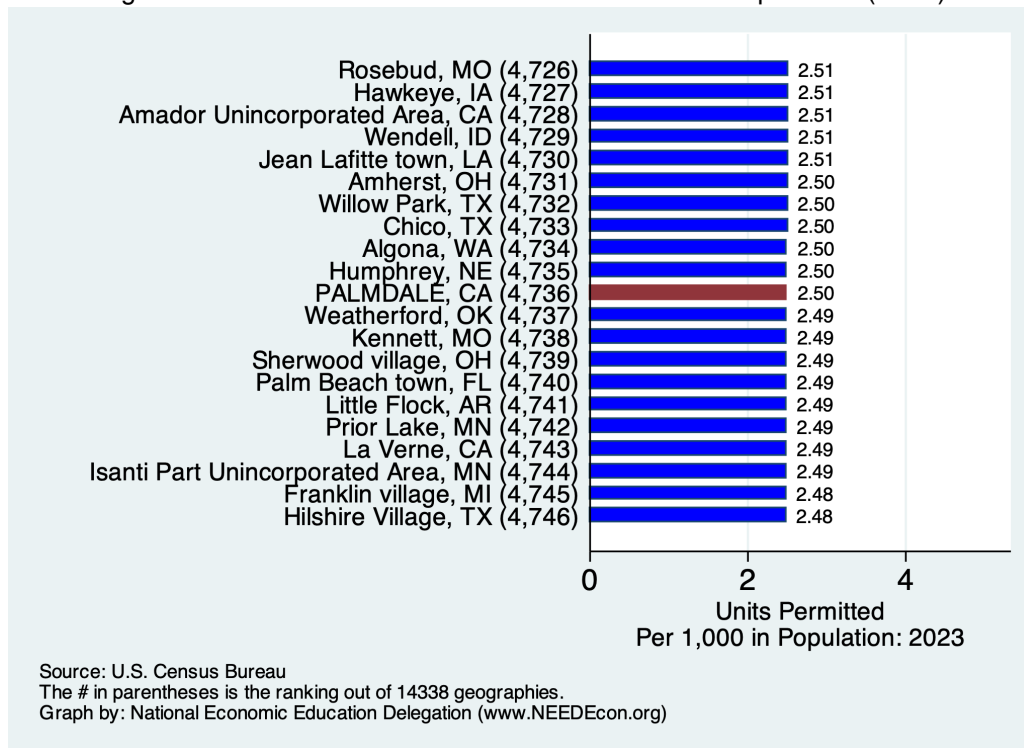
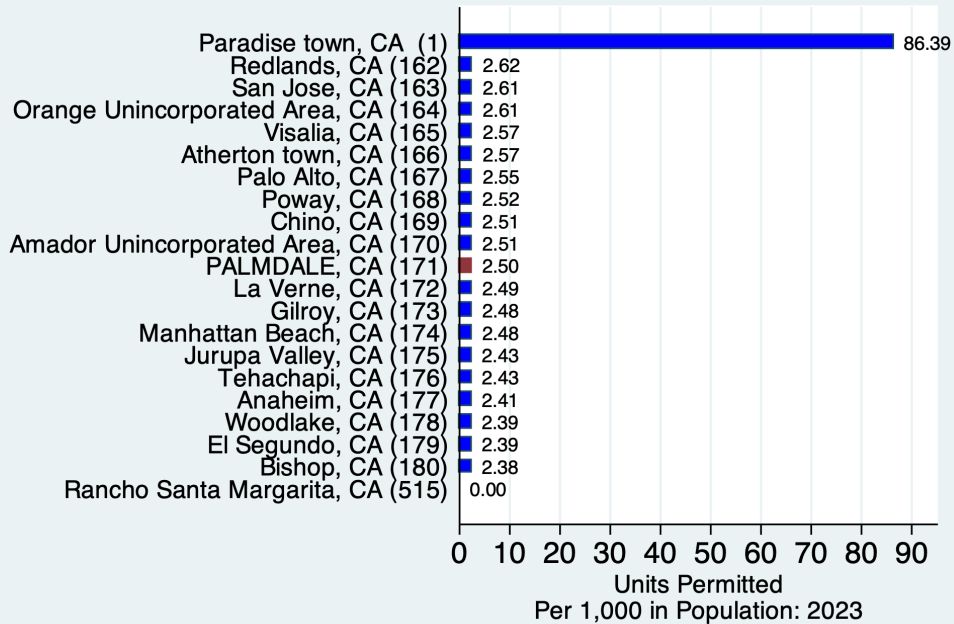
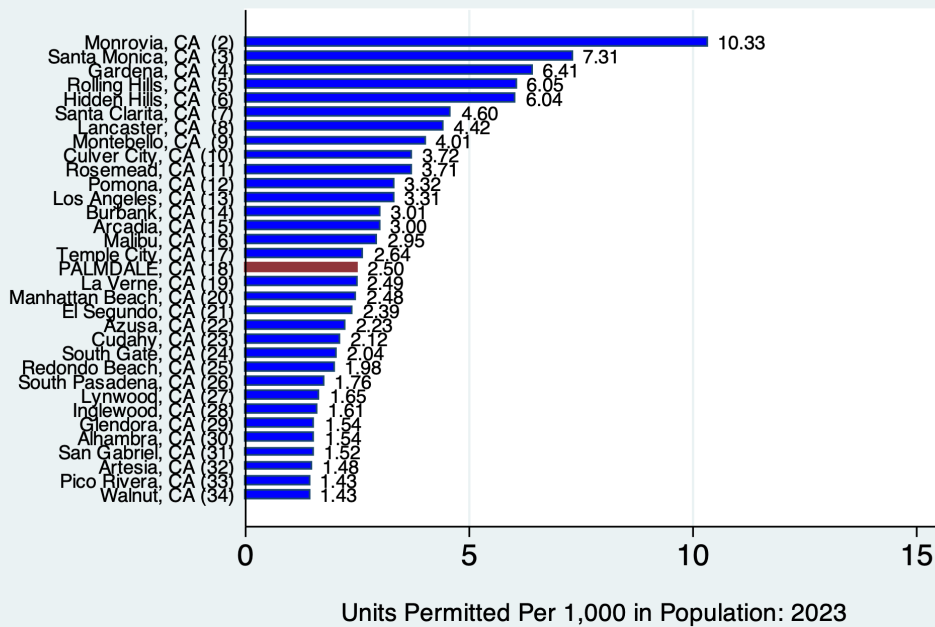


Figure 67: Number of Units Permitted - California Comparables (Rank)



