Economic and Market Analysis

Technical Report

November 3, 2021



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Table of Contents

Economic and Market Analysis Key Findings	3
Demographic and Household Conditions	3
Economic Composition and Trends	3
Housing Market	4
Hotel Market	4
Industrial Market	4
Office Market	5
Retail Market	5
Competitive Market Areas	6
Demographic and Household Conditions	7
Key Demographic Characteristics and Trends	7
Conclusions: Demographic and Household Conditions	16
Economic Conditions and Opportunities	17
Employment Trends	17
Manufacturing & Warehousing Industries	19
Household-Serving Industries	20
Office-Based Industries	20
Commuting	25
Conclusions: Economic Conditions and Opportunities	
Housing Market Conditions and Demand	31
Characteristics of Existing Housing Supply	31
Home Prices and Rents	34
Residential Development Trends and Projected Growth	36
Petaluma Housing Demand Estimate	39
Conclusions: Housing Market Conditions and Demand	40
Hotel Market Conditions and Demand	42
Competitive Supply and Visitor Segments	42
Performance and Development Activity	43
Petaluma Hotel Demand Estimate	44
Conclusions: Hotel Market Conditions and Demand	45
Industrial Market Conditions and Demand	46
Industrial Supply and Performance	46
Industrial Development Activity	50
Petaluma Industrial Demand Estimate	51
Methodology	51
Results and Drivers of Future Industrial Demand	51
Conclusions: Industrial Market Conditions and Domand	53

Office Market Conditions and Demand	54
Office Supply and Performance	54
Office Development Activity	58
Petaluma Office Demand Estimate	60
Methodology	60
Results and Drivers of Future Office Demand	60
Conclusions: Office Market Conditions and Demand	61
Retail Market	63
National Retail Trends	63
Citywide Retail Supply and Performance Overview	64
Shopping Centers and Destinations	67
Retail Development Activity	72
Petaluma Retail Demand Estimate	73
Conclusions: Retail Market Conditions and Demand	76
Appendix A	77

Economic and Market Analysis Key Findings

This report summarizes demographic, employment, and real estate market conditions and trends in Petaluma, with comparisons against competitive market areas and Sonoma County overall. The findings from this report will inform land use, economic development, and other policy decisions in the Petaluma General Plan Update. The following are key findings from the report by topic area.

Demographic and Household Conditions

- Petaluma is undergoing a demographic shift corresponding to trends also found in Sonoma County: Petaluma's population is aging with most growth happening among people over 65; Petaluma's population of residents ages 25 to 44 is also growing. Although household sizes slightly increased in recent years, the share of households with children has rapidly fallen. The decline of households with children could potentially result in fewer households seeking larger "family-friendly" housing units.
- Relative to its immediate neighbors and Sonoma County, Petaluma is a relatively and increasingly affluent city, with a rapid decline in lower-income households and rapid growth in higher-income households.

Economic Composition and Trends

- Petaluma's economy grew in the years prior to the COVID-19 pandemic, driven by a healthy mix of "export-oriented" and "household-serving" industries. The city serves as a significant employment destination, with over 30,000 jobs—approximately 15 percent of Sonoma County's jobs as of 2018. Nearly 80 percent of workers at jobs in Petaluma commute into the city from elsewhere.
- Manufacturing, the city's largest industry by number of jobs, has grown in recent years and is relatively concentrated in the city compared to Sonoma County. This industry includes strengths related to agricultural production, food manufacturing, medical devices and equipment, and a variety of smaller and diverse high-tech businesses.
- Petaluma is positioned to continue attracting additional business activity and job growth based
 - 1) the city's fundamental competitive strengths based around easy commute and goods movement access to the larger region via Highway 101, a location within productive agricultural land, and the presence of a large and highly educated residential base;
 - 2) continued growth in major industries as agricultural production continues, tourism expands, medical device company sales and investment grow during and after the COVID-19 pandemic, and local residents create additional demand for goods and services as the population grows and ages; and
 - 3) potential opportunities to attract business growth based on access to the Downtown Petaluma SMART station.

However, challenges for growth include traffic congestion on Highway 101—impacting commutes and distribution of products—and the limited supply of large commercial and industrial development opportunity sites with convenient access to Highway 101.

Housing Market

- Petaluma has attracted a variety of housing development projects including both market rate and affordable housing units. The city's new housing permits since 2010 have been nearly evenly split between single-family and multifamily homes, suggesting a reorientation toward producing higher-density units that will become more critical in order to accommodate growth within the urban growth boundary.
- As in most Bay Area communities, housing prices and rents grew rapidly in Petaluma in the past decade. The city's median home sales prices are among the highest of neighboring communities such as Cotati and Rohnert Park. The rapid price and rent increases create an ongoing need to produce additional market-rate and income-restricted affordable housing to ensure sufficient housing exists that is affordable to residents of all income ranges. This housing also expands opportunities for more workers at jobs in Petaluma to also reside in Petaluma.
- Potential demand for additional housing units in Petaluma is expected to range from 5,570 and 6,460 new units by 2050, although the city's 2,400 recently constructed and planned or proposed development projects will meet some of this demand. Petaluma's ability to build these units will depend on land use policy decisions and the financial feasibility of constructing new housing especially multifamily housing, which makes efficient use of limited land area, but is also more expensive to construct than single-family homes on a per square foot basis. Meeting demand will also require providing income-restricted affordable housing for households unable to afford market rate prices and rents.

Hotel Market

Petaluma is likely to attract long-term growth in hotel stays and demand for additional hotel rooms. Although the hotel industry is still recovering from the effects of the COVID-19 pandemic, Petaluma's primary drivers of hotel stays are well-positioned for recovery and growth. These drivers include tourists visiting wine country and business travelers with destinations in Petaluma and communities along Highway 101. Long-term hotel development trends in Petaluma and Sonoma County show consistent long-term growth rates in hotel rooms as the economy has expanded over time. Petaluma can potentially capture demand for approximately 244 and 383 additional hotel rooms by 2050.

Industrial Market

- Demand for industrial space is high and likely to continue growing in Petaluma. The city can potentially capture demand for between approximately 537,000 and 654,000 square feet of new industrial space by 2050. Petaluma's strengths include demand for:
 - Flex spaces that combine R&D and production for technology industries;
 - Flex and manufacturing spaces for food- and beverage-related businesses and medical equipment production;

- Distribution facilities to support manufacturing businesses and distribution to local homes and businesses.
- Challenges facing new industrial development and business growth include costs for space, lack of workforce due to the area's high cost of living, traffic congestion on Highway 101, and a lack of land suitable for industrial development.
- Petaluma continues to compete for businesses seeking industrial land based on the community's location on Highway 101 (which provides access to a diverse workforce), to the larger Bay Area population, and to the Port of Oakland. However, new challenges are emerging for capturing future growth in demand: 1) costs for industrial space in Petaluma have increased to the point that the city is not necessarily a "value" destination within the county (though still less expensive than many Marin County communities), 2) rising housing costs in Petaluma and throughout Sonoma County could make it increasingly difficult for manufacturing employers to attract a diverse workforce, especially in middle-wage jobs that require technical training, 3) traffic congestion on Highway 101 could reduce the city's access to the larger Bay Area region and Port of Oakland, and 4) the supply of well-located and accessible development opportunity sites is decreasing as development occurs.

Office Market

Through 2050, Petaluma could potentially anticipate modest demand of approximately 299,000 to 349,000 square feet of new office space, driven by expansion and relocation needs of larger employers and by gradual increases in demand driven by smaller medical and professional service businesses that serve the city's residents and businesses. While demand for office space in Petaluma has historically been weaker compared to industrial space—with the exception of the "Telecom Valley" era of the late-1990s to 2000s—the presence of the Downtown Petaluma SMART station and potential addition of a second SMART station could potentially generate additional interest from employers and developers.

Retail Market

- Petaluma successfully functions as a retail destination meeting the needs of the city's residents, residents of nearby communities, and tourists/visitors. While the city does not include a traditional regional mall that serves an especially large regional trade area, shoppers come to Petaluma from outside the city to shop at Petaluma's collection of "big box" retail stores and outlet mall. Downtown Petaluma also attracts additional tourists and visitors from throughout the North Bay for events. Petaluma attracts a "surplus" of retail sales per household overall and in most retail categories, indicating the city's role as a retail destination.
- By 2050, Petaluma could anticipate growth in demand for 84,500 to 108,500 square feet of new retail space. This growth estimate assumes the city attracts the growth in residents and workers suggested by this report's demand estimates for other land uses. The retail demand estimate is intentionally conservative, given trends favoring lower quantities of retail space per capita as more sales occur online. The estimate is based solely on growth in Petaluma workers and residents and in retail categories less affected by online sales, and also accounts for absorption of additional sales by recently built shopping centers.

Introduction

This report summarizes demographic, employment, and real estate market conditions and trends in Petaluma, with comparisons to competitive market areas and Sonoma County. The findings from this report are intended to inform land use, economic development, and other policy decisions in the Petaluma General Plan Update.

The report begins with an analysis of Petaluma's demographic and household conditions in order to highlight trends that shape the city's economy and demand for housing, retail, and services. The following section on employment trends describes Petaluma's economic base to better understand the dynamics of Petaluma's economy and to identify opportunities and challenges for future growth. Subsequent sections analyze real estate market conditions for residential, retail, office, industrial, and hotel land uses. The findings highlight significant strengths and challenges affecting the city's future growth potential.

