Moreno Valley, California

Indicators Report

by
The National Economic Education Delegation (NEED)

April 20, 2024

Exploring the economics, demographics, and well-being of Moreno Valley 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 Moreno Valley (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 Moreno Valley. These indicators are compared to Riverside 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 Moreno Valley 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 Moreno Valley 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 Moreno Valley, 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 Moreno Valley, but do not necessarily live in Moreno Valley.
- **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.

Jon Haveman, Ph.D. • National Economic Education Delegation
Jon@NEEDEcon.org • 415-336-5705

Contents

Executive Summary **1**
Assessing the City with Indicators 1

Demographics **3**
A Demographic Snapshot 3
Current Population 5

Employment Report **8**
Citywide Employment and Unemployment 8
MSA Employment by Industry 9
Some Employee Detail 10

Income and Earnings **16**
Per Capita Personal Income Growth 16
Poverty and Inequality 19

Housing **21**
Housing Costs and Affordability 21
Housing Picture 25
Vintage of Residential Housing 27
Occupation of Residential Housing 29
Residential Permitting 31

Commute Patterns **34**
Mode of Transportation 34
Commute Times for Employed Residents 36
Commute Times for Those Employed in the City 37
Place of Work 38
Commute Mode by Income 40
Commute Mode by Poverty Status 41

Migration **42**
Overall Migration Flows 42
Demographics of Migration Flows 44

References and Sources **46**

Jon Haveman, Ph.D. • National Economic Education Delegation
Jon@NEEDEcon.org • 415-336-5705

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 Moreno Valley's population are fundamental indicators of the city's growth potential.

A Demographic Snapshot

Jon Haveman, Ph.D. • National Economic Education Delegation
Jon@NEEDEcon.org • 415-336-5705

Statistic	2022	2019
POPULATION		
Population Estimate (#, 5yr)	209,578.0	207,289.0
Veterans (#, 5yr)	7,497.0	7,818.0
Foreign born persons (%, 5yr)	24.9	25.0
Population age 25+ (#, 5yr)	128,841.0	123,871.0
AGE AND SEX		
Persons under 5 years (%, 5yr)	6.5	7.2
Persons under 18 years (%, 5yr)	27.0	28.1
Persons 65 years and over (%, 5yr)	9.4	8.6
Female persons (%, 5yr)	50.1	51.7
INCOME AND POVERTY		
Median household income ($, 5yr)	82,637.0	66,134.0
Per capita income in past 12 months ($, 5yr)	26,861.0	21,443.0
Persons in poverty (%, 5yr)	12.9	14.5
Children age less than 18 in poverty (#, 5yr)	9,988.0	11,451.0
Children age less than 18 in poverty (%, 5yr)	18.1	20.0
RACE AND ETHNICITY		
White alone (%, 5yr)	25.7	35.5
African American alone (%, 5yr)	17.6	17.5
American Indian or Alaska Native alone (%, 5yr)	0.8	0.4
Asian alone (%, 5yr)	5.6	6.1
Native Hawaiian and Other Pacific Islander alone (%, 5yr)	0.5	0.3
Two or More Races (%, 5yr)	11.5	2.9
Hispanic or Latino (%, 5yr)	60.3	58.7
White alone, not Hispanic or Latino (%, 5yr)	13.5	15.7
HOUSING		
Housing units (#, 5yr)	55,942.0	54,041.0
Owner-occupied housing units (%, 5yr)	63.0	61.7
Median value of owner-occupied housing units ($, 5yr)	421,400.0	312,000.0
Median selected monthly owner costs-with a mortgage ($, 5yr)	2,047.0	1,709.0
Median selected monthly owner costs-without a mortgage ($, 5yr)	609.0	475.0
Median gross rent ($, 5yr)	1,858.0	1,494.0
FAMILIES AND LIVING ARRANGEMENTS		
Households (#, 5yr)	53,958.0	50,886.0
Persons per household (#, 5yr)	3.9	4.1
Living in same house 1 year ago, % of persons age 1+ (5yr)	90.3	87.5
EDUCATION		
High school graduate or higher, % of persons age 25+ (5yr)	79.3	76.4
Bachelor's degree or higher, % of persons age 25+ (5yr)	17.2	16.3
HEALTH		
With a disability, under age 65 years (#, 5yr)	13,909.0	13,369.0
Persons without health insurance, under age 65 years (%, 5yr)	10.4	10.8
LABOR FORCE		
In civilian labor force, persons age 16+ (%, 5yr)	64.6	63.7
In civilian labor force, women age 16+ (%, 5yr)	56.0	55.8
Employed, persons age 16+ (%, 5yr)	58.3	57.1
Self employed (%, 5yr)	6.1	6.4
TRANSPORTATION		
Mean travel time to work, workers age 16+ (Mins., 5yr)	33.1	34.3
Drive alone in private vehicle (%, 5yr)	76.6	78.9
Using public transportation (%, 5yr)	1.0	1.8
Worked from home (%, 5yr)	5.8	2.7

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

Jon Haveman, Ph.D. • National Economic Education Delegation
Jon@NEEDEcon.org • 415-336-5705

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				
Moreno Valley	208,289	−0.01	−0.24	1.09
County and Broader Regions				
Riverside County	2,439,234	0.34	−0.06	1.11
Southern California	21,794,548	−0.41	−2.24	−2.84
California	38,940,231	−0.35	−1.79	−2.01

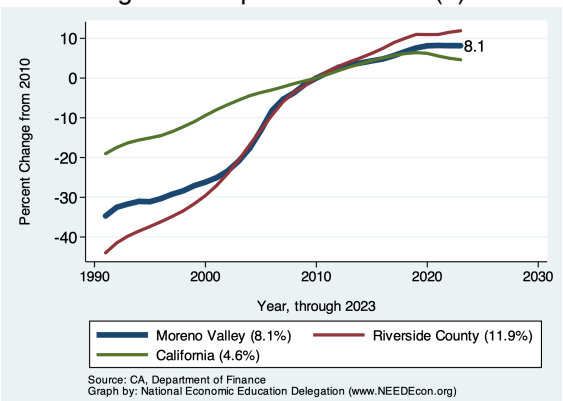
Source: CA DOF; Calculations by National Economic Education Delegation

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

City	2022	2023	% Change Local	% Change Southern California	% Change California
Riverside County	2,431.0	2,439.2	0.34	−0.41	−0.35
Riverside	314.8	313.7	−0.36		
Moreno Valley	208.3	208.3	−0.01		
Corona	157.1	157.0	−0.09		
Menifee	107.4	110.0	2.44		
Murrieta	110.6	110.0	−0.54		
Temecula	109.5	108.9	−0.52		
Jurupa Valley	105.2	105.0	−0.16		
Indio	89.8	90.8	1.17		
Hemet	89.2	89.9	0.84		
Perris	78.5	78.9	0.60		
Lake Elsinore	72.0	72.0	−0.02		
Eastvale	70.0	69.5	−0.66		
Beaumont	54.3	56.6	4.12		
San Jacinto	54.3	54.1	−0.37		
Cathedral City	51.6	51.4	−0.36		
Palm Desert	50.6	50.6	−0.02		
Palm Springs	44.2	44.1	−0.17		
Coachella	41.9	42.5	1.26		
La Quinta	37.6	38.0	1.11		
Wildomar	36.4	36.3	−0.28		
Desert Hot Springs	32.4	32.6	0.68		
Banning	30.9	31.2	1.28		
Norco	25.0	25.0	0.01		
Blythe	17.4	17.3	−0.87		
Rancho Mirage	16.9	17.0	0.94		
Calimesa	10.9	11.0	0.11		
Canyon Lake	11.0	10.9	−0.49		
Indian Wells	4.8	4.8	−0.23		

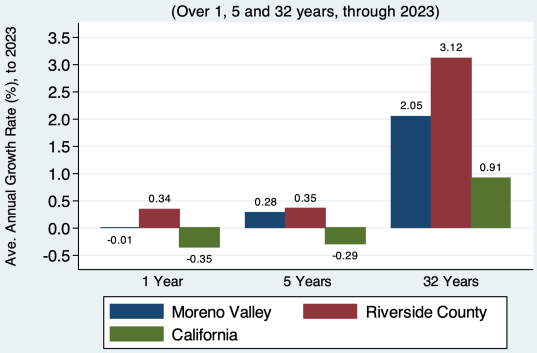
Source: CA DOF; Calculations by National Economic Education Delegation

Figure 1: Population Growth (1)



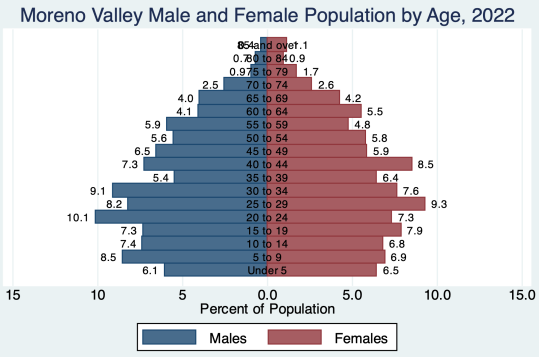
Source: CA, Department of Finance
Graph by: National Economic Education Delegation (www.NEEDEcon.org)

Figure 2: Population Growth (2)

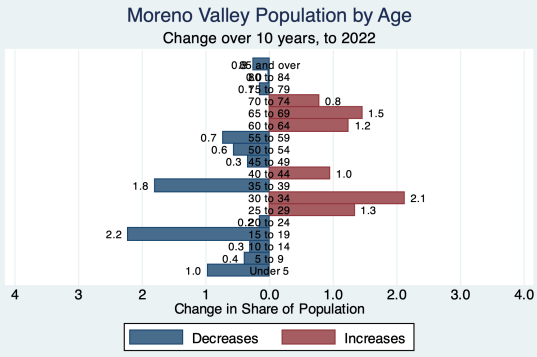


Source: U.S. Bureau of Economic Analysis
Graph by: National Economic Education Delegation (www.NEEDEcon.org)

Figure 3: Population by Age - Detailed Age Categories

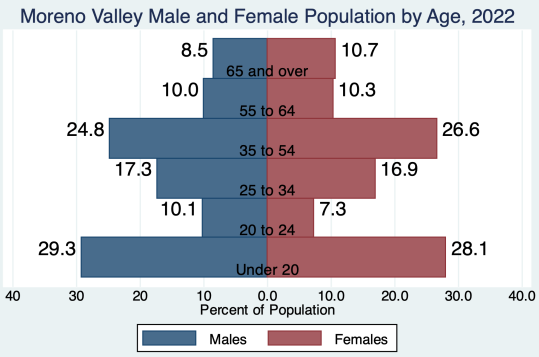


Source: U.S. Census Bureau, 1-yr American Community Survey
Graph by: National Economic Education Delegation (www.NEEDEcon.org)

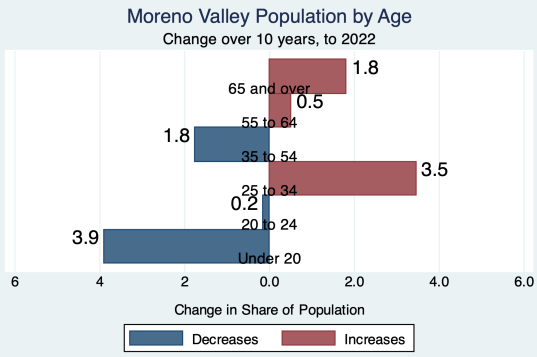


Source: U.S. Census Bureau, 1-yr American Community Survey
Graph by: National Economic Education Delegation (www.NEEDEcon.org)

Figure 4: Population by Age - Broad Age Categories



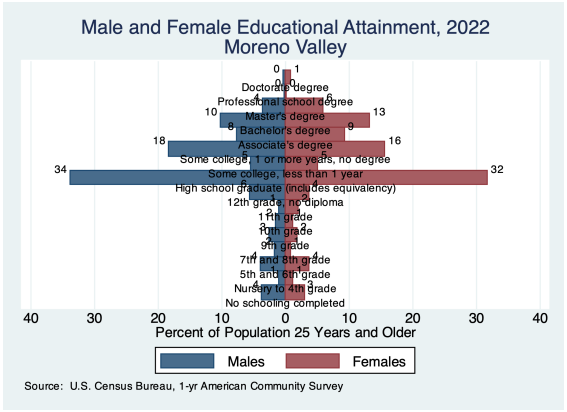
Source: U.S. Census Bureau, 1-yr American Community Survey
Graph by: National Economic Education Delegation (www.NEEDEcon.org)



Source: U.S. Census Bureau, 1-yr American Community Survey
Graph by: National Economic Education Delegation (www.NEEDEcon.org)

Jon Haveman, Ph.D. ● National Economic Education Delegation
Jon@NEEDEcon.org ● 415-336-5705

Figure 5: Population by Educational Attainment



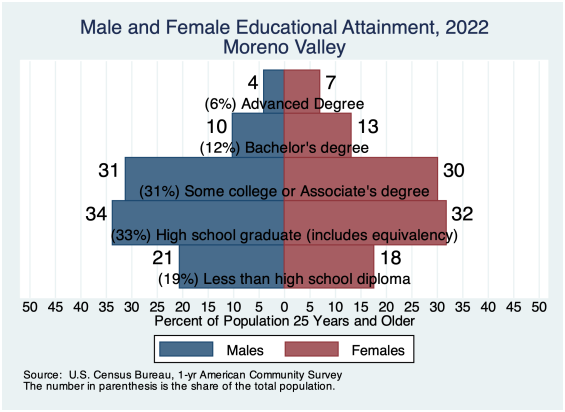


Figure 6: Population by Race/Ethnicity

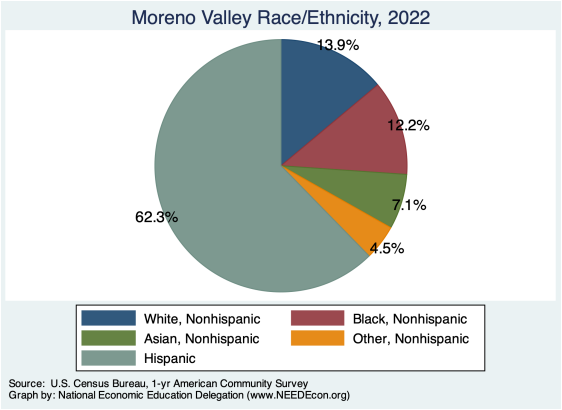
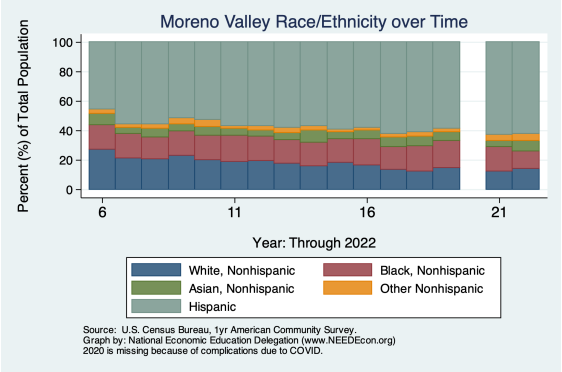


Figure 7: Population by Race/Ethnicity Over Time



Jon Haveman, Ph.D. ● National Economic Education Delegation
Jon@NEEDEcon.org ● 415-336-5705

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. Moreno Valley 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

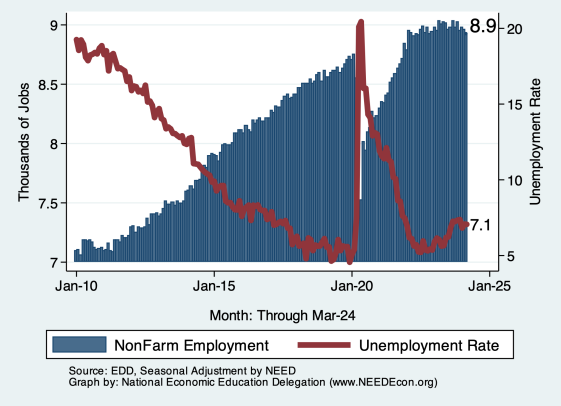


Figure 9: Employment and Unemployment - Last 12 Months

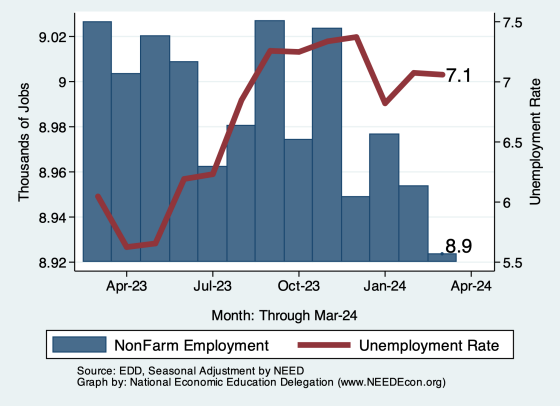


Figure 10: Relative Employment Growth Across Regions - since 2010

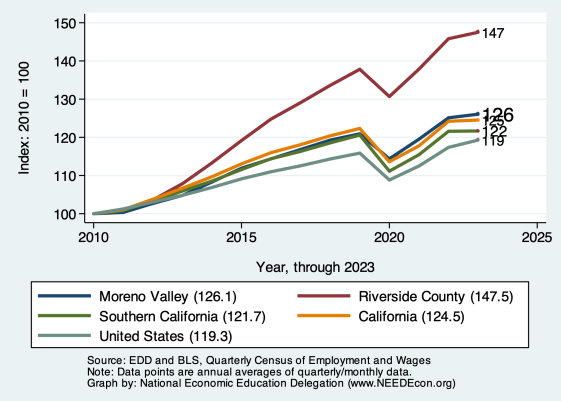
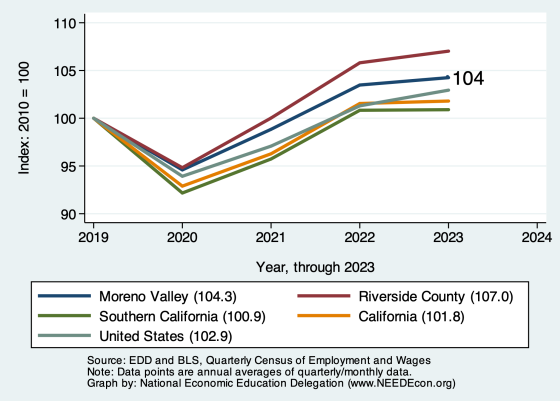


Figure 11: Relative Employment Growth Across Regions - since 2019



Jon Haveman, Ph.D. • National Economic Education Delegation
Jon@NEEDEcon.org • 415-336-5705

MSA 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 the Riverside-San Bernardino-Ontario MSA. The following table provides the latest data for the MSA.

