Petaluma, California

Indicators Report

by
The National Economic Education Delegation (NEED)

April 20, 2024

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

This report was produced by the:

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Executive Summary

Assessing the City with Indicators

About this Report

This report provides background or summary information for the city of Petaluma (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 Petaluma. These indicators are compared to Sonoma County (the County) as a whole, a broader region where one is well defined, California, and the United Sates.

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 snopshot of Petaluma 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 or employment and unemployment in Petaluma 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 Petaluma, 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 proprotion 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 Petaluma, but do not necessarily live in Petaluma.
- **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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Contents

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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 compositon.

Why is it important?

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

A Demographic Snapshot

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Statistic	2022	2019
POPULATION		
Population Estimate (#, 5yr)	59,682.0	60,767.0
Veterans (#, 5yr)	2,793.0	2,475.0
Foreign born persons (%, 5yr)	14.1	15.7
Population age 25+ (#, 5yr)	44,219.0	43,422.0
AGE AND SEX		
Persons under 5 years (%, 5yr)	4.5	5.0
Persons under 18 years (%, 5yr)	19.5	21.0
Persons 65 years and over (%, 5yr)	19.6	17.6
Female persons (%, 5yr)	50.4	50.5
INCOME AND POVERTY		
Median household income ($, 5yr)	108,527.0	91,528.0
Per capita income in past 12 months ($, 5yr)	56,290.0	45,455.0
Persons in poverty (%, 5yr)	5.9	6.7
Children age less than 18 in poverty (#, 5yr)	636.0	917.0
Children age less than 18 in poverty (%, 5yr)	5.5	7.2
RACE AND ETHNICITY		
White alone (%, 5yr)	75.3	77.5
African American alone (%, 5yr)	1.3	1.2
American Indian or Alaska Native alone (%, 5yr)	0.8	0.4
Asian alone (%, 5yr)	4.8	4.5
Native Hawaiian and Other Pacific Islander alone (%, 5yr)	0.1	0.1
Two or More Races (%, 5yr)	10.6	5.3
Hispanic or Latino (%, 5yr)	19.3	21.9
White alone, not Hispanic or Latino (%, 5yr)	69.2	68.1
HOUSING		
Housing units (#, 5yr)	24,141.0	23,291.0
Owner-occupied housing units (%, 5yr)	62.9	65.9
Median value of owner-occupied housing units ($, 5yr)	805,800.0	633,900.0
Median selected monthly owner costs-with a mortgage ($, 5yr)	3,000.0	2,531.0
Median selected monthly owner costs-without a mortgage ($, 5yr)	767.0	638.0
Median gross rent ($, 5yr)	2,361.0	1,830.0
FAMILIES AND LIVING ARRANGEMENTS		
Households (#, 5yr)	23,486.0	22,655.0
Persons per household (#, 5yr)	2.5	2.7
Living in same house 1 year ago, % of persons age 1+ (5yr)	88.8	87.0
EDUCATION		
High school graduate or higher, % of persons age 25+ (5yr)	92.4	90.4
Bachelor's degree or higher, % of persons age 25+ (5yr)	43.0	40.4
HEALTH		
With a disability, under age 65 years (#, 5yr)	2,992.0	2,961.0
Persons without health insurance, under age 65 years (%, 5yr)	3.8	3.9
LABOR FORCE		
In civilian labor force, persons age 16+ (%, 5yr)	65.4	66.2
In civilian labor force, women age 16+ (%, 5yr)	61.2	62.2
Employed, persons age 16+ (%, 5yr)	59.7	60.8
Self employed (%, 5yr)	12.3	12.8
TRANSPORTATION		
Mean travel time to work, workers age 16+ (Mins., 5yr)	26.1	28.7
Drive alone in private vehicle (%, 5yr)	71.9	73.6
Using public transportation (%, 5yr)	3.4	4.8
Worked from home (%, 5yr)	15.7	8.8

Source: American Community Survey, Summary Files
Note: Data are from the 1-year files unless indicated by the notation 5yr.

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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	% Change 3 Year	% Change 5 Year
City				
Petaluma	58,321	−0.39	−5.53	−6.31
County and Broader Regions				
Sonoma County	478,174	−0.51	−2.68	−4.91
Bay Area	7,548,792	−0.45	−2.58	−2.62
California	38,940,231	−0.35	−1.79	−2.01

Source: CA DOF; Calculations by National Economic Education Delegation

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

City	2022	2023	% Change Local	% Change Bay Area	% Change California
Sonoma County	480.6	478.2	−0.51	−0.45	−0.35
Santa Rosa	175.4	174.5	−0.47		
Petaluma	58.6	58.3	−0.39		
Rohnert Park	43.7	43.7	−0.02		
Windsor	25.8	25.6	−1.07		
Healdsburg	11.0	10.9	−0.72		
Sonoma	10.8	10.7	−1.18		
Cloverdale	8.9	8.8	−0.92		
Cotati	7.4	7.4	−0.67		
Sebastopol	7.4	7.3	−1.14		

Source: CA DOF; Calculations by National Economic Education Delegation

Figure 1: Population Growth (1)

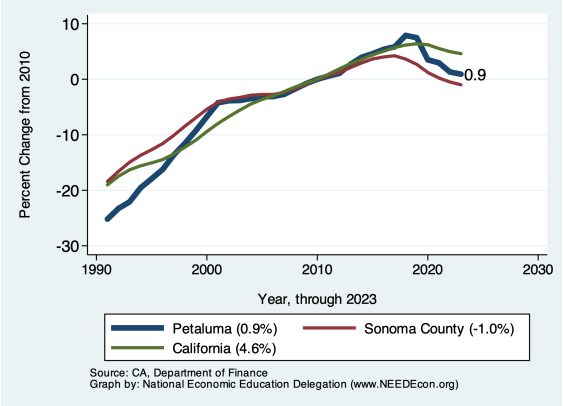

Figure 2: Population Growth (2)

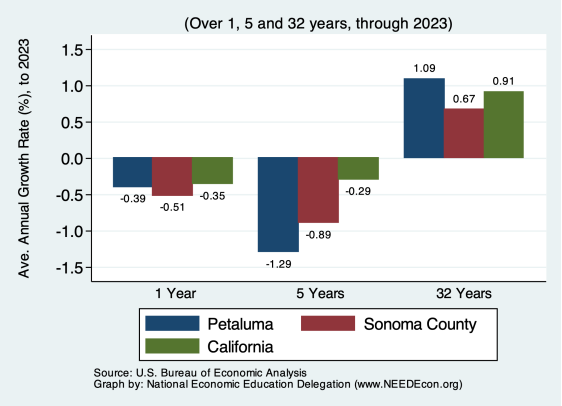

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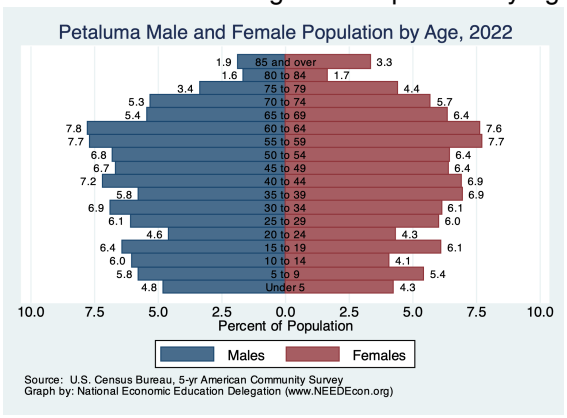
Figure 3: Population by Age - Detailed Age Categories



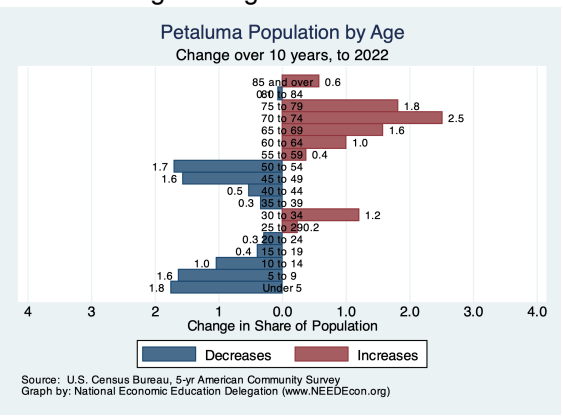
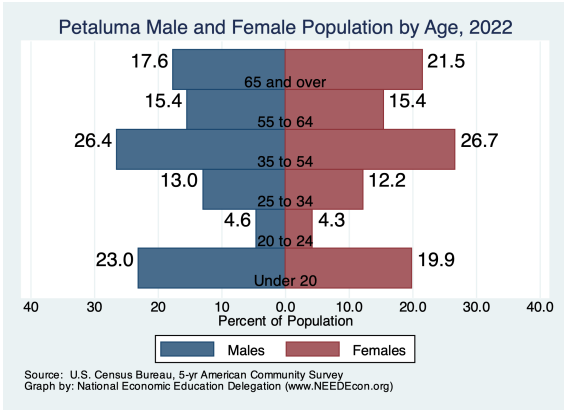


Figure 4: Population by Age - Broad Age Categories



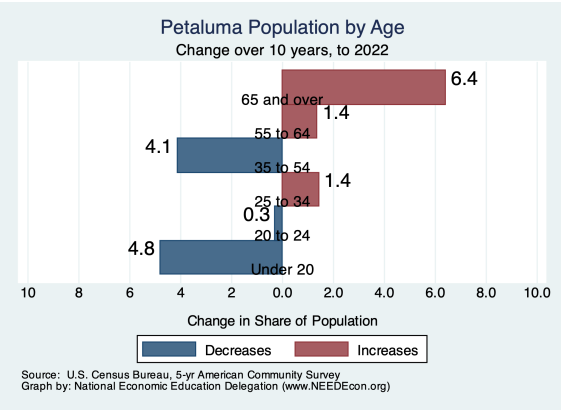
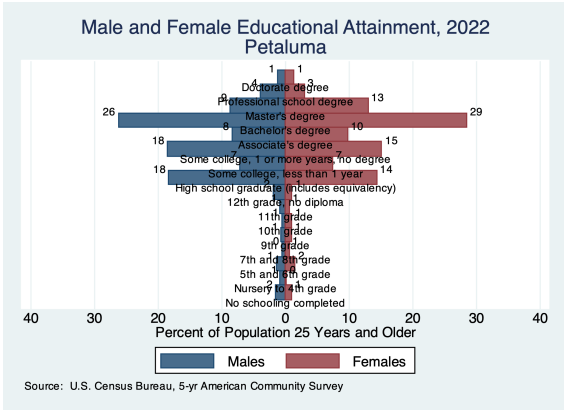


Figure 5: Population by Educational Attainment



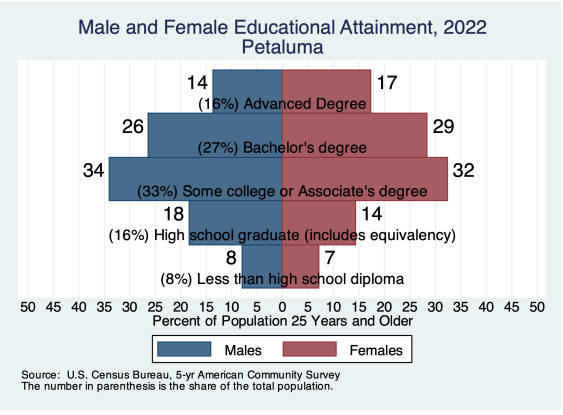


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Figure 6: Population by Race/Ethnicity

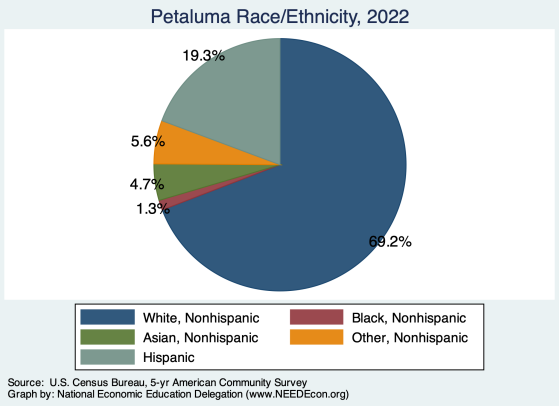
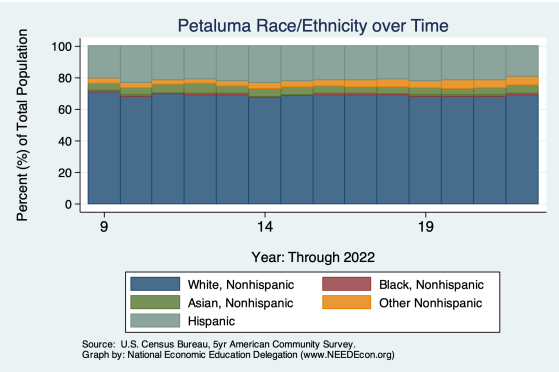


Figure 7: Population by Race/Ethnicity Over Time



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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 employment 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. Petaluma 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

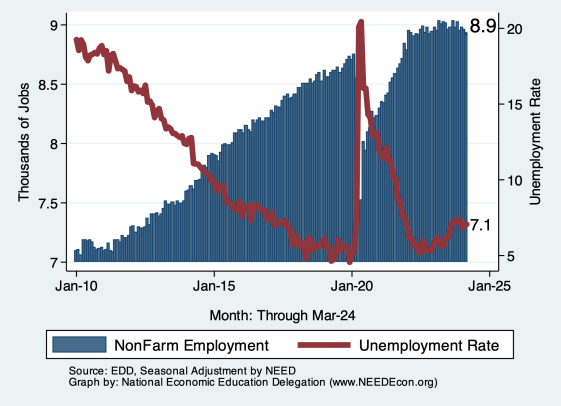


Figure 9: Employment and Unemployment - Last 12 Months

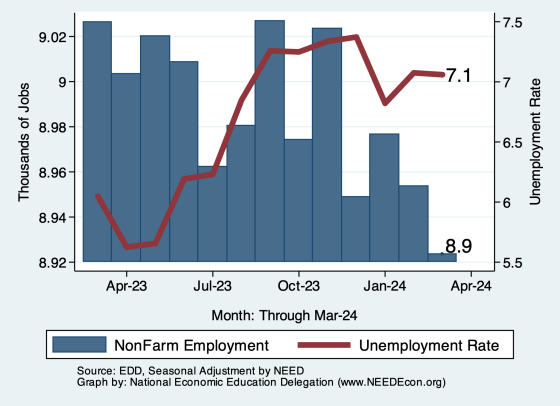


Figure 10: Relative Employment Growth Across Regions - since 2010

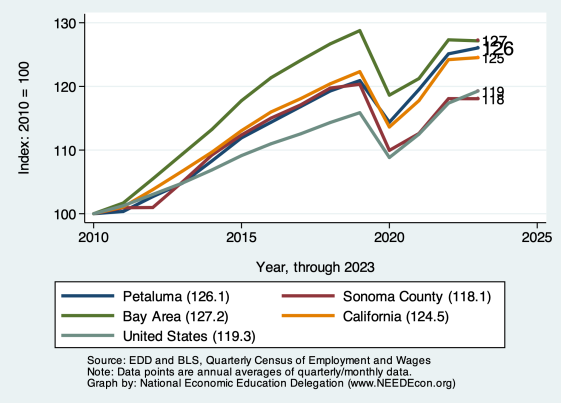
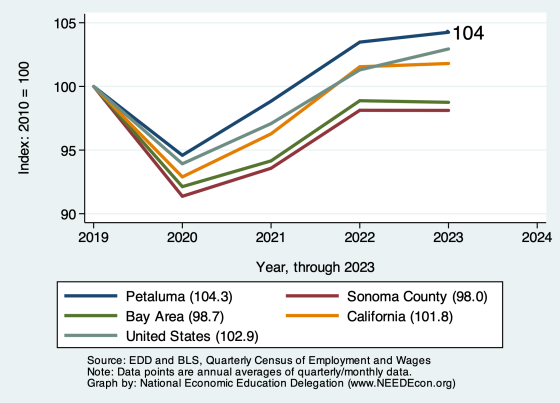


Figure 11: Relative Employment Growth Across Regions - since 2019



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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 indsutry-level employment data for Sonoma County. The following table provides the latest data for the County.