Source: U.S. Census Bureau.
 The # in parentheses is the ranking out of 515 geographies.
 Graph by: National Economic Education Delegation (www.NEEDecon.org)

Figure 68: Number of Units Permitted - Cities in Los Angeles County (Rank)



Source: U.S. Census Bureau,
 The # in parentheses is the ranking out of 88 geographies.
 Graph by: National Economic Education Delegation (www.NEEDecon.org)

Palmdale - Permitting Activity

Annual Units Permitted - Per Capita in Palmdale

Figure 69: Units Permitted Each Year

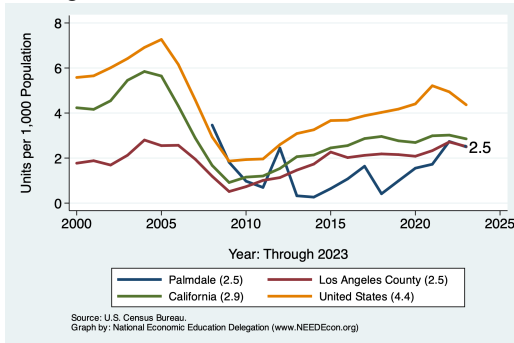
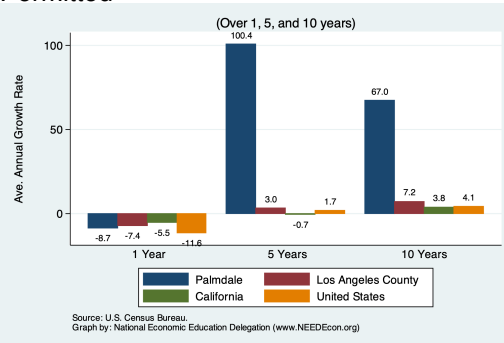


Figure 70: Average Annual Growth in Units Permitted



Annual Number of Buildings Permitted - Per Capita in Palmdale

Figure 71: Units Permitted Each Year

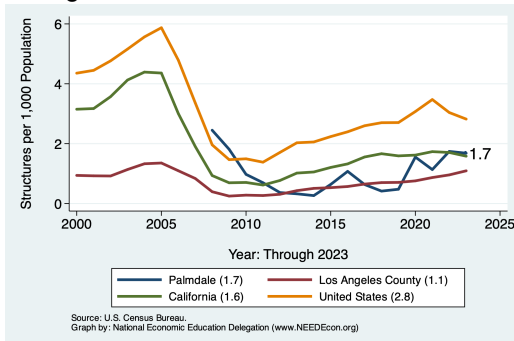
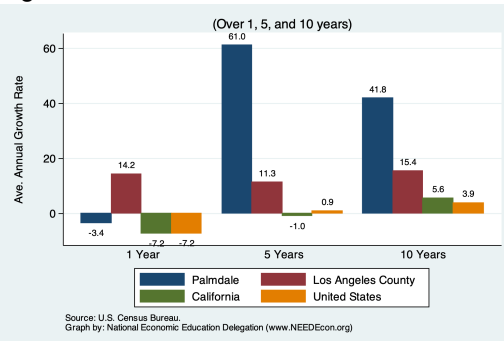


Figure 72: Average Annual Growth in Buildings Permitted



Annual Value of Property Permitted - Per Capita in Palmdale

Figure 73: Value Permitted Each Year

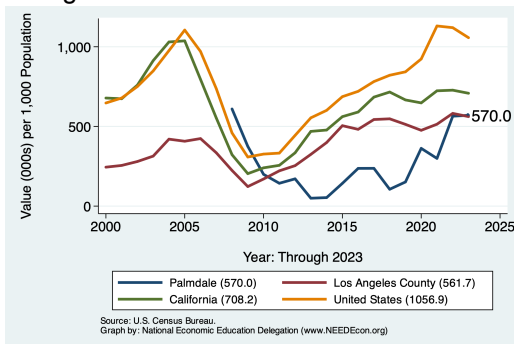
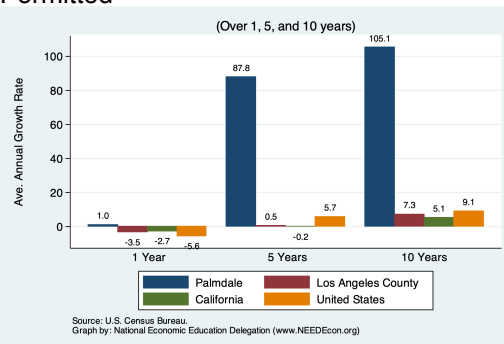


Figure 74: Average Annual Growth in Value Permitted



Commute Patterns

During the recovery from the Great Recession, the period from 2010 to 2019, the Bay Area economy, and Silicon Valley in particular, has been growing at a pace roughly double that of the state as a whole and triple that of the nation. This growth has precipitated a tight hous-

ing market and also brought about some significant changes in commute patterns, many of which have been reversed by the pandemic. Recent years have seen significant changes in both the mode of transportation and commute times.