Table 4. Employment Growth by Industry in the Riverside-San Bernardino-Ontario MSA for March, 2024

Industry	Employment	Share	Empl Growth	% Growth - Annualized Rate					
				Month	Qtr	6mo	1yr	3yr	5yr
Total Nonfarm	1,694,223	100.0	5,971.1	4.3	0.5	0.8	1.6	3.3	2.1
Total Private	1,425,885	84.2	3,363.1	2.9	0.2	0.6	1.0	3.1	2.4
Goods Producing	216,611	12.8	948.2	5.4	−5.6	−0.1	1.2	1.6	0.9
Mining, Logging and Construction	120,753	7.1	1,778.6	19.5	−2.3	3.7	5.6	2.8	2.7
Mining and Logging	1,600	0.1	0.0	0.0	0.0	0.0	14.3	7.7	6.7
Construction	118,854	7.0	1,464.0	16.0	−3.4	3.5	5.7	2.9	2.6
Manufacturing	96,076	5.7	−620.1	−7.4	−9.0	−4.3	−3.8	0.2	−1.0
Durable Goods	58,679	3.5	−417.3	−8.2	−7.6	−4.2	−3.8	−0.8	−2.2
Non-Durable Goods	37,446	2.2	−154.4	−4.8	−9.8	−3.9	−3.9	1.9	1.4
Service Providing	1,477,534	87.2	5,264.7	4.4	1.4	1.0	1.6	3.6	2.3
Trade, Trans & Utilities	452,210	26.7	1,888.6	5.2	2.5	−1.1	−1.3	0.9	3.3
Wholesale Trade	67,659	4.0	−155.0	−2.7	−3.2	−2.3	−2.0	0.5	0.1
Retail Trade	180,685	10.7	416.7	2.8	−3.1	−2.4	−1.4	0.9	−0.1
Trans & Warehousing	197,024	11.6	662.2	4.1	3.8	−0.7	−1.0	1.1	9.6
Utilities	5,718	0.3	−49.7	−9.9	6.1	3.0	3.6	4.7	4.3
Information	13,125	0.8	−47.7	−4.3	−3.7	−2.7	−1.5	2.5	−1.3
Financial Activities	44,464	2.6	−86.6	−2.3	−2.2	−1.3	−1.4	−0.2	−0.1
Finance & Insurance	21,985	1.3	−20.5	−1.1	−2.2	−2.7	−1.8	−3.5	−2.2
Real Estate & Rental & Leasing	22,538	1.3	−36.2	−1.9	−0.4	0.6	−0.9	3.9	2.5
Professional & Business Srvcs	166,274	9.8	1,764.0	13.7	0.5	3.2	−0.5	0.7	1.9
Prof, Sci, & Tech	46,211	2.7	201.6	5.4	1.8	0.5	−0.1	3.5	2.5
Admin & Support Srvcs	106,331	6.3	1,990.8	25.5	−1.6	5.0	−1.0	−0.6	1.6
Employment Srvcs	49,934	2.9	1,065.4	29.5	4.6	7.0	−3.0	−2.4	3.3
Educational & Health Srvcs	301,992	17.8	2,216.0	9.2	7.6	6.3	8.0	6.5	4.4
Education Srvcs	22,176	1.3	163.7	9.3	1.9	3.7	5.7	9.9	2.6
Health Care & Social Assistance	279,860	16.5	1,961.8	8.8	8.4	6.5	8.2	6.3	4.6
Leisure & Hospitality	182,103	10.7	−703.3	−4.5	−4.5	−4.9	−2.6	8.2	0.7
Arts, Entertainment & Recreation	20,665	1.2	64.7	3.8	−1.9	−10.2	−3.2	14.6	−0.0
Accommodation & Food Srvcs	161,299	9.5	−746.8	−5.4	−5.1	−4.5	−2.4	7.5	0.8
Other Srvcs	49,608	2.9	174.0	4.3	−3.6	0.2	1.4	6.3	1.5
Government	270,223	15.9	911.3	4.1	4.5	5.1	4.9	4.7	0.7
Federal	21,813	1.3	94.6	5.4	4.0	3.9	3.8	1.0	0.8
State	28,999	1.7	−1.0	−0.0	2.5	1.2	1.9	−2.1	−1.2
Local	219,293	12.9	791.9	4.4	4.8	5.6	5.4	6.2	1.0
County	31,724	1.9	−72.5	−2.7	3.4	1.8	0.3	−3.0	−1.6
City	17,509	1.0	52.9	3.7	6.7	8.4	8.1	8.4	2.9
Local Government Education	134,406	7.9	641.5	5.9	5.6	6.9	7.0	8.4	1.2

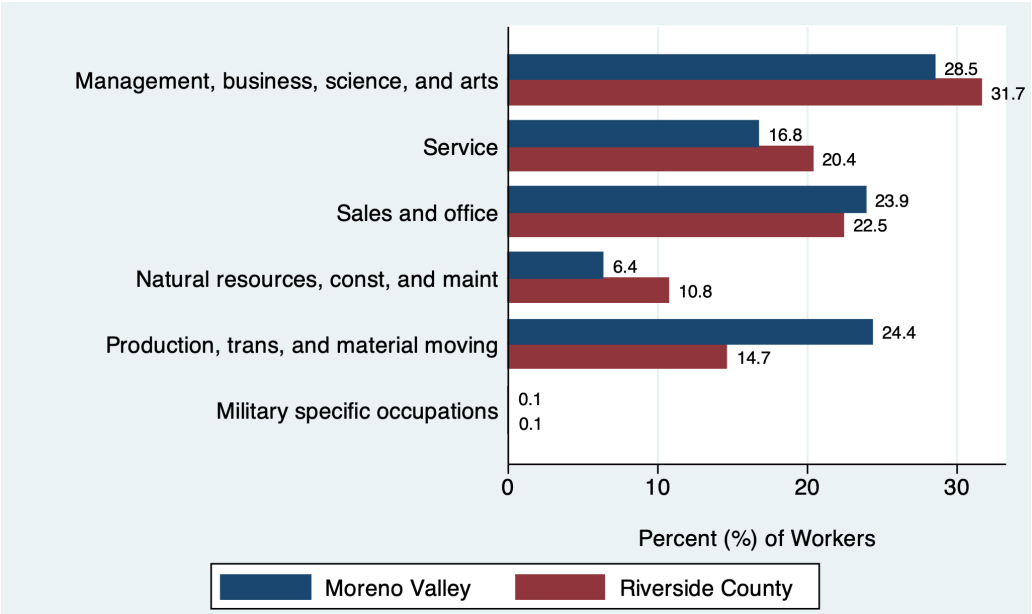
Source: EDD, National Economic Education Delegation (NEED)

Jon Haveman, Ph.D. • National Economic Education Delegation
Jon@NEEDEcon.org • 415-336-5705

Some Employee Detail

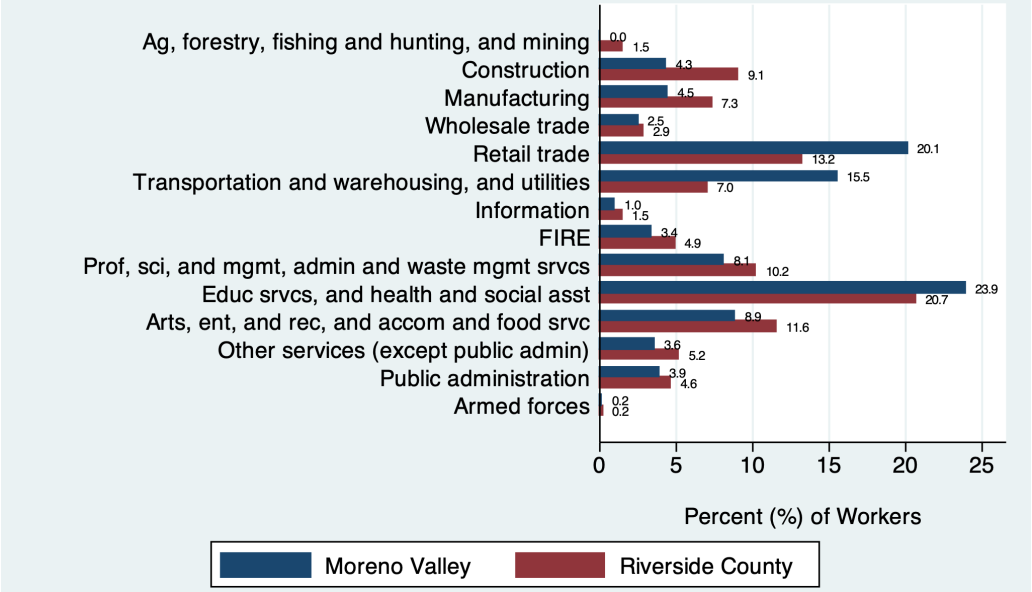
Employed in Moreno Valley

Figure 12: Employment by Occupation



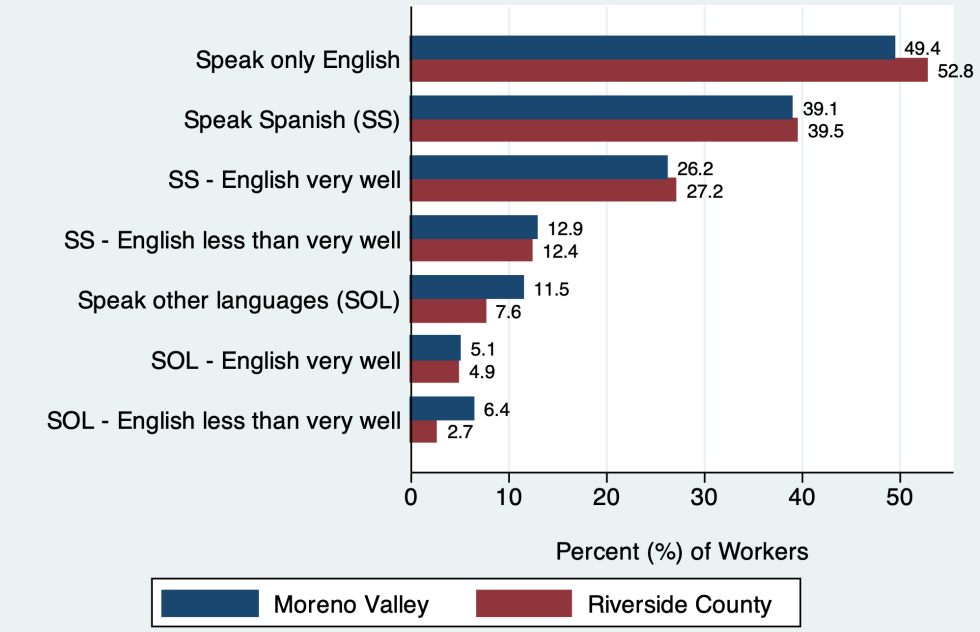
Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

Figure 13: Employment by Industry



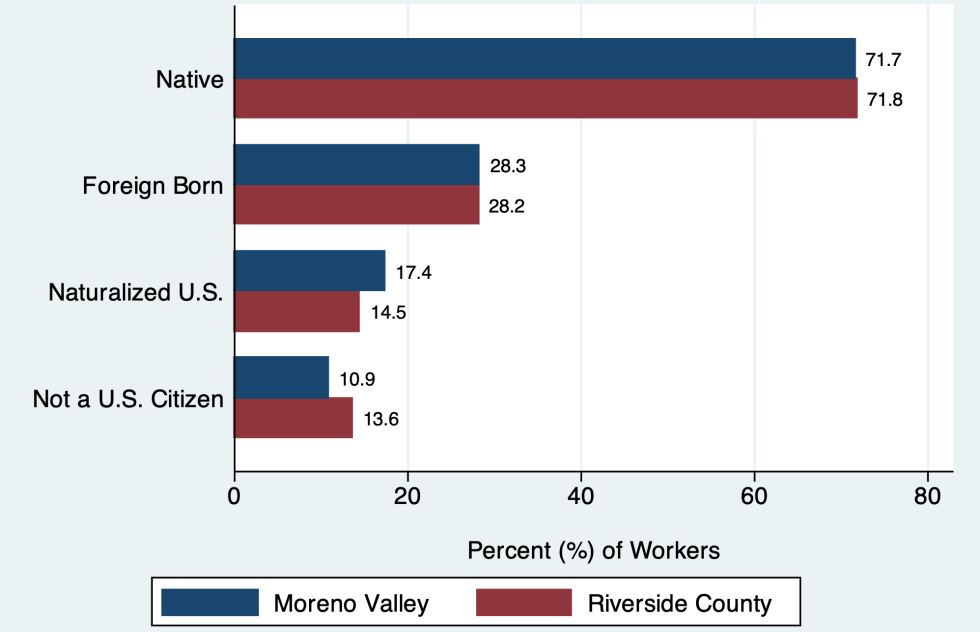
Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

Figure 14: Language Spoken at Home



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

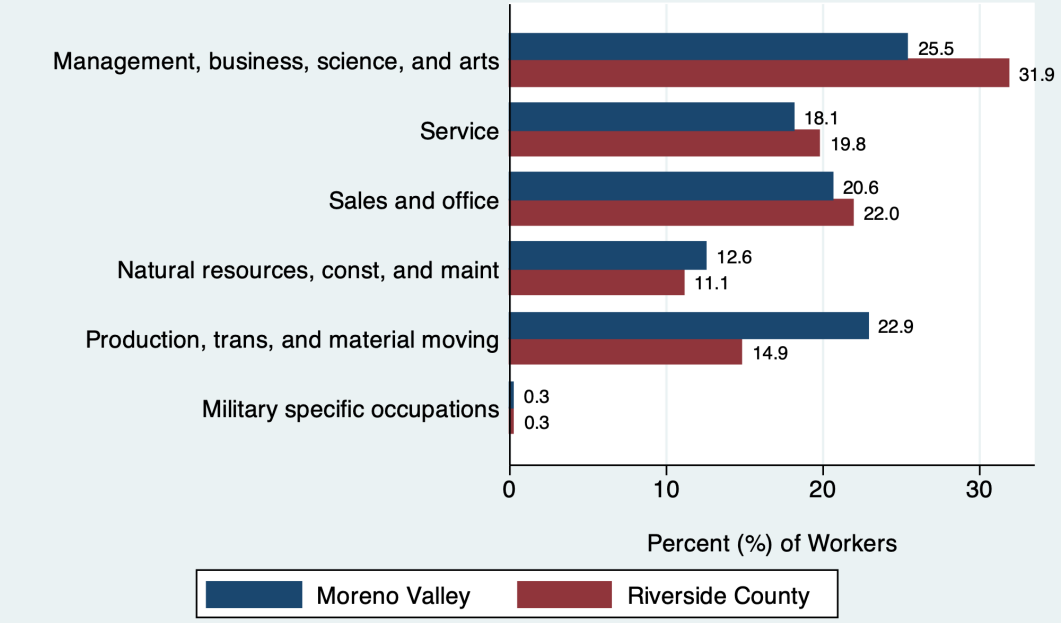
Figure 15: Citizenship



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

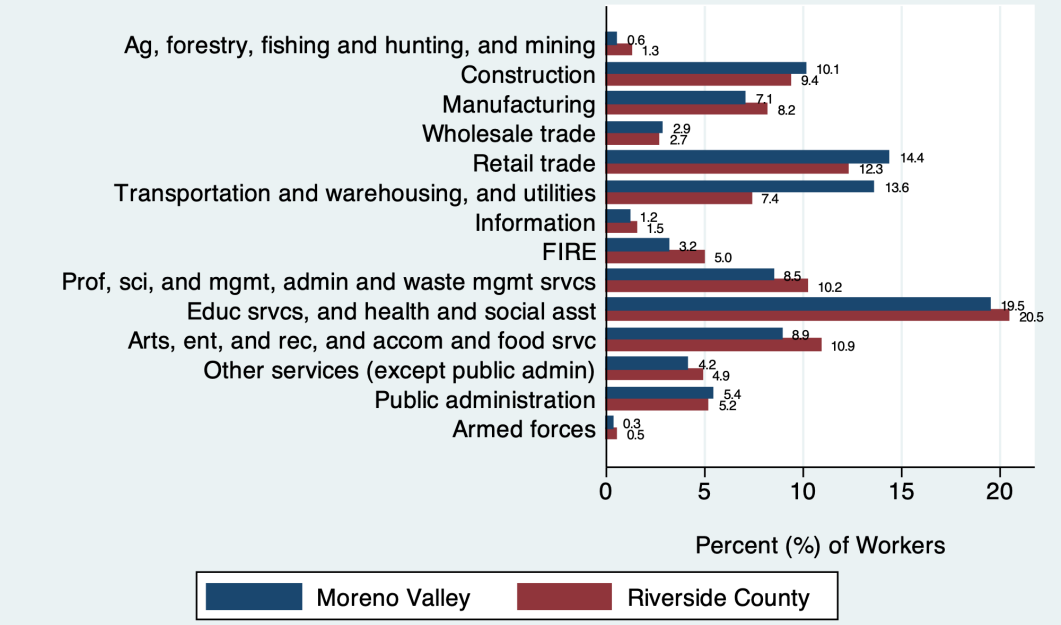
Employed Residents of Moreno Valley

Figure 16: Employment by Occupation



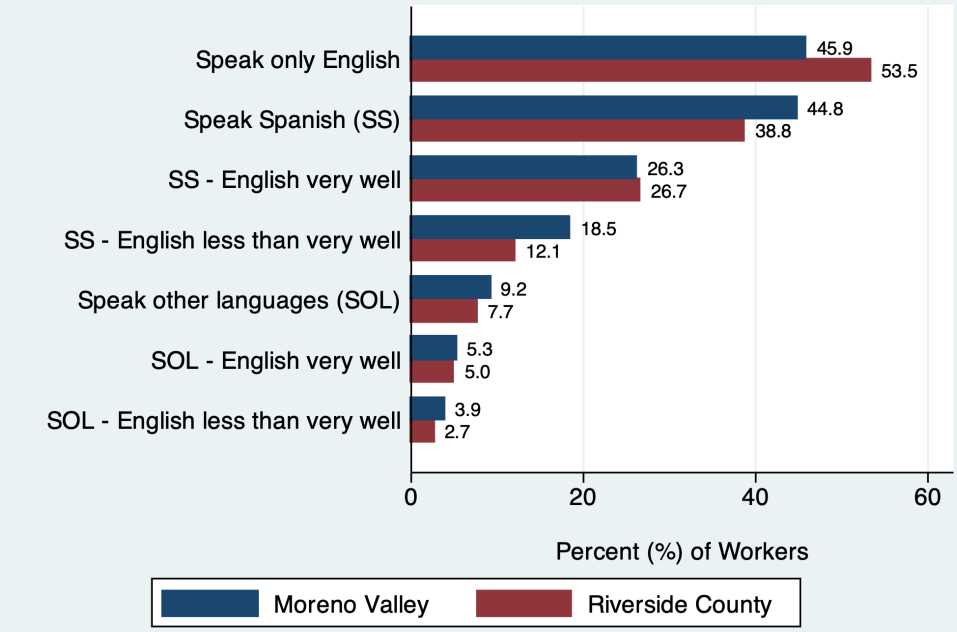
Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