This report also provides long-term market demand estimates for housing units, retail space, hotel rooms, office space, and industrial space. These demand estimates describe the quantity of demand that Petaluma could potentially attract based on regional growth and the city's competitive advantages. However, market-based demand is one of many factors that will determine how much actual growth or development will occur in Petaluma. The amount of new development that is ultimately accommodated in Petaluma's General Plan will depend on the community's values and objectives, the capacity of facilities and infrastructure (including schools), the desired scale of development, and numerous other issues which will be considered during future phases of the General Plan update process.

Competitive Market Areas

Petaluma competes within Sonoma County and specific market areas for businesses seeking commercial or industrial space, and for residents seeking housing. This report describes Petaluma's demographic, economic, and market conditions relative to Sonoma County and appropriate competitive market areas. The competitive market areas were established based on interviews with local real estate brokers and a review of market reports and studies for Petaluma and nearby cities. Based on this input, most analyses compare Petaluma against the area including or consisting of the cities of Rohnert Park, Cotati, Novato, as well as Sonoma County and sometimes Marin County. Other geographies are incorporated into the analyses and findings as appropriate.

Demographic and Household Conditions

This section describes Petaluma's population and households, with comparisons to nearby cities and Sonoma County. The analysis is based on publicly available data sources, including the decennial U.S. Census data and American Community Survey 5-Year Estimates. Petaluma's demographic characteristics and trends provide a larger context for understanding market conditions and opportunities.

Historic Context

Petaluma's history of growth and development provides useful context for understanding future opportunities, since assets and trends that shaped a community's growth in the past will continue to set the stage for change in the future. Upon incorporation in 1858, Petaluma was a rural economic center focused on serving the agricultural needs of the growing populations of San Francisco and other central Bay Area communities. Population growth accelerated as access to the region improved—first with the completion of the Golden Gate Bridge in 1937, but then most significantly upon the construction of Highway 101 as a freeway in the late-1950s. The easy commute access to San Francisco provided by Highway 101 combined with larger trends in suburban growth to spur a home construction and population boom in Petaluma. This growth primarily occurred in eastern Petaluma, closer to Highway 101, rather than in the existing historic core west of the Petaluma River. Petaluma adopted a residential growth cap in 1972 to limit development and established an urban growth boundary in 1998. Population growth has slowed dramatically over time as development opportunity sites have diminished. Housing costs have risen dramatically as well, requiring residents to earn high incomes to afford most market-rate housing.

Key Demographic Characteristics and Trends

Petaluma has a population of approximately 60,800 residents and 22,700 households, as shown in Figure 1. Petaluma is the largest city among the adjacent communities of Rohnert Park, Cotati, and Novato, all of which are included within Petaluma's primary market area for most land uses.

In the last decade, average household sizes increased as population growth slightly outpaced household growth in Petaluma and the nearby region. From 2010 to 2019, Petaluma, Rohnert Park, Cotati, and Sonoma County household sizes all increased (Figure 1).

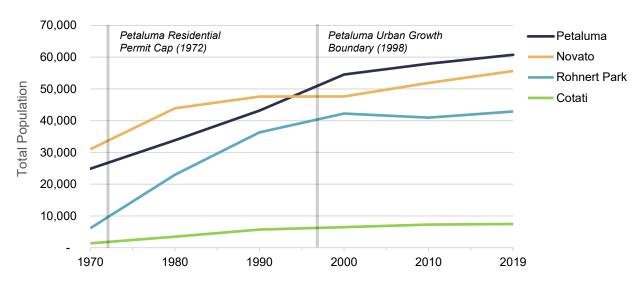
As Petaluma has become increasingly built out, population growth slowed significantly in the city and surrounding communities in the last decade compared to previous decades dating back to at least 1970. Figure 2 shows that population growth has slowed in Petaluma since 2000, while Figure 3 indicates that growth in Petaluma, nearby cities, and Sonoma County was higher in the two decades following 1970 compared to the most recent decade, 2010 to 2019.

Figure 1: Population and Household Tends, Petaluma, Neighboring Cities, and Sonoma County, 2010 to 2019

	2010	2019	Change 2	010-2019
	Number	Number	Number	Percent
Petaluma				
Total Population	57,941	60,767	2,826	5%
Total Households	21,737	22,655	918	4%
Average Household size	2.63	2.70	0.07	3%
Rohnert Park				
Total Population	40,971	42,902	1,931	5%
Total Households	15,808	16,377	569	4%
Average Household size	2.57	2.60	0.00	1%
Cotati				
Total Population	7,265	7,454	189	3%
Total Households	2,978	2,758	-220	-7%
Average Household size	2.44	2.70	0.26	11%
Novato				
Total Population	51,904	55,642	3,738	7%
Total Households	20,279	22,325	2,046	10%
Average Household size	2.53	2.50	-0.03	-1%
Sonoma County				
Total Population	483,878	499,772	15,894	3%
Total Households	185,825	189,374	3,549	2%
Average Household size	2.55	2.60	0.05	2%

Source: US Census 2010; American Community Survey 5-year Est., 2019; Strategic Economics, 2021.

Figure 2: Total Population, Petaluma and Neighboring Cities, 1970 to 2019



Source: MTC-ABAG, Bay Area Census, 1970-2010; American Community Survey 5-year Estimate, 2019; Strategic Economics, 2021.

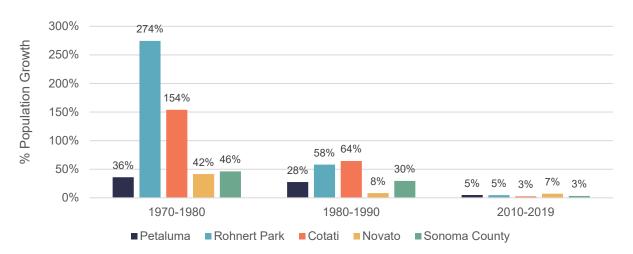


Figure 3: Population Growth, Petaluma, Neighboring Cities, and Sonoma County, 1970 to 2019

Source: MTC-ABAG, Bay Area Census, 1970-2010; American Community Survey 5-year Estimate, 2019; Strategic Economics, 2021.

Petaluma is generally racially and ethnically similar to its neighboring cities and Sonoma County, though Petaluma has a higher share of White residents. As shown in Figure 4, the Non-Hispanic White population accounts for over 60 percent of the population in Rohnert Park, Cotati, Novato, and Sonoma County. 68 percent of Petaluma's residents are White, compared to 63 percent in Sonoma County overall. The Hispanic or Latinx population is also the second-largest racial and ethnic group in Petaluma, Rohnert Park, Cotati, Novato, and Sonoma County, accounting for around 20 percent of the total population. Rohnert Park and Sonoma County have a somewhat larger Hispanic or Latinx population (27 percent) than Petaluma, Cotati, and Novato.

Educational attainment is higher in Petaluma than in Rohnert Park, Cotati, and Sonoma County, but lower than in Novato. Figure 5 shows that about 40 percent of the total population 25 years or older in Petaluma has a bachelor's degree or higher. Petaluma's share of residents with a college education or higher is larger than in Rohnert Park (29 percent), Cotati (32 percent), and Sonoma County (35 percent), but less than Novato (46 percent).

Roughly one-third of households are families with children and one-third are families without children in Petaluma, its neighboring cities, and Sonoma County. The remaining third consists of single-person households and other non-family households. Figure 6 shows that in 2019, household types were similar across Petaluma, Rohnert Park, Cotati, Novato, and Sonoma County.

Families with children declined in Petaluma, Rohnert Park, Novato, and Sonoma County from 2010 to 2019. Figure 7 shows that between 2010 and 2019, the number of families with children declined in Petaluma, Rohnert Park, Novato, and Sonoma County, while the number of families without children and single-person households increased.

Age distribution in Petaluma is similar to its neighboring cities and Sonoma County. Figure 8 shows that Petaluma, Rohnert Park, Cotati, Novato, and Sonoma County have similar age demographics, although Rohnert Park and Cotati have somewhat younger populations with smaller shares of residents within the age groups of 45 to 64 and 65 and older.

In the last decade, the number of senior residents has increased significantly in Petaluma, its neighboring cities, and Sonoma County. Figure 9 shows that from 2010 to 2019 residents age 65 and older have increased more than any other age group in Petaluma, Rohnert Park, Cotati, Novato, and Sonoma County. During this same period, Petaluma experienced a loss of residents aged 18 to 24 and aged 45 to 64, but experienced a small increase in residents aged 25 to 44. Rohnert Park, Cotati, and Sonoma County also experienced increases in residents aged 25 to 44. These shifts are partly driven by the aging of the largest "Baby Boomer" generation (born 1946 to 1964) and "Millennial" generation (born from the early 1980s through the mid- to late-1990s). These trends may indicate a future challenge in accommodating a diverse range of households-including families with children-if residents in the large 65 and older group prefer to occupy larger family-friendly housing units.