Mode of Transportation

Figure 75: Percent of Workers Commuting by Car Alone

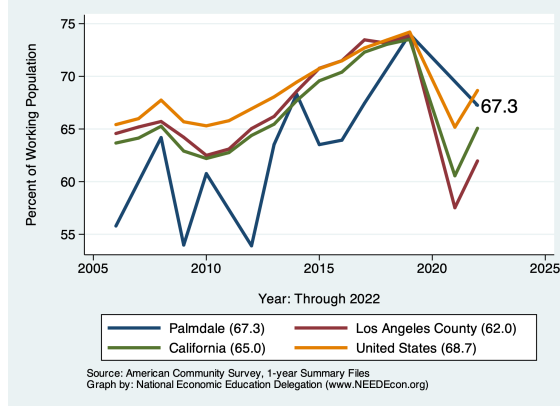


Figure 76: Percent of Workers Commuting by Carpool

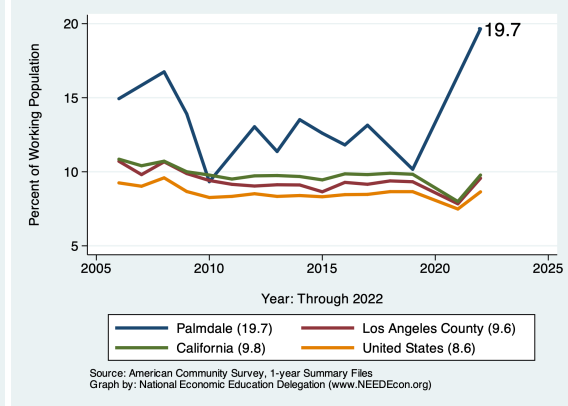


Figure 77: Percent of Workers using Public Transportation

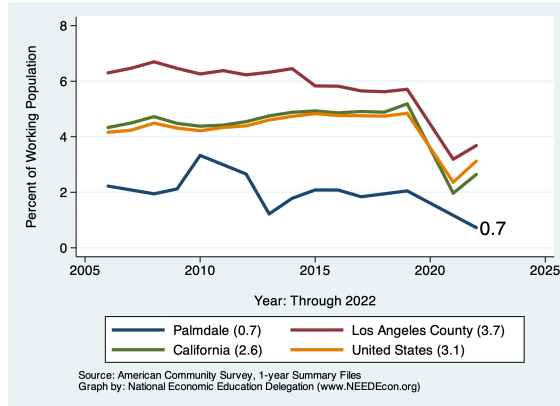
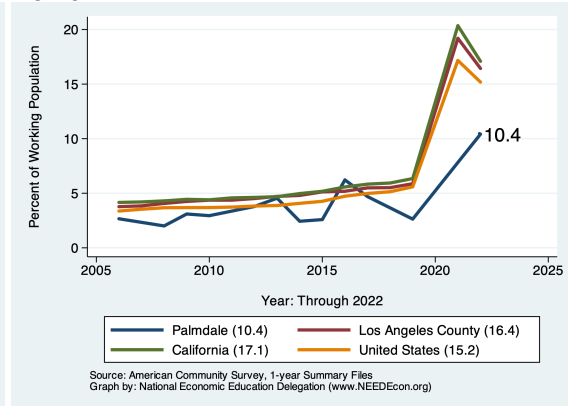


Figure 78: Percent of Workers Who Work From Home



The first table on this page presents data for those who LIVE in Palmdale. The second provides data on those who work, but do not necessarily live in Palmdale. The final two columns provide for a comparison of commute mode choices of people locally with those in California more broadly.

Table 6. SEX OF WORKERS BY MODE OF TRANSPORTATION TO WORK

Mode of Transit	Male		Female		All Workers		All of CA (%)
	#	(%)	#	(%)	#	(%)	
Car, Truck, or Van:	35,743	89.0	24,968	82.7	60,711	86.9	75.3
Drove Alone	28,053	69.9	18,930	62.7	46,983	67.3	65.5
Carpooled:	7,690	19.2	6,038	20.0	13,728	19.7	9.8
In 2-person carpool	4,531	11.3	3,368	11.2	7,899	11.3	7.0
In 3-person carpool	2,776	6.9	1,511	5.0	4,287	6.1	1.7
In 4-or-more-person carpool	383	1.0	1,159	3.8	1,542	2.2	1.2
Public Transportation (excl Taxi):	312	0.8	196	0.6	508	0.7	2.7
Bus or Trolley Bus	254	0.6	169	0.6	423	0.6	1.8
Streetcar or Trolley Car	0	0.0	0	0.0	0	0.0	0.5
Subway or Elevated	0	0.0	0	0.0	0	0.0	0.2
Railroad	58	0.1	27	0.1	85	0.1	0.1
Ferryboat	0	0.0	0	0.0	0	0.0	0.1
Bicycle	0	0.0	0	0.0	0	0.0	0.7
Walked	235	0.6	202	0.7	437	0.6	2.4
Taxicab, Motorcycle, or other	591	1.5	334	1.1	925	1.3	1.7
Worked at Home	3,271	8.1	4,006	13.3	7,277	10.4	17.2
Total:	40,152	100.0	29,706	98.4	69,858	100.0	

Source: 2022 1-year American Community Survey, Summary File

Table 7. SEX OF WORKERS BY MODE OF TRANSPORTATION TO WORK FOR WORKPLACE GEOGRAPHY

Mode of Transit	Male		Female		All Workers		All of CA (%)
	#	(%)	#	(%)	#	(%)	
Car, Truck, or Van:	23,683	87.5	18,011	80.0	41,694	84.3	78.0
Drove Alone	21,556	79.6	16,287	72.4	37,843	76.5	68.5
Carpooled:	2,127	7.9	1,724	7.7	3,851	7.8	9.5
In 2-person carpool	1,422	5.3	1,177	5.2	2,599	5.3	6.9
In 3-person carpool	239	0.9	370	1.6	609	1.2	1.5
In 4-or-more-person carpool	466	1.7	177	0.8	643	1.3	1.1
Public Transportation (excl Taxi):	104	0.4	177	0.8	281	0.6	3.6
Bus or Trolley Bus	104	0.4	177	0.8	281	0.6	2.3
Streetcar or Trolley Car	0	0.0	0	0.0	0	0.0	0.8
Subway or Elevated	0	0.0	0	0.0	0	0.0	0.3
Railroad	0	0.0	0	0.0	0	0.0	0.2
Ferryboat	0	0.0	0	0.0	0	0.0	0.1
Bicycle	177	0.7	0	0.0	177	0.4	0.7
Walked	219	0.8	310	1.4	529	1.1	2.4
Taxicab, Motorcycle, or other	729	2.7	646	2.9	1,375	2.8	1.7
Worked at Home	2,160	8.0	3,254	14.5	5,414	10.9	13.6
Total:	27,072	100.0	22,398	99.5	49,470	100.0	

Source: 2022 5-year American Community Survey, Summary File

The results in this table are for those who work in the region, regardless of the location of their residence.

Commute Times for Employed Residents

Table 8. SEX OF WORKERS BY TRAVEL TIME TO WORK

Mode of Transit	Male		Female		All Workers		All of CA
	#	(%)	#	(%)	#	(%)	(%)
Less than 5 minutes	0	0.0	91	0.3	91	0.1	2.1
5 to 9 minutes	1,487	4.0	1,461	5.3	2,948	4.7	7.8
10 to 14 minutes	2,527	6.9	2,725	9.9	5,252	8.4	12.4
15 to 19 minutes	4,520	12.3	5,854	21.3	10,374	16.5	15.4
20 to 24 minutes	2,867	7.8	3,956	14.4	6,823	10.9	14.8
25 to 29 minutes	519	1.4	540	2.0	1,059	1.7	6.4
30 to 34 minutes	1,932	5.2	1,134	4.1	3,066	4.9	15.2
35 to 39 minutes	261	0.7	202	0.7	463	0.7	2.9
40 to 44 minutes	905	2.5	345	1.3	1,250	2.0	4.1
45 to 59 minutes	5,021	13.6	2,324	8.5	7,345	11.7	8.2
60 to 89 minutes	9,211	25.0	4,099	14.9	13,310	21.2	7.2
90 or more minutes	7,631	20.7	2,969	10.8	10,600	16.9	3.6
Total:	36,881	100.0	25,700	93.7	62,581	99.6	