Figure 17: Employment by Industry



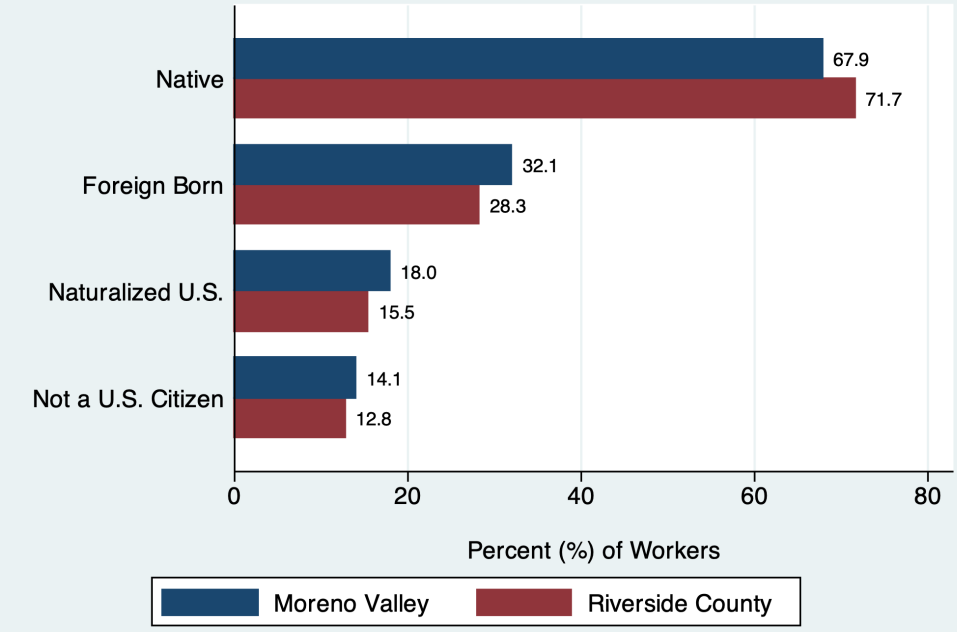
Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

Figure 18: Language Spoken at Home



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

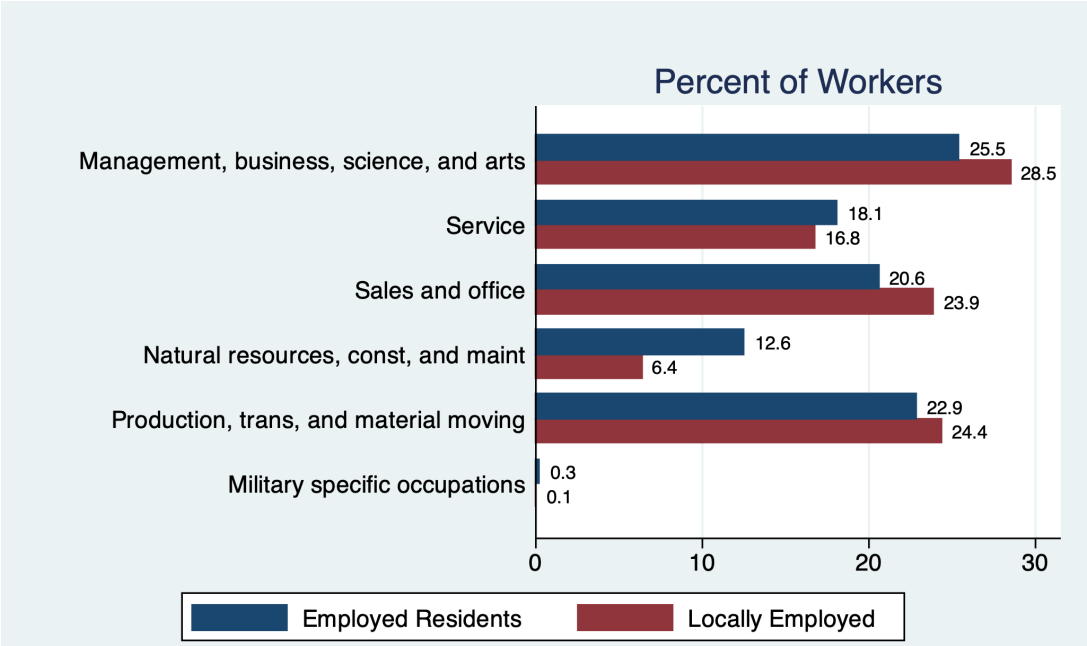
Figure 19: Citizenship



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

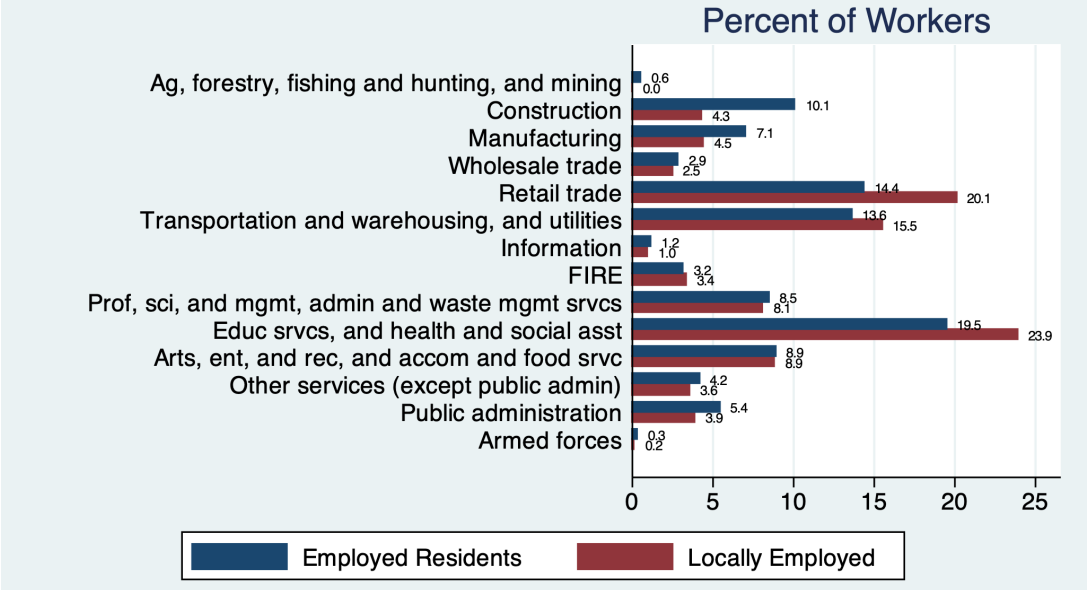
Employed Residents vs Workers in Moreno Valley

Figure 20: Employment by Occupation



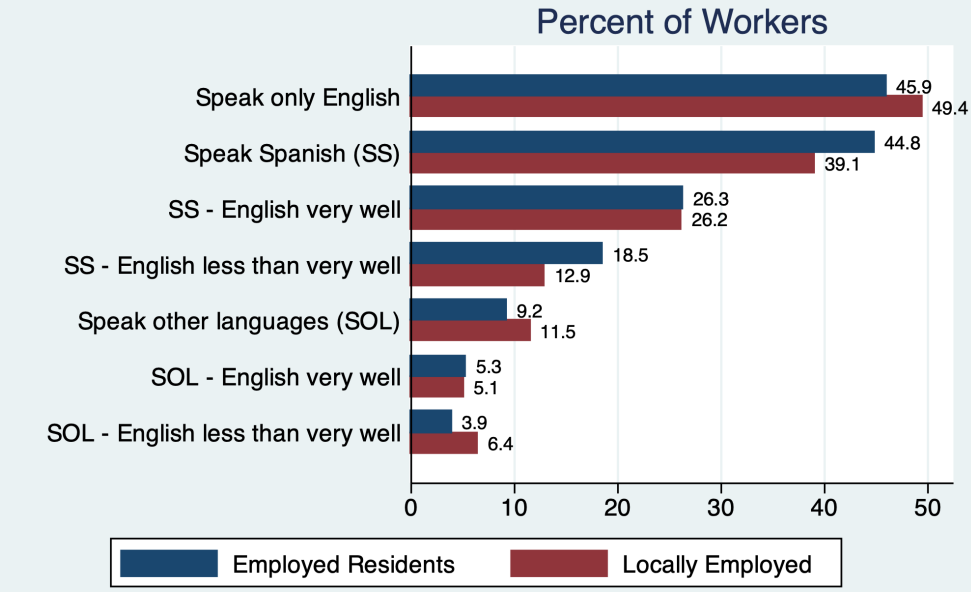
Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

Figure 21: Employment by Industry



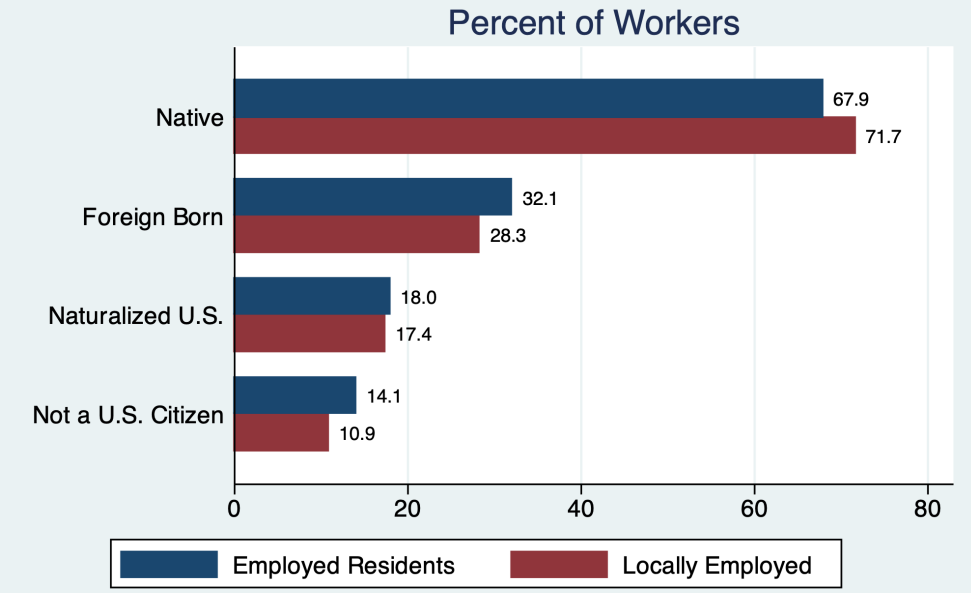
Source: American Community Survey, 2022 5-yr Summary Files.
Graph by: National Economic Education Delegation (www.NEEDEcon.org).

Figure 22: Language Spoken at Home



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

Figure 23: Citizenship



Source: American Community Survey, 2022 1-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 Moreno Valley. 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. Non-cash 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

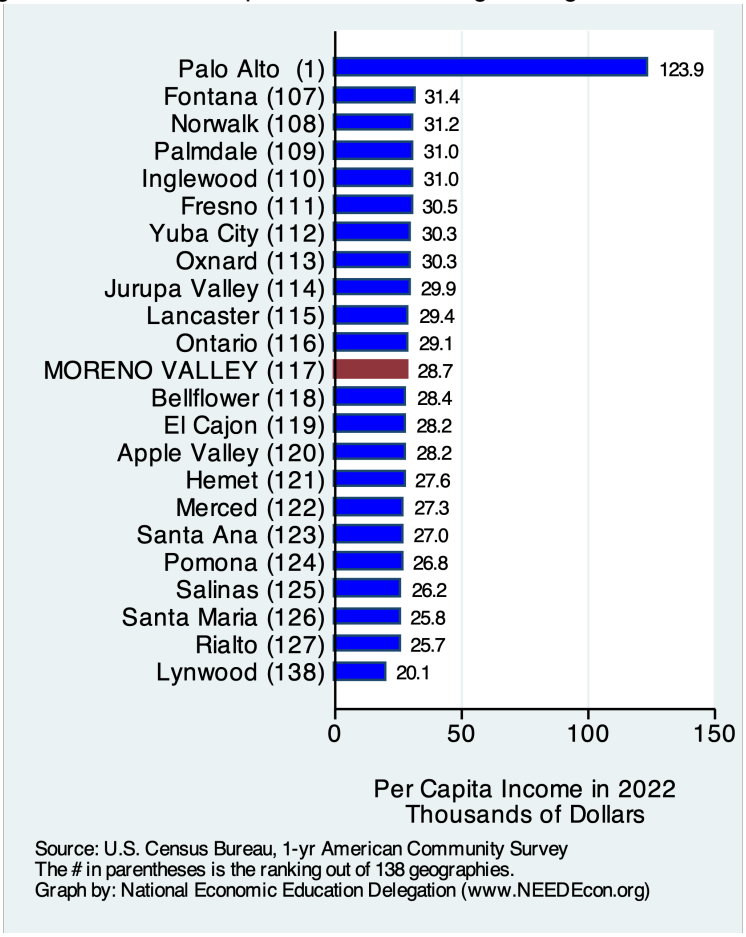
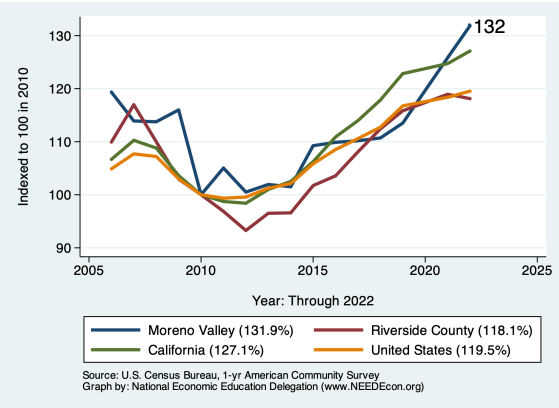
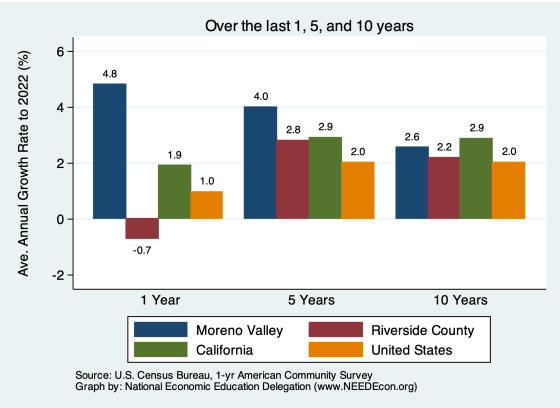


Figure 25: Regional Comparison of Growth over Time





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

Figure 26: Income Levels

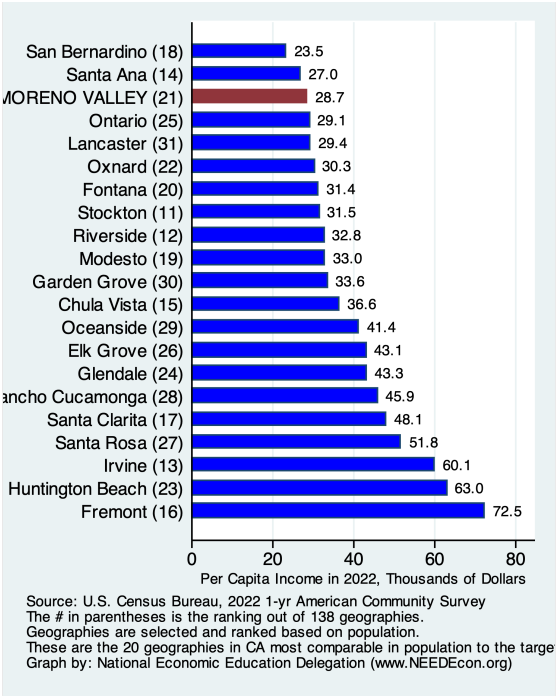
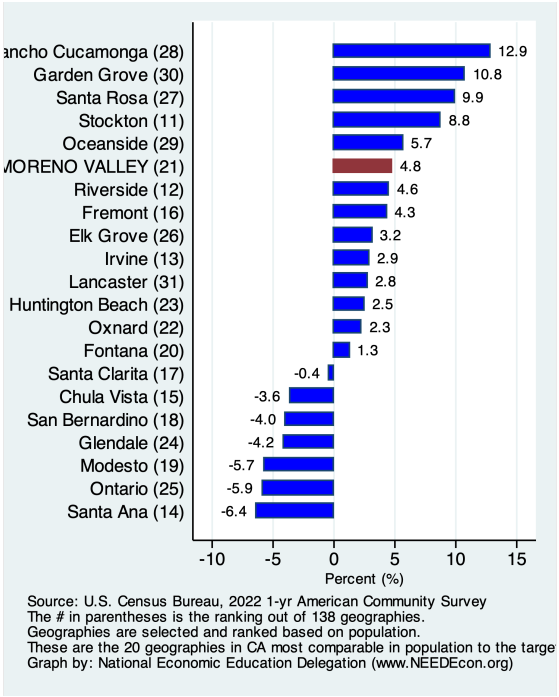


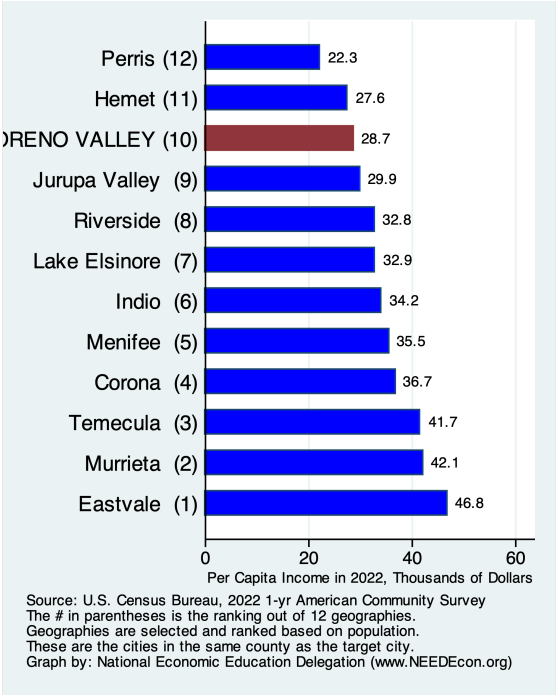
Figure 27: Growth over Time



Jon Haveman, Ph.D. ● National Economic Education Delegation
Jon@NEEDEcon.org ● 415-336-5705