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

Industry	Employment	Share	Empl Growth	% Growth - Annualized Rate					
				Month	Qtr	6mo	1yr	3yr	5yr
Total Nonfarm	209,486	100.0	−97.9	−0.6	2.6	3.5	2.3	3.3	0.1
Total Private	181,380	86.6	−223.2	−1.5	1.1	3.1	2.1	3.1	0.3
Goods Producing	39,851	19.0	−59.9	−1.8	0.0	3.1	1.9	0.9	0.1
Mining, Logging and Construction	16,850	8.0	216.7	16.8	4.2	4.8	4.4	0.8	0.5
Mining and Logging	200	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Construction	16,528	7.9	235.7	18.8	−0.3	3.0	4.4	0.8	0.5
Manufacturing	23,040	11.0	−127.1	−6.4	−2.3	2.6	−0.0	0.7	−0.3
Durable Goods	8,755	4.2	−87.5	−11.2	−4.0	−2.9	−3.4	−0.3	−0.6
Non-Durable Goods	14,295	6.8	−48.9	−4.0	−1.2	6.0	2.1	1.4	−0.1
Service Providing	169,624	81.0	−107.5	−0.8	3.1	3.5	2.4	3.9	0.1
Trade, Trans & Utilities	34,539	16.5	−60.5	−2.1	3.2	2.0	−0.0	−0.7	−0.9
Wholesale Trade	6,580	3.1	−42.2	−7.4	−7.6	−4.0	−4.3	−4.3	−2.7
Retail Trade	23,203	11.1	21.6	1.1	4.4	2.9	0.8	−0.2	−1.0
Information	2,400	1.1	0.0	0.0	−15.1	−7.8	−4.0	1.4	−1.5
Financial Activities	8,008	3.8	64.7	10.2	7.1	7.1	2.4	3.1	−1.6
Finance & Insurance	4,035	1.9	48.8	15.7	−5.0	1.6	−2.4	−2.3	−2.9
Professional & Business Srvcs	24,853	11.9	102.8	5.1	2.9	4.3	−0.6	2.4	1.3
Prof, Sci, & Tech	9,671	4.6	30.9	3.9	0.9	3.4	0.9	1.3	0.1
Admin & Support Srvcs	11,797	5.6	48.2	5.0	2.2	3.2	−2.6	3.2	1.9
Educational & Health Srvcs	37,983	18.1	59.8	1.9	3.7	4.1	6.5	3.8	1.6
Health Care & Social Assistance	35,907	17.1	24.8	0.8	3.3	5.2	7.6	3.7	1.8
Leisure & Hospitality	26,066	12.4	−469.2	−19.3	−1.6	1.5	1.6	12.6	0.2
Accommodation & Food Srvcs	21,977	10.5	−524.7	−24.7	−1.2	2.8	1.4	11.4	0.1
Other Srvcs	7,881	3.8	80.0	13.0	7.0	7.7	5.4	9.4	1.8
Government	27,979	13.4	93.3	4.1	11.6	4.5	3.1	4.4	−1.1
Federal	1,300	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State	2,943	1.4	−51.6	−18.8	−10.4	−5.5	−2.9	3.0	−4.8
Local	23,740	11.3	135.6	7.1	16.1	5.8	4.1	4.9	−0.5
County	4,987	2.4	21.5	5.3	4.4	6.3	4.2	1.3	0.7
City	2,752	1.3	35.0	16.6	4.0	3.5	4.0	2.8	1.7
Local Government Education	11,780	5.6	26.5	2.7	27.4	4.1	2.2	6.3	−2.2

Source: EDD, National Economic Education Delegation (NEED)

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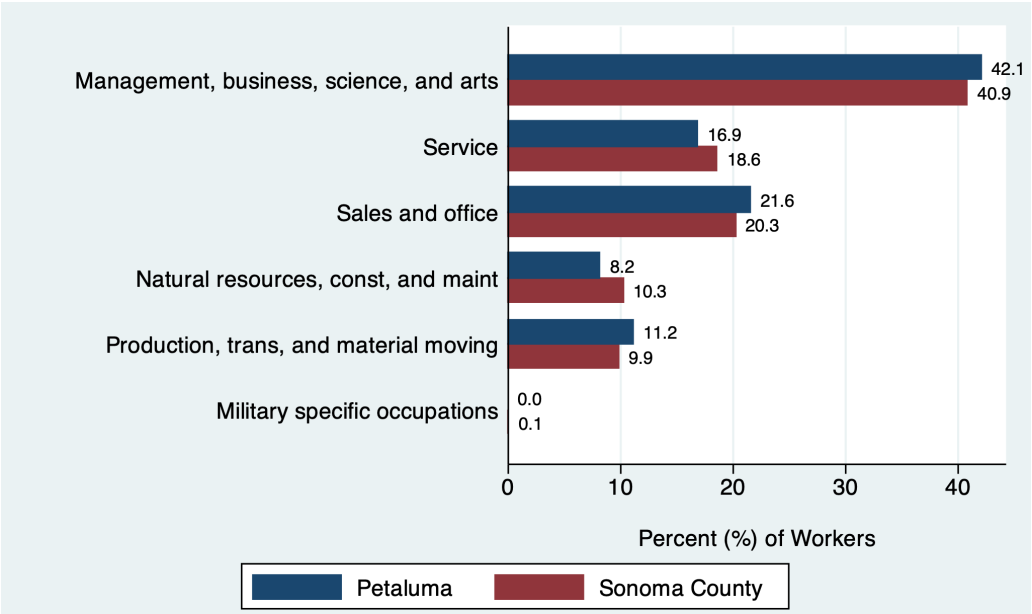
Some Employee Detail

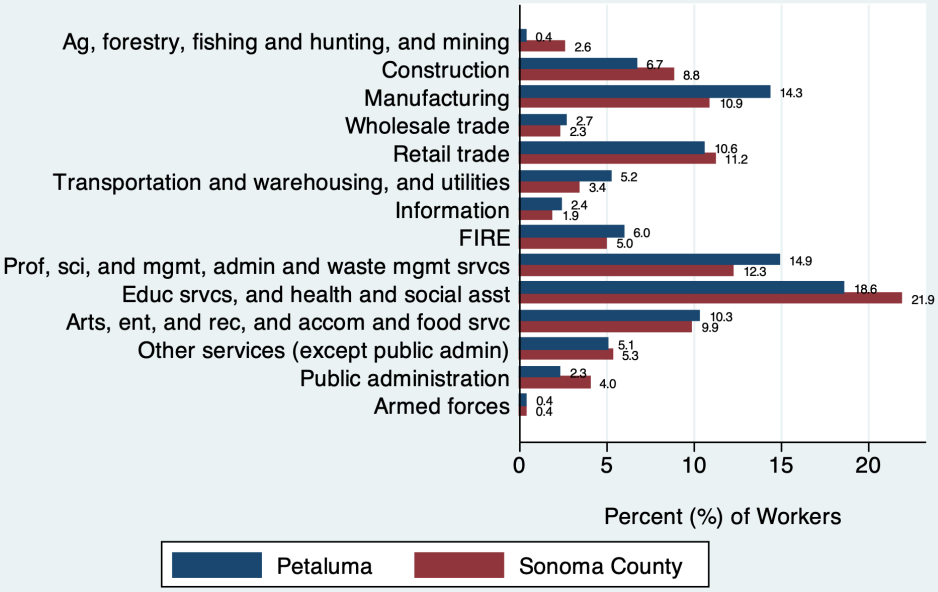
Employed in Petaluma

Figure 12: Employment by Occupation



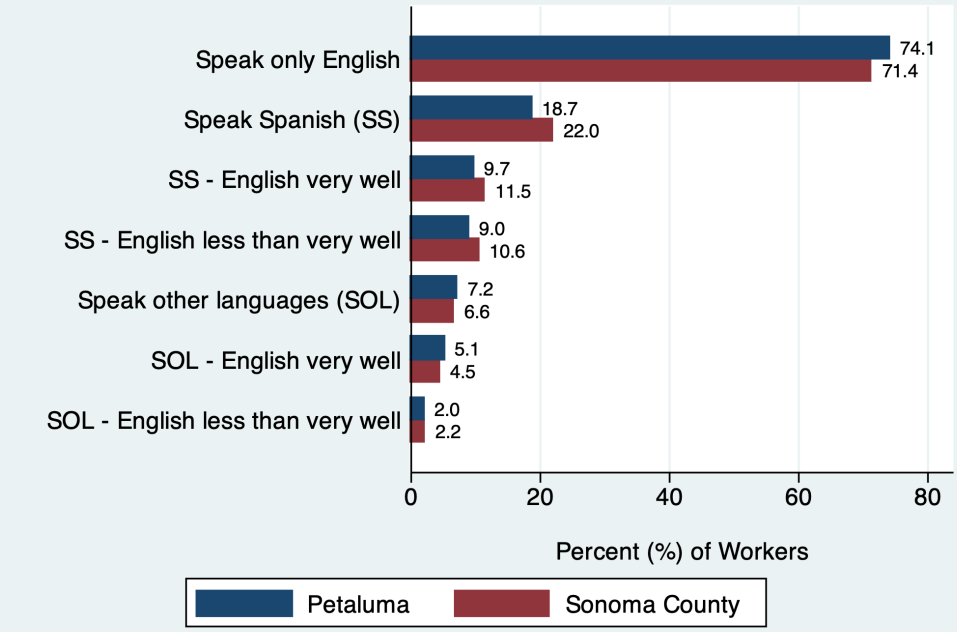
Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

Figure 13: Employment by Industry



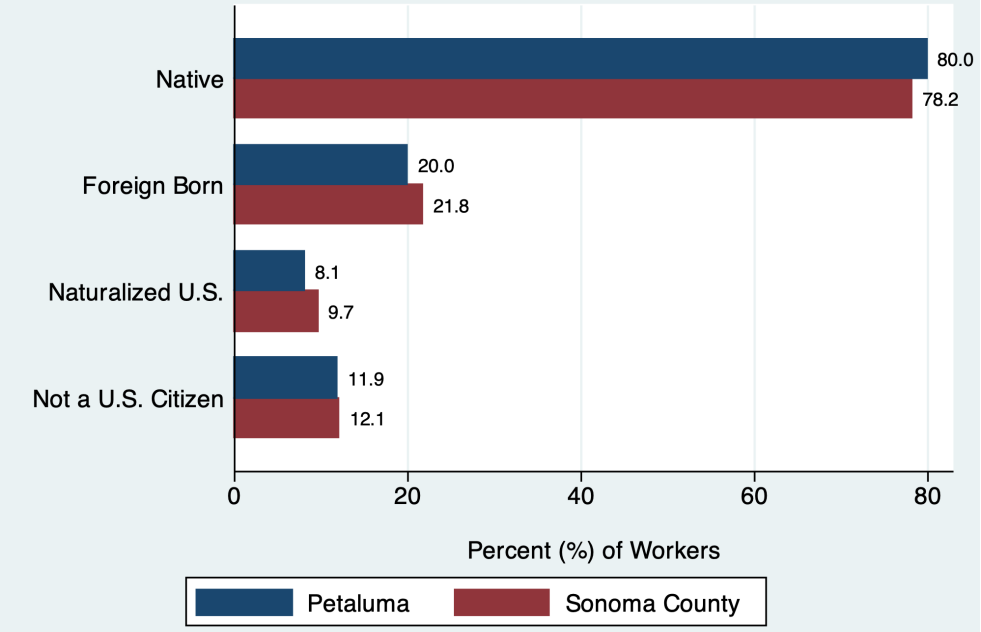
Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

Figure 14: Language Spoken at Home



Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

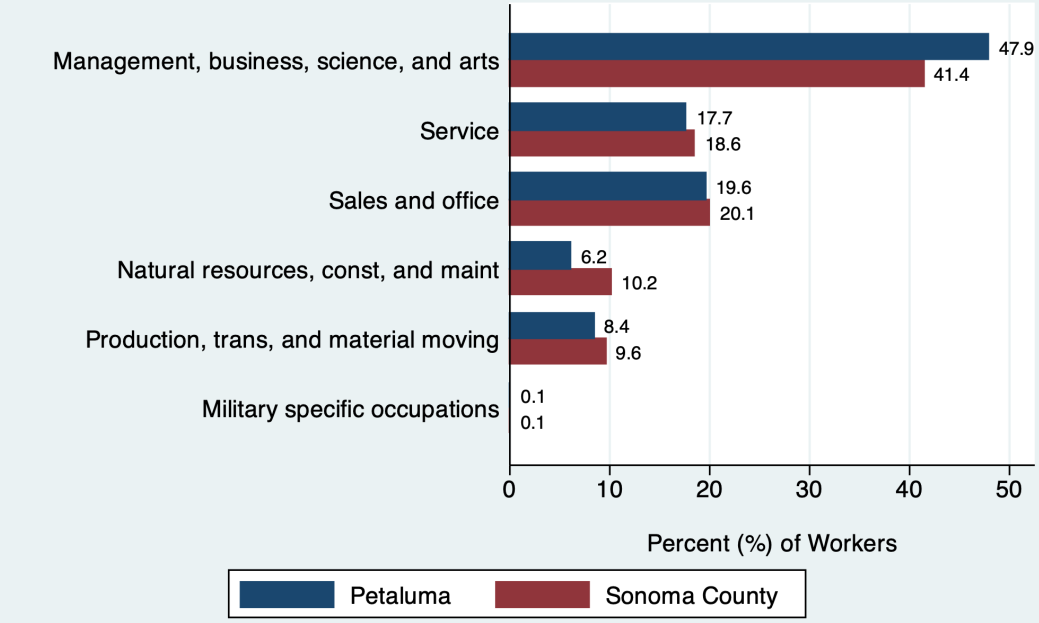
Figure 15: Citizenship



Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

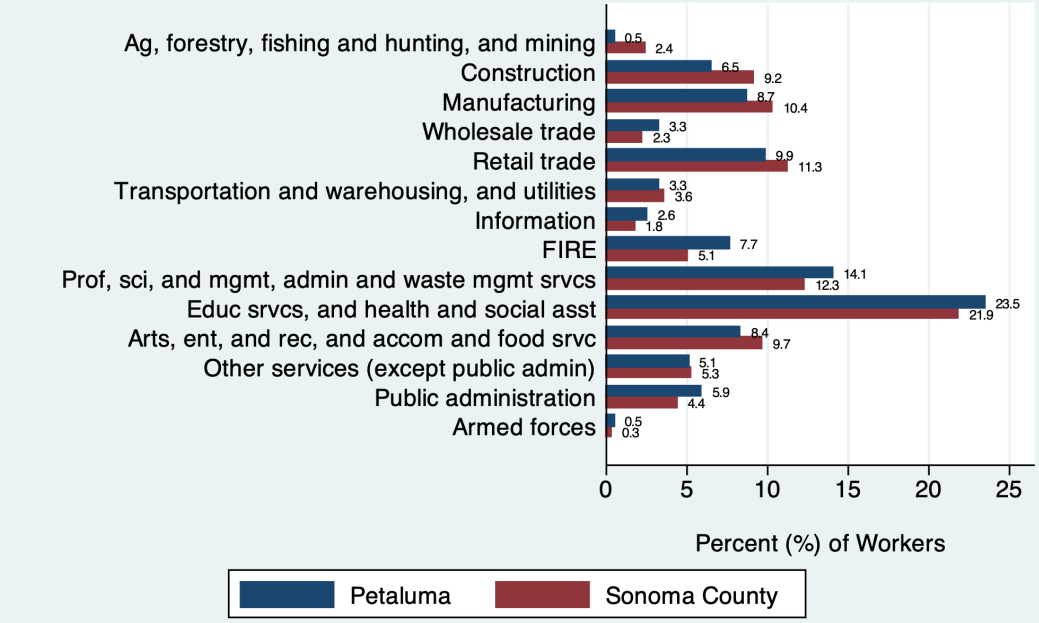
Employed Residents of Petaluma

Figure 16: Employment by Occupation



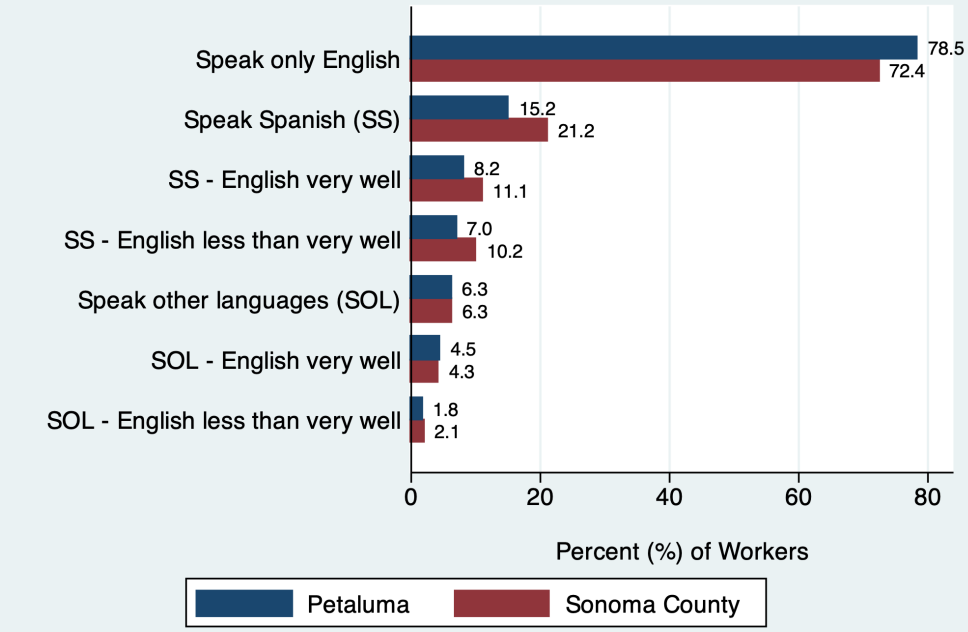
Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

Figure 17: Employment by Industry



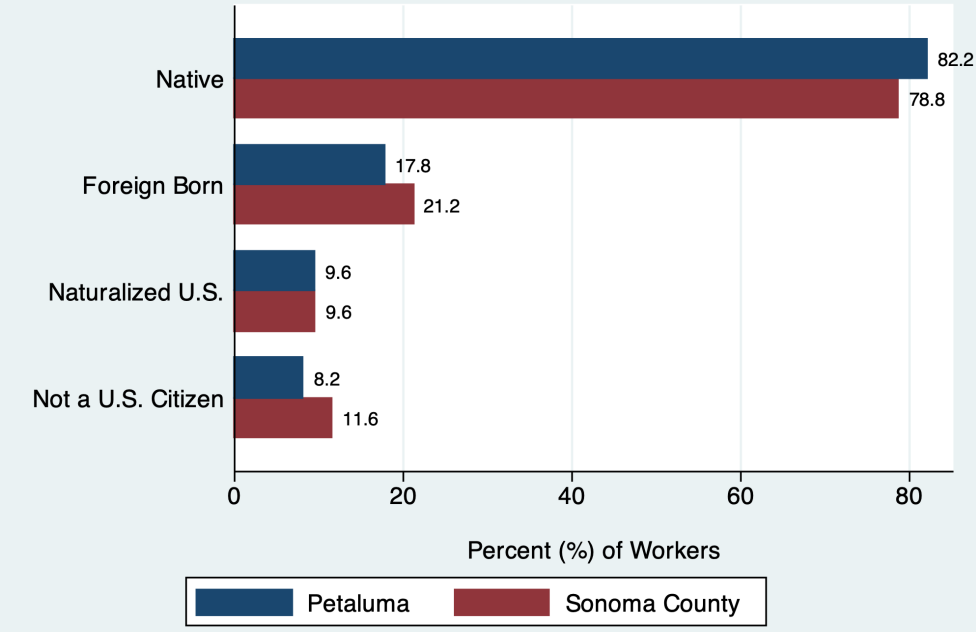
Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