Source: 2022 1-year American Community Survey, Summary File

Figure 79: Percent of Employed Population With Commutes of More than 30 Minutes

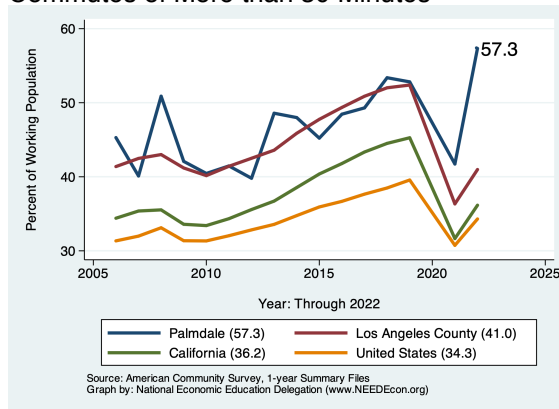


Figure 80: Percent of Employed Population With Commutes of More than 90 Minutes

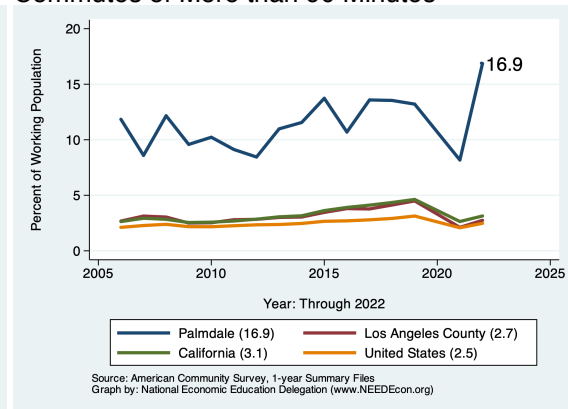
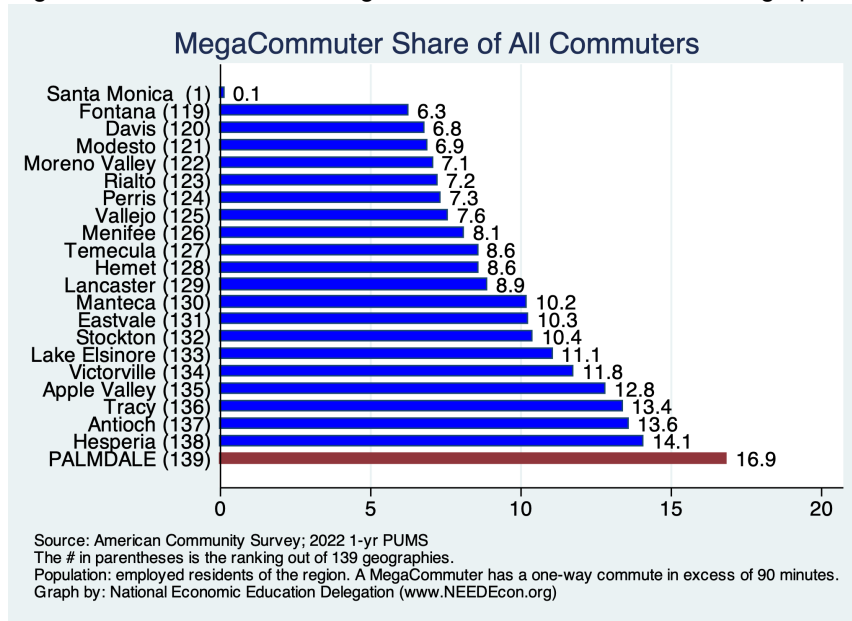


Figure 81: Rank: Share of MegaCommuters Across Similar Geographies



Commute Times for Those Employed in the City

Table 9. SEX OF WORKERS BY TRAVEL TIME TO WORK FOR WORKPLACE GEOGRAPHY

Mode of Transit	Male		Female		All Workers		All of CA (%)
	#	(%)	#	(%)	#	(%)	
Less than 5 minutes	235	0.9	153	0.8	388	0.9	2.1
5 to 9 minutes	1,363	5.5	1,158	5.7	2,521	5.7	7.8
10 to 14 minutes	3,623	14.5	2,473	12.3	6,096	13.8	12.4
15 to 19 minutes	4,583	18.4	4,364	21.6	8,947	20.2	15.3
20 to 24 minutes	3,642	14.6	3,523	17.5	7,165	16.2	14.8
25 to 29 minutes	1,252	5.0	528	2.6	1,780	4.0	6.4
30 to 34 minutes	2,785	11.2	1,921	9.5	4,706	10.6	15.2
35 to 39 minutes	817	3.3	192	1.0	1,009	2.3	2.9
40 to 44 minutes	1,106	4.4	200	1.0	1,306	2.9	4.1
45 to 59 minutes	1,928	7.7	1,047	5.2	2,975	6.7	8.2
60 to 89 minutes	2,427	9.7	1,153	5.7	3,580	8.1	7.2
90 or more minutes	1,019	4.1	45	0.2	1,064	2.4	3.6
Total:	24,780	99.5	16,757	83.1	41,537	93.8	

Source: 2022 1-year American Community Survey, Summary File
The results in this table are for those who work in the region, regardless of the location of their residence.