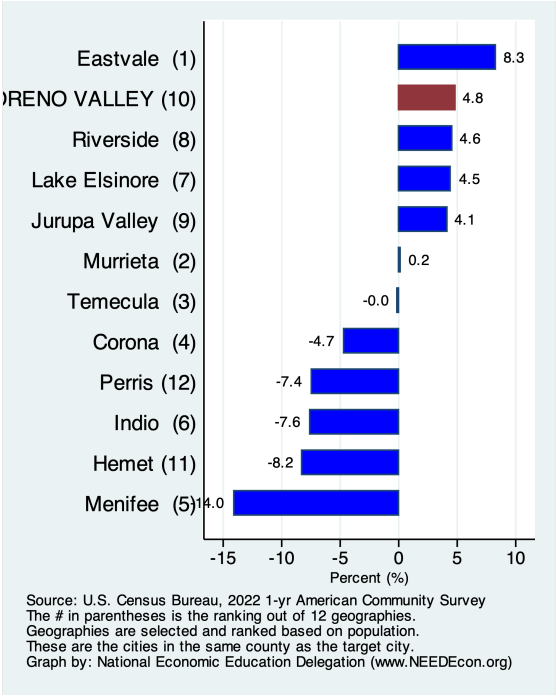
Real Per Capita Income Ranking Among Cities in Riverside County

Figure 28: Income Levels



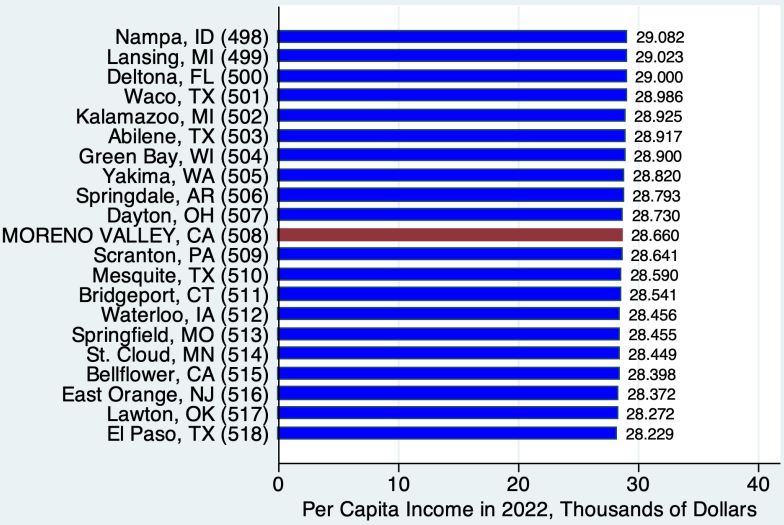
Source: U.S. Census Bureau, 2022 1-yr American Community Survey
The # in parentheses is the ranking out of 12 geographies.
Geographies are selected and ranked based on population.
These are the cities in the same county as the target city.
Graph by: National Economic Education Delegation (www.NEEDEcon.org)

Figure 29: Growth over Time



Source: U.S. Census Bureau, 2022 1-yr American Community Survey
The # in parentheses is the ranking out of 12 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, 1-yr American Community Survey
The # in parentheses is the ranking out of 598 geographies.
Graph by: National Economic Education Delegation (www.NEEDEcon.org)

Jon Haveman, Ph.D. • National Economic Education Delegation
Jon@NEEDEcon.org • 415-336-5705

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.

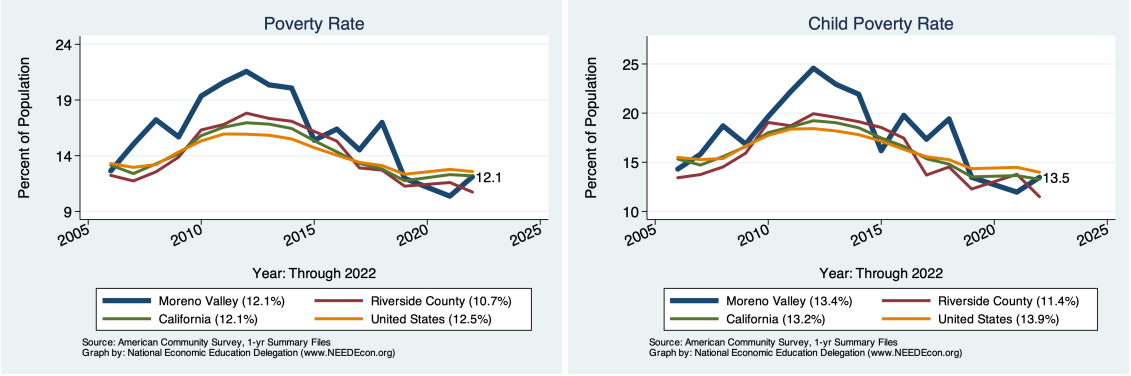


Figure 31: Inequality

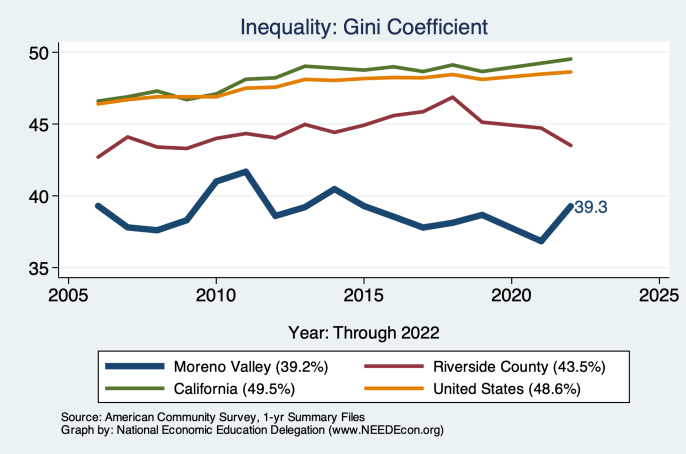
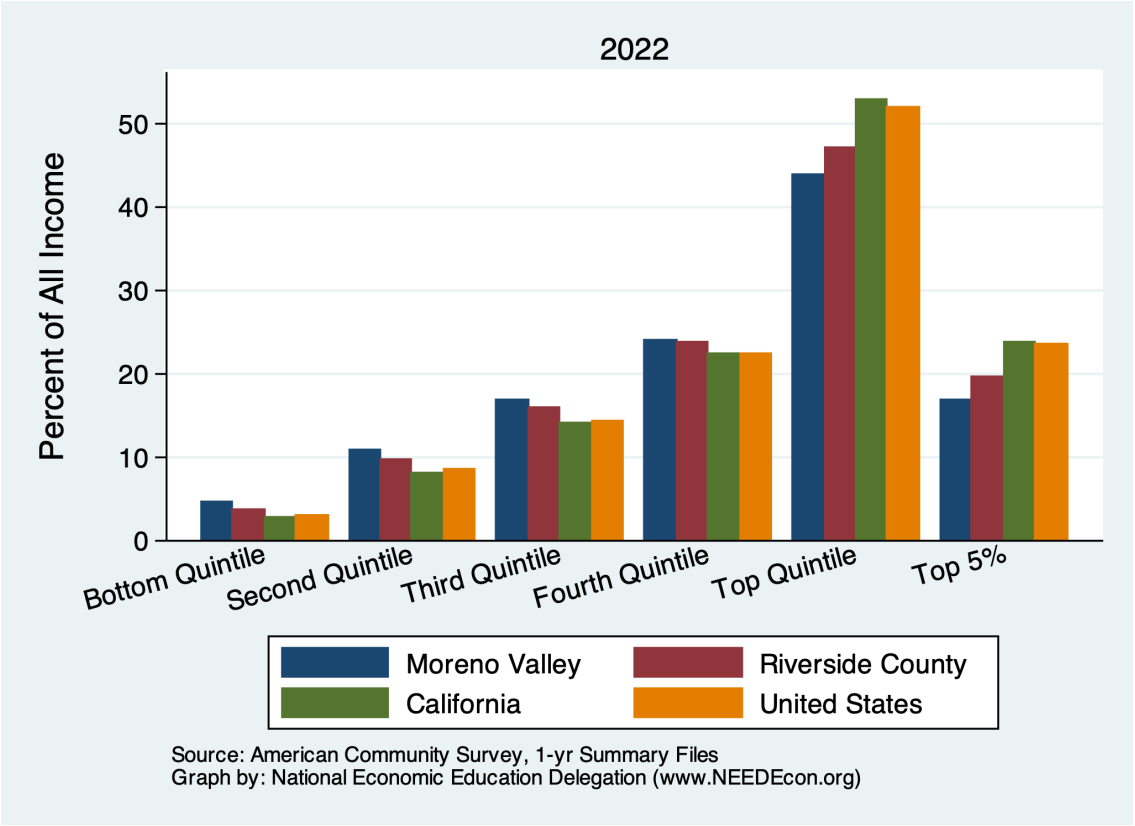
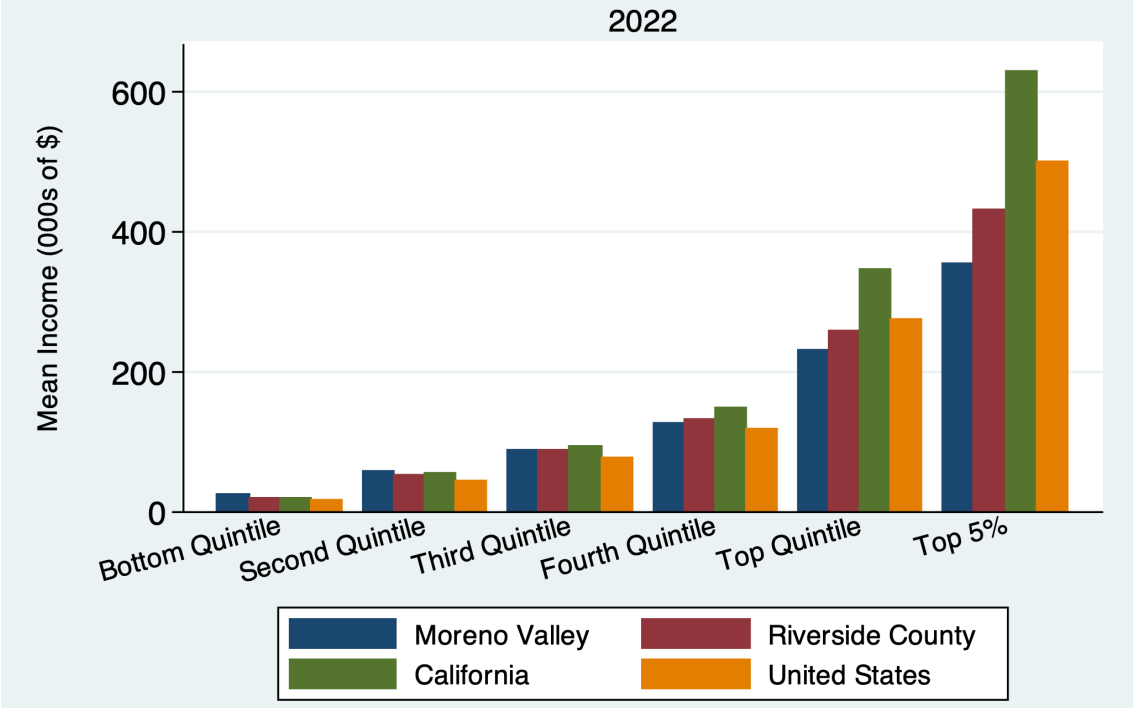


Figure 32: Shares Across the Income Distribution



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

Figure 33: Means Across the Income Distribution



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

Jon Haveman, Ph.D. • National Economic Education Delegation
Jon@NEEDEcon.org • 415-336-5705

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 Moreno Valley and Broader Regions

Figure 34: Median Home Prices

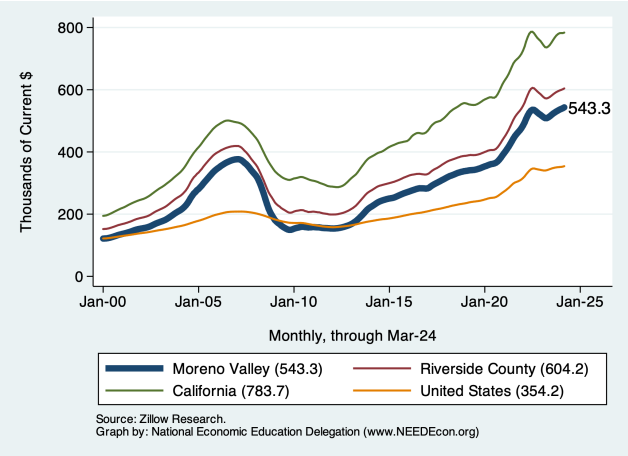
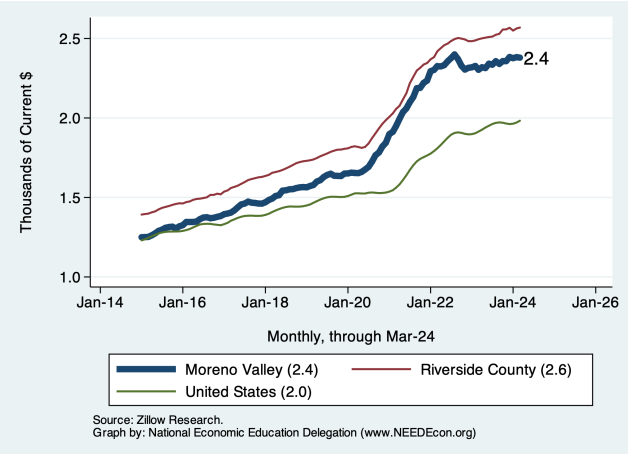


Figure 35: Median Rents



Housing Ownership in Moreno Valley and Broader Regions

Figure 36: Home Ownership Rates

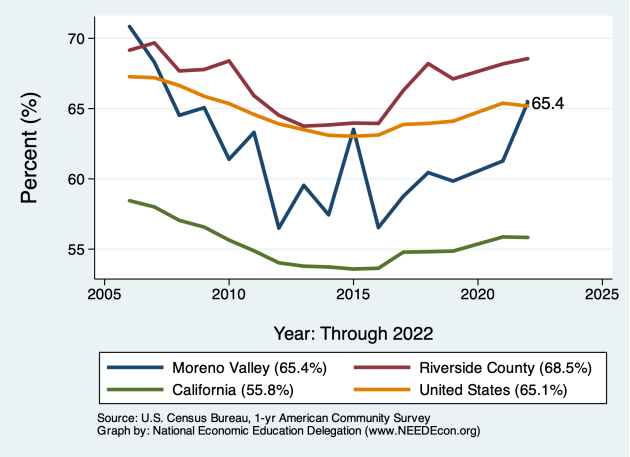


Figure 37: Home Ownership by Age

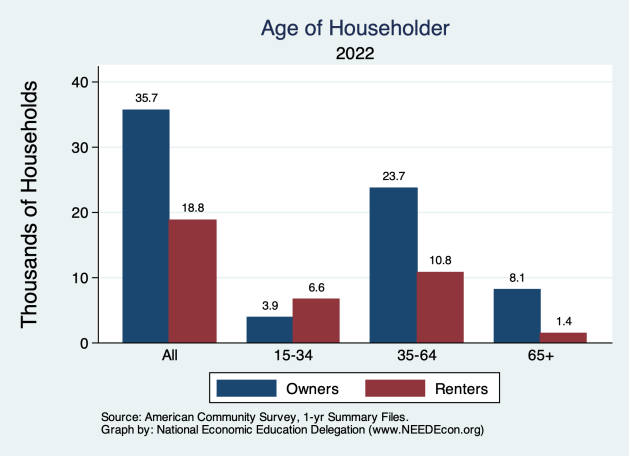
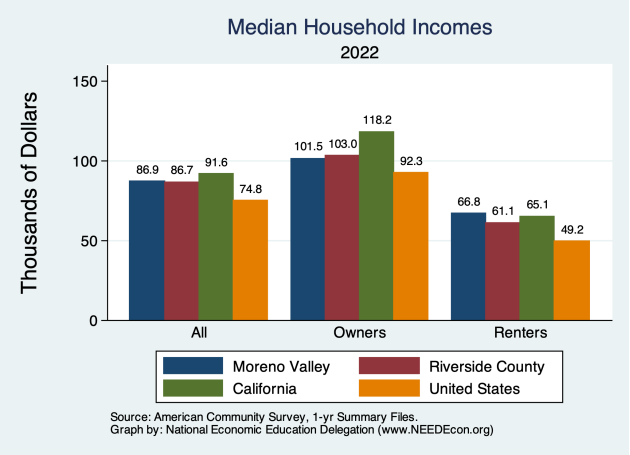


Figure 38: Income by Tenure



Jon Haveman, Ph.D. • National Economic Education Delegation
Jon@NEEDEcon.org • 415-336-5705