Figure 18: Language Spoken at Home



Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

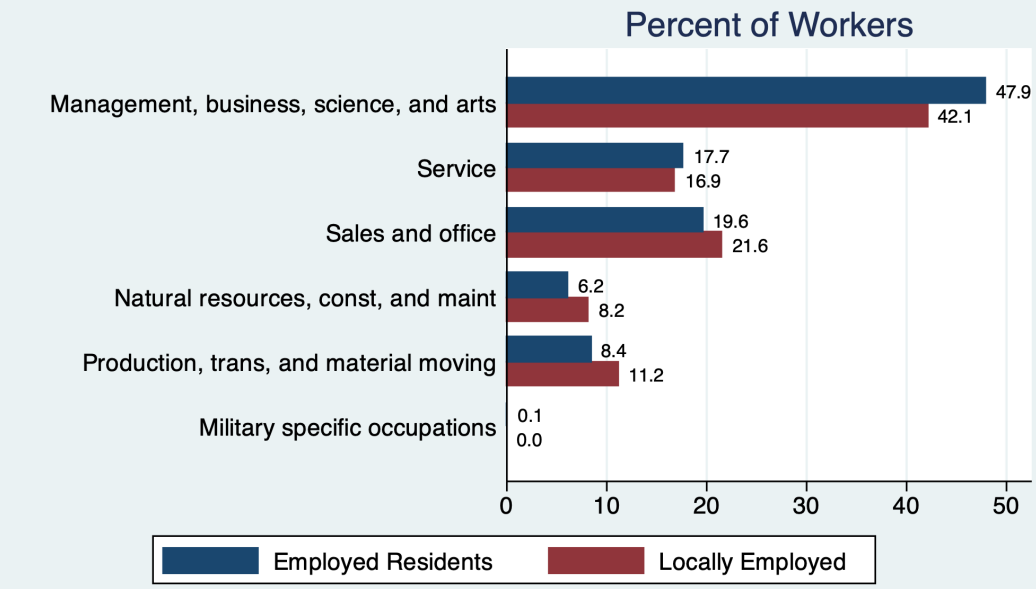
Figure 19: Citizenship



Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

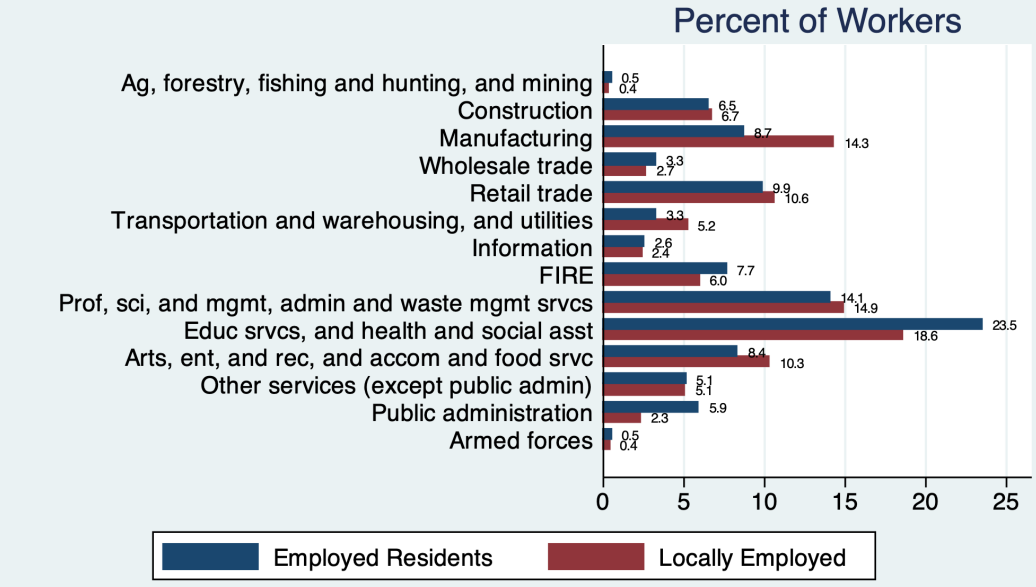
Employed Residents vs Workers in Petaluma

Figure 20: Employment by Occupation



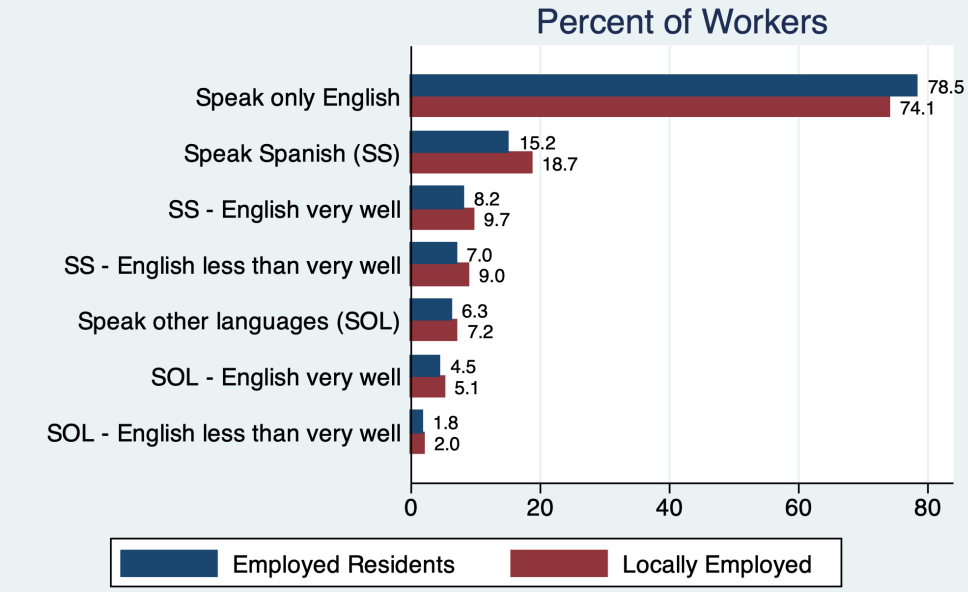
Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

Figure 21: Employment by Industry



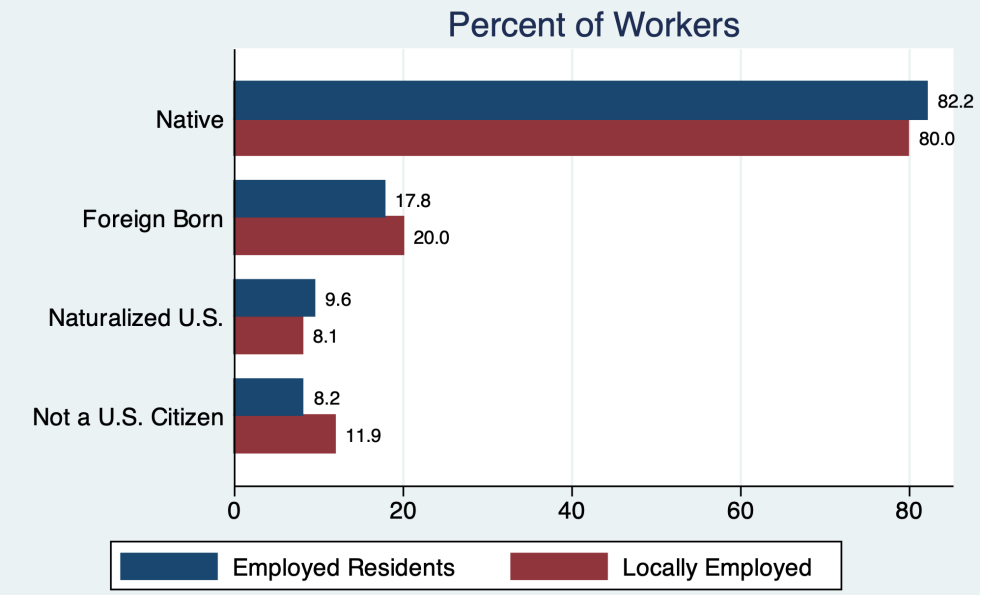
Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

Figure 22: Language Spoken at Home



Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

Figure 23: Citizenship



Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

Income and Earnings

Per Capita Income Growth

Definition:

Per capita income is the average income per person in Petaluma. 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

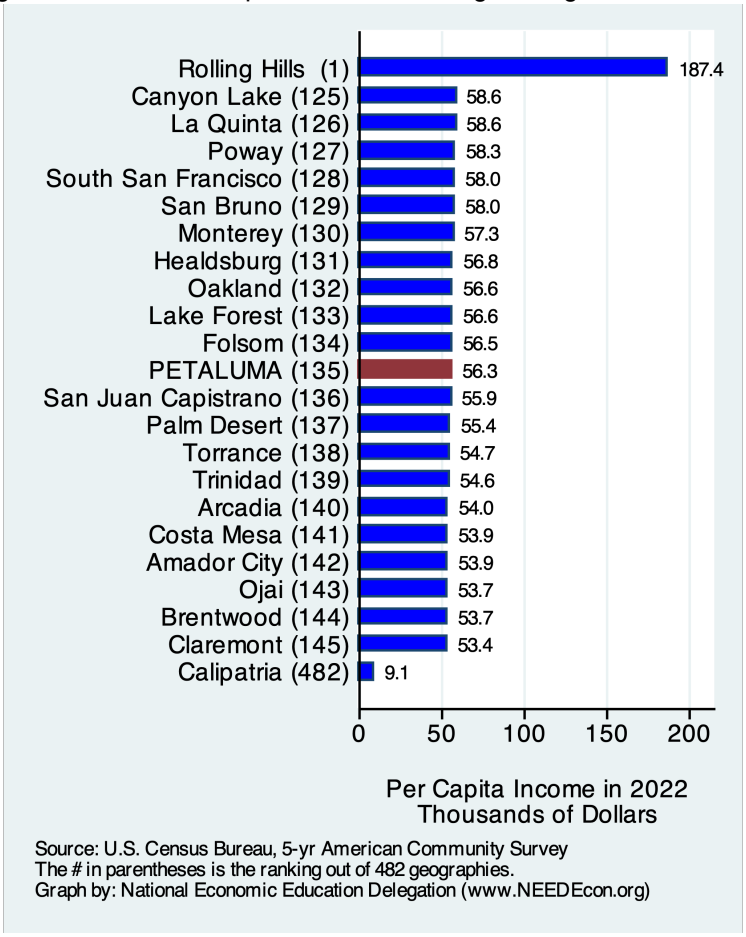
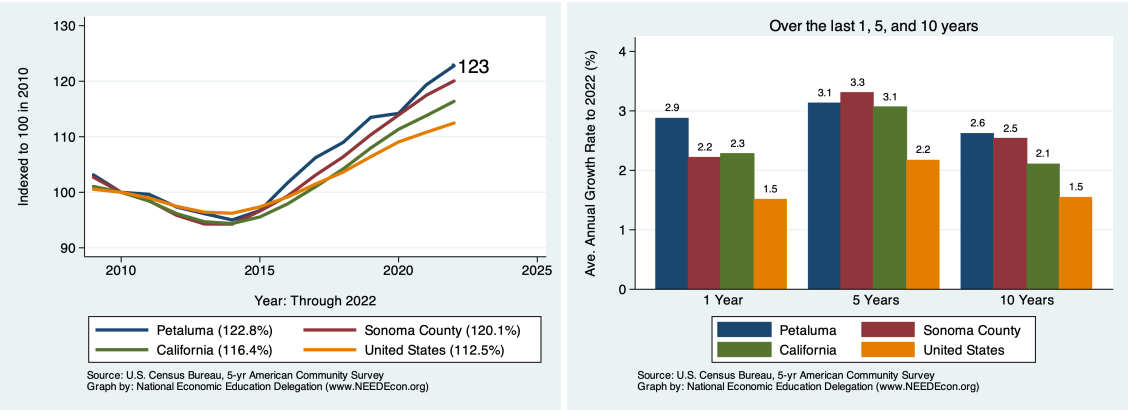


Figure 25: Regional Comparison of Growth over Time



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

Figure 26: Income Levels

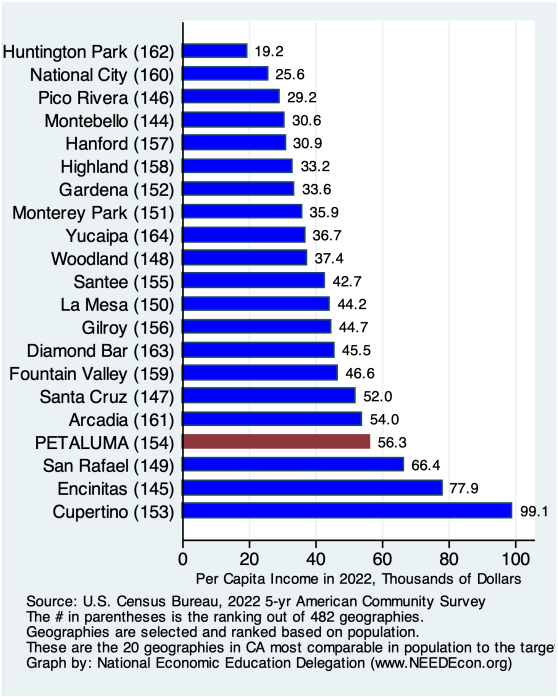
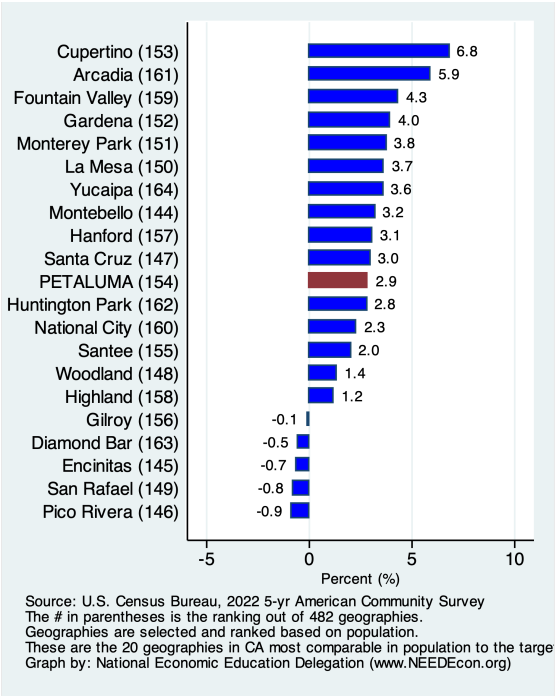


Figure 27: Growth over Time



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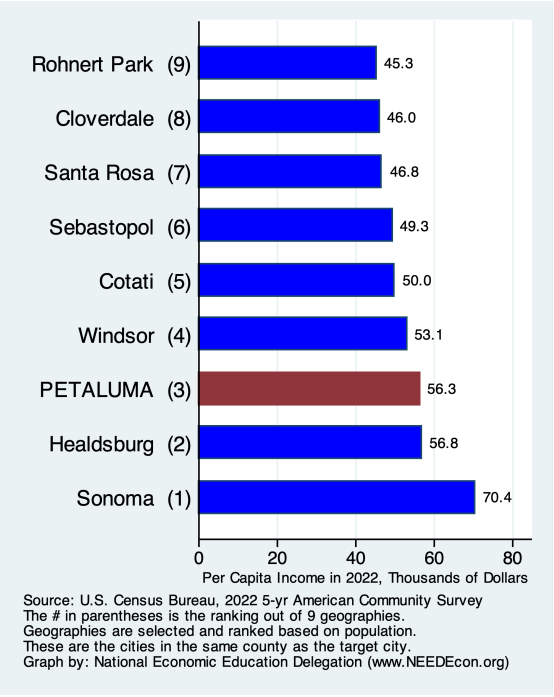
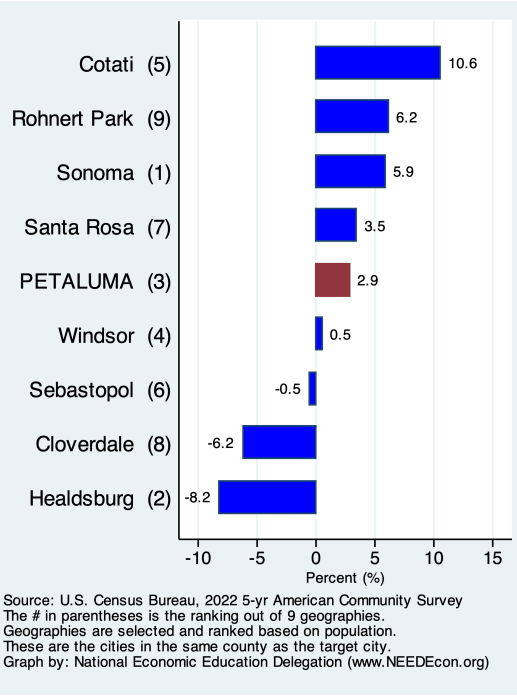
Real Per Capita Income Ranking Among Cities in Sonoma County

Figure 28: Income Levels



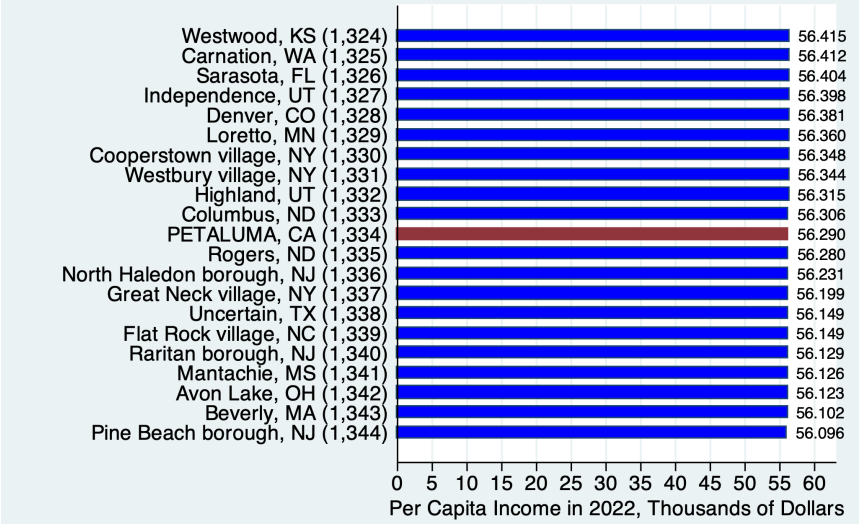
Source: U.S. Census Bureau, 2022 5-yr American Community Survey
The # in parentheses is the ranking out of 9 geographies.
Geographies are selected and ranked based on population.
These are the cities in the same county as the target city.
Graph by: National Economic Education Delegation (www.NEEDEcon.org)

Figure 29: Growth over Time



Source: U.S. Census Bureau, 2022 5-yr American Community Survey
The # in parentheses is the ranking out of 9 geographies.
Geographies are selected and ranked based on population.
These are the cities in the same county as the target city.
Graph by: National Economic Education Delegation (www.NEEDEcon.org)

Figure 30: Comparison with All Cities Nationwide



Source: U.S. Census Bureau, 5-yr American Community Survey
The # in parentheses is the ranking out of 19,695 geographies.
Graph by: National Economic Education Delegation (www.NEEDEcon.org)

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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.