Figure 4: Race and Ethnicity, Petaluma, Neighboring Cities, and Sonoma County, 2019

	Petaluma		Rohnert Park		Cotati		Novato		Sonoma County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Non-Hispanic White	41,357	68%	26,159	61%	5,555	75%	35,312	63%	316,022	63%
Hispanic/Latinx	13,305	22%	11,540	27%	1,375	18%	10,531	19%	133,569	27%
Non-Hispanic Black/African American	646	1%	935	2%	46	1%	1,917	3%	7,399	1%
Non-Hispanic Asian	2,688	4%	2,845	7%	121	2%	4,276	8%	20,082	4%
Other Race/Ethnicity	2,771	5%	1,423	3%	357	5%	3,606	6%	22,700	5%

Figure 5: Educational Attainment, Petaluma, Neighboring Cities, and Sonoma County, 2019

	Petaluma		Rohnert Park		Cotati		Novato		Sonoma County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
High School Degree or Less	11,299	26%	9,268	32%	1,554	32%	9,315	23%	107,651	30%
Some College	14,582	34%	11,093	39%	1,773	36%	12,390	31%	124,081	35%
Bachelor's Degree	11,365	26%	5,886	20%	1,043	21%	12,232	30%	79,864	22%
Advanced Degree	6,176	14%	2,561	9%	502	10%	6,577	16%	47,718	13%
Total Population 25 Year or Older	43,422	100%	28,808	100%	4,872	100%	40,514	100%	359,314	100%

Figure 6: Households by Type, Petaluma, Neighboring Cities, and Sonoma County, 2019

	Petaluma		Rohnert Park		Cotati		Novato		Sonoma County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Families with children	7,105	31%	4,545	28%	958	35%	6,089	27%	52,713	28%
Families without children	8,262	36%	5,342	33%	819	30%	8,335	37%	67,728	36%
Householder living alone	5,807	26%	4,217	26%	757	27%	6,313	28%	52,010	27%
Other non-family household	1,481	7%	2,273	14%	224	8%	1,588	7%	16,923	9%

Figure 7: Change in Households by Type, Petaluma, Neighboring Cities, and Sonoma County, 2010 to 2019

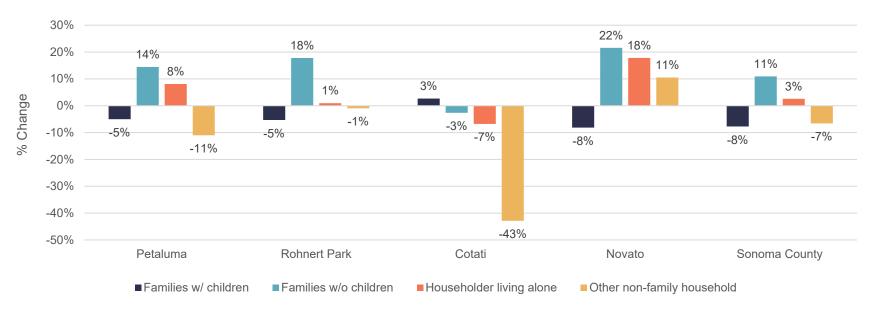
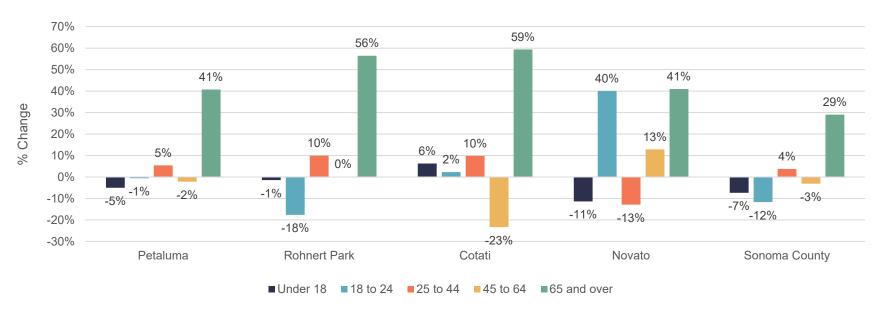


Figure 8: Age Distribution, Petaluma, Neighboring Cities, and Sonoma County, 2019

	Peta	Petaluma		Rohnert Park		Cotati		Novato		Sonoma County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Under 18	12,782	21%	8,449	20%	1,691	23%	10,429	19%	99,190	20%	
18 to 24	4,563	8%	5,645	13%	891	12%	4,699	8%	41,268	8%	
25 to 44	15,854	26%	12,129	28%	2,262	30%	11,103	20%	126,625	25%	
45 to 64	16,895	28%	10,730	25%	1,633	22%	17,960	32%	137,776	28%	
65 and over	10,673	18%	5,949	14%	977	13%	11,451	21%	94,913	19%	

Figure 9: Change in Age Distribution, Petaluma, Neighboring Cities, and Sonoma County, 2010 to 2019



Incomes in Petaluma are high relative to Rohnert Park, Cotati, and Sonoma County, but lower than in Novato. In 2019, the median household income in Petaluma was \$91,528, while the county was \$81,018 (Figure 10).

"Above moderate-income" households are the largest and fastest-growing household income category in Petaluma and Sonoma County. The state and federal governments categorize households relative to "area median income" (AMI) in Sonoma County in order to determine maximum allowable rents and housing costs that can be charged to households in income-restricted housing. These categorizations are helpful for understanding Petaluma's distribution of households based on their relative ability to afford housing costs in the city and county, especially since the data accounts for differences in household size. Figure 11 shows that in 2017, households earning "above moderate incomes"—i.e., those earning at or above area AMI and best able to afford relatively higher housing costs—account for 61 percent of households in Petaluma and 54 percent of households in Sonoma County. Figure 12 shows that between 2010 and 2017 the number of above-moderate income households increased by 14 percent in Petaluma and 12 percent in Sonoma County. During this period Petaluma gained a small percent of very low-income households (3 percent) but lost 23 percent of its low-income households and three percent of its moderate-income households.

A smaller share of renter-occupied households than owner-occupied households in Petaluma are housing cost-burdened. Figure 13 shows that in 2019, 16 percent of renter-occupied households and 21 percent of owner-occupied households are cost-burdened in Petaluma—i.e., spending more than 30 percent of their income on housing costs. This is unusual compared to most communities in the United States; for example, a higher share (20 percent) of Sonoma County renter households are cost burdened relative to owner-occupied households (19 percent).

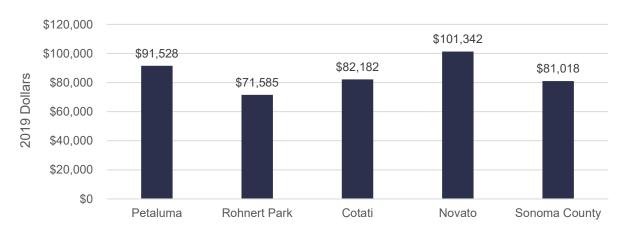


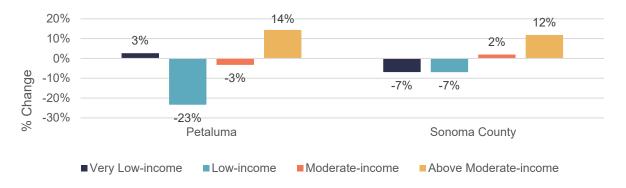
Figure 10: Median Income, Petaluma, Neighboring Cities, and Sonoma County, 2019

Figure 11: Households by Income Categories, Petaluma and Sonoma County, 2010 to 2017

	201	10	201	17
	Number	Percent	Number	Percent
Petaluma				
Very Low-income	3,820	18%	3,920	18%
Low-income	3,360	16%	2,575	12%
Moderate-income	2,160	10%	2,090	9%
Above Moderate-income	11,910	56%	13,620	61%
Total	21,245	100%	22,200	100%
Sonoma County				
Very Low-income	41,925	23%	39,035	21%
Low-income	32,440	18%	30,195	16%
Moderate-income	18,560	10%	18,920	10%
Above Moderate-income	91,105	50%	101,900	54%
Total	184,035	100%	190,060	100%

Note: Area median income (AMI) is based on the Sonoma County AMI. Very Low-income (0-50% AMI), Lowincome (51% to 80% AMI), Moderate-income (81% to 100% AMI), Above Moderate-income (>100% AMI). Source: HUD, Comprehensive Housing Affordability Strategy, 2010, 2017; Strategic Economics, 2021.

Figure 12: Percent Change in Households by Income Category, Petaluma and Sonoma County, 2010 to 2017



Source: HUD, Comprehensive Housing Affordability Strategy, 2010, 2017; Strategic Economics, 2021.

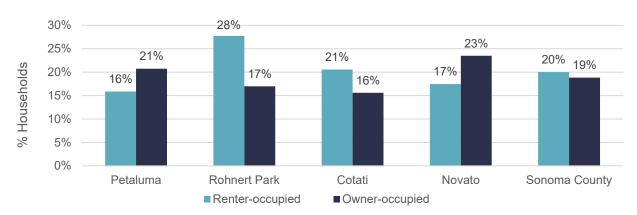


Figure 13: Housing Cost-Burdened Households, Petaluma, Neighboring Cities, and Sonoma County, 2019

Conclusions: Demographic and Household Conditions

- Petaluma's population is aging with most growth happening among people over 65. Petaluma's population of residents ages 25 to 44 is also growing. Although household sizes increased in recent years, the share of households with children has rapidly fallen. The decline of households with children could potentially result in fewer households seeking larger "family-friendly" housing units.
- Petaluma is also a relatively and increasingly affluent city compared to its immediate neighbors and the county, with a rapid decline in lower-income households and rapid growth in higherincome households.

Economic Conditions and Opportunities

This section summarizes employment and commute trends in Petaluma, nearby cities, and Sonoma County. The analysis from this section helps identify opportunities and challenges for future growth of Petaluma's economy and potential impacts on future commercial development trends. The analysis primarily used data from the U.S. Census Longitudinal Employment Household Dynamics (LEHD) for the years 2011 and 2018.