Figure 39: Income Distribution by Tenure

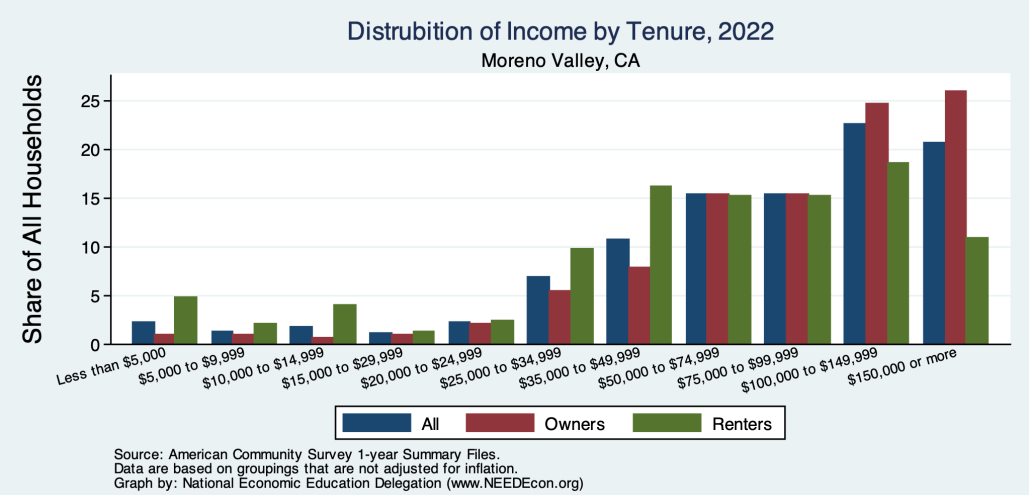


Figure 40: Income Distribution of Home Owners

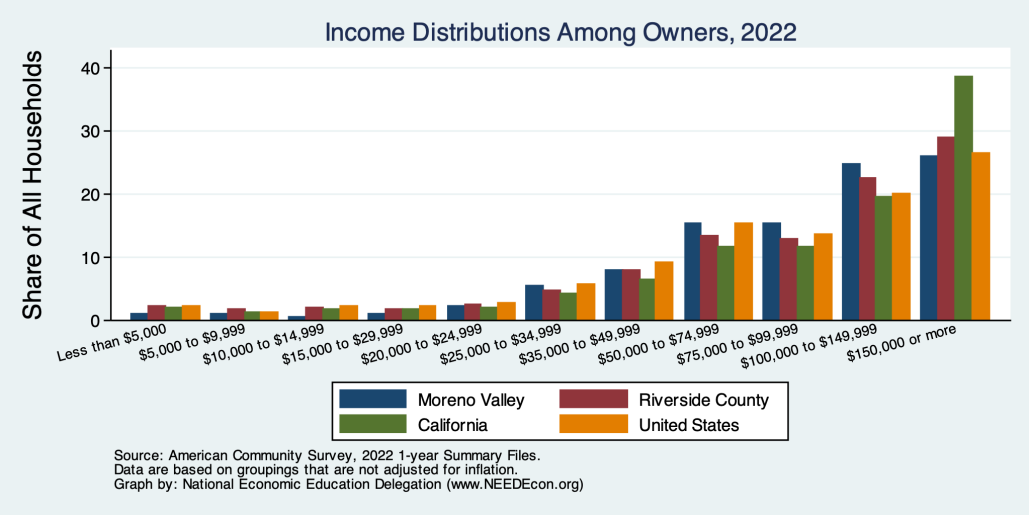
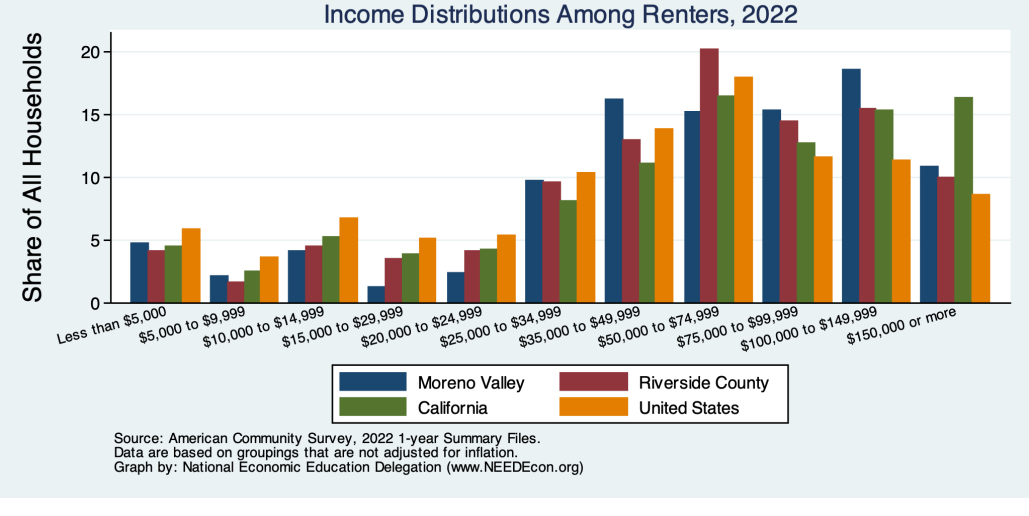


Figure 41: Income Distribution of Renters



Housing Burden in Moreno Valley and Broader Regions

Figure 42: Home Owners w/ A Mortgage

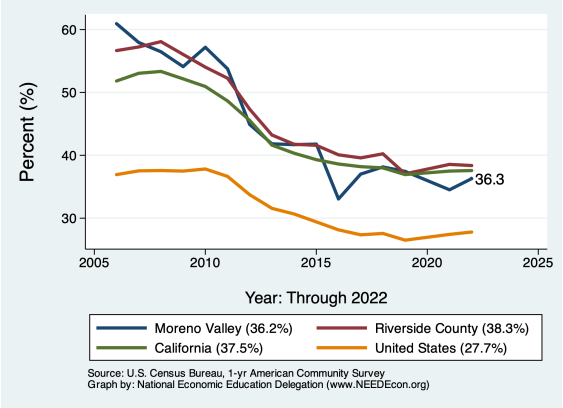


Figure 43: Home Owners w/o A Mortgage

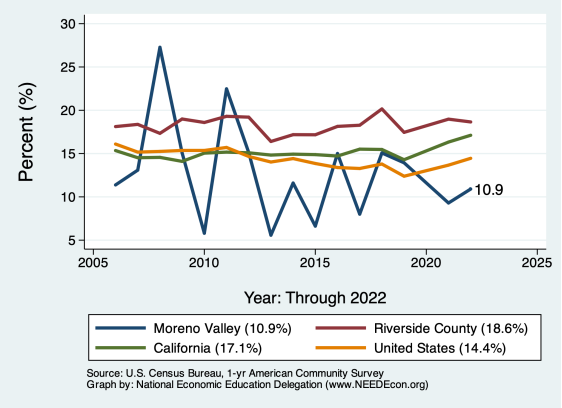


Figure 44: Renters

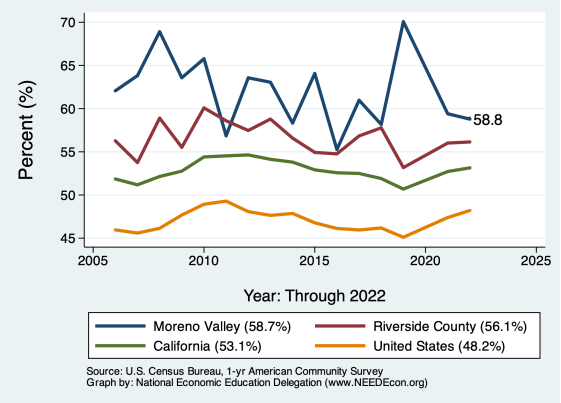
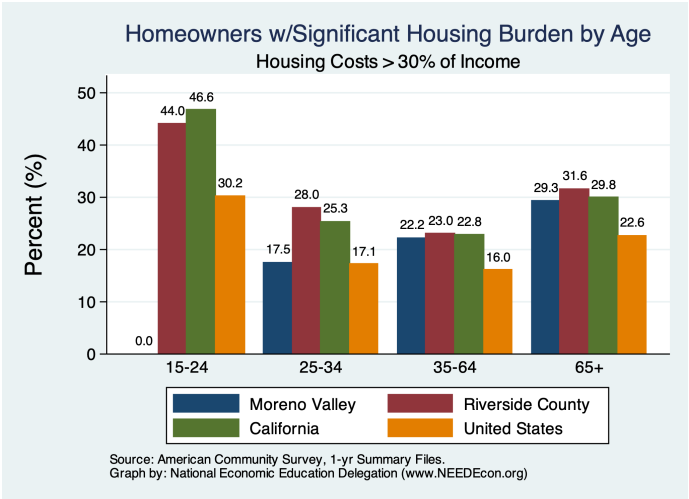


Figure 45: Homeowner Housing Burden by Age



Jon Haveman, Ph.D. • National Economic Education Delegation
Jon@NEEDEcon.org • 415-336-5705

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	208,289.0	207,181.0	193,365.0	0.5	7.7
Total # of Homes	58,416.0	57,005.0	55,559.0	2.5	5.1
# Occupied Units	56,848.0	53,607.0	51,592.0	6.0	10.2
Persons per Household	3.7	3.9	3.7	-5.2	-2.2
Vacancy Rate (%)	2.7	6.0	7.1	-55.0	-62.4

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

Figure 46: Housing Growth

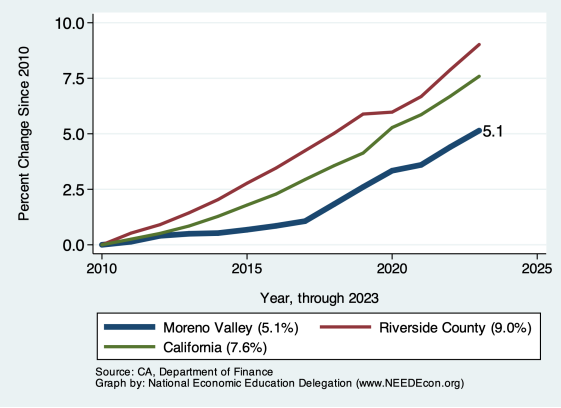


Figure 47: Persons per Household

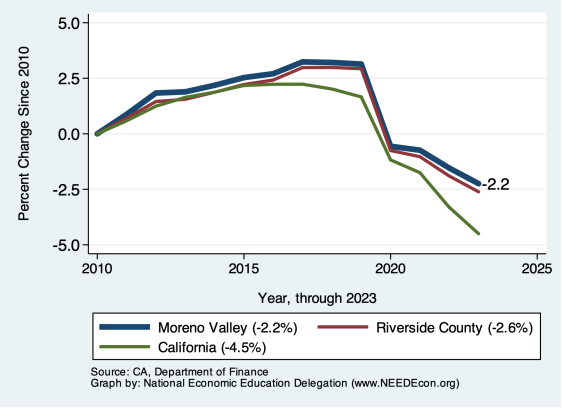


Figure 48: Vacancy Rates

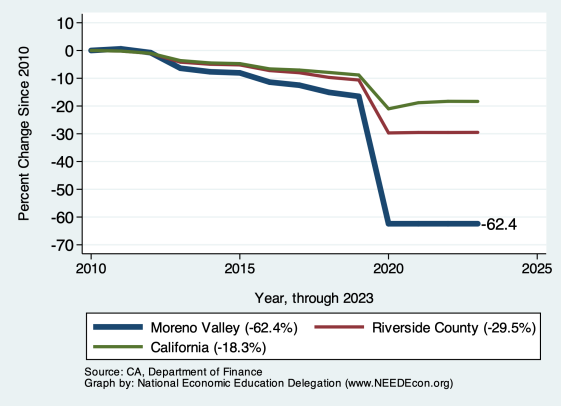
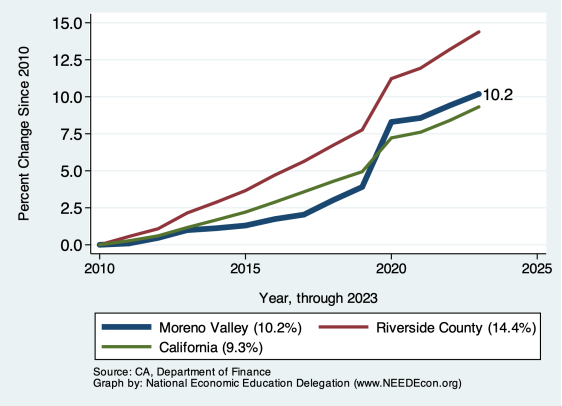


Figure 49: Number of Occupanied Units



Jon Haveman, Ph.D. • National Economic Education Delegation
Jon@NEEDEcon.org • 415-336-5705

Trends in the Growth of Housing by Housing Type

Figure 50: Single Detached Homes

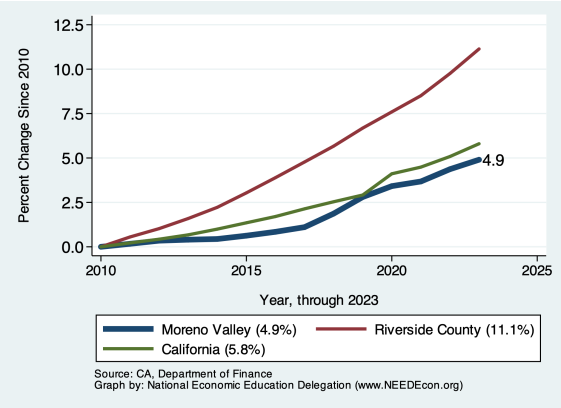


Figure 51: Single Attached Homes

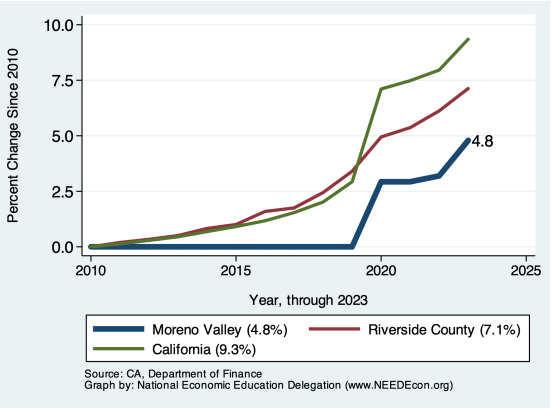


Figure 52: Housing in Buildings with Two to Four Units

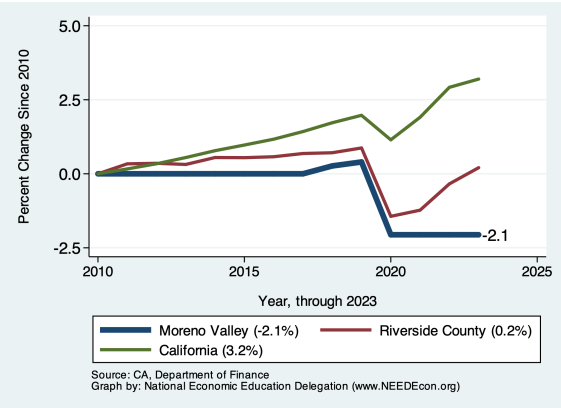
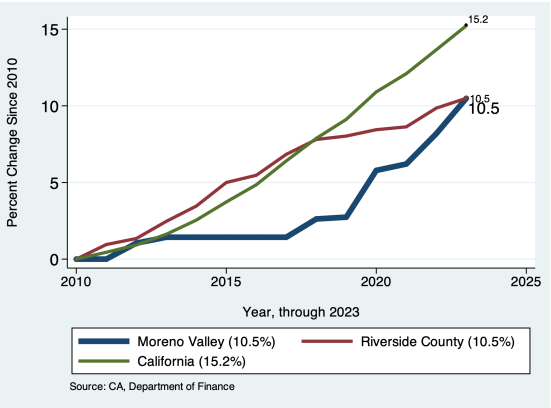


Figure 53: Housing in Buildings with Five or More Units



Jon Haveman, Ph.D. ● National Economic Education Delegation
Jon@NEEDEcon.org ● 415-336-5705

Vintage of Residential Housing

Why is it important?