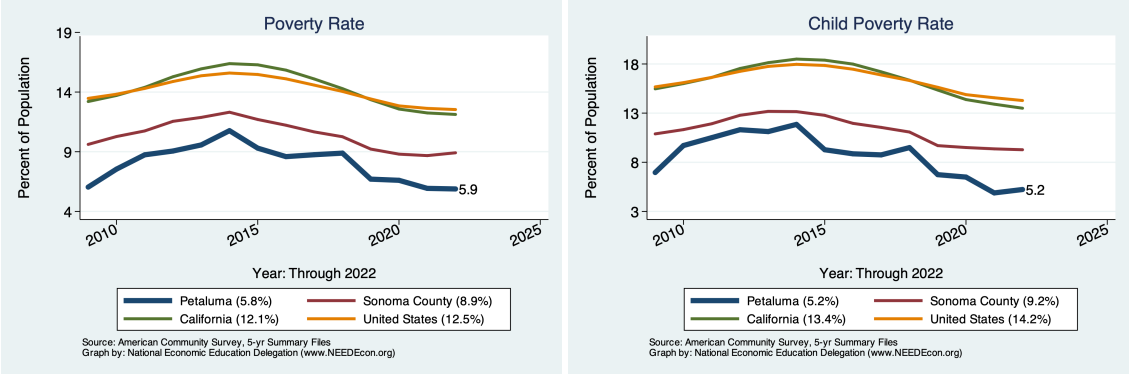


Figure 31: Inequality

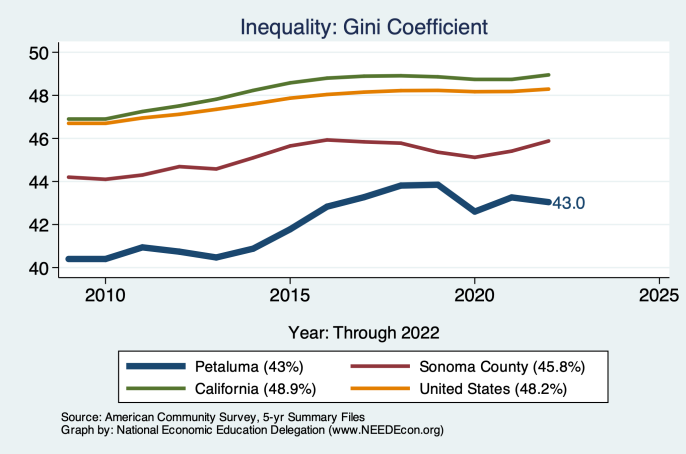
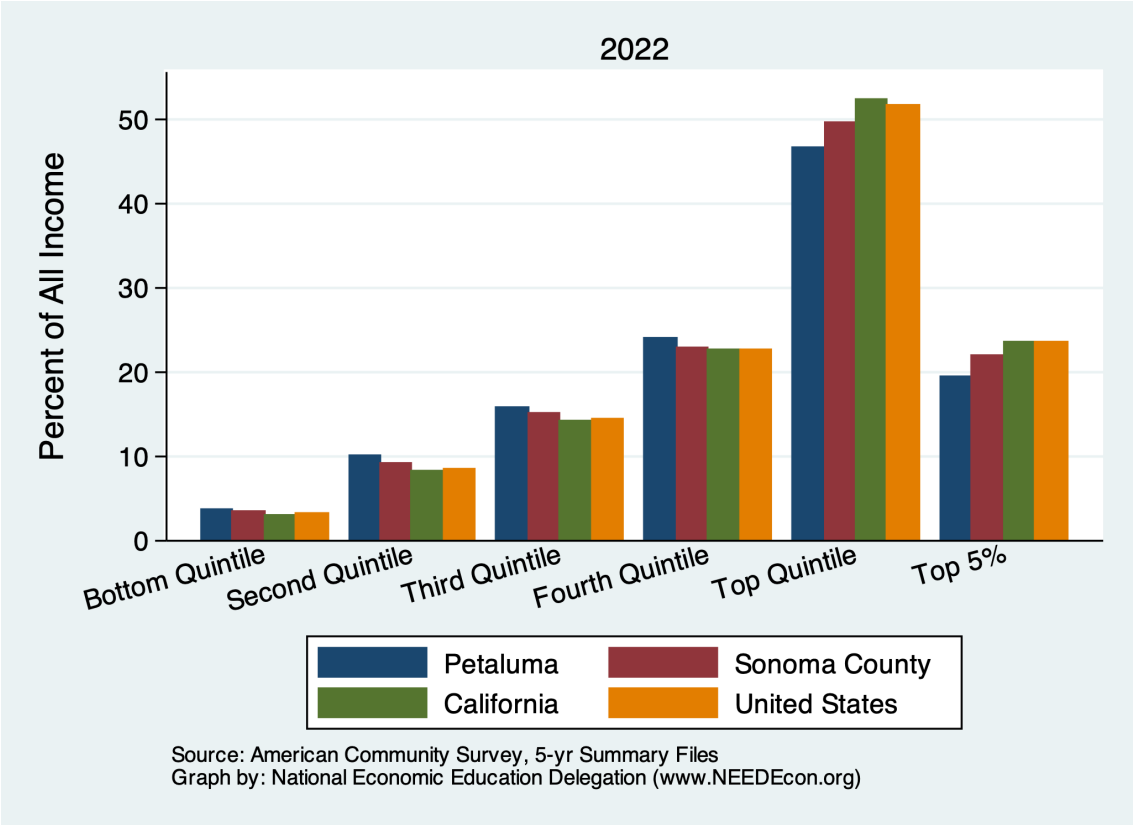
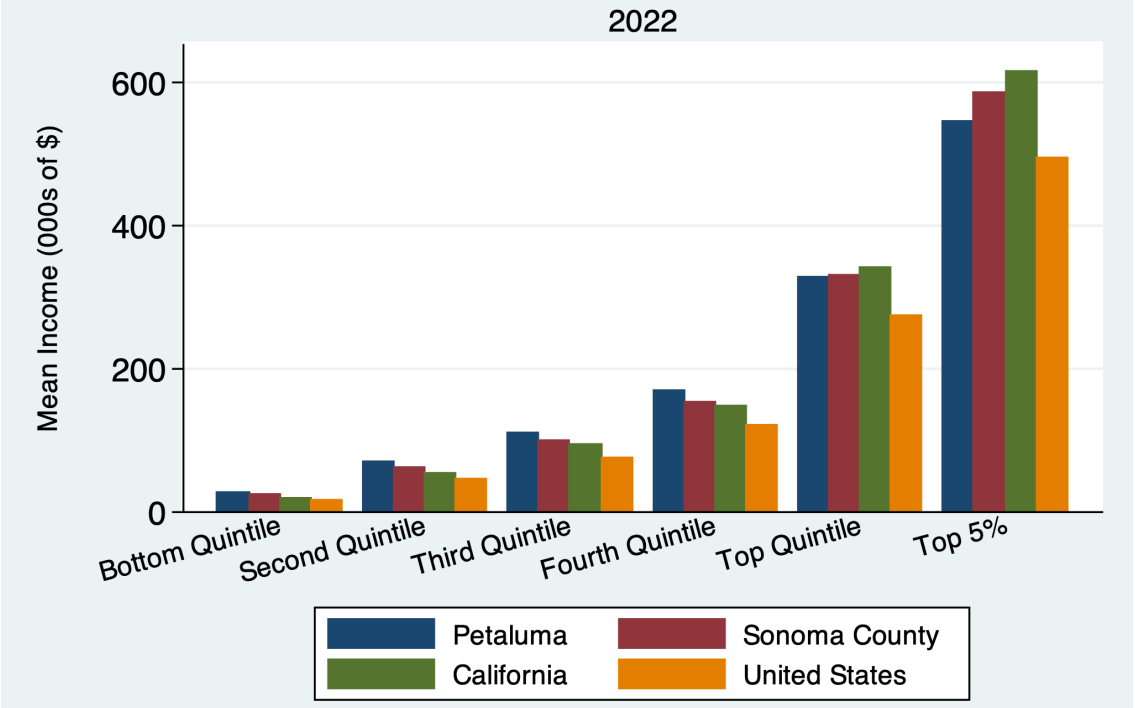


Figure 32: Shares Across the Income Distribution



Source: American Community Survey, 5-yr Summary Files
Graph by: National Economic Education Delegation (www.NEEDEcon.org)

Figure 33: Means Across the Income Distribution



Source: American Community Survey, 5-yr Summary Files
Graph by: National Economic Education Delegation (www.NEEDEcon.org)

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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 Petaluma and Broader Regions

Figure 34: Median Home Prices

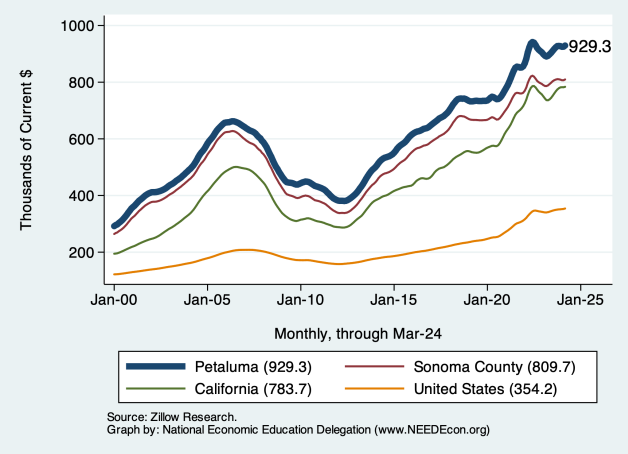
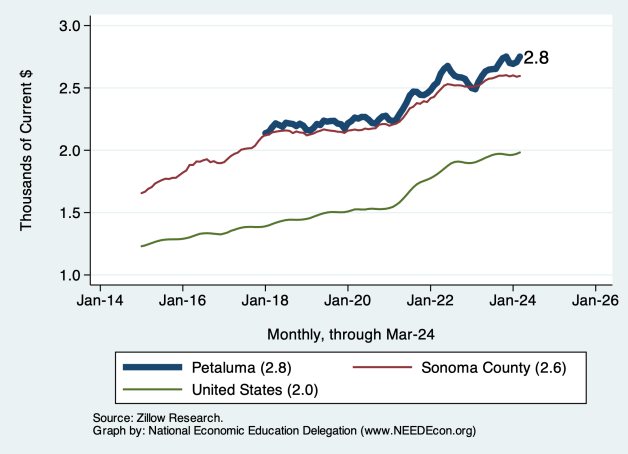


Figure 35: Median Rents



Housing Ownership in Petaluma and Broader Regions

Figure 36: Home Ownership Rates

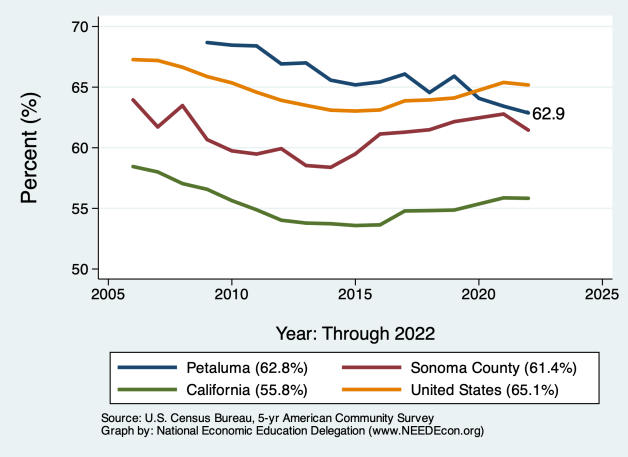


Figure 37: Home Ownership by Age

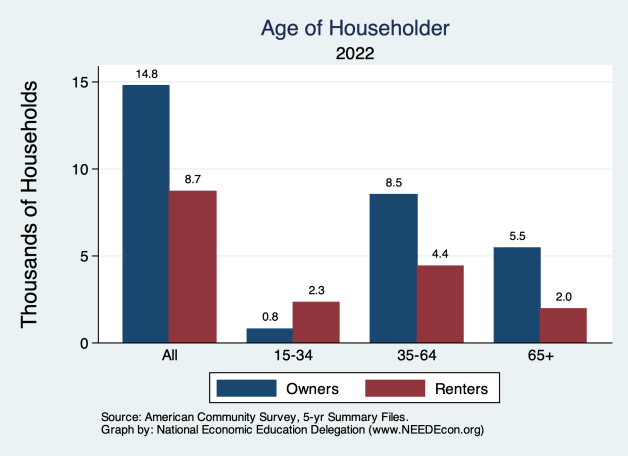


Figure 38: Income by Tenure

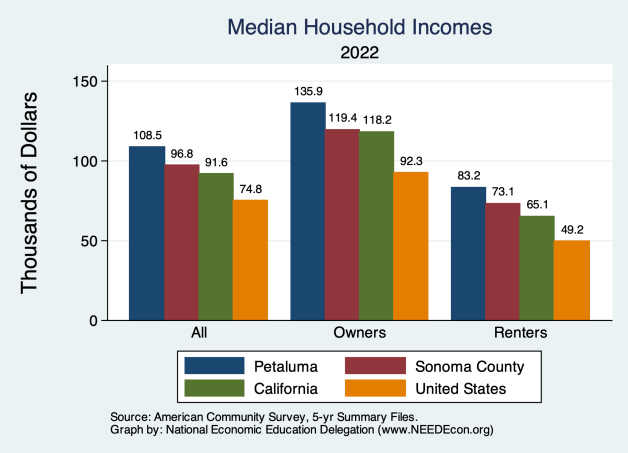


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Figure 39: Income Distribution by Tenure