Historic Context

Petaluma's economy today was shaped by a series of local competitive strengths that favored the emergence of different major industries tied into the county, region, and national economies. Petaluma's specialization in processing, distribution, and manufacturing of agricultural and food products dates initially to the city's mid-19th century advantages of being well-located for processing of agricultural products and shipment via river to San Francisco. This component of the city's economy has evolved and diversified over time to include eggs, poultry, dairy, and food and beverage manufacturing—especially products related to today's Sonoma County wine industry. Each of these industries continues in some form in the city today, still benefitting from the city's surrounding agricultural industry and access to larger population centers and goods movement hubs—now via Highway 101 instead of the river.

The North Bay and Petaluma's rapid growth of a relatively affluent and well-educated population began in the 1950's upon completion of Highway 101 as a freeway. This change in Petaluma's population and regional accessibility is directly linked to three other major sources of economic activity in the city today. First, the city and Sonoma County emerged as a base of medical device and equipment manufacturing businesses; this industry is linked to initial breakthroughs decades ago and the presence of a skilled and highly-educated workforce today. Petaluma's historic status as a lower-cost business location (due to its distance from the region's largest employment centers) was also a competitive asset, as companies have migrated northward from Marin over time. Similar assets led to the emergence of Petaluma and neighboring cities as "Telecom Valley" in the late-1990s and the early-2000s; although this industry has waned since the first dot-com boom, Petaluma's businesses still include many specialized electronic product businesses. Petaluma's large resident population also supports a large number of retail, restaurant, and service businesses.

Petaluma attracted additional business activity in recent decades based on the city's location within the North Bay wine country tourist destination, the existence of a charming historic downtown that draws tourists and regional visitors, and a location with easy access to outdoor recreation opportunities.

Employment Trends

Petaluma is a significant employment destination in Sonoma County, with about 31,000 jobs. According to the most recent estimate of employment from the U.S. Census Longitudinal Employer-Household Dynamics (LEHD) data set, in 2018 there were an estimated 31,145 jobs in Petaluma (Figure 14). Petaluma accounted for 15 percent of total jobs in Sonoma County, which is higher than the city's 12 percent share of the county's population as of estimates for 2019.

From 2011 to 2018, job growth in Petaluma outpaced Sonoma County. As Figure 15 shows, between 2011 and 2018, Petaluma's number of jobs grew at a rate of 36 percent, a pace twice as fast as in Sonoma County, which grew at a rate of 18 percent. Petaluma's number of jobs also grew faster than Rohnert Park and Novato, which grew at a rate of 14 percent and six percent respectively.

Petaluma has a diverse economy with strengths in manufacturing, health care, retail, hotels, and food services. Figure 16 and Figure 17 show that Manufacturing is Petaluma's largest industry, followed by Heath Care & Social Assistance, Retail Trade, Administrative & Waste Services, and Accommodations & Food Services.²

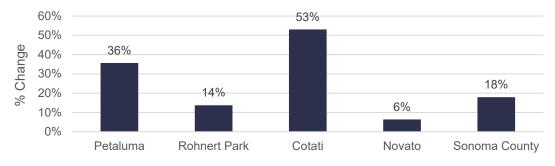
Petaluma's fastest-growing industries represent a diverse set of industry sectors, including hotels, food services, industrial-based sectors, and office-based sectors. Figure 18 highlights Petaluma's fastest-growing industries from 2011 to 2018. These sectors include the largely office-based industries of Finance & Insurance and Information, and sectors largely associated with industrial lands, including Transportation & Warehousing and Wholesale Trade. Employment in Accommodation (hotels) & Food Services also grew rapidly since 2011.

Figure 14: Total Count and Share of Jobs by Location, Petaluma, Market Area Cities, and Sonoma County, 2018

	Jobs	% Nearby Cities	% Sonoma County
Petaluma	31,145	44%	15%
Rohnert Park	13,313	19%	7%
Cotati	3,399	5%	2%
Novato	22,922	32%	N/A
Nearby Cities (including Petaluma)	70,779	100%	N/A
Sonoma County	203,788	N/A	100%

Source: U.S. Census Bureau, LEHD, 2018; Strategic Economics, 2021.

Figure 15: Total Job Growth, Petaluma, Neighboring Cities, and Sonoma County, 2011-2018



Source: U.S. Census Bureau, LEHD, 2011, 2018; Strategic Economics, 2021.

¹ This industry sector consists of business support services and waste management services. The sector includes temporary staffing agencies whose workers' job sites may differ from the agency office location.

² The capitalized industry names throughout this report directly refer to official industry definitions (titles) of the North American Industry Classification System, or "NAICS." These references are used when directly describing employment data. See Figure 16 for the complete list of these industry sectors. "&" symbols are used in this report when referring to industry sectors with "and" in their definitions / titles. Subsequent sections of this report also describe NAICS industry "subsectors" using the same approach.

Manufacturing & Warehousing Industries

- Manufacturing is Petaluma's largest industry sector, and jobs in the sector grew at a faster pace than in Sonoma County since 2011. In 2018, there were 4,894 Manufacturing jobs in Petaluma, which accounted for 16 percent of the city's total jobs (Figure 16). From 2011 to 2018, the city added about 950 jobs at employers classified within the manufacturing industry, an increase of 24 percent. Manufacturing jobs grew at a faster rate in Petaluma than in Sonoma County, where the industry grew by 14 percent between 2011 and 2018.
- Manufacturing jobs are highly concentrated in Petaluma. Figure 19 shows that Petaluma's total employment accounts for 15 percent of jobs in Sonoma County, but Petaluma's Manufacturing jobs account for a greater share, 21 percent, of Manufacturing jobs in the County.
- Food & Beverage Manufacturing is a significant and growing component of the Sonoma County Manufacturing industry sector. According to Quarterly Census of Employment and Wages (QCEW) data from the U.S. Bureau of Labor Statistics, in Sonoma County Food & Beverage manufacturing jobs accounted for 53 percent of total Manufacturing employment in 2019. Countywide Food & Beverage Manufacturing jobs also grew by 33 percent since 2010. Food and beverage manufacturing is driven in large part by the region's strength in the agriculture industry, including wine, beer, dairy, and specialty food production and processing. Jobs in the agriculture industry itself³ account for just three percent of total jobs in Sonoma County, but the sector grew by 22 percent in Sonoma County from 2011 to 2018.
- Petaluma's manufacturing jobs and businesses are integrated with Sonoma County's strengths in food and beverage manufacturing. This integration suggests Petaluma could benefit from ongoing growth in Sonoma County's agriculture industry. Petaluma is home to several manufacturing businesses specializing in meat and dairy processing, wholesale bakeries, breweries, and other food and beverage production as shown in Figure 20—although not all of these businesses engage in manufacturing within the city itself. There are also a number of smaller food and beverage manufacturing businesses consisting of distilleries and specialty food manufacturing such as granola bars, candy, coffee roasting, and hot sauce. Petaluma and Sonoma County's food and beverage manufacturing companies support a larger ecosystem of companies that produce related products such as aluminum caps for wine and beer bottles, special enzymes for food and beverage production, yeast, and to-go containers and cutlery distribution.
- Manufacturing businesses in Petaluma also include a diversified variety of life sciences and specialized high-tech activities. Although exact jobs data is limited for Petaluma, the city includes a variety of specialized manufacturing businesses producing products related to life sciences or technological innovations. The life sciences and medical device products industry has decades-long roots in Sonoma County. While declining over time, as noted by the Sonoma County Economic Development Board, the industry still includes several large employers in the

³ Refers to the Agriculture, Forestry, Fishing, & Hunting NAICS industry sector.

⁴ Sonoma County Economic Development Board, "Technology, Manufacturing & Lifestyle Products Industry Report," 2020, http://sonomaedb.org/PDF/ Data-Center/ 2020/Insider-Report-Manufacturing, -Tech, -Lifestyle-ADA-Final/.

county; examples of these businesses within Petaluma include Labcon, with approximately 200 employees, and Thermo Fisher Scientific, among others. Petaluma also includes specialized manufacturing businesses related to electronic devices, which in some ways represent a historic connection to Petaluma's reputation as part of "Telecom Valley" through the early-2000s.

Transportation & Warehousing jobs account for a small but highly concentrated and growing industry that has ties to manufacturing. Transportation & Warehousing jobs constitute four percent of total jobs in Petaluma. The sector is overrepresented compared to Sonoma County. Transportation & Warehousing jobs in Petaluma account for about 31 percent of total Transportation & Warehousing jobs in Sonoma County. The sector also grew by about 500 jobs (88 percent increase) in Petaluma from 2011 to 2018. The sector benefits from the presence of manufacturing in the city and works with many of these businesses to distribute their products.

Household-Serving Industries

"Household-serving" industries include businesses that primarily support the needs of Petaluma and the surrounding region's population, such as retail sales, personal services, dining, health care, and entertainment. Although tourism drives some outside spending in these industries, most of these businesses depend on area residents spending and "recirculating" their dollars within the local economy (as opposed to industries such as manufacturing, which attract outside spending by selling their products outside the community).