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

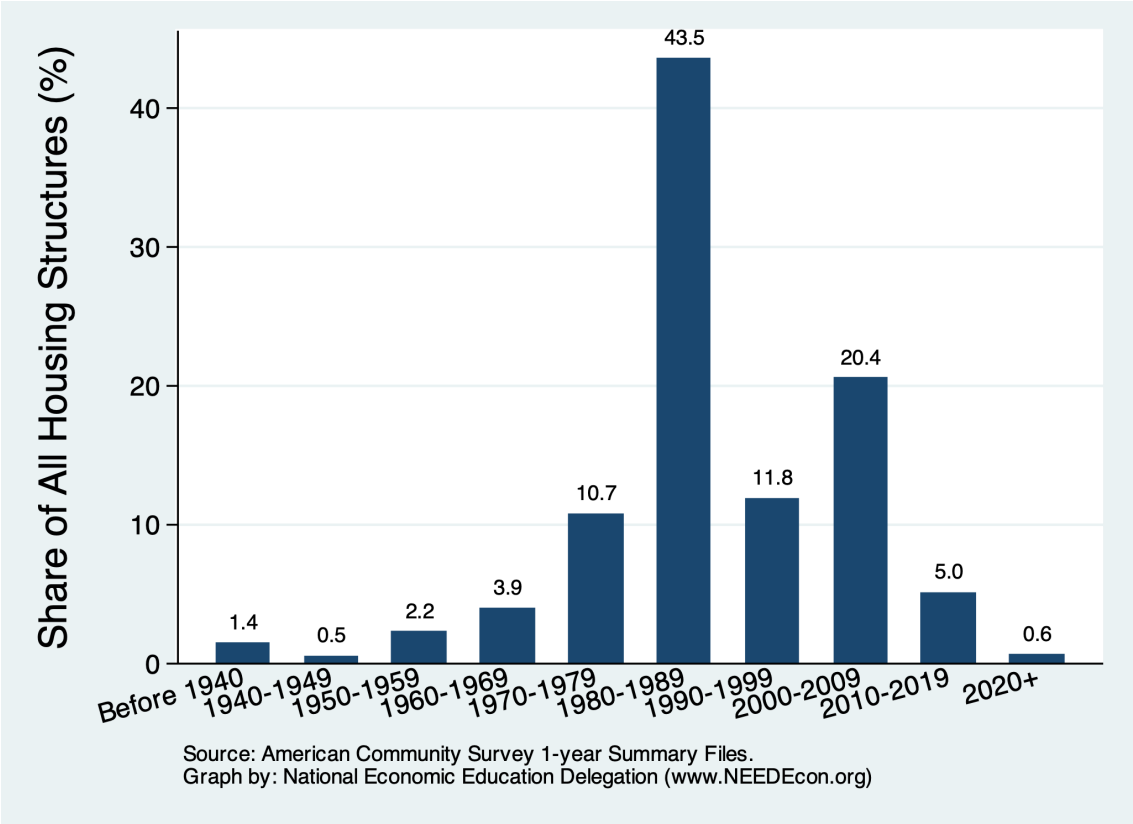


Figure 55: Housing Vintage across Regions

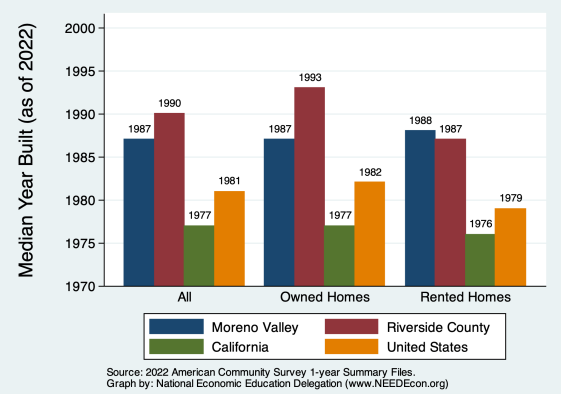


Figure 56: Housing Vintage by Tenure

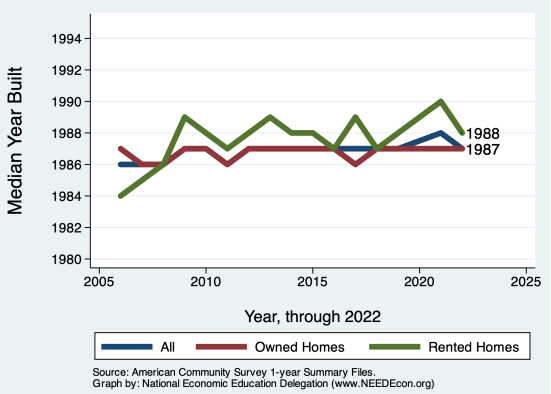


Figure 57: Vintage of Owned Residences

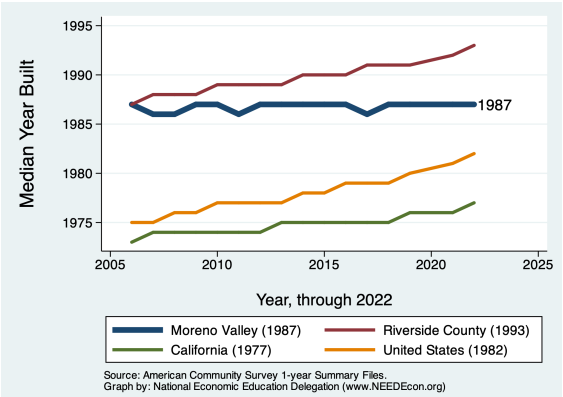


Figure 58: Vintage of Rented Residences

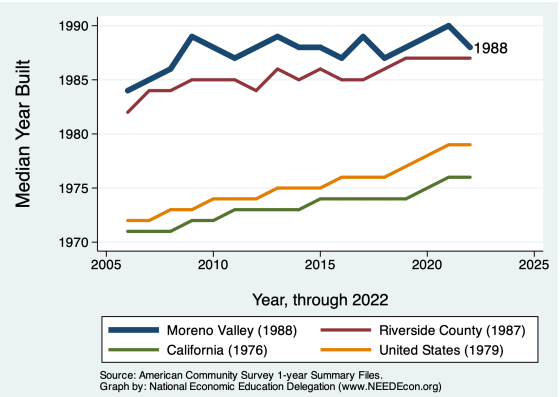
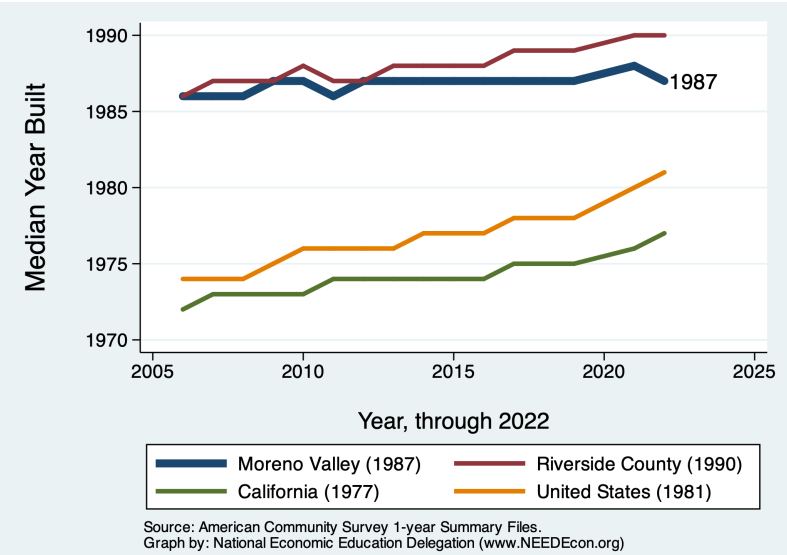


Figure 59: Vintage of All Residences



Jon Haveman, Ph.D. • National Economic Education Delegation
Jon@NEEDEcon.org • 415-336-5705

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

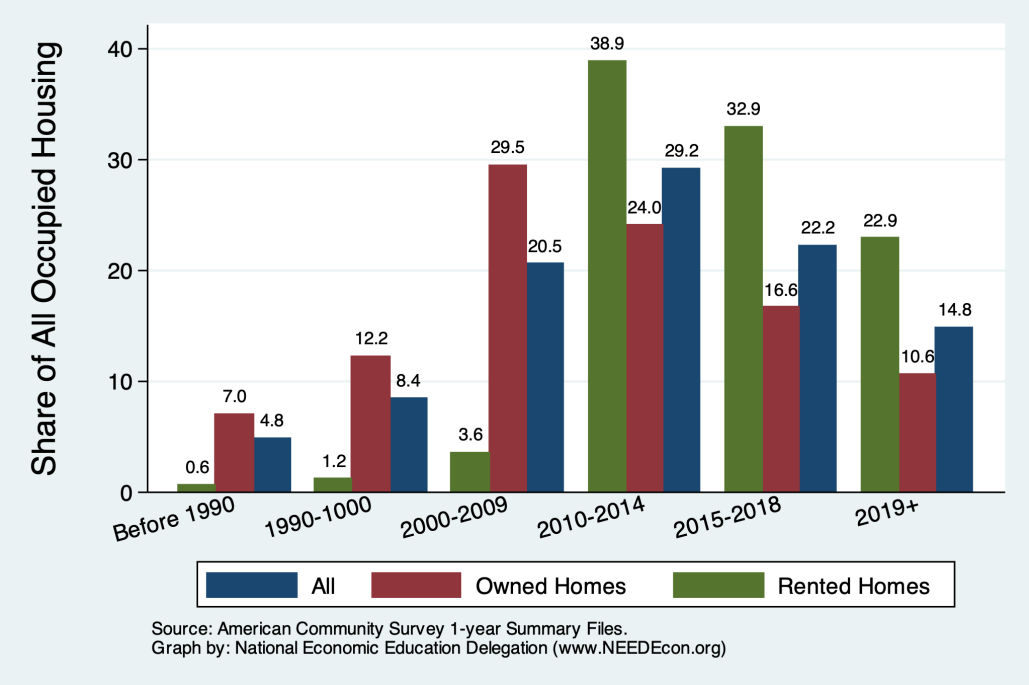


Figure 61: Year Occupied by Current Residents across Regions

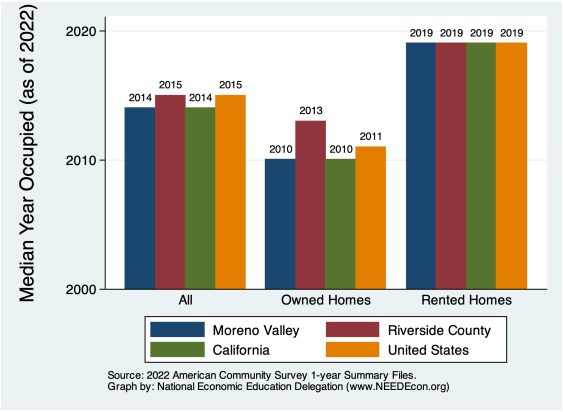
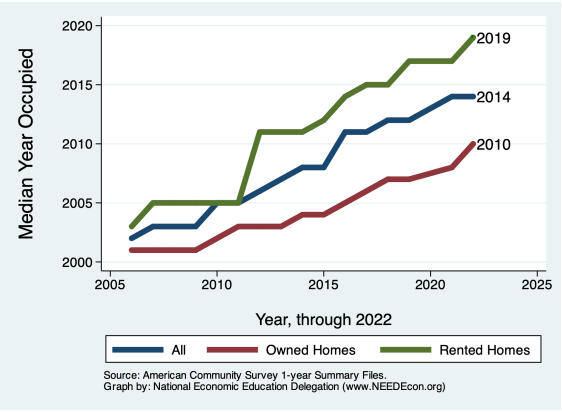


Figure 62: Year Occupied by Current Residents by Tenure



Jon Haveman, Ph.D. • National Economic Education Delegation
Jon@NEEDEcon.org • 415-336-5705

Figure 63: Year Occupied by Current Residents for Owned Housing

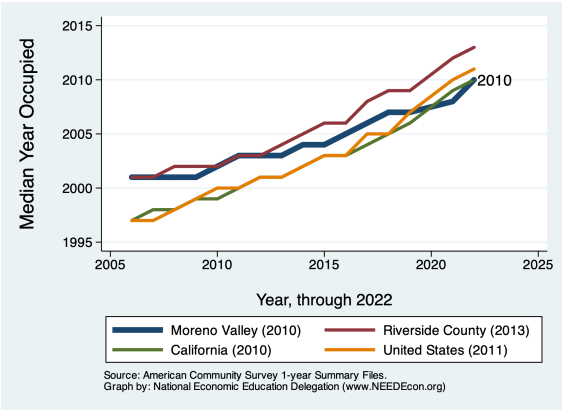


Figure 64: Year Occupied by Current Residents for Rented Housing

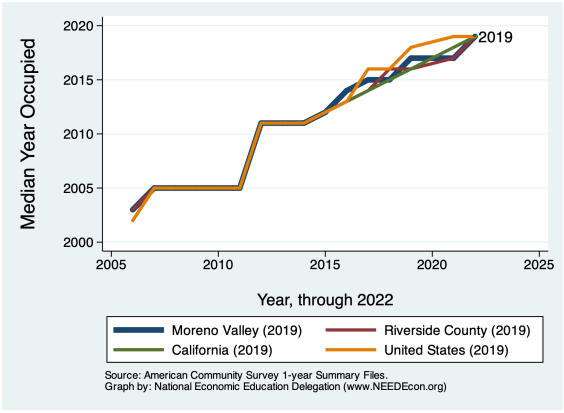
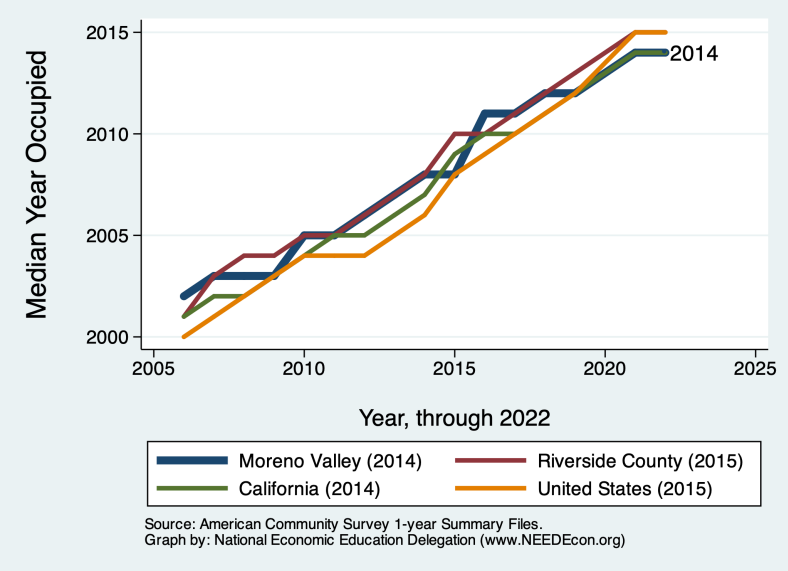


Figure 65: Year Occupied by Current Residents for All Housing



Residential Permitting

Definition:

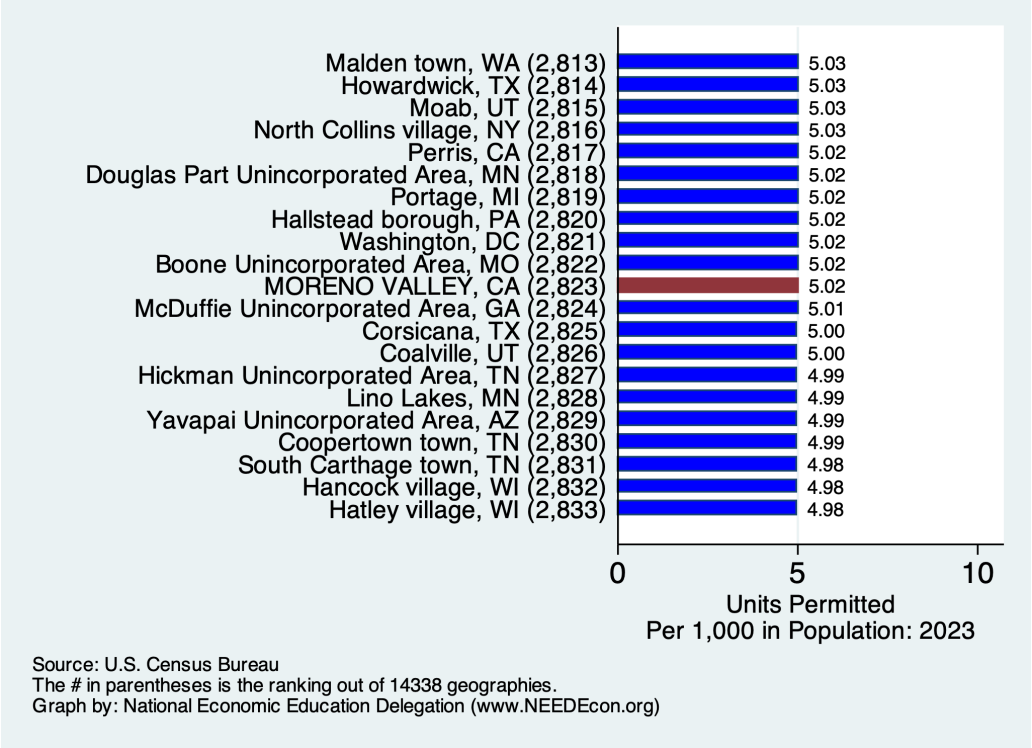
This indicator provides evidence on the number of residential buildings that are permitted for construction each year. Permit data for Moreno Valley is compared with data from Riverside County as a whole and broader regions. The statistic provided scales the number of permits by population. This is done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

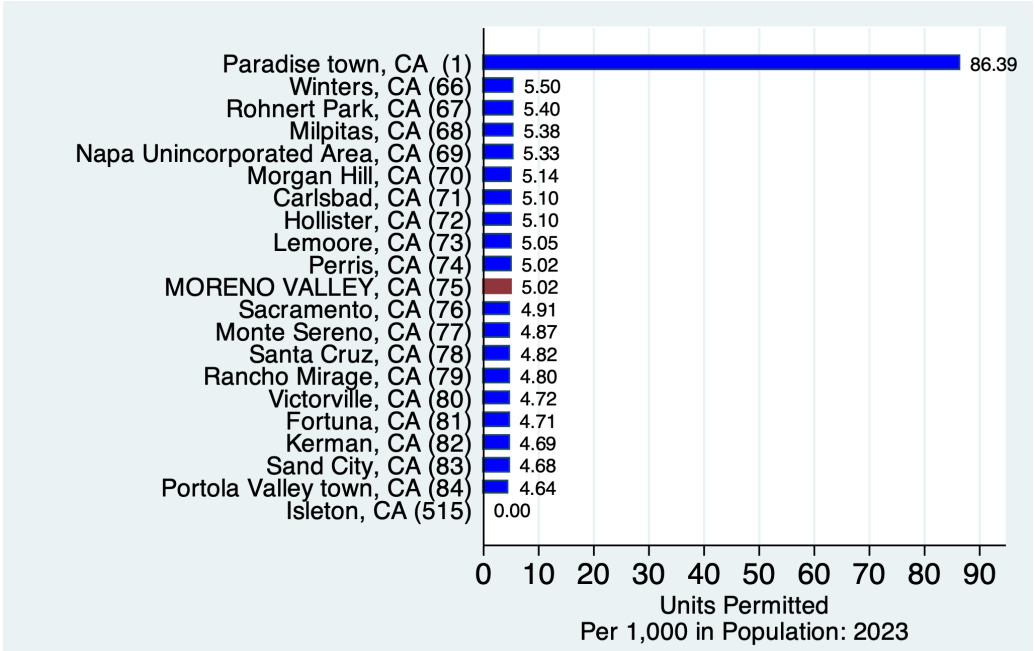
Moreno Valley - Ranking Among Comparables

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



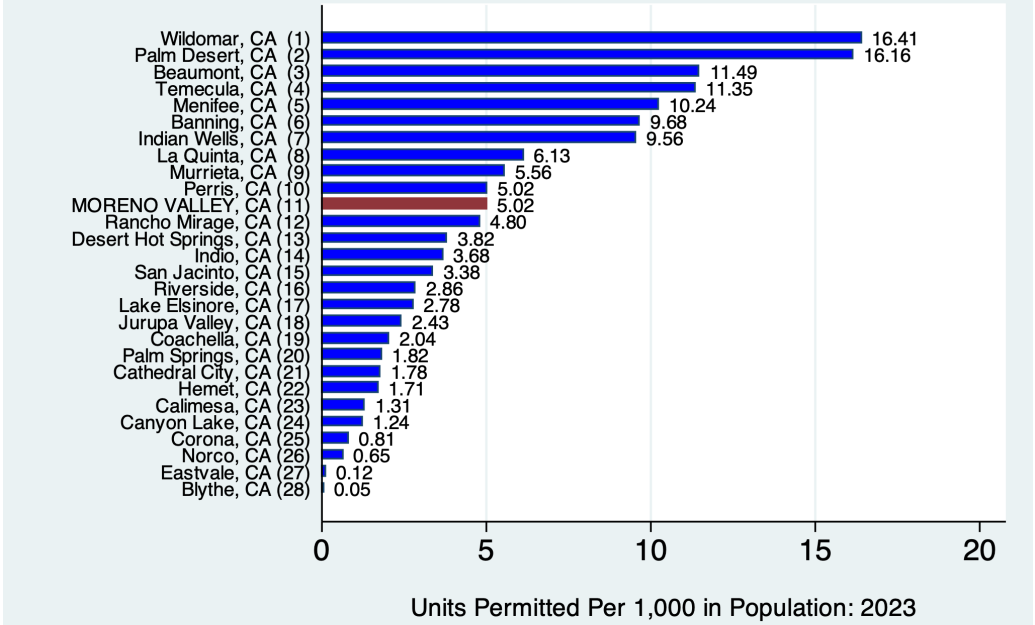
Source: U.S. Census Bureau
The # in parentheses is the ranking out of 14338 geographies.
Graph by: National Economic Education Delegation (www.NEEDEcon.org)

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 Riverside County (Rank)



Source: U.S. Census Bureau,
The # in parentheses is the ranking out of 28 geographies.
Graph by: National Economic Education Delegation (www.NEEDEcon.org)