Figure 82: Percent of Local Employees With Commutes of More than 30 Minutes

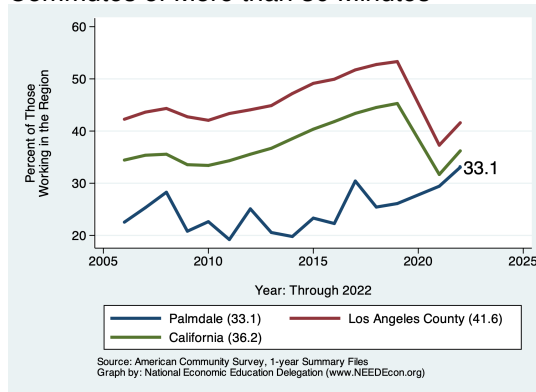


Figure 83: Percent of Local Employees With Commutes of More than 90 Minutes

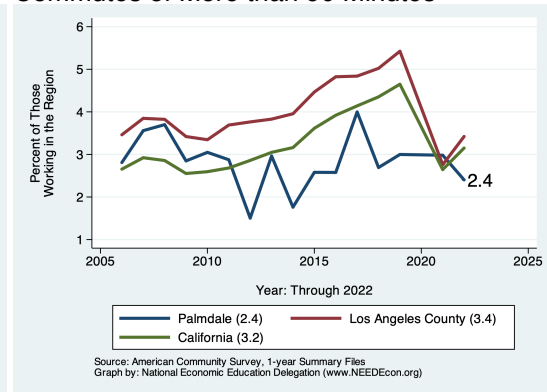
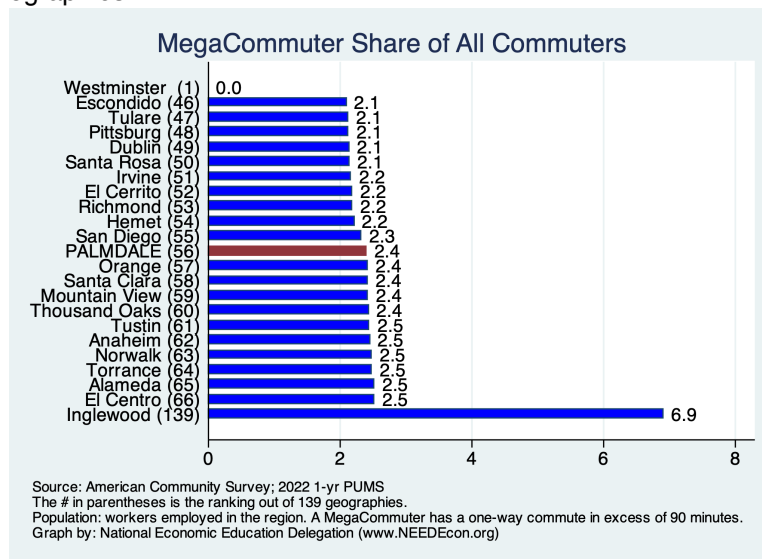


Figure 84: Rank: Share of MegaCommuters Across Similar Geographies



Place of Work

This section provides evidence on where workers living in Palmdale work. As evidenced in the first table, some of Palmdale’s employed workers work in the City, but many do not. The first table and graph pair provide evidence at the county level while the second provide evidence with regard to working outside of the Palmdale city boundary.

Table 10. SEX OF WORKERS BY PLACE OF WORK—STATE AND COUNTY LEVEL

Place of Work	Male		Female		All Workers		All of CA (%)
	#	(%)	#	(%)	#	(%)	
Worked in state of residence:	40,152	100.0	29,610	94.6	69,762	99.9	99.6
Worked in county of residence	38,464	95.8	29,174	93.2	67,638	96.8	85.3
worked outside of county of residence	1,688	4.2	436	1.4	2,124	3.0	14.3
Worked outside state of residence	0	0.0	96	0.3	96	0.1	0.4
Total:	40,152	100.0	29,706	94.9	69,858	100.0	

Source: 2022 1-year American Community Survey, Summary File

Figure 85: Percent of Workers Employed Outside of Their County of Residence

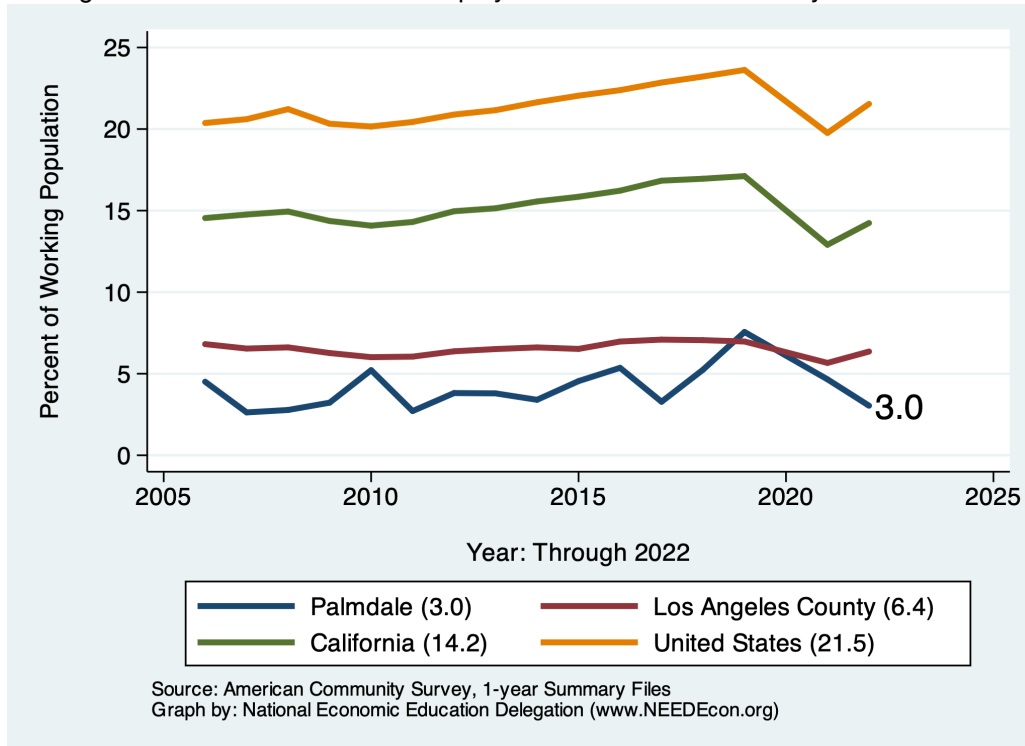
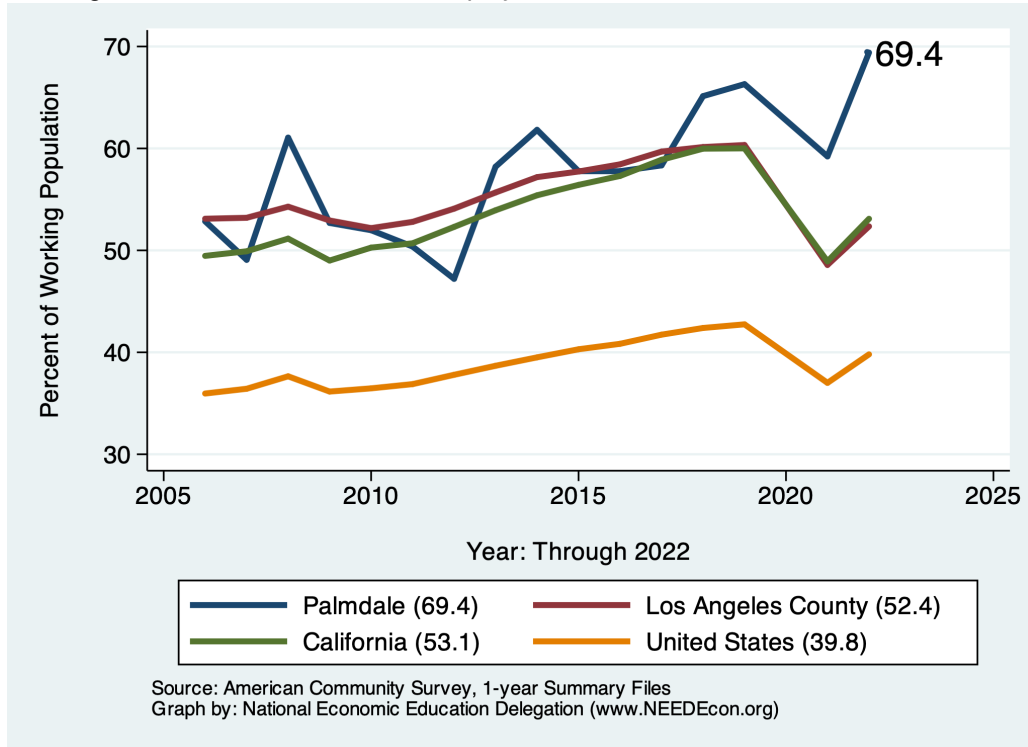