- "Health Care & Social Assistance" is Petaluma's second-largest industry sector and is growing rapidly. Health & Social Assistance jobs accounted for 13 percent of total employment in Petaluma, and from 2011 to 2018 the industry added approximately 880 new jobs, an increase of 28%. Growth in the sectors is driven by the aging population in Petaluma (Figure 8), which has created greater demand for in-home health services and outpatient healthcare.
- "Accommodation & Food Services" is a large and growing industry in Petaluma, serving both local residents and visitors. Petaluma and Sonoma County are destinations for tourism and recreation, which brings travelers that shop, dine, and stay in the hotels and other accommodation properties. In 2018, Accommodation & Food Services jobs accounted for nine percent of the city's total jobs (Figure 16). From 2011 to 2018, the city gained approximately 2,900 new Accommodation & Food Services jobs, an increase of 45 percent. Like Petaluma's manufacturing industry, the city's food service industry benefits from the region's specialization in agriculture, and the city contains popular cafes, bakeries, and wine and beer tasting rooms.
- Retail also accounts for a large and growing number of jobs in Petaluma. In 2018, there were an estimated 3,265 Retail Trade jobs in Petaluma, which accounted for 10 percent of the city's total jobs. Employment in Retail Trade grew by 27 percent from 2011 to 2018, an increase of approximately 700 jobs in the city.

Office-Based Industries

Office-based industries together represent a modest share of jobs in Petaluma. Jobs in Professional, Scientific, & Technical Services; Information; Finance & Insurance; and Management of Companies & Enterprises together account for 12 percent of jobs in Petaluma. Jobs in office-based industries as a whole increased by 38 percent between 2011 and 2018, an increase of about 1,000 jobs.

- Professional, Scientific, & Technical Services and Finance & Insurance jobs account for most office-based jobs in Petaluma. In 2018, Professional, Scientific, & Technical Services represented five percent of total jobs, and Finance & Insurance accounted for 4 percent of total jobs. Finance & Insurance is the fastest-growing office-based sector, increasing by 724 jobs from 2011 to 2018, a 123 percent increase. The city's downtown contains many of the small, primarily local-serving businesses in these industries, which include businesses such as insurance offices, banking, accountants, architects, and engineers.
- Information and Management of Companies & Enterprises represent the smallest share of office-based industries. In 2018, there were about 490 Information jobs (2 percent of total jobs) and 390 Management of Companies & Enterprises jobs.

Figure 16: Employment by Industry, Petaluma and Sonoma County, 2011-2018

		Petaluma						onoma Cou	unty	
	201	2011		8	%Change	201	2011		8	%Change
	Number	Share	Number	Share	Share	Number	Share	Number	Share	Share
Manufacturing	3,941	17%	4,894	16%	24%	20,215	12%	22,995	11%	14%
Health Care and Social Assistance	3,158	14%	4,039	13%	28%	24,330	14%	31,643	16%	30%
Retail Trade	2,563	11%	3,265	10%	27%	19,070	11%	21,242	10%	11%
Administrative & Waste Services	1,259	5%	3,246	10%	158%	7,350	4%	12,640	6%	72%
Accommodation & Food Services	2,001	9%	2,911	9%	45%	15,674	9%	20,414	10%	30%
Educational Services	1,988	9%	1,984	6%	0%	16,775	10%	16,686	8%	-1%
Wholesale Trade	1,298	6%	1,943	6%	50%	7,366	4%	8,080	4%	10%
Construction	996	4%	1,782	6%	79%	8,402	5%	15,030	7%	79%
Professional & Technical Services	1,311	6%	1,468	5%	12%	11,314	7%	9,856	5%	-13%
Finance and Insurance	591	3%	1,315	4%	123%	4,195	2%	4,531	2%	8%
Transportation and Warehousing	588	3%	1,099	4%	87%	3,419	2%	3,521	2%	3%
Other Services (exclud. Public Admin)	1,068	5%	979	3%	-8%	10,001	6%	7,067	3%	-29%
Arts, Entertainment, and Recreation	600	3%	575	2%	-4%	4,055	2%	6,349	3%	57%
Information	316	1%	491	2%	55%	2,597	2%	3,030	1%	17%
Public Administration	451	2%	416	1%	-8%	6,958	4%	7,292	4%	5%
Management of Companies	440	2%	386	1%	-12%	1,896	1%	2,506	1%	32%
Real Estate and Rental & Leasing	246	1%	321	1%	30%	2,863	2%	3,613	2%	26%
Ag., Forestry, Fishing & Hunting	70	0%	22	0%	-69%	5,086	3%	6,149	3%	21%
Utilities	74	0%	8	0%	-89%	1,149	1%	1,007	0%	-12%
Mining	0	0%	1	0%	N/A	116	0%	137	0%	18%
Total	22,959	100%	31,145	100%	36%	172,831	100%	203,788	100%	18%

Source: U.S. Census Bureau, LEHD, 2011, 2018; Strategic Economics, 2021.

18% 16% 16% 16% 13% 14% 11% 10% 10% % of Total Jobs 12% 10% 9%^{10%} 10% 8% 7% 8% 6% 6% 6% 6% 6% 4% 4% ■ Petaluma ■ Sonoma County

Figure 17: Largest Industries, Petaluma and Sonoma County, 2018

Source: U.S. Census Bureau, LEHD, 2018; Strategic Economics, 2021.

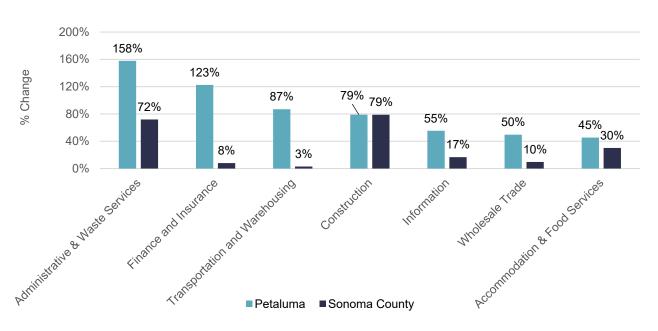
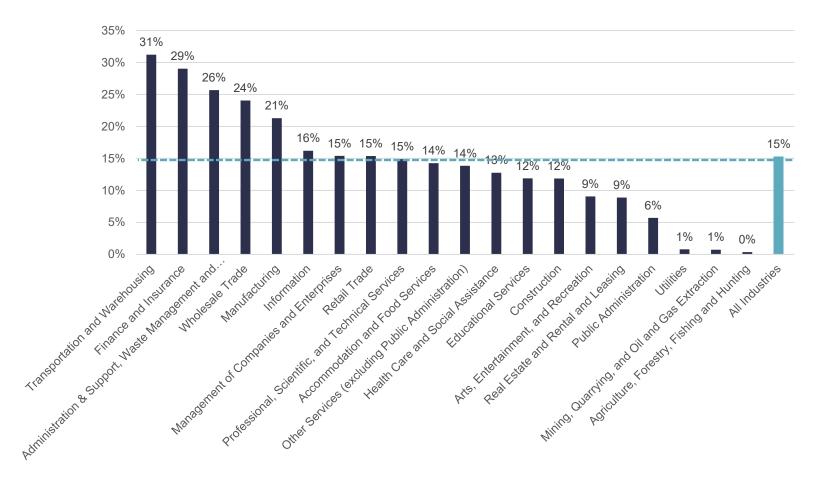


Figure 18: Fastest Growing Industries, Petaluma and Sonoma County, 2011-2018

Source: U.S. Census Bureau, LEHD, 2011, 2018; Strategic Economics, 2021.

Figure 19: Petaluma Employment as a Share of Sonoma County Employment by Industry, 2018



Source: U.S. Census Bureau, LEHD, 2018; Strategic Economics, 2021.

Figure 20: Large Food and Beverage Manufacturing Firms in Petaluma, 2021

Category	Firm Name
Meat Processing	Marin Sun Farms
	Perdue
Dairy Processing	Clover-Stornetta Farms
	Tomales Bay Foods
	Straus Family Creamery
	Point Reyes Farmstead Cheese Co.
	Fromagex Inc.
Beverage Manufacturing	Revive Brands
	The Yerba Mate Co., Llc
	The Lagunitas Brewing Co Inc
Wholesale Bakery	Alvarado Street Bakery
	Rustic Bakery
Other Food Manufacturing	Amy's Kitchen Inc
	O Olive Oil & Vinegar
Source: City of Petaluma, 2021,	Strategic Economics, 2021.

Commuting

Nearly 80 percent of workers that are employed in Petaluma live outside the city's borders. Figure 21 shows that in 2018, 79 percent of Petaluma's workforce commuted from outside the city. Most of Petaluma's workforce commuted from somewhere in Sonoma County, many from nearby cities such as Santa Rosa and Rohnert Park (Figure 22). About five percent of those employed in Petaluma lived in Marin County, and five percent in Solano County.

About a guarter of employed Petaluma residents work in the city, while another 30 percent work in communities along the Highway 101 corridor in Sonoma and Marin Counties. In 2018, approximately 6,000 residents worked within the Petaluma city limits, and these residents accounted for 24 percent of the total number of working Petaluma residents (Figure 21). The remaining 76 percent of residents commute to jobs located outside the city (Figure 23), many of which were located along the Highway 101 corridor (Figure 25). Within Sonoma County, 9 percent of employed residents worked in Santa Rosa and three percent in Rohnert Park. 17 percent of residents commuted to jobs in Marin County and seven percent were employed in San Francisco.

The accelerated adoption of remote work during the COVID-19 pandemic will likely lead to lasting shifts in commute patterns. The COVID-19 pandemic forced a large percentage of employers and employees to adapt to remote work. Data from the U.S. Bureau of Labor Statistics found that over 33 percent of employed workers over age 16 worked remotely due to the pandemic in mid-2020 nationally, declining to 22 percent in the fourth quarter of 2020.5 An analysis completed by the Bay Area Council Economic Institute found that 32 percent and 39 percent of jobs in Sonoma County and Marin County,

⁵ Matthew Dey, Harley Frazis, David S. Piccone Jr, and Mark A. Loewenstein, "Teleworking and lost work during the pandemic: new evidence from the CPS," Monthly Labor Review, U.S. Bureau of Labor Statistics, July 2021, https://doi.org/10.21916/mlr.2021.15.

respectively, are likely eligible for remote work.⁶ Even after the pandemic recedes, employers are likely to allow a higher share of workers to work remotely some or all of the time compared to pre-pandemic conditions. Such a change could result in shifting commute patterns in Petaluma and overall reductions in commute trips per worker.