Moreno Valley - Permitting Activity

Annual Units Permitted - Per Capita in Moreno Valley

Figure 69: Units Permitted Each Year

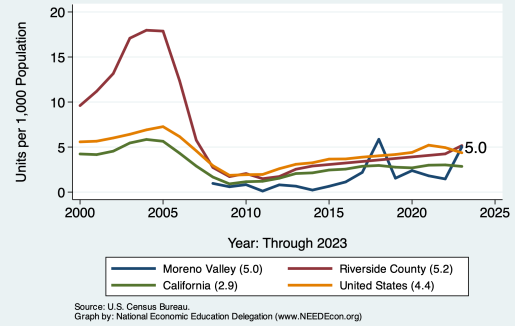
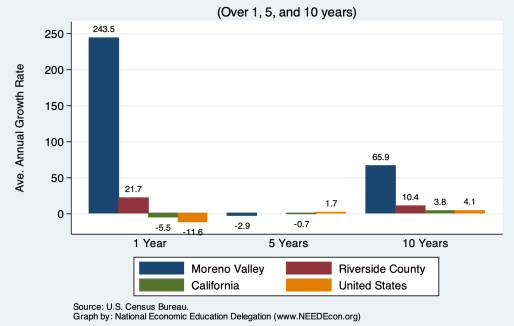


Figure 70: Average Annual Growth in Units Permitted



Annual Number of Buildings Permitted - Per Capita in Moreno Valley

Figure 71: Units Permitted Each Year

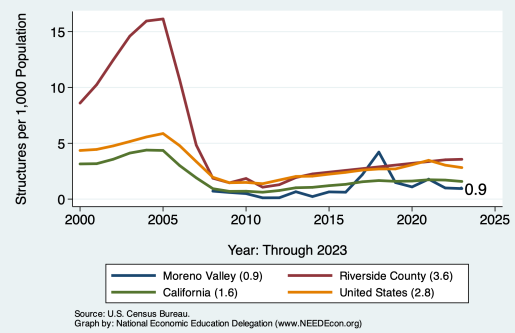
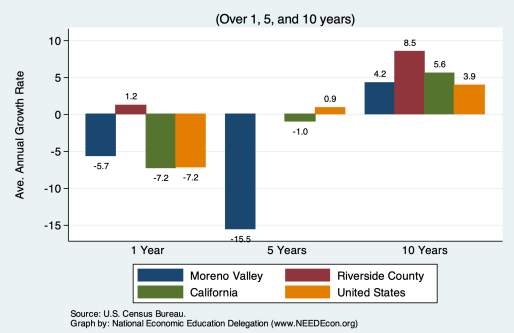


Figure 72: Average Annual Growth in Buildings Permitted



Annual Value of Property Permitted - Per Capita in Moreno Valley

Figure 73: Value Permitted Each Year

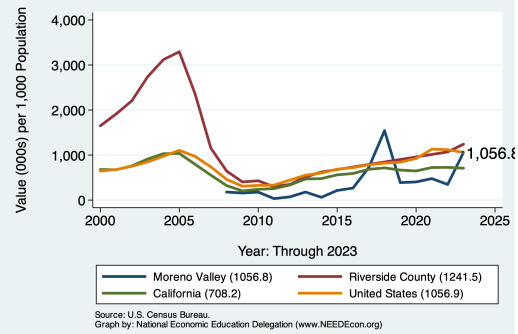
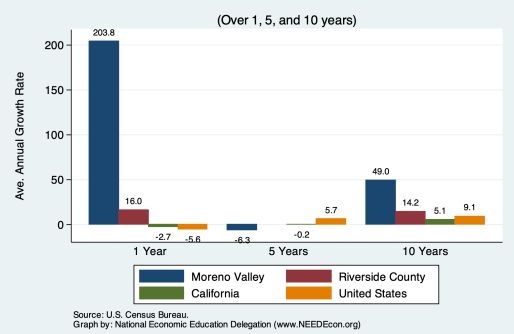


Figure 74: Average Annual Growth in Value Permitted



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 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

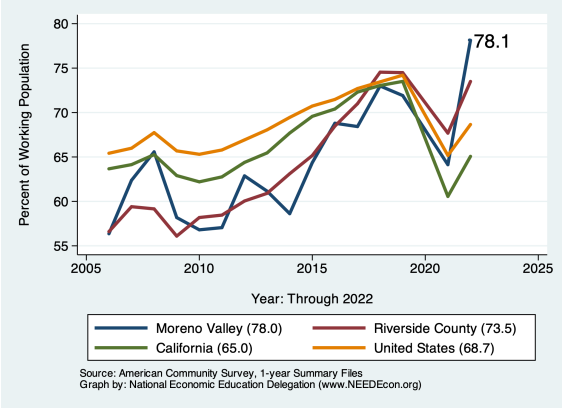


Figure 76: Percent of Workers Commuting by Carpool

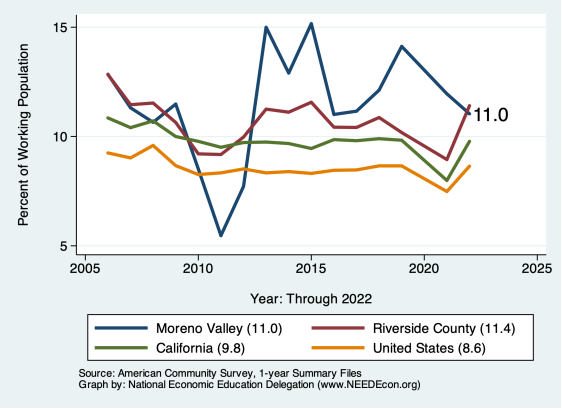


Figure 77: Percent of Workers using Public Transportation

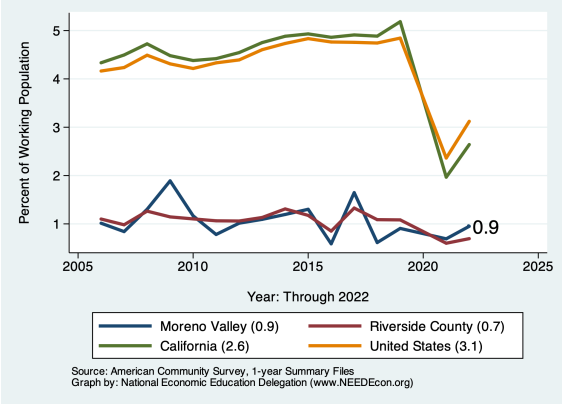
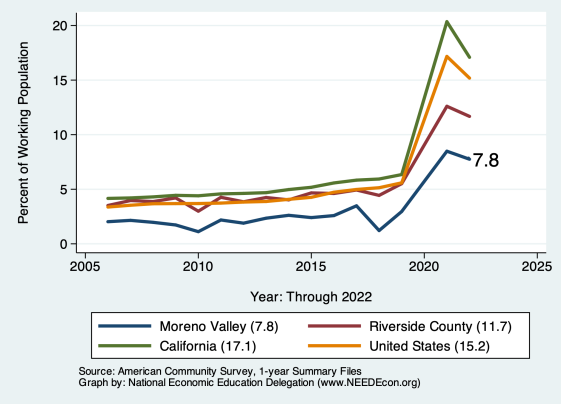


Figure 78: Percent of Workers Who Work From Home



Jon Haveman, Ph.D. • National Economic Education Delegation
Jon@NEEDEcon.org • 415-336-5705

The first table on this page presents data for those who LIVE in Moreno Valley. The second provides data on those who work, but do not necessarily live in Moreno Valley. 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:	53,430	91.7	36,128	82.9	89,558	89.2	75.3
Drove Alone	47,559	81.6	30,911	70.9	78,470	78.1	65.5
Carpooled:	5,871	10.1	5,217	12.0	11,088	11.0	9.8
In 2-person carpool	5,036	8.6	4,077	9.4	9,113	9.1	7.0
In 3-person carpool	375	0.6	344	0.8	719	0.7	1.7
In 4-or-more-person carpool	460	0.8	796	1.8	1,256	1.3	1.2
Public Transportation (excl Taxi):	158	0.3	796	1.8	954	0.9	2.7
Bus or Trolley Bus	48	0.1	412	0.9	460	0.5	1.8
Streetcar or Trolley Car	0	0.0	0	0.0	0	0.0	0.5
Subway or Elevated	110	0.2	384	0.9	494	0.5	0.2
Railroad	0	0.0	0	0.0	0	0.0	0.1
Ferryboat	0	0.0	0	0.0	0	0.0	0.1
Bicycle	205	0.4	114	0.3	319	0.3	0.7
Walked	365	0.6	610	1.4	975	1.0	2.4
Taxicab, Motorcycle, or other	423	0.7	421	1.0	844	0.8	1.7
Worked at Home	3,689	6.3	4,097	9.4	7,786	7.8	17.2
Total:	58,270	100.0	42,166	96.7	100,436	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

	Male		Female		All Workers		All of CA
Mode of Transit	#	(%)	#	(%)	#	(%)	(%)
Car, Truck, or Van:	24,401	80.0	23,595	84.4	47,996	82.1	78.0
Drove Alone	21,911	71.8	20,144	72.1	42,055	72.0	68.5
Carpooled:	2,490	8.2	3,451	12.4	5,941	10.2	9.5
In 2-person carpool	1,813	5.9	2,450	8.8	4,263	7.3	6.9
In 3-person carpool	457	1.5	542	1.9	999	1.7	1.5
In 4-or-more-person carpool	220	0.7	459	1.6	679	1.2	1.1
Public Transportation (excl Taxi):	159	0.5	225	0.8	384	0.7	3.6
Bus or Trolley Bus	152	0.5	225	0.8	377	0.6	2.3
Streetcar or Trolley Car	0	0.0	0	0.0	0	0.0	0.8
Subway or Elevated	7	0.0	0	0.0	7	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	79	0.3	15	0.1	94	0.2	0.7
Walked	239	0.8	351	1.3	590	1.0	2.4
Taxicab, Motorcycle, or other	472	1.5	338	1.2	810	1.4	1.7
Worked at Home	2,648	8.7	2,738	9.8	5,386	9.2	13.6
Total:	27,998	91.8	27,262	97.6	55,260	94.6	

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	267	0.5	492	1.2	759	0.8	2.1
5 to 9 minutes	2,929	5.4	1,468	3.5	4,397	4.7	7.8
10 to 14 minutes	5,146	9.4	4,344	10.4	9,490	10.2	12.4
15 to 19 minutes	5,134	9.4	6,905	16.6	12,039	13.0	15.4
20 to 24 minutes	6,771	12.4	4,788	11.5	11,559	12.5	14.8
25 to 29 minutes	2,708	5.0	2,400	5.8	5,108	5.5	6.4
30 to 34 minutes	9,363	17.2	6,505	15.6	15,868	17.1	15.2
35 to 39 minutes	2,361	4.3	1,954	4.7	4,315	4.7	2.9
40 to 44 minutes	1,890	3.5	1,863	4.5	3,753	4.1	4.1
45 to 59 minutes	6,528	12.0	2,839	6.8	9,367	10.1	8.2
60 to 89 minutes	7,290	13.4	2,154	5.2	9,444	10.2	7.2
90 or more minutes	4,194	7.7	2,357	5.7	6,551	7.1	3.6
Total:	54,581	100.0	38,069	91.5	92,650	100.0	

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

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

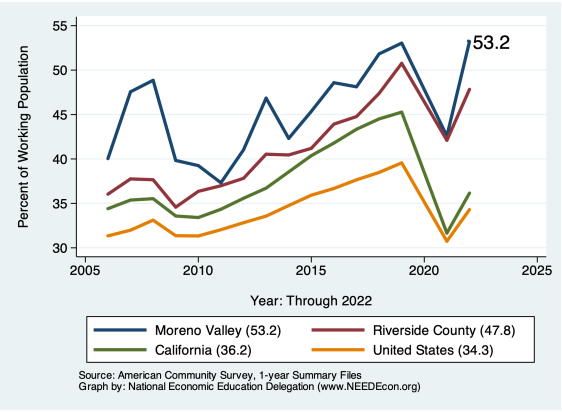


Figure 80: Percent of Employed Population With Commutes of More than 90 Minutes

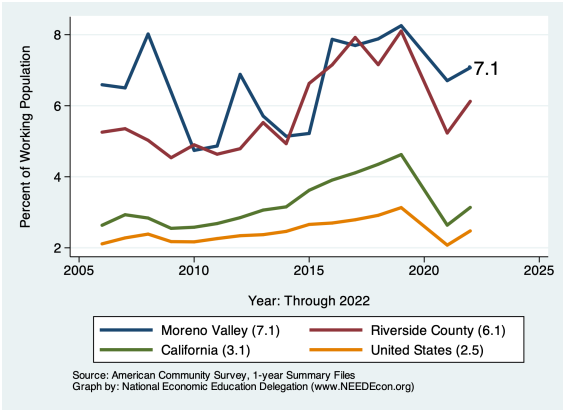
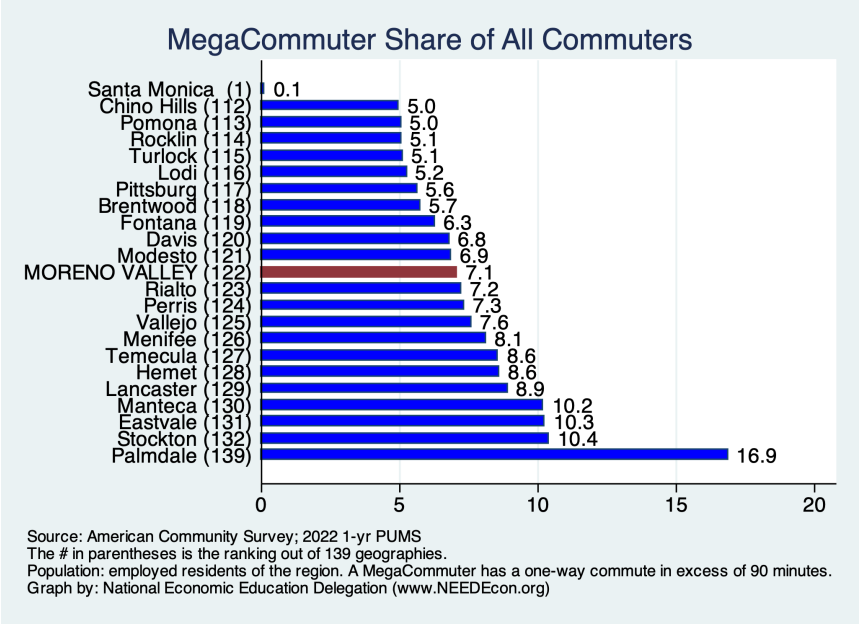


Figure 81: Rank: Share of MegaCommuters Across Similar Geographies



Jon Haveman, Ph.D. • National Economic Education Delegation
Jon@NEEDEcon.org • 415-336-5705

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	100	0.3	341	1.3	441	0.8	2.1
5 to 9 minutes	1,981	6.9	1,242	4.7	3,223	5.9	7.8
10 to 14 minutes	4,073	14.2	4,380	16.4	8,453	15.4	12.4
15 to 19 minutes	2,094	7.3	3,218	12.1	5,312	9.7	15.3
20 to 24 minutes	2,402	8.4	3,386	12.7	5,788	10.5	14.8
25 to 29 minutes	1,780	6.2	992	3.7	2,772	5.0	6.4
30 to 34 minutes	4,568	15.9	3,993	15.0	8,561	15.6	15.2
35 to 39 minutes	401	1.4	387	1.5	788	1.4	2.9
40 to 44 minutes	1,305	4.5	877	3.3	2,182	4.0	4.1
45 to 59 minutes	3,278	11.4	1,790	6.7	5,068	9.2	8.2
60 to 89 minutes	2,872	10.0	1,652	6.2	4,524	8.2	7.2
90 or more minutes	1,211	4.2	568	2.1	1,779	3.2	3.6
Total:	26,065	90.7	22,826	85.7	48,891	89.0	

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.

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

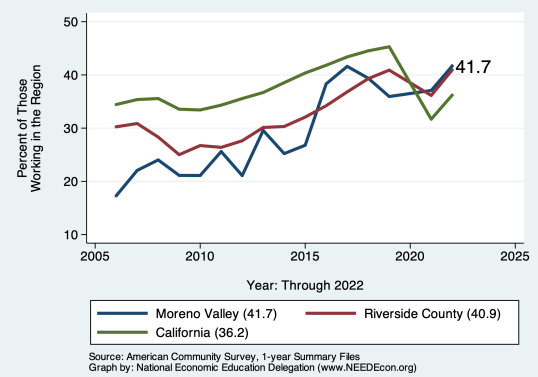


Figure 83: Percent of Local Employees With Commutes of More than 90 Minutes

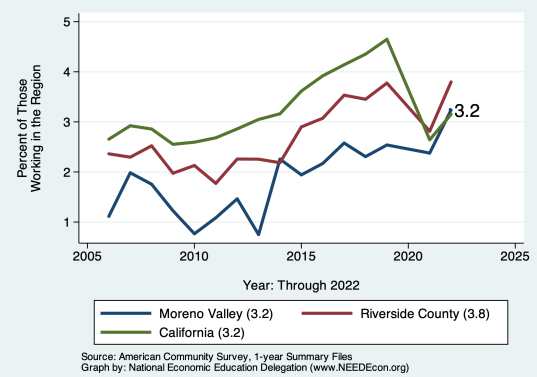
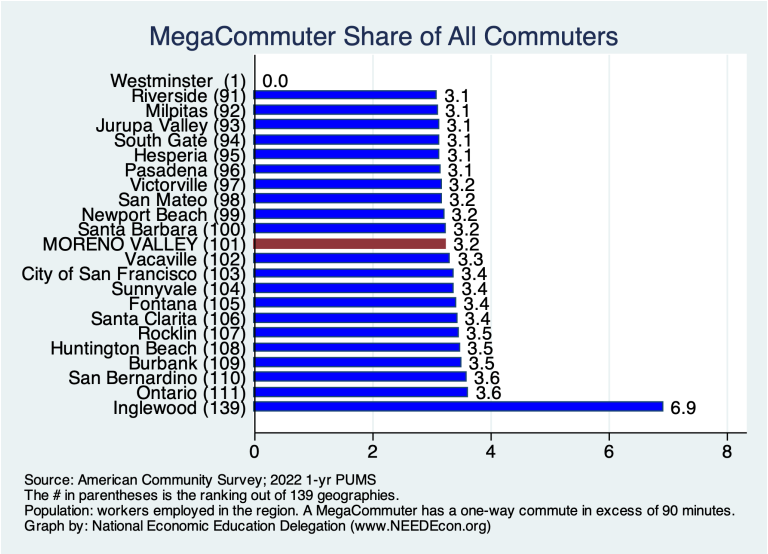