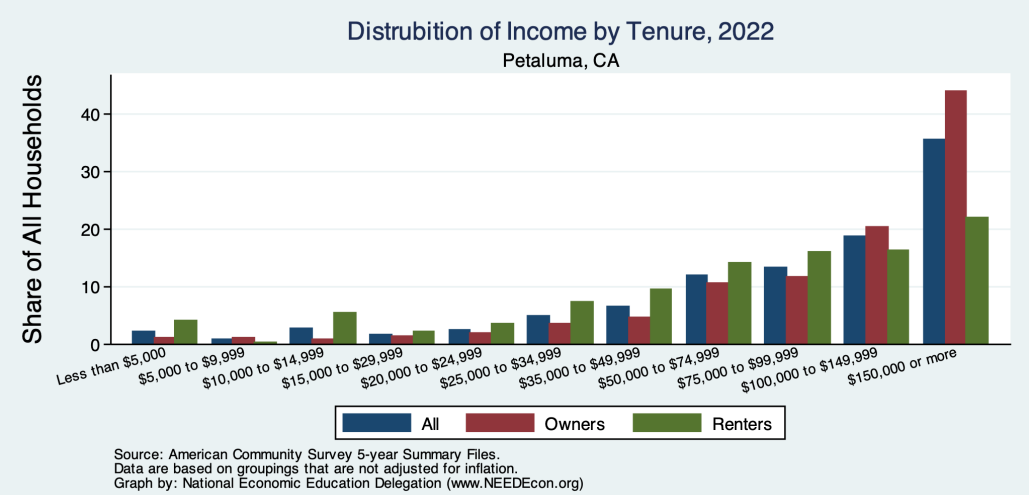


Figure 40: Income Distribution of Home Owners

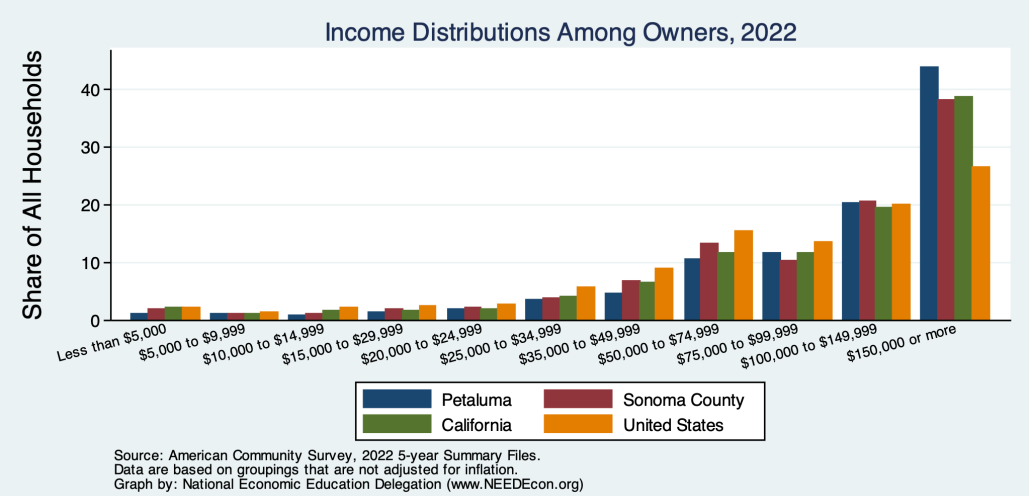
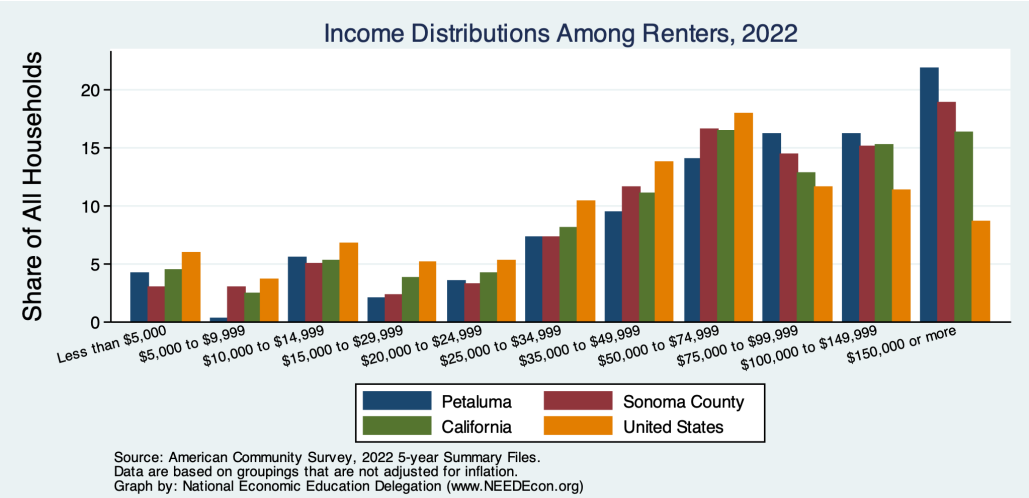


Figure 41: Income Distribution of Renters



Housing Burden in Petaluma and Broader Regions

Figure 42: Home Owners w/ A Mortgage

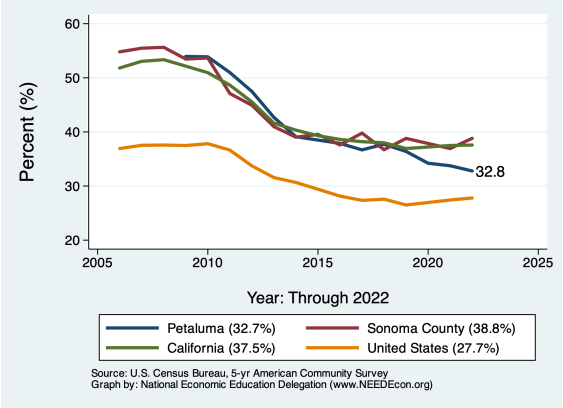


Figure 43: Home Owners w/o A Mortgage

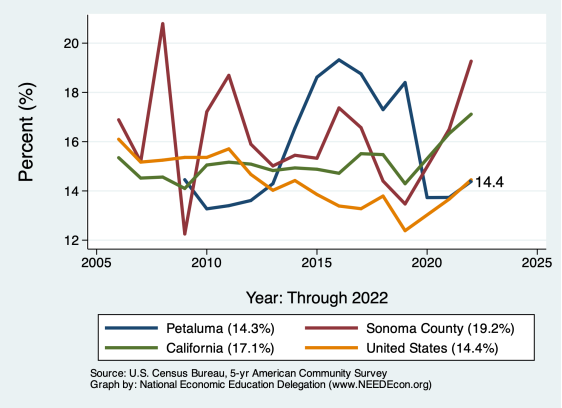


Figure 44: Renters

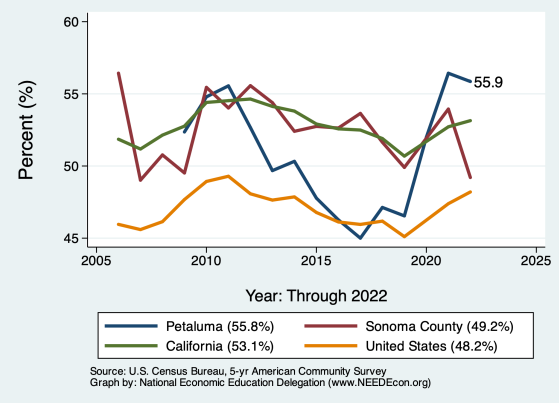
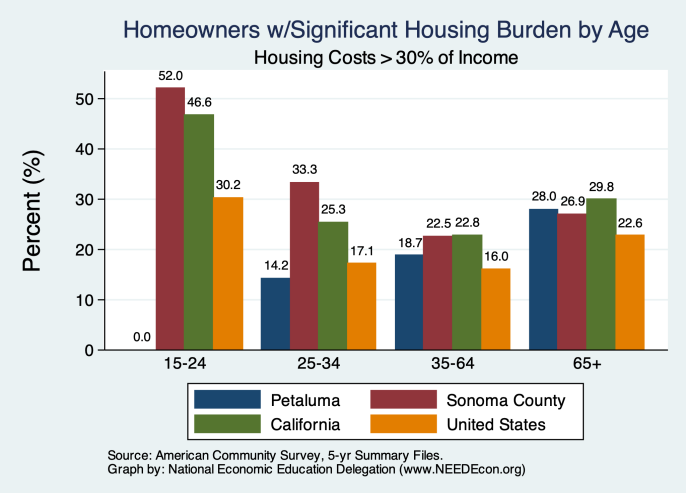


Figure 45: Homeowner Housing Burden by Age



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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	% Change from 2010
Total Population	58,321.0	62,195.0	57,941.0	-6.2	0.7
Total # of Homes	24,376.0	23,543.0	22,736.0	3.5	7.2
# Occupied Units	23,488.0	22,846.0	21,737.0	2.8	8.1
Persons per Household	2.5	2.7	2.6	-8.8	-6.7
Vacancy Rate (%)	3.6	3.0	4.4	23.0	-17.1

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

Figure 46: Housing Growth

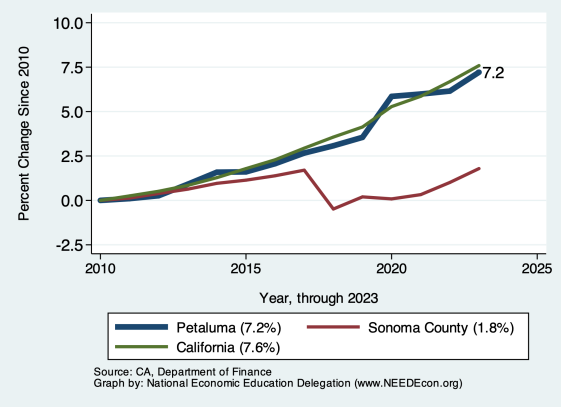


Figure 47: Persons per Household

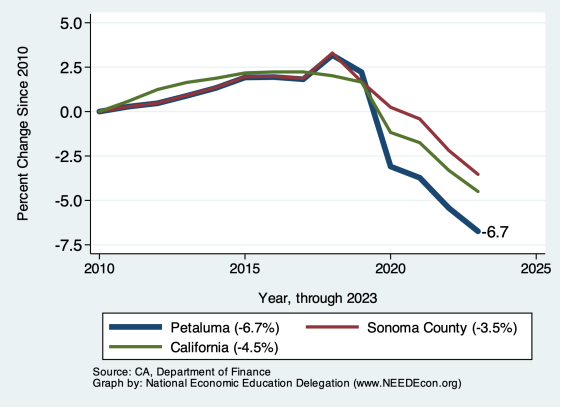


Figure 48: Vacancy Rates

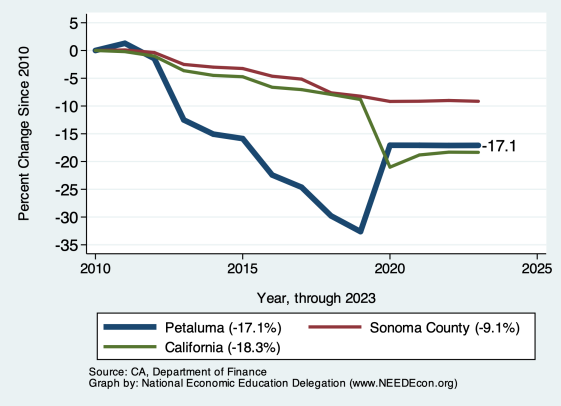
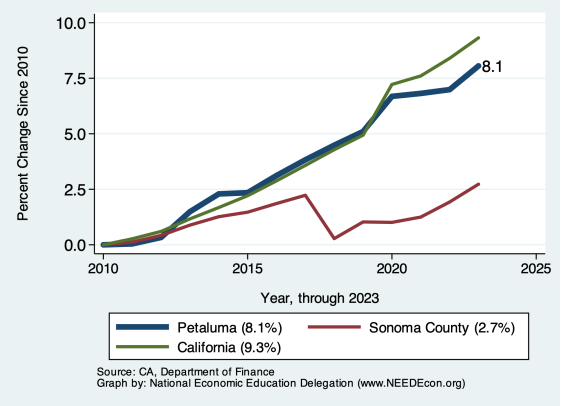


Figure 49: Number of Occupanied Units



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Trends in the Growth of Housing by Housing Type

Figure 50: Single Detached Homes

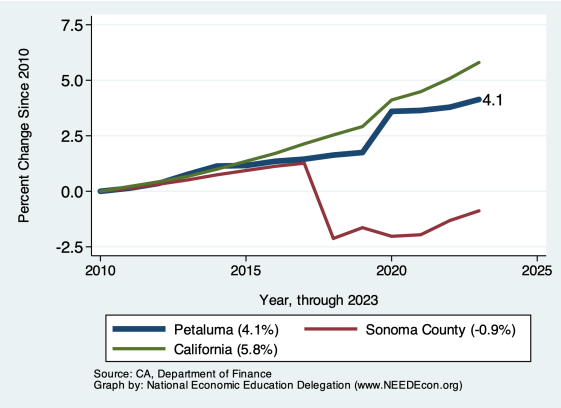


Figure 51: Single Attached Homes

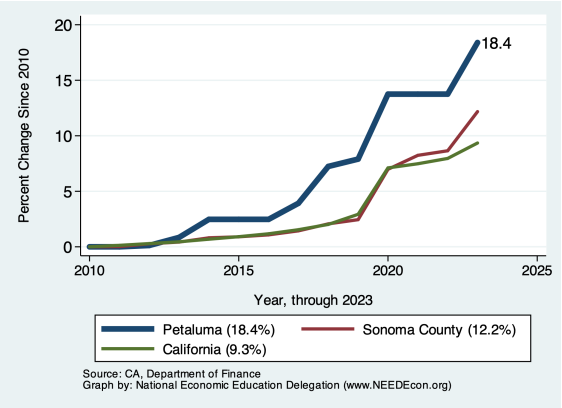


Figure 52: Housing in Buildings with Two to Four Units

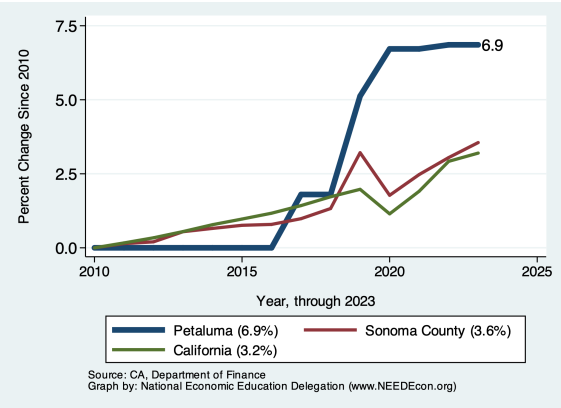
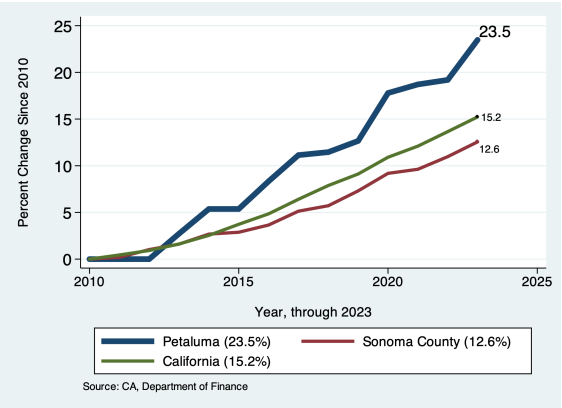


Figure 53: Housing in Buildings with Five or More Units



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Vintage of Residential Housing

Why is it important?

This section provides evidence on the year in which residential housing in Petaluma was built. We break it down into owned versus rented residences and provide a comparison across Sonoma 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 housing. 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