Table 11. SEX OF WORKERS BY PLACE OF WORK-PLACE LEVEL

Place of Work	Male		Female		All Workers #	All Workers (%)	All of CA (%)
	#	(%)	#	(%)			
Living in a place:	40,152	100.0	29,706	94.9	69,858	100.0	95.8
Worked in place of residence	10,490	26.1	10,885	34.8	21,375	30.6	42.3
Worked outside place of residence	29,662	73.9	18,821	60.1	48,483	69.4	53.4
Not living in a place	0	0.0	0	0.0	0	0.0	4.2
Total:	40,152	100.0	29,706	94.9	69,858	100.0	

Source: 2022 1-year American Community Survey, Summary File

Figure 86: Percent of Workers Employed Outside of Their Place of Residence



Commute Mode by Income

**Table 12. MEDIAN EARNINGS IN THE PAST 12 MONTHS
BY MEANS OF TRANSPORTATION TO WORK**

	City		California	United States	
	Median	Ratio	Ratio	Median	Ratio
Car, truck, or van - drove alone	47,092	104.7	48,335	45,677	103.1
Car, truck, or van - carpooled	41,314	123.6	35,926	34,518	119.7
Public transportation (excluding taxicab)	60,111	186.6	34,625	41,443	145.1
Walked	6,719	23.6	30,552	27,247	24.7
Taxicab, motorcycle, bicycle, or other means	24,234	64.1	40,631	36,218	66.9
Worked from home	48,989	66.0	79,738	69,180	70.8
Total:	46,344	93.0	49,818	46,365	100.0

Source: 2022 1-year American Community Survey, Summary File

Notes: 1) Ratio = the ratio of the regional median to either the CA or US median, relative to the Total ratio.

Values above 100 imply a high local median. Values below 100 imply a low local median.

For example, a value of 200 means that the local mean is 2x higher than would be expected.

For "Total:", ratio is simply the ratio of the medians.

2) For regions with more than one geography, the medians are averages weighted by working population.

Table 13. MODE OF TRANSPORTATION TO WORK BY WORKERS' EARNINGS

Mode of Transit	< \$25,000		\$25,000-\$74,999		\$75,000+		All		All of CA
	#	(%)	#	(%)	#	(%)	#	(%)	(%)
Car, Truck, or Van: Drove Alone	12,528	51.4	19,486	78.6	11,634	76.1	51,045	74.8	68.4
Car, Truck, or Van: Carpooled	2,712	11.1	2,910	11.7	1,845	12.1	8,979	13.2	9.5
Public Transportation (excl Taxi)	391	1.6	260	1.0	138	0.9	924	1.4	3.6
Walked	245	1.0	28	0.1	13	0.1	362	0.5	2.4
Taxicab, Motorcycle, or other	785	3.2	224	0.9	267	1.7	1,548	2.3	2.4
Worked at Home	1,387	5.7	1,842	7.4	1,381	9.0	5,414	7.9	13.6
Total:	18,048	74.0	24,750	99.9	15,278		68,272		100.0

Source: 2022 5-year American Community Survey, Summary File

**Table 14. MODE OF TRANSPORTATION TO WORK BY WORKERS' EARNINGS FOR
WORKPLACE GEOGRAPHY**

Mode of Transit	< \$25,000		\$25,000-\$74,999		\$75,000+		All		All of CA
	#	(%)	#	(%)	#	(%)	#	(%)	(%)
Car, Truck, or Van: Drove Alone	9,117	50.2	13,432	78.7	10,315	79.3	37,836	75.1	68.5
Car, Truck, or Van: Carpooled	1,328	7.3	1,257	7.4	743	5.7	3,851	7.6	9.5
Public Transportation (excl Taxi)	198	1.1	24	0.1	23	0.2	281	0.6	3.6
Walked	324	1.8	34	0.2	135	1.0	529	1.0	2.4
Taxicab, Motorcycle, or other	695	3.8	275	1.6	411	3.2	1,552	3.1	2.4
Worked at Home	1,387	7.6	1,842	10.8	1,381	10.6	5,414	10.7	13.6
Total:	13,049	71.8	16,864	98.8	13,008		49,463	98.2	

Source: 2022 5-year American Community Survey, Summary File

The results in this table are for those who work in the region, regardless of the location of their residence.