Figure 21: Where Petaluma Residents Work and Petaluma Workers Live, 2018

	Number	Share
Workers at Jobs in the City of Petaluma:	28,425	
Work and Live in Petaluma	6,001	21%
Work in Petaluma but Live Elsewhere	22,424	79%
Working Residents of Petaluma:	24,779	
Work and Live in Petaluma	6,001	24%
Work Elsewhere but Live in Petaluma	18,778	76%
Source: U.S. Census Bureau, LEHD, 2018; Strategic	Economics, 202	1.

Figure 22: Home Locations of Workers at Jobs in Petaluma, 2018

	Number	Share
Sonoma County	17,379	61%
City of Petaluma	6,001	21%
City of Santa Rosa	4,312	15%
City of Rohnert Park	2,119	7%
City of Cotati	480	2%
Marin County	1,508	5%
City of Novato	661	2%
Solano County	1,426	5%
City of Vallejo	603	2%
Contra Costa County	959	3%
Alameda County	868	3%
Napa County	761	3%
San Francisco City & County	561	2%
All Other Locations	4,963	17%
Total	28,425	
Source: U.S. Census Bureau, LEHD, 2018; Stra	tegic Economics, 2021.	•

⁶ Greer, Cowan and Jeff Bellisario, "Remote Work in the Bay Area: An Initial Evaluation of the Data and Implications for Public Policy," Bay Area Council Economic Institute, December 2020, http://www.bayareaeconomy.org/report/remote-work-in-the-bay-

Figure 23: Work Locations of Petaluma Residents, 2018

	Number	Share
Sonoma County	11,907	48%
City of Petaluma	6,001	24%
City of Santa Rosa	2,263	9%
City of Rohnert Park	691	3%
Marin County	4,213	17%
City of Novato	1,407	6%
City of San Rafael	1,463	6%
San Francisco City & County	1,752	7%
Alameda County	1,322	5%
City of Oakland	379	2%
Contra Costa County	791	3%
Santa Clara County	761	3%
City of San Jose	292	1%
Napa County	631	3%
All Other Locations	3,402	14%
Total	24,779	
Source: II S. Conque Bureau I EUD 2019:	Stratogic Economics 20	124

Source: U.S. Census Bureau, LEHD, 2018; Strategic Economics, 2021.

Santa Rosa Ronert Park Cotati Napa Sonoma [101] Novato Vallejo San Rafael Corte Madera [101] Oakland San Francisco 0 2.5 Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user Workers per Square Mile Legend City Limit 5 - 50 51 - 150 151 - 250 251 - 425 426 - 600

Figure 24: Home Locations of Workers Employed in Petaluma, 2018



[101] Santa Rosa Ronert Park Cotati Napa Sonoma Petaluma [101] Novato Vallejo San Rafael Corte Madera Oakland San Francisco 0 2.5 Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user Legend Jobs per Square Mile City Limit 5 - 50 51 - 100 101 - 225 226 - 400 401 - 600

Figure 25: Work Locations of Petaluma Residents, 2018



Conclusions: Economic Conditions and Opportunities

- Petaluma's economy grew in the years prior to the COVID-19 pandemic, driven by a healthy mix
 of "export-oriented" and "household-serving" industries. The city serves as a significant
 employment destination, with over 30,000 jobs and approximately 15 percent of Sonoma
 County's jobs as of 2018. Nearly 80 percent of workers at jobs in Petaluma commute into the city
 from elsewhere.
- Manufacturing is the city's largest industry by number of jobs. Jobs in the industry sector grew from 2011 to 2018, and the sector is concentrated in Petaluma compared to Sonoma County. Industry strengths in Petaluma include agricultural production, food manufacturing, medical devices and equipment, and a variety of smaller and diverse high-tech businesses.
- Petaluma is positioned to continue attracting additional business activity and job growth based on:
 - 1) the city's fundamental competitive strengths based around easy commute and goods movement access to the larger region via Highway 101, a location within productive agricultural land, and the presence of a large and highly educated residential base;
 - 2) continued growth in major industries as agricultural production continues, tourism expands, medical device company sales and investment grow during and after the COVID-19 pandemic, and local residents create additional demand for goods and services as the population grows and ages;
 - o 3) potential opportunities to attract business growth based on access to the Downtown Petaluma SMART station. However, challenges for growth include traffic congestion on Highway 101—impacting commutes and distribution of products—and the limited supply of commercial and industrial development opportunity sites with the large size and Highway 101 access preferred by many businesses.

Housing Market Conditions and Demand

This section provides an overview of the Petaluma housing market and projected housing demand by the year 2050. The analysis begins by describing Petaluma and its residential competitive market area's⁷ housing inventory by product type, sales price and rent trends, and trends in housing development. The residential market area includes the areas of Southern Sonoma and Northern Marin County along Highway 101. The major cities within the market area include Petaluma, Rohnert Park, Cotati, and Novato. This section concludes with a range of estimated potential capture of demand for additional housing units in Petaluma through 2050.

Historic Context

Petaluma's existing housing stock essentially reflects three historic trends. First, approximately 13 percent of the city's housing was constructed prior to 1950. This housing represents the city's older and historic housing stock largely built west of today's Highway 101 during the mid-19th to mid-20th century period. This was followed by the enormous boom in housing construction triggered in the post-war era of suburbanization, particularly after completion of Highway 101 as a freeway in the late-1950s. Largely constructed east of Highway 101, this housing mostly consists of single-family homes in communities designed for automobile access to separate retail and services in shopping centers. 55 percent of Petaluma's housing stock was built between 1950 and 1990. Finally, overall housing production has slowed significantly in Petaluma since 2010. This slowdown partly occurred due to slow production after the mortgage foreclosure crisis and recession of 2009, and partly due to the increasingly limited supply of development opportunity sites within the city's urban growth boundary. These changes are driving a need for developers and the city to reorient toward adding housing in higher-density formats such as townhomes and multifamily apartments and condos.

Characteristics of Existing Housing Supply

Petaluma has approximately 22,700 total housing units. In 2019, Petaluma had a total of 22,655 occupied housing units, which accounted for 35 percent of total units among the market area cities, 25 percent of units in South Sonoma and North Marin County, and 12 percent total units in Sonoma County (Figure 26).

About one-third of households rent in Petaluma. Figure 27 shows that in 2019 a somewhat smaller share of households rented their home in Petaluma compared to Sonoma County where 39 percent of households were renters. A greater share of households rented their home in Rohnert Park (45 percent) and Cotati (43 percent). Rohnert Park and Cotati may contain a greater share of renters in part due to the presence of Sonoma State University, which is located in Rohnert Park and enrolled at a total of 7,807 students in 2020.8

About 80 percent of Petaluma's housing units are single-family units. In 2019, 79 percent of occupied housing units in Petaluma were single-family homes and 17 percent of units were in multifamily buildings (units in complexes with two or more units). Petaluma's housing stock diversity is similar to Sonoma County and the City of Novato, where single-family homes account for about three-quarters of

⁷ Additional explanation of market areas can be found on page 5.

⁸ http://ra.sonoma.edu/sites/ra/files/images/total_student_enrollment_f20.pdf

housing units. A much greater share of housing units in Rohnert Park (37 percent) were multifamily units, aligning with Rohnert Park's relatively larger share of renter households.

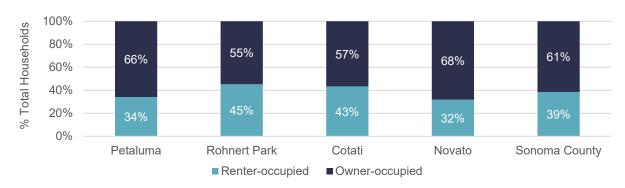
A significant share of Petaluma's housing stock was built in the 1970s and 1980s. Figure 29 shows that 35 percent of Petaluma's housing units were built from 1970 to 1989. These two decades were also active years for building in Rohnert Park when two-thirds of the city's housing units were built and Cotati when nearly half of its housing units were built. Around 40 percent of Novato's and Sonoma County's housing units were also built during this period. This trend aligns with the population growth and suburban expansion in the region beginning in the 1950s.

Figure 26: Total Number of Occupied Housing Units, 2000, 2010, 2019

	2000	2010	2019	Change 2000-2019	
	Number	Number	Number	Number	Percent
Petaluma	19,932	21,737	22,655	2,723	14%
Rohnert Park	15,503	15,808	16,377	874	6%
Cotati	2,532	2,978	2,758	226	9%
Novato	18,524	20,279	22,325	3,801	21%
South Sonoma County	60,448	63,873	65,842	5,394	9%
North Marin County	21,719	23,036	25,126	3,407	16%
Sonoma County	172,403	185,825	189,374	16,971	10%

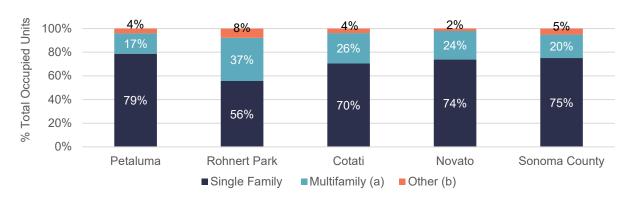
Source: U.S. Census 2000, 2010, and American Community Survey 5-year Est., 2019; Strategic Economics 2021.