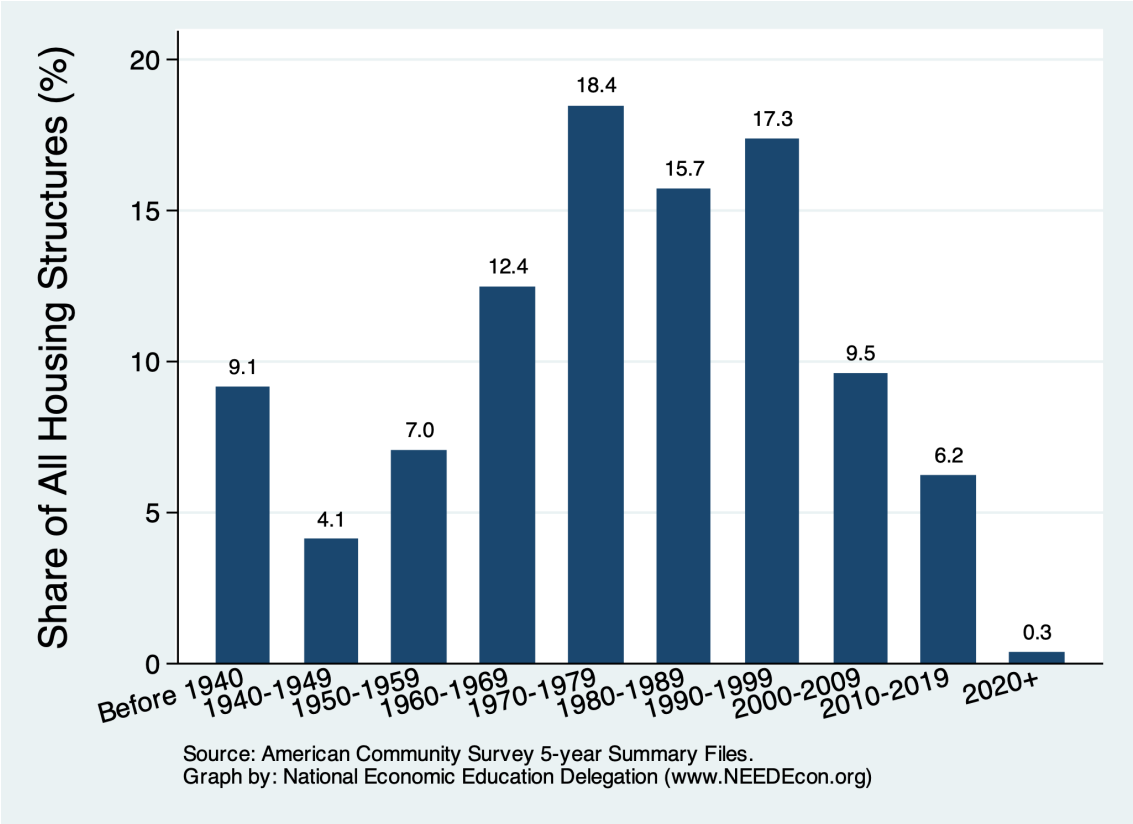


Figure 55: Housing Vintage across Regions

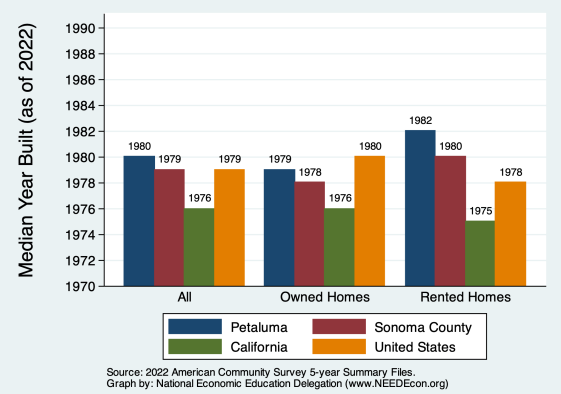


Figure 56: Housing Vintage by Tenure

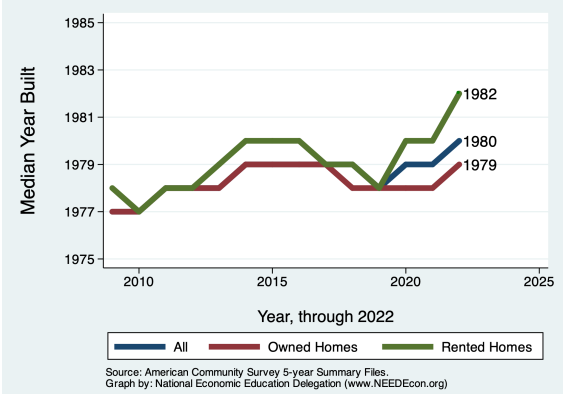


Figure 57: Vintage of Owned Residences

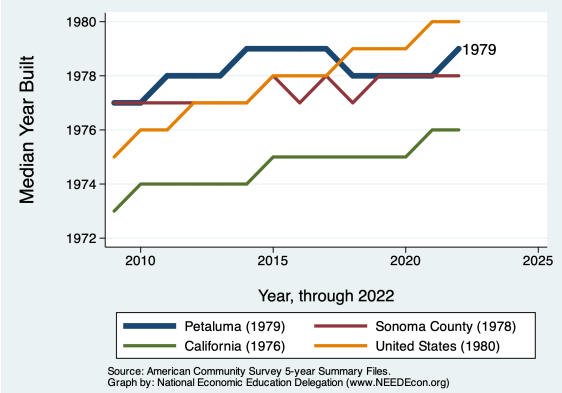


Figure 58: Vintage of Rented Residences

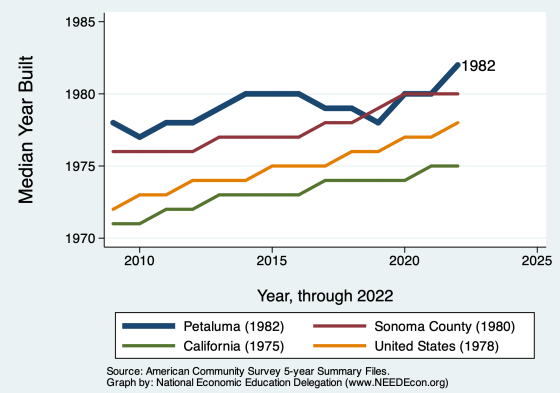
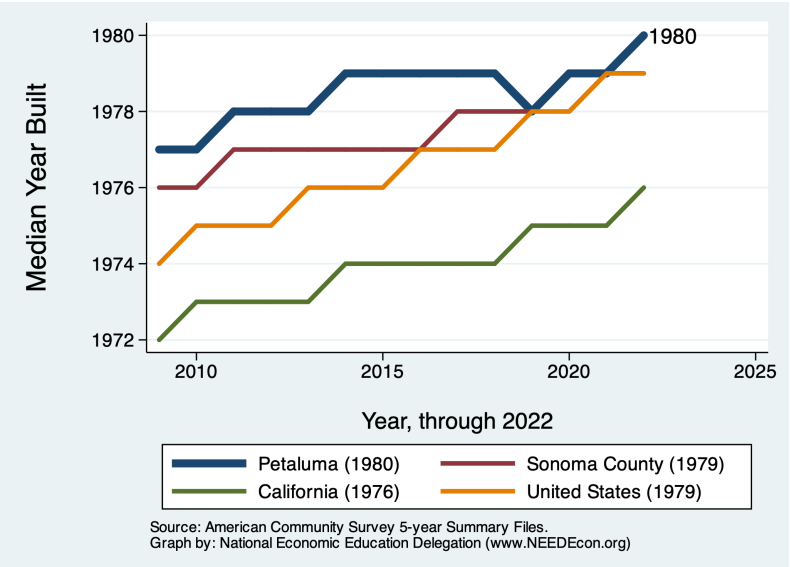


Figure 59: Vintage of All Residences



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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

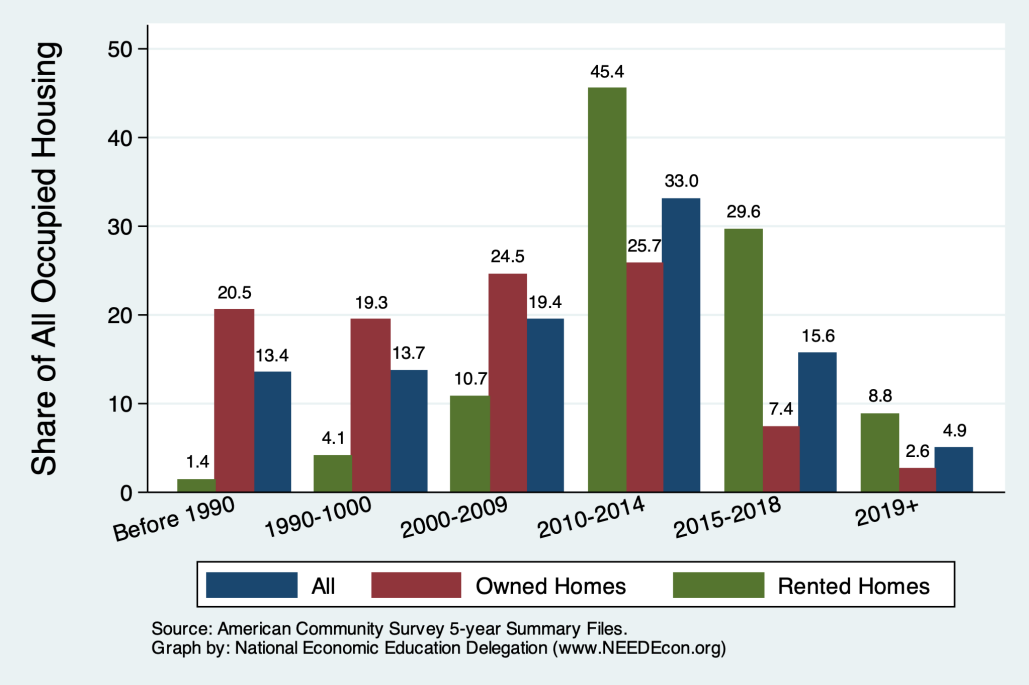

Figure 61: Year Occupied by Current Residents across Regions

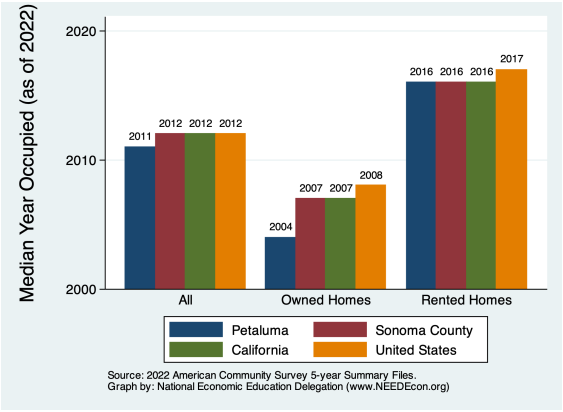

Figure 62: Year Occupied by Current Residents by Tenure

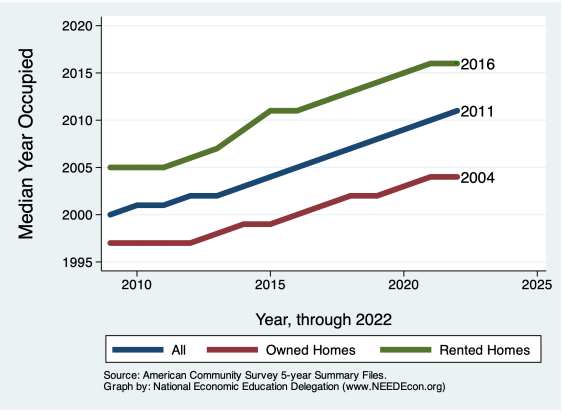

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Figure 63: Year Occupied by Current Residents for Owned Housing

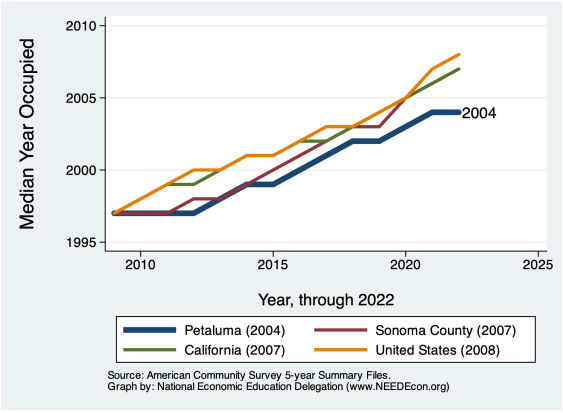


Figure 64: Year Occupied by Current Residents for Rented Housing

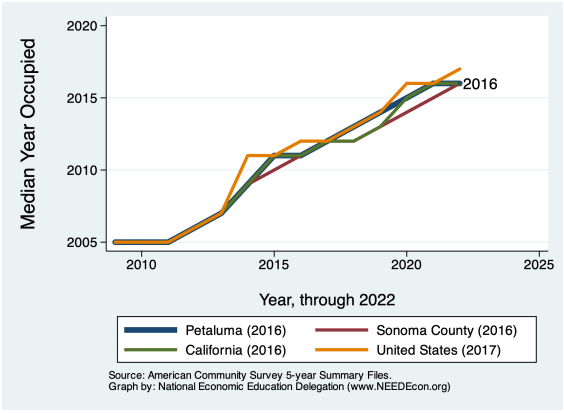
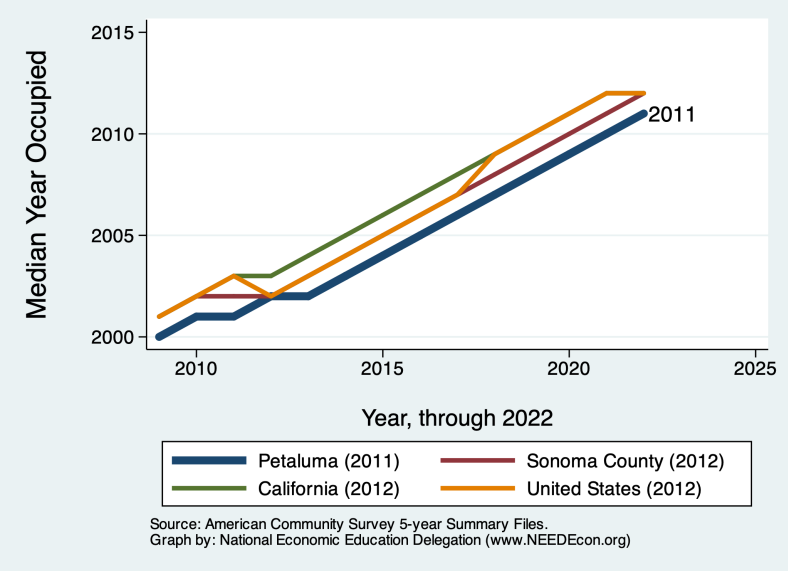


Figure 65: Year Occupied by Current Residents for All Housing



Residential Permitting

Definition:

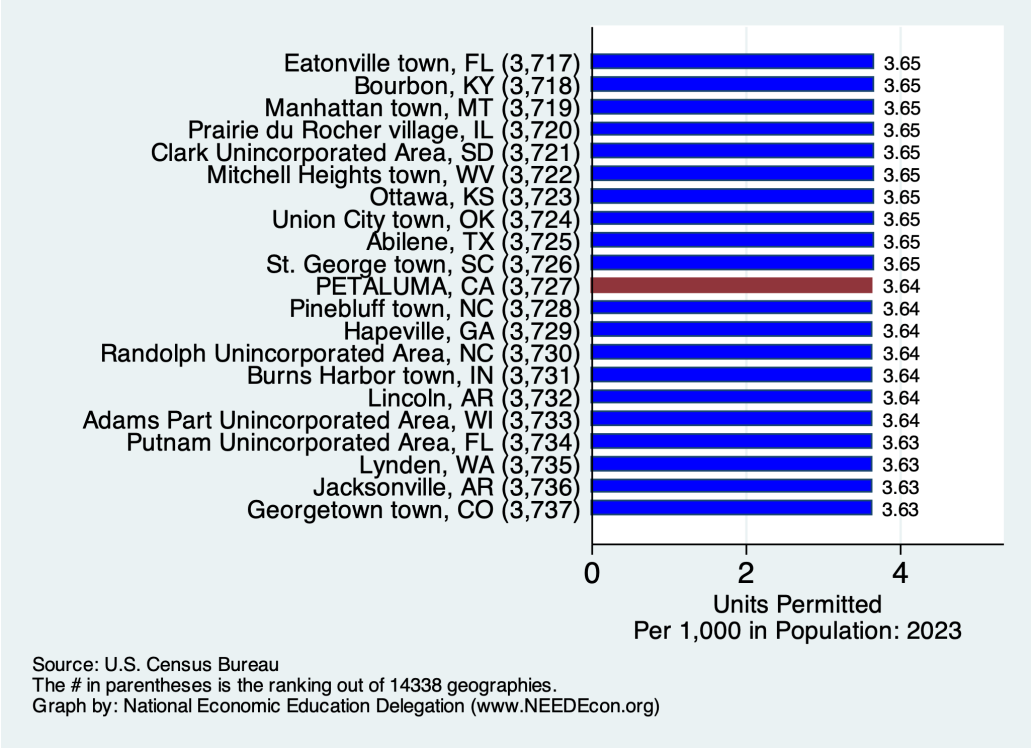
This indicator provides evidence on the number of residential buildings that are permitted for construction each year. Permit data for Petaluma is compared with data from Sonoma County as a whole and broader regions. The statistic provided scales the number of permits by population. This is done to facilitate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

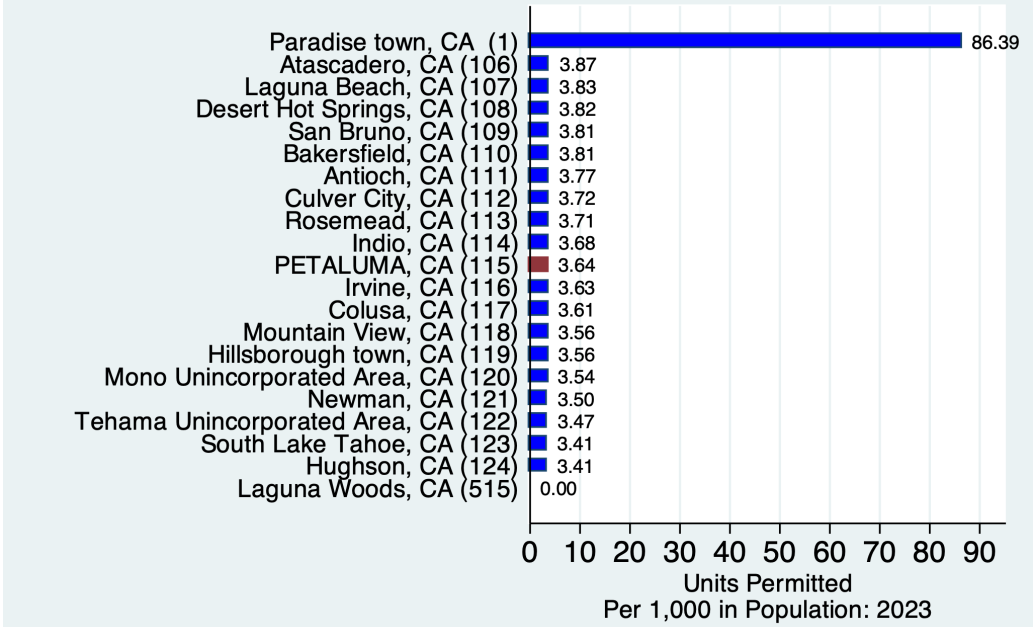
Petaluma - Ranking Among Comparables

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



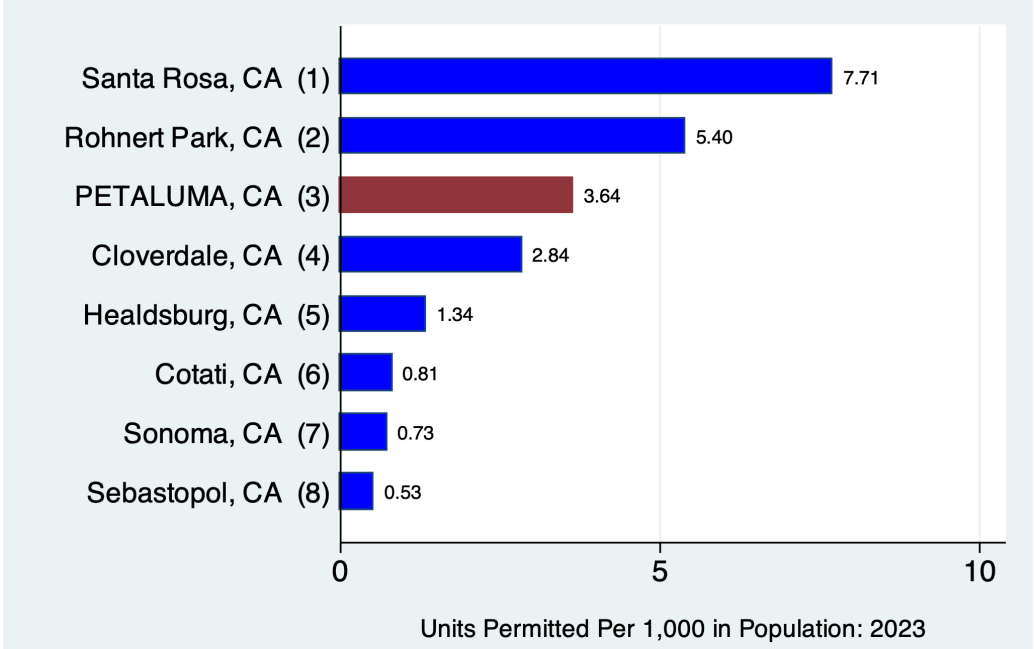
Source: U.S. Census Bureau
The # in parentheses is the ranking out of 14338 geographies.
Graph by: National Economic Education Delegation (www.NEEDEcon.org)