Commute Mode by Poverty Status

Table 15. MODE OF TRANSPORTATION TO WORK BY POVERTY STATUS

Mode of Transit	In Poverty		100-149% of Pov		>150% of Pov		All		All of CA (%)
	#	(%)	#	(%)	#	(%)	#	(%)	
Car, Truck, or Van: Drove Alone	2,598	41.7	2,525	39.4	41,860	67.1	46,983	67.3	65.8
Car, Truck, or Van: Carpooled	537	8.6	816	12.7	12,375	19.8	13,728	19.7	9.8
Public Transportation (excl Taxi)	0	0.0	0	0.0	508	0.8	508	0.7	2.6
Walked	220	3.5	151	2.4	66	0.1	437	0.6	2.1
Taxicab, Motorcycle, or other	127	2.0	0	0.0	798	1.3	925	1.3	2.4
Worked at Home	319	5.1	177	2.8	6,781	10.9	7,277	10.4	17.2
Total:	3,801	61.0	3,669	57.2	62,388		69,858		

Source: 2022 1-year American Community Survey, Summary File

Table 16. MODE OF TRANSPORTATION TO WORK BY POVERTY STATUS FOR WORKPLACE GEOGRAPHY

Mode of Transit	In Poverty		100-149% of Pov		>150% of Pov		All		All of CA (%)
	#	(%)	#	(%)	#	(%)	#	(%)	
Car, Truck, or Van: Drove Alone	676	14.5	1,916	37.2	32,795	72.0	35,387	70.5	65.8
Car, Truck, or Van: Carpooled	486	10.4	145	2.8	3,726	8.2	4,357	8.7	9.8
Public Transportation (excl Taxi)	0	0.0	0	0.0	124	0.3	124	0.2	2.6
Walked	220	4.7	276	5.4	315	0.7	811	1.6	2.1
Taxicab, Motorcycle, or other	77	1.7	0	0.0	781	1.7	858	1.7	2.4
Worked at Home	319	6.8	177	3.4	6,781	14.9	7,277	14.5	17.2
Total:	1,778	38.1	2,514	48.8	44,522	97.7	48,814	97.2	100.0

Source: 2022 1-year American Community Survey, Summary File

The results in this table are for those who work in the region, regardless of the location of their residence.

Migration

Overall Migration Flows

Definition:

The United States is a country with an increasingly mobile population. People move, migrate, from one place to another with increasing frequency.

Why is it important?

Having a handle on whether or not Palmdale is a net recipient (migration inflows) or donor (mi-

gration outflows) of population is very important for understanding trends in the City's development. This section outlines migration patterns by age, education, income, marital status, and housing tenure. Understanding recent trends is very important for making policy, investment, and other decisions about the future. Also, understanding the extent to which the population is stable, or experiences significant turnover each year is helpful for planning purposes.

Figure 87: Overall Movements of Residents

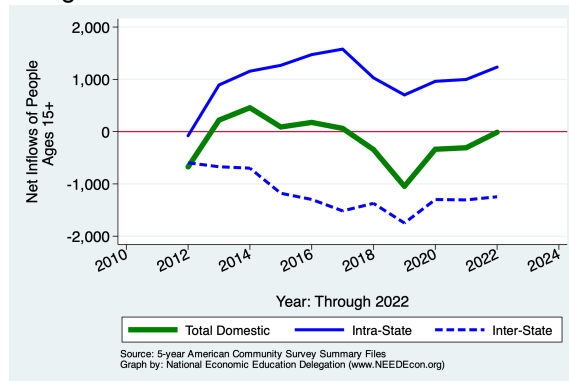


Table 17: Migration by Income

Category	Population	Net Inflows				
		All Migration	Same State		Across States	From Abroad
			W/in County	Between Counties		
No income	28,325	292	495	-445	-11	253
With income	98,868	82	2,090	-906	-1,235	133
\$1 to \$9,999 or less	13,700	-414	114	-157	-371	0
\$10,000 to \$14,999	11,193	336	291	-61	67	39
\$15,000 to \$24,999	13,901	-166	254	-339	-95	14
\$25,000 to \$34,999	13,232	184	303	-51	-68	0
\$35,000 to \$49,999	14,208	-98	408	-288	-252	34
\$50,000 to \$64,999	10,023	120	239	23	-142	0
\$65,000 to \$74,999	4,511	-189	-33	-29	-163	36
\$75,000 or more	18,100	309	514	-4	-211	10
All:	127,193	374	2,585	-1,351	-1,246	386

Source: 2022 5-year American Community Survey, Summary File

Note: The data in this and other tables in this section are limited in that there is no information on the City's population that has moved abroad.

The "From Abroad" column is gross movements into the City from abroad.

Figure 88: Overall Movements of Low Income Residents

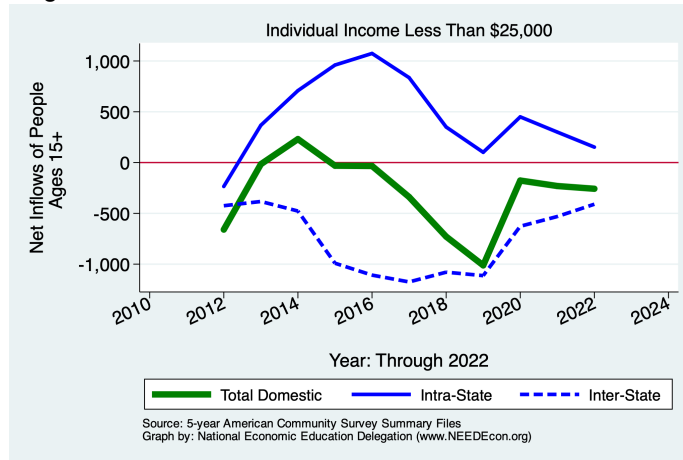


Figure 89: Overall Movements of Middle Income Residents

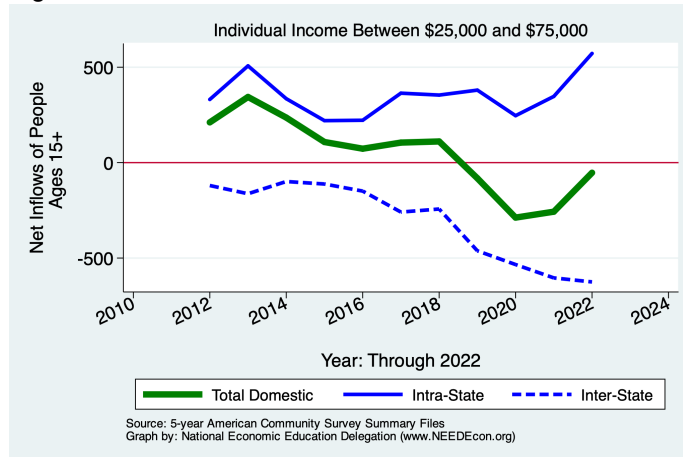
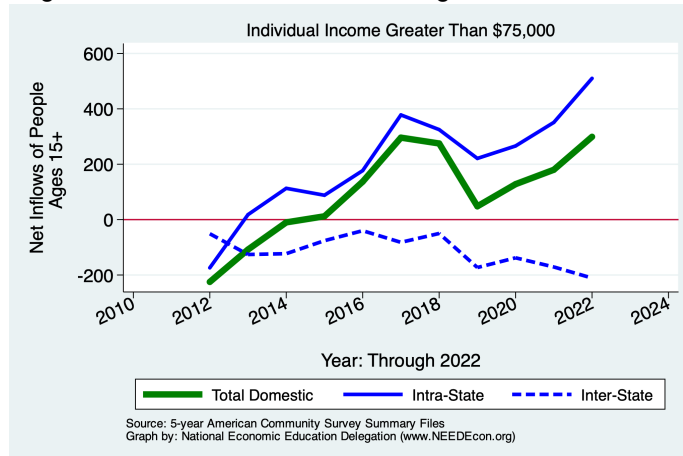