Figure 27: Housing Tenure, Petaluma, Market Area Cities, Sonoma County, 2019



Source: American Community Survey, 5-year Est., 2019; Strategic Economics 2021.

Figure 28: Units in Structure, Petaluma, Market Area Cities, Sonoma County, 2019



(a) Multifamily housing includes complexes with two or more units. (b) E.g., group housing and mobile homes

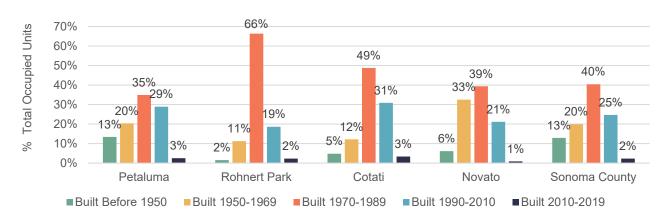


Figure 29: Share of Housing Units by Year Built, Petaluma, Market Area Cities, Sonoma County, 2019

Home Prices and Rents

Petaluma has the second-highest home values in the market area. In 2020, the median sales price of a single-family home in Petaluma was approximately \$770,000. Single-family homes and condominiums were more expensive in Petaluma than in Rohnert Park, Cotati, and Sonoma County overall. However, Novato's median single-family home sales prices were higher, at approximately \$1 million. The median condominium sale price in Petaluma was approximately \$543,000, which was similar to the sales price of condominiums in Novato at \$547,000.

Home prices have risen rapidly in the last decade in Petaluma and the market area. Since 2012, single-family home prices approximately doubled in Petaluma, Rohnert Park, Cotati, and Sonoma County. Single-family home prices rose more slowly in Novato at around 80 percent from 2012 to 2020, though these homes are significantly more expensive overall.

Condominium prices increased more rapidly than single-family home prices. From 2012 to 2020 condo prices more than doubled in Petaluma, cities in the market area, and Sonoma County.

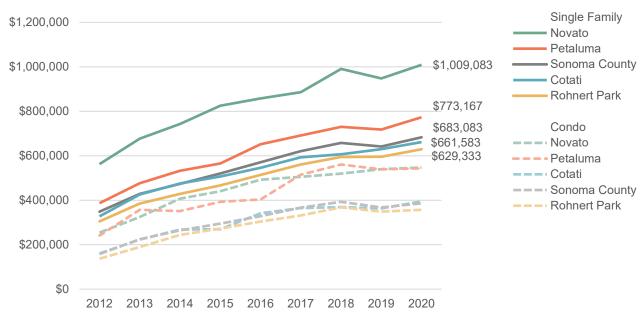
Since 2010, multifamily rents in Petaluma remained comparable to Novato but higher than the other market area cities and Sonoma County. In 2020, the average rent in Petaluma was \$2,151, about the same as in Novato at \$2,147. In the last decade, average rents in Petaluma and Novato remained higher than Rohnert Park, Cotati, and Sonoma County.

In the last decade, multifamily rents increased rapidly in Petaluma and the market area. From 2010 to 2020, rents increased by approximately 50 percent in Petaluma, Rohnert Park, Novato, and Sonoma County.

Forest fires in the last few years exacerbated the demand for housing in Petaluma and Sonoma County as a whole. Rents and sales prices in the Bay Area as a whole have increased rapidly in the past decade due to job growth (and resulting population growth) outpacing the construction of new housing. Sonoma County also experienced a local loss of housing supply that worsened this condition: local realtors interviewed for this report noted that many families displaced by the recent fires in the

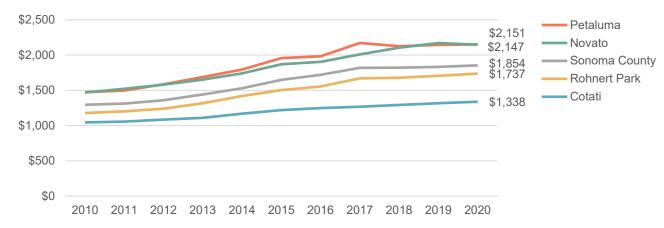
nearby region—such as the 2017 Tubbs Fire, which destroyed approximately 5,143 housing units across Sonoma County⁹—have sought housing in nearby areas, including Petaluma.

Figure 30: Median Single-Family and Condominium Home Price, Petaluma, Market Area Cities, Sonoma County, 2012 to 2020



Source: Redfin, March 2021; Strategic Economics, 2021.

Figure 31: Average Monthly Rent per Unit, Petaluma, Market Area Cities, Sonoma County, 2010-2020



⁹ "Sonoma County Recovery & Resiliency Framework," December 2018, p. 69.

Residential Development Trends and Projected Growth

In the last 10 years, Petaluma issued approximately 1,050 building permits for new residential construction, split between single-family homes and multifamily dwelling units. From 2010 to 2020 Petaluma's residential permit activity accounted for 30 percent of total permits issued in the market area and 18 percent of permits issued in Sonoma County (Figure 32). During this period, about half of the permits issued in Petaluma were single-family homes and half for multifamily units.

Petaluma did not reach its annual permit limit of 500 permits in any year between 2010 and 2020. Figure 33 shows that from 2010 to 2020, the total number of residential permits issued did not exceed 500 permits in any year. During this 10-year period, the most permits that were issued in a year was 188 in 2016.

Approximately 2,400 housing units may be available for lease or purchase in Petaluma in the next several years. Figure 34 provides an overview of data from the City of Petaluma, CoStar, and other online sources that estimate that a total of 2,427 units are planned to be built, approved to be built, or are currently under construction. About 80 percent of these units are expected to be in multifamily projects. These additional housing units will help to meet growth in demand for additional housing in Petaluma.

Several major market-rate housing projects that are planned, proposed, and currently under construction in Petaluma are large apartment projects located near Downtown Petaluma or along the Petaluma River. Figure 35 shows that there are two large apartment projects currently under construction. The 500 Hopper Street project will add 273 apartment units and the North River Apartments project will add 184 units. Two additional large apartment projects have also been approved to be built and would add 307 units to the city, and three planned projects would add 722 more units. Projects shown in Figure 35 are primarily located near the city's downtown or along the Petaluma River. These locations potentially create opportunities for housing growth to support retail, services, and entertainment in those areas.

Between 2015 and 2050, the South Sonoma and North Marin County areas together are projected to grow by 26,000 new housing units. As of January 2021, the Association of Bay Area Governments/Metropolitan Transportation Commission (ABAG/MTC) made household growth projections available for each county and for sub-county "superdistricts." The two superdistricts that best represent Petaluma's residential market area are "South Sonoma County," which includes the incorporated cities of Rohnert Park, Cotati, Petaluma, and Sonoma, and "North Marin," which includes the City of Novato. ABAG/MTC estimates that by 2050 the two superdistricts could total 113,000 households, an increase of 26,000 units since 2015.

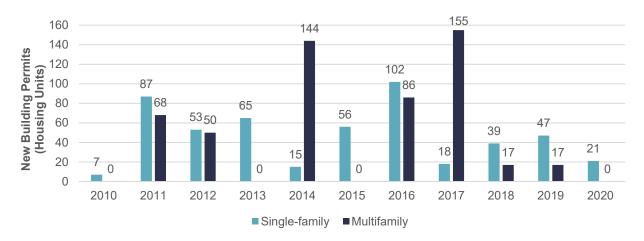
Figure 32: Total Building Permits for New Housing Construction, Petaluma, Market Area, Sonoma County, 2010 to 2020

	Petaluma				Marke	t Area	Sonoma	County
	Number	Percent	Percent of Market Area	Percent of County	Number	Percent	Number	Percent
Single-family Units	510	49%	23%	5%	2,191	55%	10,231	78%
Multifamily Units	537	51%	30%	18%	1,804	45%	2,968	22%
Total Units	1,047	100%	26%	8%	3,995	100%	13,199	100%

Note: Market Area includes the cities, Petaluma, Rohnert Park, Cotati, and Novato.

Source: HUD SOCDS, 2021; Strategic Economics, 2021.

Figure 33: Petaluma Building Permits for New Housing Construction, 2010 to 2020



Source: HUD SOCDS, 2021; Strategic Economics, 2021.

Figure 34: Recent, Planned/Approved, and Under Construction Housing Units, Petaluma, Market Area Cities, 2021

	Planned/Proposed		Planned/Proposed Approved		Under Co	onstruction
	Units	Projects	Units	Projects	Units	Projects
Petaluma	1,141	14	468	8	818	6
Rohnert Park	713	4	135	1	218	1
Cotati	-	-	117	2	47	1
Novato	155	4	148	4	408	7
Total Market Area	2,009	22	868	15	1,491	15

Note: Approximately 80 percent of pipeline units in Petaluma are in multifamily projects.

Source: City of Petaluma, 2021; City of Rohnert Park, 2021; City of Cotati, 2021; City of Novato, 2021; CoStar,

2021; Strategic Economics, 2021.