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 Sonoma County (Rank)



Source: U.S. Census Bureau,
The # in parentheses is the ranking out of 8 geographies.
Graph by: National Economic Education Delegation (www.NEEDEcon.org)

Petaluma - Permitting Activity

Annual Units Permitted - Per Capita in Petaluma

Figure 69: Units Permitted Each Year

N/A

Figure 70: Average Annual Growth in Units Permitted

N/A

Annual Number of Buildings Permitted - Per Capita in Petaluma

Figure 71: Units Permitted Each Year

N/A

Figure 72: Average Annual Growth in Buildings Permitted

N/A

Annual Value of Property Permitted - Per Capita in Petaluma

Figure 73: Value Permitted Each Year

N/A

Figure 74: Average Annual Growth in Value Permitted

N/A

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 housing 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

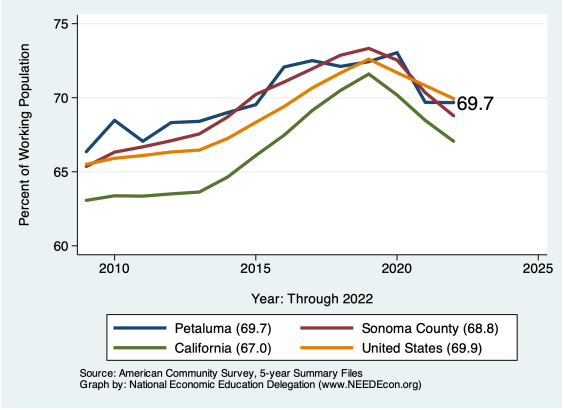


Figure 76: Percent of Workers Commuting by Carpool

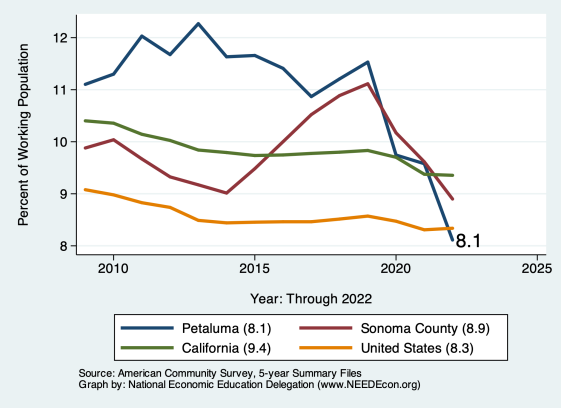


Figure 77: Percent of Workers using Public Transportation

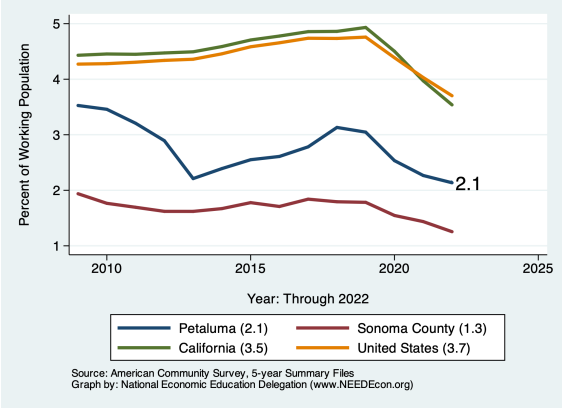
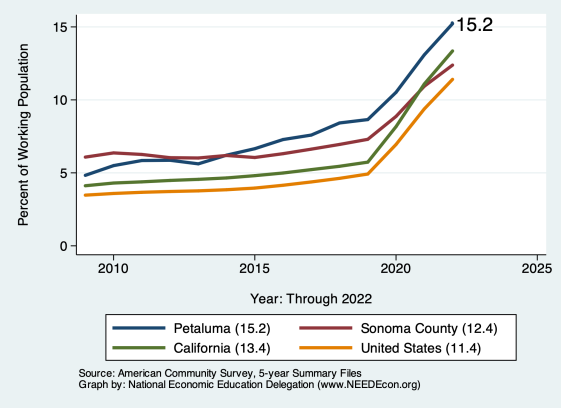


Figure 78: Percent of Workers Who Work From Home



The first table on this page presents data for those who LIVE in Petaluma. The second provides data on those who work, but do not necessarily live in Petaluma. 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

	Male		Female		All Workers		All of CA
Mode of Transit	#	(%)	#	(%)	#	(%)	(%)
Car, Truck, or Van:	12,406	76.8	11,412	77.0	23,818	77.8	78.0
Drove Alone	11,013	68.2	10,321	69.7	21,334	69.7	68.4
Carpooled:	1,393	8.6	1,091	7.4	2,484	8.1	9.5
In 2-person carpool	1,117	6.9	849	5.7	1,966	6.4	6.9
In 3-person carpool	146	0.9	152	1.0	298	1.0	1.5
In 4-or-more-person carpool	130	0.8	90	0.6	220	0.7	1.1
Public Transportation (excl Taxi):	365	2.3	289	2.0	654	2.1	3.6
Bus or Trolley Bus	274	1.7	180	1.2	454	1.5	2.3
Streetcar or Trolley Car	0	0.0	0	0.0	0	0.0	0.8
Subway or Elevated	85	0.5	96	0.6	181	0.6	0.3
Railroad	0	0.0	13	0.1	13	0.0	0.2
Ferryboat	6	0.0	0	0.0	6	0.0	0.1
Bicycle	91	0.6	53	0.4	144	0.5	0.7
Walked	200	1.2	236	1.6	436	1.4	2.4
Taxicab, Motorcycle, or other	300	1.9	79	0.5	379	1.2	1.7
Worked at Home	2,088	12.9	2,573	17.4	4,661	15.2	13.6
Total:	15,450	95.6	14,642	98.8	30,092	98.3	

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

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

	Male		Female		All Workers		All of CA
Mode of Transit	#	(%)	#	(%)	#	(%)	(%)
Car, Truck, or Van:	13,687	78.5	12,171	75.1	25,858	77.4	78.0
Drove Alone	11,897	68.2	11,031	68.1	22,928	68.6	68.5
Carpooled:	1,790	10.3	1,140	7.0	2,930	8.8	9.5
In 2-person carpool	1,313	7.5	756	4.7	2,069	6.2	6.9
In 3-person carpool	360	2.1	305	1.9	665	2.0	1.5
In 4-or-more-person carpool	117	0.7	79	0.5	196	0.6	1.1
Public Transportation (excl Taxi):	173	1.0	44	0.3	217	0.6	3.6
Bus or Trolley Bus	152	0.9	44	0.3	196	0.6	2.3
Streetcar or Trolley Car	21	0.1	0	0.0	21	0.1	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	134	0.8	63	0.4	197	0.6	0.7
Walked	197	1.1	281	1.7	478	1.4	2.4
Taxicab, Motorcycle, or other	221	1.3	179	1.1	400	1.2	1.7
Worked at Home	2,088	12.0	2,573	15.9	4,661	14.0	13.6
Total:	16,500	94.6	15,311	94.5	31,811	95.2	

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 Times for Employed Residents

Table 8. SEX OF WORKERS BY TRAVEL TIME TO WORK

	Male		Female		All Workers		All of CA
Mode of Transit	#	(%)	#	(%)	#	(%)	(%)
Less than 5 minutes	354	2.4	263	2.0	617	2.2	2.0
5 to 9 minutes	1,189	8.0	1,373	10.3	2,562	9.2	7.5
10 to 14 minutes	1,882	12.7	1,716	12.9	3,598	12.9	12.2
15 to 19 minutes	1,412	9.5	1,248	9.4	2,660	9.5	15.0
20 to 24 minutes	1,032	7.0	1,251	9.4	2,283	8.2	14.3
25 to 29 minutes	614	4.1	698	5.2	1,312	4.7	6.3
30 to 34 minutes	1,878	12.7	1,961	14.7	3,839	13.7	15.0
35 to 39 minutes	351	2.4	572	4.3	923	3.3	2.9
40 to 44 minutes	653	4.4	497	3.7	1,150	4.1	4.3
45 to 59 minutes	1,661	11.2	1,277	9.6	2,938	10.5	8.6
60 to 89 minutes	1,687	11.4	924	6.9	2,611	9.4	7.9
90 or more minutes	649	4.4	289	2.2	938	3.4	4.0
Total:	13,362	90.3	12,069	90.5	25,431	91.1	

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

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

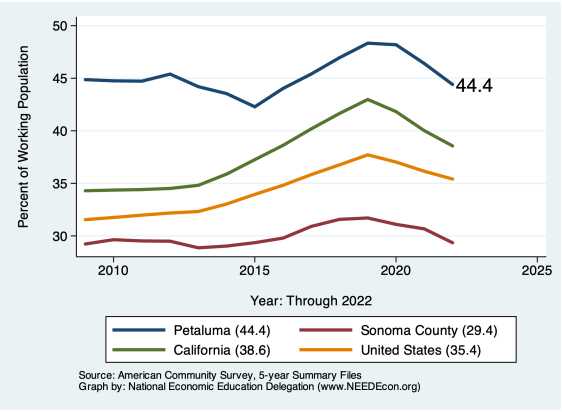


Figure 80: Percent of Employed Population With Commutes of More than 90 Minutes

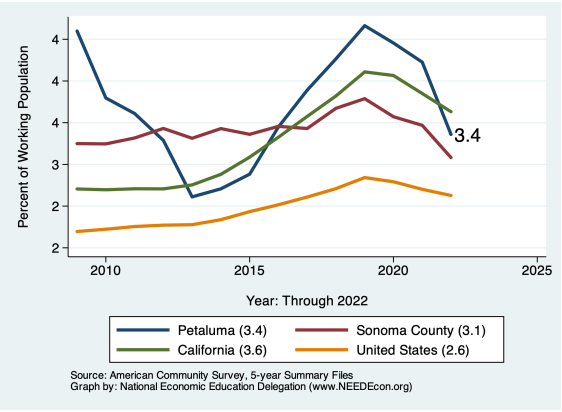
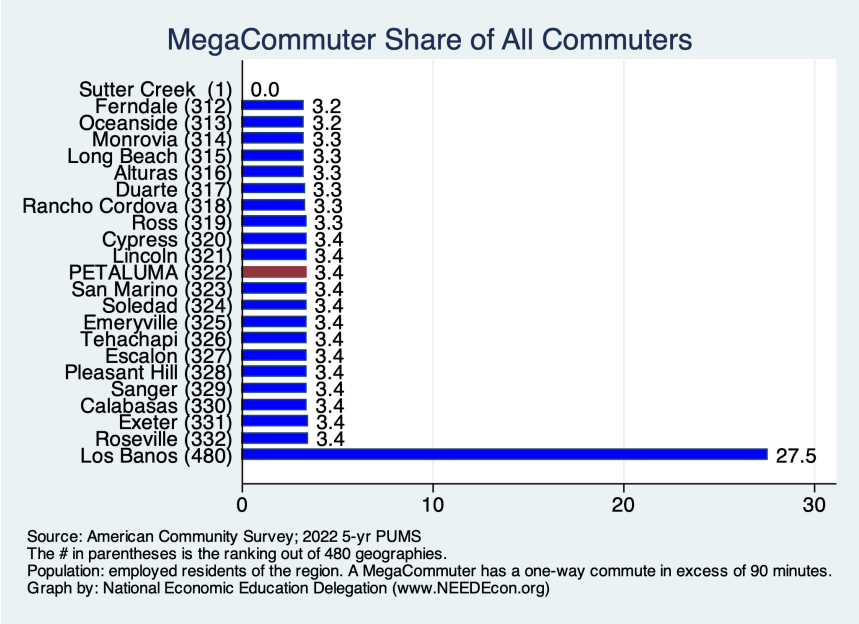


Figure 81: Rank: Share of MegaCommuters Across Similar Geographies



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Commute Times for Those Employed in the City

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

	Male		Female		All Workers		All of CA
Mode of Transit	#	(%)	#	(%)	#	(%)	(%)
Less than 5 minutes	427	2.7	309	2.1	736	2.4	2.0
5 to 9 minutes	1,332	8.3	1,705	11.6	3,037	9.9	7.5
10 to 14 minutes	2,441	15.2	2,166	14.7	4,607	14.9	12.2
15 to 19 minutes	2,273	14.1	1,984	13.5	4,257	13.8	15.0
20 to 24 minutes	1,493	9.3	1,831	12.4	3,324	10.8	14.3
25 to 29 minutes	1,240	7.7	708	4.8	1,948	6.3	6.3
30 to 34 minutes	1,919	11.9	1,653	11.2	3,572	11.6	15.0
35 to 39 minutes	444	2.8	432	2.9	876	2.8	2.9
40 to 44 minutes	385	2.4	179	1.2	564	1.8	4.3
45 to 59 minutes	1,001	6.2	791	5.4	1,792	5.8	8.6
60 to 89 minutes	967	6.0	635	4.3	1,602	5.2	7.9
90 or more minutes	490	3.0	345	2.3	835	2.7	4.0
Total:	14,412	89.6	12,738	86.4	27,150	88.1	

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.

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

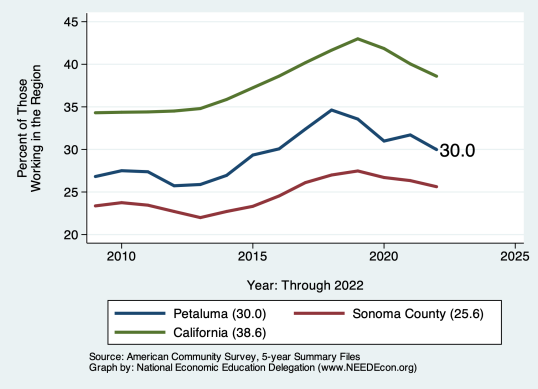


Figure 83: Percent of Local Employees With Commutes of More than 90 Minutes

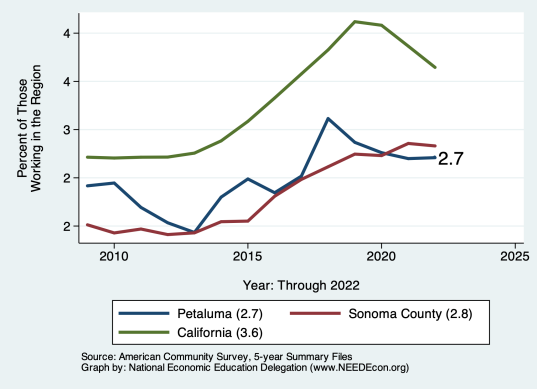
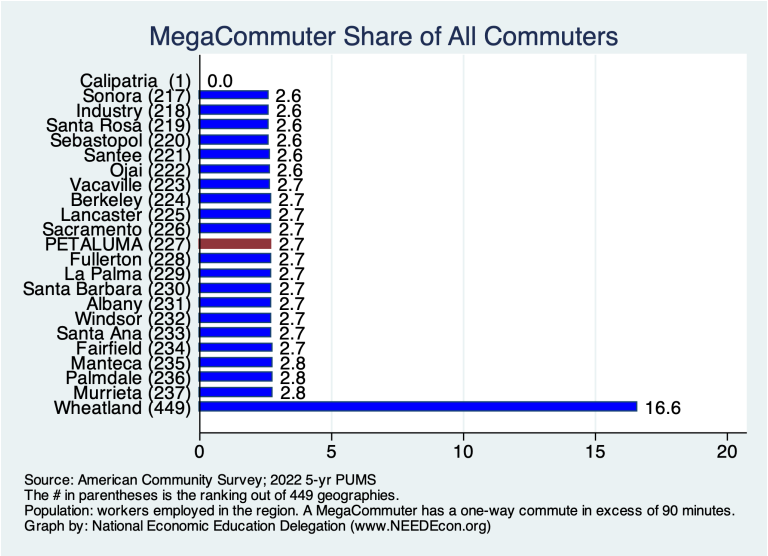


Figure 84: Rank: Share of MegaCommuters Across Similar Geographies



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Place of Work

This section provides evidence on where workers living in Petaluma work. As evidenced in the first table, some of Petaluma'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 Petaluma city boundary.