Figure 84: Rank: Share of MegaCommuters Across Similar Geographies



Place of Work

This section provides evidence on where workers living in Moreno Valley work. As evidenced in the first table, some of Moreno Valley'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 Moreno Valley 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:	58,124	99.7	42,102	96.6	100,226	99.8	99.6
Worked in county of residence	38,859	66.7	31,226	71.6	70,085	69.8	85.3
worked outside of county of residence	19,265	33.1	10,876	24.9	30,141	30.0	14.3
Worked outside state of residence	146	0.3	64	0.1	210	0.2	0.4
Total:	58,270	100.0	42,166	96.7	100,436	100.0	

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

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

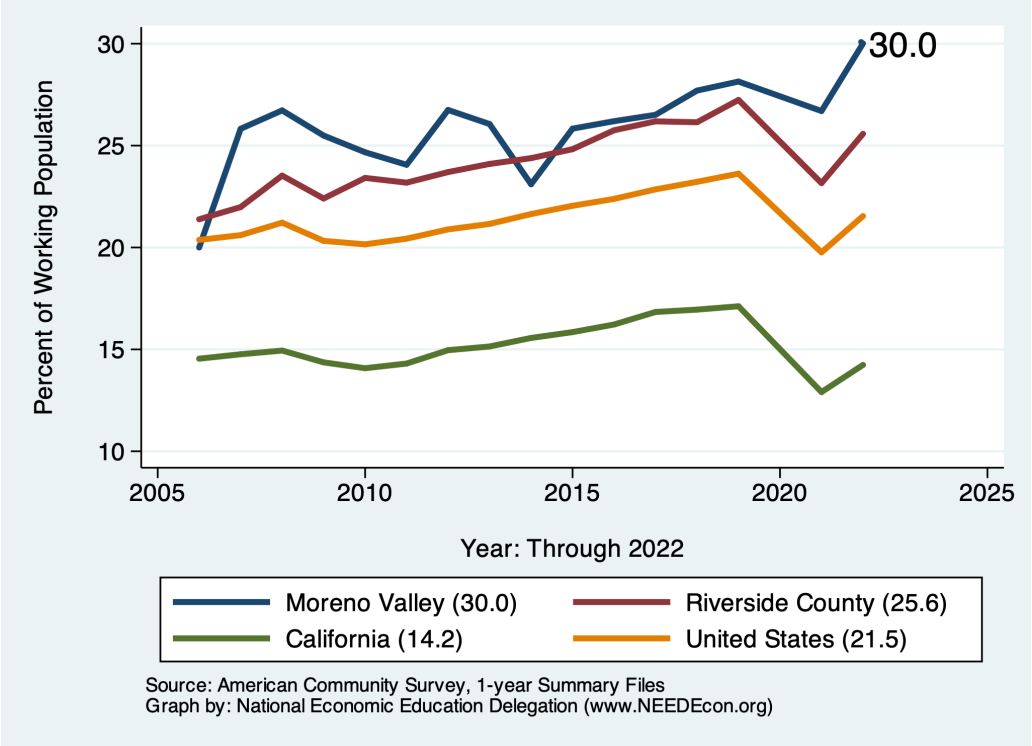
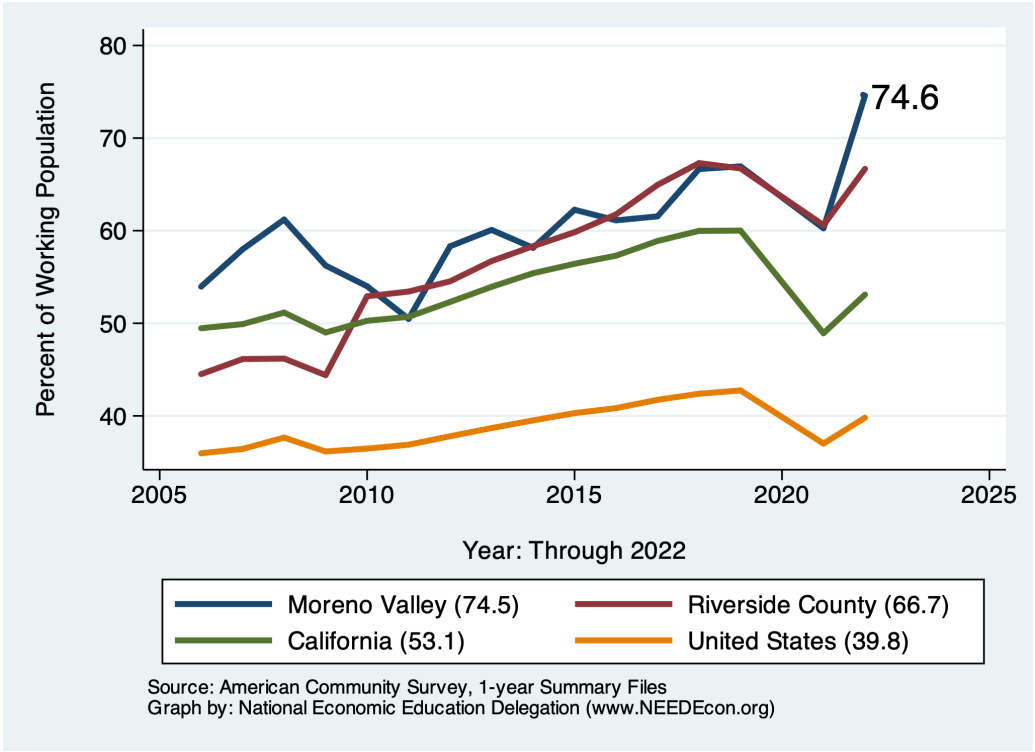


Table 11. SEX OF WORKERS BY PLACE OF WORK–PLACE LEVEL

Place of Work	Male #	Male (%)	Female #	Female (%)	All Workers #	All Workers (%)	All of CA (%)
Living in a place:	58,270	100.0	42,166	96.7	100,436	100.0	95.8
Worked in place of residence	13,047	22.4	12,485	28.6	25,532	25.4	42.3
Worked outside place of residence	45,223	77.6	29,681	68.1	74,904	74.6	53.4
Not living in a place	0	0.0	0	0.0	0	0.0	4.2
Total:	58,270	100.0	42,166	96.7	100,436	100.0	

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

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



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

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	40,207	48,335	102.6	45,677	101.0
Car, truck, or van - carpooled	39,403	35,926	135.3	34,518	131.0
Public transportation (excluding taxicab)	53,555	34,625	190.8	41,443	148.3
Walked	16,648	30,552	67.2	27,247	70.1
Taxicab, motorcycle, bicycle, or other means	53,774	40,631	163.2	36,218	170.4
Worked from home	44,803	79,738	69.3	69,180	74.3
Total:	40,395	49,818	81.1	46,365	87.1

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

	< $25,000		$25,000-$74,999		$75,000+		All		All of CA
Mode of Transit	#	(%)	#	(%)	#	(%)	#	(%)	(%)
Car, Truck, or Van: Drove Alone	18,743	51.4	27,765	71.7	13,177	69.0	71,075	70.8	68.4
Car, Truck, or Van: Carpooled	4,181	11.5	4,299	11.1	2,306	12.1	12,820	12.8	9.5
Public Transportation (excl Taxi)	251	0.7	205	0.5	171	0.9	652	0.6	3.6
Walked	269	0.7	127	0.3	71	0.4	639	0.6	2.4
Taxicab, Motorcycle, or other	355	1.0	460	1.2	85	0.4	1,085	1.1	2.4
Worked at Home	1,331	3.7	1,695	4.4	1,665	8.7	5,386	5.4	13.6
Total:	25,130	68.9	34,551	89.2	17,475	91.5	91,657	91.3	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	12,224	48.8	14,578	71.8	8,001	75.0	42,055	71.1	68.5
Car, Truck, or Van: Carpooled	2,342	9.4	1,545	7.6	839	7.9	5,941	10.0	9.5
Public Transportation (excl Taxi)	231	0.9	89	0.4	15	0.1	384	0.6	3.6
Walked	236	0.9	121	0.6	65	0.6	590	1.0	2.4
Taxicab, Motorcycle, or other	291	1.2	300	1.5	78	0.7	904	1.5	2.4
Worked at Home	1,331	5.3	1,695	8.3	1,665	15.6	5,386	9.1	13.6
Total:	16,655	66.5	18,328	90.2	10,663		55,260	93.4	

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	4,933	55.3	4,730	47.8	68,807	78.0	78,470	78.1	65.8
Car, Truck, or Van: Carpooled	542	6.1	596	6.0	9,950	11.3	11,088	11.0	9.8
Public Transportation (excl Taxi)	348	3.9	0	0.0	606	0.7	954	0.9	2.6
Walked	17	0.2	339	3.4	619	0.7	975	1.0	2.1
Taxicab, Motorcycle, or other	0	0.0	59	0.6	1,104	1.3	1,163	1.2	2.4
Worked at Home	0	0.0	675	6.8	7,111	8.1	7,786	7.8	17.2
Total:	5,840	65.4	6,399	64.7	88,197		100,436		

Source: 2022 1-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	2,346	44.5	3,198	63.8	35,121	66.9	40,665	68.7	65.8
Car, Truck, or Van: Carpooled	208	3.9	357	7.1	5,786	11.0	6,351	10.7	9.8
Public Transportation (excl Taxi)	80	1.5	0	0.0	176	0.3	256	0.4	2.6
Walked	17	0.3	339	6.8	535	1.0	891	1.5	2.1
Taxicab, Motorcycle, or other	45	0.9	0	0.0	683	1.3	728	1.2	2.4
Worked at Home	0	0.0	675	13.5	7,111	13.5	7,786	13.2	17.2
Total:	2,696	51.1	4,569	91.2	49,412	94.1	56,677	95.8	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 Moreno Valley 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

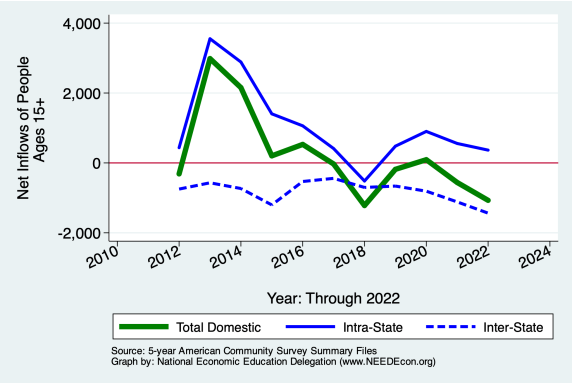


Table 17: Migration by Income

		Net Inflows				
			Same State			
Category	Population	All Migration	W/in County	Between Counties	Across States	From Abroad
No income	34,937	109	191	−213	0	131
With income	132,266	−162	−78	727	−1,016	205
$1 to $9,999 or loss	18,383	−186	−272	−43	−17	146
$10,000 to $14,999	11,786	−181	−294	140	−60	33
$15,000 to $24,999	16,582	−375	147	−153	−395	26
$25,000 to $34,999	20,058	720	349	673	−302	0
$35,000 to $49,999	22,291	−162	−397	215	20	0
$50,000 to $64,999	14,902	−321	−96	−152	−73	0
$65,000 to $74,999	5,192	292	276	70	−54	0
$75,000 or more	23,072	51	209	−23	−135	0
All:	167,203	−53	113	514	−1,016	336

Source: 2022 1-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

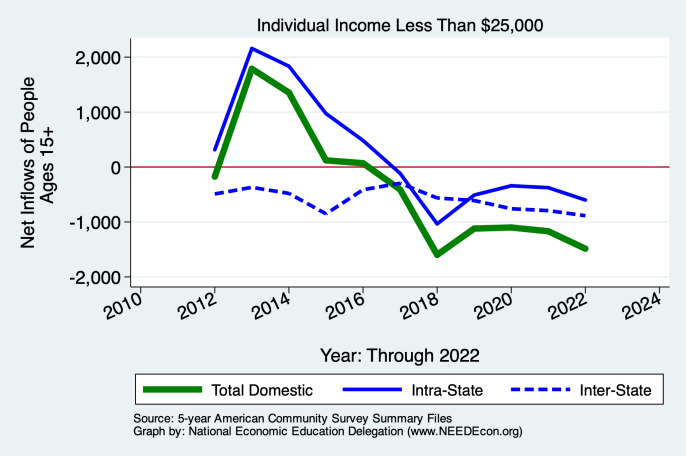


Figure 89: Overall Movements of Middle Income Residents

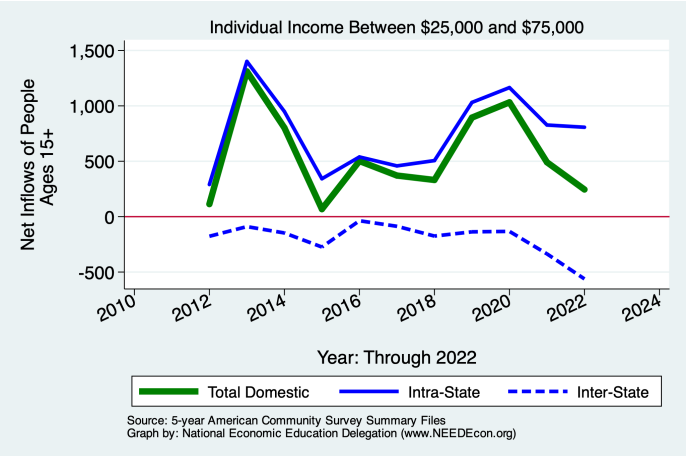
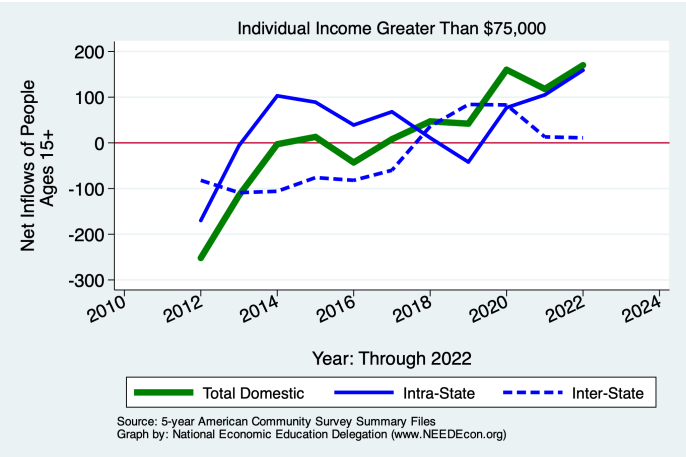


Figure 90: Overall Movements of High Income Residents



Jon Haveman, Ph.D. • National Economic Education Delegation
Jon@NEEDEcon.org • 415-336-5705

Demographics of Migration Flows

Table 18: Migration by Marital Status

Category	Population	Net Inflows: All Migration	Same State: W/in County	Same State: Between Counties	Across States	From Abroad
Never married	74,225	822	140	1,173	−491	0
Now married, except separated	71,985	−1,067	−347	−523	−343	146
Divorced	10,907	−142	11	9	−223	61
Separated	3,561	28	303	−216	−59	0
Widowed	6,525	306	6	71	100	129
Total:	167,203	−53	113	514	−1,016	336

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

Table 19: Migration by Tenure

Category	Population	Net Inflows: All Migration	Same State: W/in County	Same State: Between Counties	Across States	From Abroad
Householder lived in owner-occupied housing units	140,063	633	25	762	−361	207
Householder lived in renter-occupied housing units	69,005	−263	−87	397	−752	179
Total:	209,068	370	−62	1,159	−1,113	386

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

Figure 91: Domestic Movements of Residents by Tenure

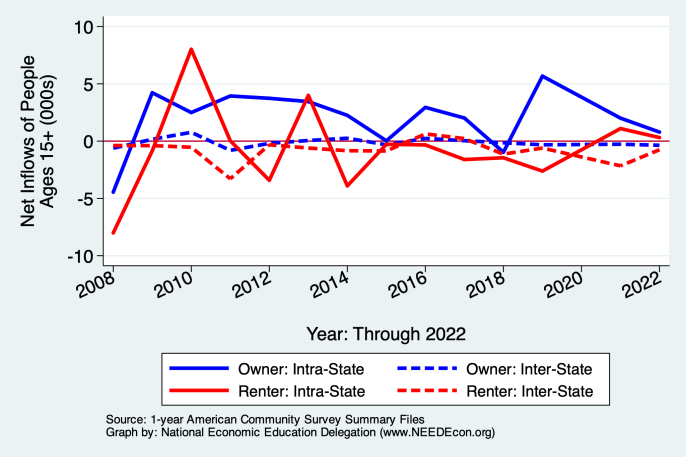


Table 20: Migration by Age

Category	Population	Net Inflows				
			Same State			
		All Migration	W/in County	Between Counties	Across States	From Abroad
1 to 4 years	11,080	−472	−239	−155	−110	32
5 to 17 years	43,021	79	−283	991	−694	65
18 and 19 years	6,580	−286	−101	−137	−52	4
20 to 24 years	17,578	−711	−380	−98	−277	44
25 to 29 years	17,584	102	167	39	−149	45
30 to 34 years	16,673	354	−30	572	−221	33
35 to 39 years	13,604	−246	−224	64	−86	0
40 to 44 years	14,327	−84	0	48	−132	0
45 to 49 years	13,495	126	−69	306	−144	33
50 to 54 years	12,102	232	33	322	−158	35
55 to 59 years	11,773	−132	−193	156	−100	5
60 to 64 years	9,680	−437	−234	−179	−26	2
65 to 69 years	8,093	84	−83	254	−101	14
70 to 74 years	5,353	−76	−71	21	−34	8
75 years and over	6,157	188	−38	87	61	78
Total Population:	207,100	−1,279	−1,745	2,291	−2,223	398

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	25,437	129	−345	348	19	107
High school graduate (includes equiv)	43,463	−601	−178	−445	22	0
Some college or assoc. degree	40,702	116	264	−73	−247	172
Bachelor's degree	15,536	348	380	750	−839	57
Graduate or professional degree	7,370	262	103	148	11	0
Total:	132,508	254	224	728	−1,034	336

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

Table 22: Median Income of Migration Flows

Flow	In-Migration	Out-Migration
Same House 1 Year Ago	34,574	34,574
Moved Within Same County	35,969	35,189
Moved to Different County, Same State	31,268	28,000
Moved Between States	36,314	28,506
Moved from Abroad	9,255	
Total Population:	34,369	34,432

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	33.0	33.0
Moved Within Same County	29.2	31.4
Moved to Different County, Same State	27.9	26.1
Moved Between States	59.8	30.5
Moved from Abroad	49.9	
Total Population:	32.5	32.6

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 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/

Jon Haveman, Ph.D. • National Economic Education Delegation
Jon@NEEDEcon.org • 415-336-5705