Figure 90: Overall Movements of High Income Residents



Demographics of Migration Flows

Table 18: Migration by Marital Status

Category	Population	Net Inflows				
		All Migration	Same State			From Abroad
			W/in County	Between Counties	Across States	
Never married	52,007	-520	1,169	-962	-754	27
Now married, except separated	58,921	1,259	1,405	-115	-385	354
Divorced	8,610	-385	-197	-97	-91	0
Separated	2,832	24	139	-97	-18	0
Widowed	4,823	-4	69	-80	2	5
Total:	127,193	374	2,585	-1,351	-1,246	386

Source: 2022 5-year American Community Survey, Summary File

Table 19: Migration by Tenure

Category	Population	Net Inflows				
		All Migration	Same State			From Abroad
			W/in County	Between Counties	Across States	
Householder lived in owner-occupied housing units	119,329	7,633	7,271	616	-501	247
Householder lived in renter-occupied housing units	42,207	166	1,358	-116	-1,076	0
Total:	161,536	7,799	8,629	500	-1,577	247

Source: 2022 1-year American Community Survey, Summary File

Figure 91: Domestic Movements of Residents by Tenure

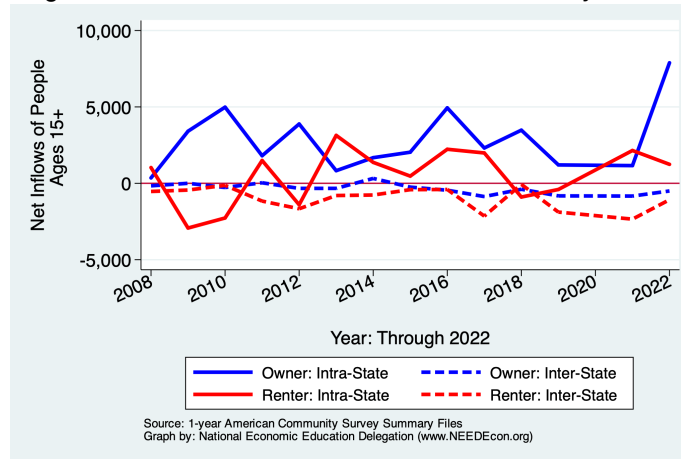


Table 20: Migration by Age

Category	Population	Net Inflows				
		All Migration	Same State			From Abroad
			W/in County	Between Counties	Across States	
1 to 4 years	9,809	128	415	-61	-252	26
5 to 17 years	36,441	828	1,151	-151	-196	24
18 and 19 years	4,922	-295	-83	-199	-13	0
20 to 24 years	11,904	-192	309	-196	-305	0
25 to 29 years	11,696	-440	-45	-269	-165	39
30 to 34 years	11,314	4	398	-145	-262	13
35 to 39 years	10,638	287	380	38	-166	35
40 to 44 years	10,886	319	425	-63	-43	0
45 to 49 years	10,797	192	218	-22	-4	0
50 to 54 years	10,077	323	336	-13	-36	36
55 to 59 years	9,847	251	122	-23	4	148
60 to 64 years	9,085	-122	-62	-10	-76	26
65 to 69 years	6,783	122	265	-120	-89	66
70 to 74 years	4,760	14	117	-93	-20	10
75 years and over	5,865	-221	-67	-81	-86	13
Total Population:	164,824	1,198	3,879	-1,408	-1,709	436

Source: 2022 5-year American Community Survey, Summary File

Table 21: Migration by Educational Attainment

Category	Population	Net Inflows				
		All Migration	Same State			From Abroad
			W/in County	Between Counties	Across States	
Less than high school graduate	23,804	724	689	-46	9	72
High school graduate (includes equiv)	30,424	86	626	-450	-343	253
Some college or assoc. degree	30,538	38	418	58	-446	8
Bachelor's degree	11,608	-152	180	-352	-33	53
Graduate or professional degree	5,374	33	174	-11	-130	0
Total:	101,748	729	2,087	-801	-943	386

Source: 2022 5-year American Community Survey, Summary File

Table 22: Median Income of Migration Flows

Flow	In-Migration	Out-Migration
Same House 1 Year Ago	33,983	33,983
Moved Within Same County	47,565	25,497
Moved to Different County, Same State	80,469	15,560
Moved Between States	13,194	31,332
Total Population:	34,604	33,185

Source: 2022 1-year American Community Survey, Summary File

Table 23: Median Age of Migration Flows

Flow	In-Migration	Out-Migration
Same House 1 Year Ago	34.7	34.7
Moved Within Same County	29.4	31.2
Moved to Different County, Same State	25.0	25.2
Moved Between States	83.0	28.5
Moved from Abroad	7.4	
Total Population:	33.8	34.0

Source: 2022 1-year American Community Survey, Summary File

References and Sources

The majority of the data presented in this report are from the American Community Survey (ACS). For larger geographies, the 1-year Summary Files provide the data. For smaller communities, roughly those with less than 65,000 in population in 2021, the 5-year Summary Files provide the data.

The ACS data are supplemented by building permit data from the U.S. Census Bureau, population and housing data from the California Department of Finance, and home price and rental rates from Zillow.

U.S. Census Bureau. American Community Survey 1-year and 5-year Summary Files. <https://www.census.gov/programs-surveys/acs/data/data-via-ftp.html>. The 1-year data are released in September each year and the 5-year data are released in January.

Zillow Research Data <https://www.zillow.com/research/data/>

U.S. Census Bureau. Building Permits Data, updated annually in February. <https://www.census.gov/construction/bps/current.html>

State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State — January 1. Sacramento, California, May. <https://dof.ca.gov/forecasting/demographics/estimates/>

State of California, Department of Finance, E-2. California County Population Estimates and Components of Change by Year, July 1, 2010-2021. Sacramento, California, December. <https://dof.ca.gov/forecasting/demographics/>

State of California, Department of Finance, E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change — January 1. Sacramento, California, May. <https://dof.ca.gov/forecasting/demographics/>