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

	Male		Female		All Workers		All of CA
Place of Work	#	(%)	#	(%)	#	(%)	(%)
Worked in state of residence:	15,421	95.4	14,592	98.5	30,013	98.0	99.6
Worked in county of residence	10,447	64.7	10,837	73.2	21,284	69.5	84.1
worked outside of county of residence	4,974	30.8	3,755	25.3	8,729	28.5	15.4
Worked outside state of residence	29	0.2	50	0.3	79	0.3	0.4
Total:	15,450	95.6	14,642	98.8	30,092	98.3	

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

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

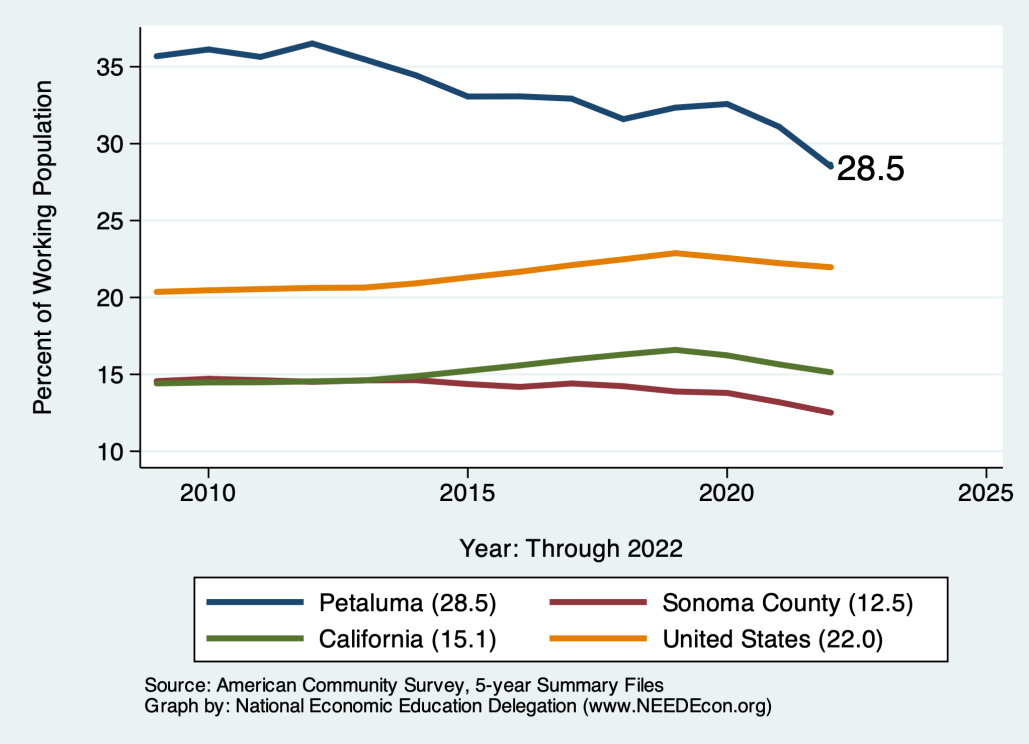
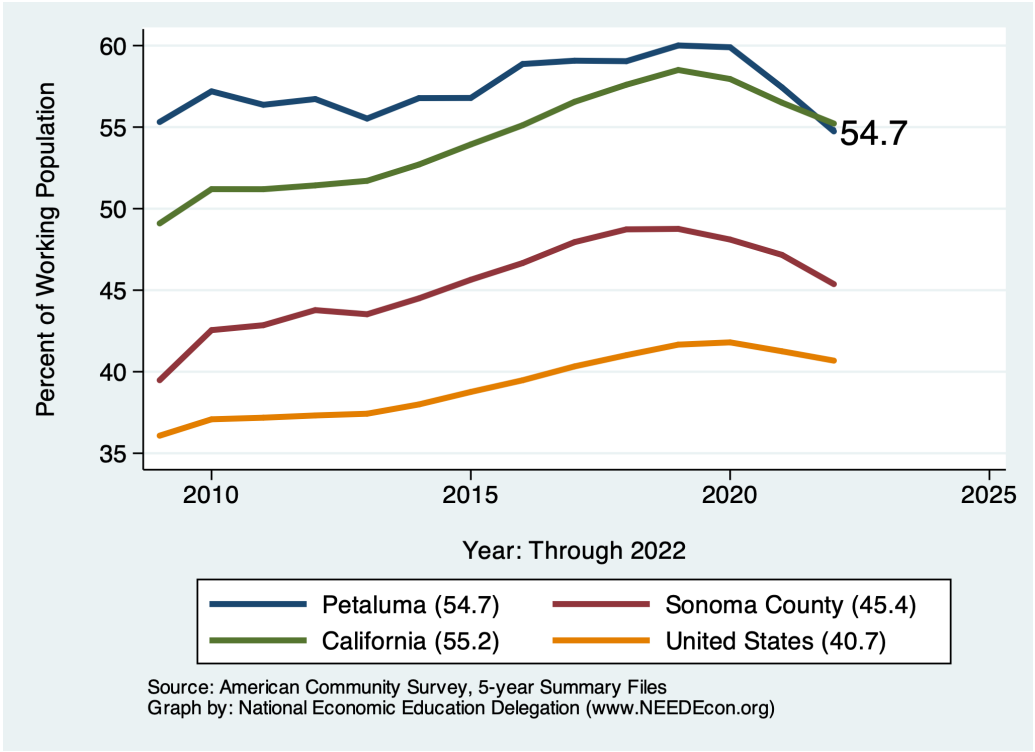


Table 11. SEX OF WORKERS BY PLACE OF WORK–PLACE LEVEL

	Male		Female		All Workers		All of CA
Place of Work	#	(%)	#	(%)	#	(%)	(%)
Living in a place:	15,450	95.6	14,642	98.8	30,092	98.3	95.9
Worked in place of residence	6,197	38.4	7,133	48.2	13,330	43.5	39.5
Worked outside place of residence	9,253	57.3	7,509	50.7	16,762	54.7	56.4
Not living in a place	0	0.0	0	0.0	0	0.0	4.1
Total:	15,450	95.6	14,642	98.8	30,092	98.3	

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

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



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Commute Mode by Income

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

	City	California		United States	
	Median	*Median*	*Ratio*	*Median*	*Ratio*
Car, truck, or van - drove alone	61,253	48,566	99.0	46,171	98.5
Car, truck, or van - carpooled	40,668	36,463	87.6	34,487	87.6
Public transportation (excluding taxicab)	73,919	40,179	144.4	45,100	121.7
Walked	85,357	29,366	228.2	27,142	233.5
Taxicab, motorcycle, bicycle, or other means		40,433		36,140	
Worked from home	79,188	75,153	82.7	67,180	87.5
Total:	62,091	48,747	127.4	46,099	134.7

Source: 2022 5-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

	< $25,000		$25,000-$74,999		$75,000+		All		All of CA
Mode of Transit	#	(%)	#	(%)	#	(%)	#	(%)	(%)
Car, Truck, or Van: Drove Alone	4,340	46.9	6,246	65.8	8,657	69.4	21,334	69.7	68.4
Car, Truck, or Van: Carpooled	823	8.9	689	7.3	696	5.6	2,484	8.1	9.5
Public Transportation (excl Taxi)	178	1.9	158	1.7	311	2.5	654	2.1	3.6
Walked	136	1.5	74	0.8	226	1.8	436	1.4	2.4
Taxicab, Motorcycle, or other	223	2.4	77	0.8	167	1.3	523	1.7	2.4
Worked at Home	840	9.1	1,094	11.5	2,410	19.3	4,661	15.2	13.6
Total:	6,540	70.6	8,338	87.8	12,467		30,092	98.3	100.0

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

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

	< $25,000		$25,000-$74,999		$75,000+		All		All of CA
Mode of Transit	#	(%)	#	(%)	#	(%)	#	(%)	(%)
Car, Truck, or Van: Drove Alone	5,471	48.3	8,099	76.0	6,538	66.2	22,928	68.7	68.5
Car, Truck, or Van: Carpooled	1,107	9.8	913	8.6	557	5.6	2,930	8.8	9.5
Public Transportation (excl Taxi)	100	0.9	32	0.3	21	0.2	217	0.6	3.6
Walked	151	1.3	87	0.8	228	2.3	478	1.4	2.4
Taxicab, Motorcycle, or other	258	2.3	86	0.8	117	1.2	597	1.8	2.4
Worked at Home	840	7.4	1,094	10.3	2,410	24.4	4,661	14.0	13.6
Total:	7,927	70.0	10,311	96.8	9,871		31,811	95.3	

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

	In Poverty		100-149% of Pov		>150% of Pov		All		All of CA
Mode of Transit	#	(%)	#	(%)	#	(%)	#	(%)	(%)
Car, Truck, or Van: Drove Alone	471	31.9	622	42.5	20,241	70.4	21,334	69.7	68.7
Car, Truck, or Van: Carpooled	122	8.3	221	15.1	2,141	7.4	2,484	8.1	9.5
Public Transportation (excl Taxi)	51	3.5	58	4.0	545	1.9	654	2.1	3.6
Walked	18	1.2	25	1.7	393	1.4	436	1.4	2.1
Taxicab, Motorcycle, or other	23	1.6	0	0.0	500	1.7	523	1.7	2.4
Worked at Home	58	3.9	109	7.5	4,494	15.6	4,661	15.2	13.6
Total:	743	50.3	1,035	70.7	28,314	98.5	30,092	98.3	

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

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

	In Poverty		100-149% of Pov		>150% of Pov		All		All of CA
Mode of Transit	#	(%)	#	(%)	#	(%)	#	(%)	(%)
Car, Truck, or Van: Drove Alone	975	54.4	829	49.3	21,118	70.0	22,922	68.7	68.7
Car, Truck, or Van: Carpooled	130	7.3	156	9.3	2,644	8.8	2,930	8.8	9.5
Public Transportation (excl Taxi)	38	2.1	10	0.6	169	0.6	217	0.7	3.6
Walked	54	3.0	28	1.7	396	1.3	478	1.4	2.1
Taxicab, Motorcycle, or other	58	3.2	0	0.0	539	1.8	597	1.8	2.4
Worked at Home	58	3.2	109	6.5	4,494	14.9	4,661	14.0	13.6
Total:	1,313	73.3	1,132	67.3	29,360	97.3	31,805	95.3	

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.

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 Petaluma is a net recipient (migration inflows) or donor (migration 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

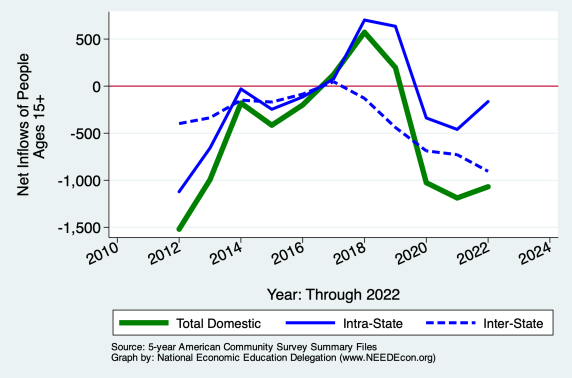


Table 17: Migration by Income

		Net Inflows				
			Same State			
Category	Population	All Migration	W/in County	Between Counties	Across States	From Abroad
No income	5,207	−235	−40	−117	−225	147
With income	45,416	−534	−492	485	−680	153
$1 to $9,999 or loss	4,625	34	−20	41	−31	44
$10,000 to $14,999	3,115	−94	−48	−19	−52	25
$15,000 to $24,999	4,744	−193	−68	−99	−26	0
$25,000 to $34,999	4,866	−24	29	−26	−51	24
$35,000 to $49,999	4,977	−441	−305	64	−200	0
$50,000 to $64,999	4,614	83	110	49	−85	9
$65,000 to $74,999	2,824	4	−48	117	−88	23
$75,000 or more	15,651	97	−142	358	−147	28
All:	50,623	−769	−532	368	−905	300

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

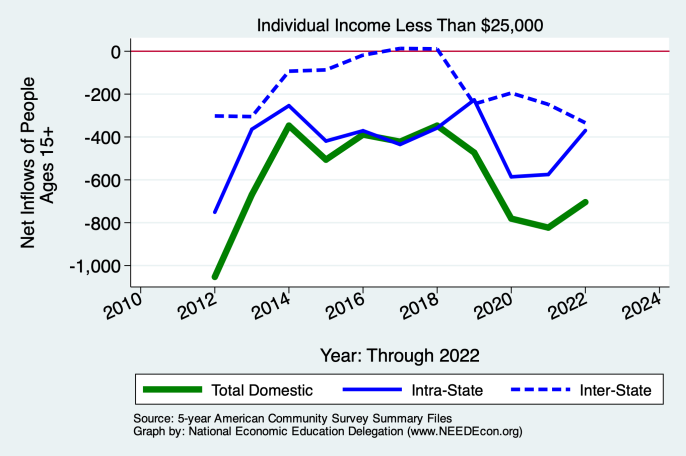


Figure 89: Overall Movements of Middle Income Residents

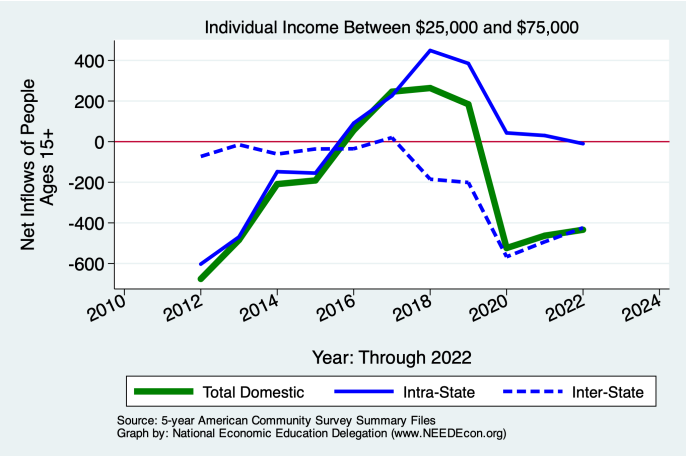
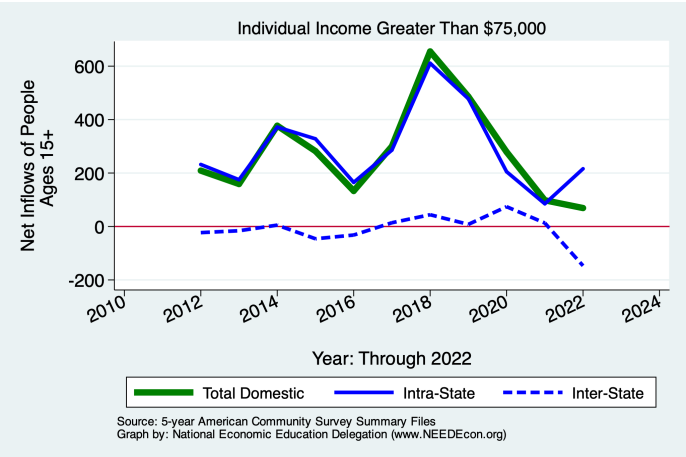


Figure 90: Overall Movements of High Income Residents



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Demographics of Migration Flows

Table 18: Migration by Marital Status

Category	Population	Net Inflows				
			Same State			
		All Migration	W/in County	Between Counties	Across States	From Abroad
Never married	15,068	−219	−145	94	−360	192
Now married, except separated	25,991	−601	−412	295	−575	91
Divorced	6,182	−7	6	−56	43	0
Separated	729	20	−18	38	0	0
Widowed	2,653	38	37	−3	−13	17
Total:	50,623	−769	−532	368	−905	300

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

Table 19: Migration by Tenure

Category	Population	Net Inflows				
			Same State			
		All Migration	W/in County	Between Counties	Across States	From Abroad
Householder lived in owner-occupied housing units	38,377	−862	−740	406	−671	143
Householder lived in renter-occupied housing units	20,125	−620	−461	−235	−129	205
Total:	58,502	−1,482	−1,201	171	−800	348

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

Figure 91: Domestic Movements of Residents by Tenure

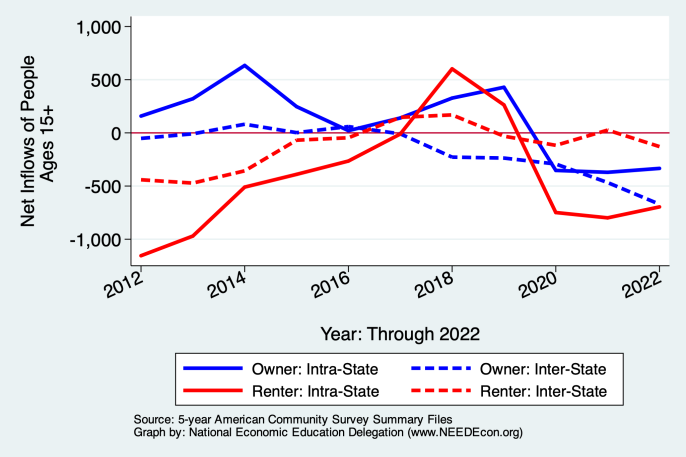

Table 20: Migration by Age

Category	Population	Net Inflows				
			Same State			
		All Migration	W/in County	Between Counties	Across States	From Abroad
1 to 4 years	2,225	−255	−262	23	−51	35
5 to 17 years	8,958	−488	−288	−222	−32	54
18 and 19 years	1,143	−149	−14	−68	−150	83
20 to 24 years	2,662	−62	−267	19	130	56
25 to 29 years	3,612	−265	−34	−11	−232	12
30 to 34 years	3,882	−305	−299	13	−56	37
35 to 39 years	3,798	−125	−1	172	−296	0
40 to 44 years	4,209	221	58	159	−27	31
45 to 49 years	3,902	−59	−29	1	−31	0
50 to 54 years	3,943	51	82	8	−56	17
55 to 59 years	4,599	−37	−73	52	−27	11
60 to 64 years	4,594	−230	−39	−110	−81	0
65 to 69 years	3,525	7	−11	10	8	0
70 to 74 years	3,285	46	17	68	−51	12
75 years and over	4,870	113	60	70	−17	0
Total Population:	59,207	−1,537	−1,100	184	−969	348

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

Table 21: Migration by Educational Attainment

Category	Population	Net Inflows				
			Same State			
		All Migration	W/in County	Between Counties	Across States	From Abroad
Less than high school graduate	3,364	−206	−85	−19	−102	0
High school graduate (includes equiv)	7,194	−78	19	118	−227	12
Some college or assoc. degree	14,665	−312	−302	31	−102	61
Bachelor's degree	12,118	250	143	307	−223	23
Graduate or professional degree	6,878	−237	−44	−5	−212	24
Total:	44,219	−583	−269	432	−866	120

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	49,517	49,517
Moved Within Same County	63,468	57,303
Moved to Different County, Same State	70,227	41,385
Moved Between States	45,625	43,750
Total Population:	51,327	49,683

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

Table 23: Median Age of Migration Flows

Flow	In-Migration	Out-Migration
Same House 1 Year Ago	45.5	45.5
Moved Within Same County	34.4	29.0
Moved to Different County, Same State	36.1	30.5
Moved Between States	28.8	31.9
Moved from Abroad	21.1	
Total Population:	43.8	42.8

Source: 2022 5-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 relased 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/

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