Figure 35: Select Petaluma Residential Development Projects, Under Construction, Approved, or Planned/Proposed, 2021

Property Name	Property Address	Status	Details	Number of Units
Riverfront 2010	500 Hopper Street	Under Construction	Mixed-Use Development that includes 273 Residential units (134 single family, 39 town homes, 100 apartments) a hotel with 120 rooms, and 60,000 sq. ft. of office.	273
North River Apartments	368 and 402 Petaluma Blvd. N	Under Construction	184 apartment units on a 3.92-acre property.	184
Quarry Heights (Lomas)	Petaluma Blvd. S (Dutra Quarry)	Under Construction	272 total new single-family and townhomes. 142 townhome units and 40 single-family units are complete. The remaining 90 single-family units are not built.	90
Brody Ranch Subdivision	360 Corona Road	Under Construction	Development of 199 total units consisting of 59 single-family homes, one duplex, and 138 condominiums	199
Haystack Pacifica	215 Weller Street	Approved	182 apartment units with 14,516 sq. ft. of commercial at corners.	182
Deer Creek	0 N McDowell	Approved	129-unit apartment development on 4.71 acres.	129
Scannell Mixed-Use Development	500 Lakeville Street and 500 Hopper Street	Planned/ Proposed	39.22-acre site with a mix of commercial office and residential uses: 190,000 sq. ft. of commercial office use and 275 residential units (95 single-family home units and 180 multi-family units).	275
Riverview Apartments	2592 Casa Grande Road	Planned/ Proposed	Development on 14.4 acres to construct 264 apartment units within 27 three-story buildings. The project includes a recreation center and indoor pool and all associated site improvements.	264
Sid Commons	Graylawn Ave.	Planned/ Proposed	278-unit apartment development.	278

Source: City of Petaluma, 2021; CoStar, 2021; Strategic Economics, 2021.

Figure 36: Plan Bay Area 2050 Housing Projections by Superdistricts, 2015 to 2050

	2015	2050
	Number	Number
South Sonoma County	64,000	83,000
North Marin County	23,000	30,000
Sonoma County	188,000	220,000

Note 1: In 2015 were 21,616 households in Petaluma.

Note 2: South Sonoma County includes the cities, Rohnert Park, Cotati, Petaluma, and Sonoma

Note 3: North Marin County includes the City of Novato.

Source: ABAG/MTC, Plan Bay Area 2050 Final Blueprint Forecast, 2021; Strategic Economics, 2021.

Petaluma Housing Demand Estimate

This section describes demand estimates for new housing units in Petaluma through 2050. The demand estimates are based on household projections by the Association of Bay Area Governments and the Metropolitan Transportation Commission (ABAG/MTC). ABAG/MTC's 2050 projections for the entire region are significantly higher than previous 2040 projections. 10

The projections for Petaluma presented below reflect two possible scenarios for Petaluma to capture varying shares of new households and corresponding housing demand from the total projected household growth for the South Sonoma County and North Marin County superdistricts discussed above.

- Low Estimate Scenario: This scenario assumes that Petaluma's capture of new households and associated housing unit demand in the South Sonoma and North Marin County subregions will be equivalent to the city's existing share of housing units within the two superdistricts as of 2019.
- High Estimate Scenario: This scenario assumes that Petaluma's capture of new households and associated housing unit demand in the South Sonoma and North Marin County subregion will be equivalent to the city's share of new housing growth in the two superdistricts between 2000 to 2019.

Petaluma could capture demand for between 5,570 and 6,460 new housing units by 2050. It is important to note that actual annual growth will vary from year to year over the next 30 years depending on economic and market conditions. ABAG/MTC anticipates that a greater share of regional household growth will occur by 2040 and that household growth will flatten between 2040 and 2050.

These projected household numbers could be relatively conservative in that they are based on region population modeling that also reflects potential development constraints. However, if regional employment growth exceeds the ABAG/MTC projections, latent demand for housing could be much higher. On the other hand, if employment growth is lower than expected, then demand for new housing may also be lower than expected. Other factors that will impact actual housing production

¹⁰ This is due to a recent policy change which requires ABAG/MTC to account for households that otherwise must commute into the region for work due to a shortage of housing options within the nine-county Bay Area. The 2050 projections have also been adjusted to reflect the stronger-than-anticipated employment growth that occurred within the last few years, as well as the fact that the new population in the region is slightly older than historical projections expected, and therefore more likely to form independent households.

include zoning, financial feasibility, affordability, macroeconomic conditions that affect financing conditions (i.e., interest rates), nearby employment growth, and incomes of area residents. Note that the COVID-19 pandemic and related federal government and Federal Reserve policy responses may impact housing growth within the next few years, although these impacts are difficult to predict

Indicators suggest that demand will remain strong for both single-family and multifamily housing products. The significant price appreciation for single-family homes (Figure 30), indicates that there is substantial demand for single-family housing in Petaluma. Potential demand for multifamily housing is also suggested by recent demographic trends regarding the increasing share of households without children, single person holders, and the share of seniors in Petaluma (Figure 7 and Figure 9). These household types and age groups generally have lower space requirements than families with children. If these trends continue, then these groups are likely to generate demand for more multifamily housing.

Recently constructed and planned or proposed development projects will absorb some of the projected demand for housing. As of June of 2021, there were approximately 2,400 units in Petaluma's development pipeline. Of these, about 80 percent are for multifamily units.

Figure 37: Petaluma Housing Demand Estimate, 2050

Demand Estimate Inputs	
Households in South Sonoma/ North Marin County, 2015	87,000
Projected Households in South Sonoma/ North Marin County, 2050	113,000
Average Annual Growth in New Households, 2015-2020	743
Projected New Households, 2020 to 2050	22,286
Housing Demand Estimate	
Scenario 1 (Low Estimate)	
Petaluma Share of Households in South Sonoma/ North Marin County, 2019	25%
Projected New Housing Demand in Petaluma, 2020 to 2050	5,571
Scenario 2 (High Estimate)	
Petaluma Share of New Household Growth in South Sonoma/ North Marin	29%
County, 2000-2019	2970
Projected New Housing Demand in Petaluma, 2020 to 2050	6,463
Source: ABAG/MTC, 2021; Strategic Economics, 2021.	

Conclusions: Housing Market Conditions and Demand

Petaluma has attracted a variety of housing development projects including both market rate and affordable housing units. The city's new housing permits since 2010 have been nearly evenly split between single-family and multifamily homes, suggesting a reorientation toward producing the higher-density units that will become more critical in order to accommodate growth within the urban growth boundary.

- As in most Bay Area communities, housing prices and rents rapidly grew in Petaluma in the past decade, and the city's median sales prices are among the highest compared to nearby communities. This rapid cost escalation creates an ongoing need to produce additional marketrate and income-restricted affordable housing to retain income diversity within the city and ensure workers at jobs in Petaluma can afford to be a part of the community.
- Petaluma could potentially capture demand for between 5,570 and 6,460 new housing units by 2050, although the city's 2,400 recently constructed and planned or proposed development projects will absorb some of the projected demand for housing. Petaluma's ability to capture this demand will depend on policy decisions and the financial feasibility of constructing new housing especially multifamily housing, which makes efficient use of limited land area, but is also more expensive to construct than single-family homes on a per square foot basis.

Hotel Market Conditions and Demand

This section describes hotel market conditions in Petaluma and Sonoma County, the primary competitive hotel market area. The analysis utilizes data from the Sonoma County Economic Development Board and Smith Travel Research (STR), transient occupancy tax revenue data for the City of Petaluma, and reports and interviews with knowledgeable local experts in the tourism industry. This section concludes with a range of estimates for future demand for hotel rooms in Petaluma.

Competitive Supply and Visitor Segments

Petaluma is located within the Sonoma County hotel market area. Sonoma County is a desirable leisure travel tourist destination due to its location within wine country, its craft beverage industry and culinary offerings, and outdoor recreational opportunities.

Petaluma's accommodations inventory consists of nine hotels and motels. As of 2020, the city's hotel inventory accounted for about 11 percent of the 7,122 hotel rooms in Sonoma County (Figure 38). The majority of Petaluma's hotel inventory is older, with 58 percent of hotel rooms being constructed before the year 1990, although this data pre-dates the opening of a new Marriott Courtyard hotel in Petaluma that opened in spring 2021. This hotel age distribution is similar to Sonoma County, in which 51 percent of hotels were constructed prior to the year 1990.

In the last forty years, Sonoma County added on average 116 hotel rooms each year. From 1980 to 2021 Petaluma added 536 hotel rooms and Sonoma County added 4,758 hotel rooms. During this period Petaluma's represented approximately 11 percent of Sonoma County's growth in hotel rooms, thus maintaining Petaluma's existing share of countywide hotel rooms.

Visitors are drawn to Petaluma's hotels based primarily on tourism related to wine country and large events, and business travel connected to major employers within Petaluma and communities along Highway 101. Petaluma's hotel room inventory primarily consists of mid-scale and upper-midscale hotels that appeal to both leisure and business travelers, though Hotel Petaluma is especially oriented to tourists. Petaluma's budget hotels, including the Quality Inn and America's Best properties, appeal to value-seeking tourists as well as workers temporarily employed in the region in industries such as construction.

Figure 38: Sonoma County Hotel Room Inventory by Opening Date, 1970-2020

		Petaluma		Sonoma County		
Year Opened	Number of Hotels	Number of Rooms	Share of Rooms	Number of Hotels	Number of Rooms	Share of Rooms
Before 1970	2	164	21%	32	1,560	22%
1970-1979	1	55	7%	6	402	6%
1980-1989	2	230	30%	26	1,665	23%
1990-1999	0	0	0%	8	431	6%
2000-2009	1	184	24%	17	1,389	20%
2010-2020	1	122	16%	13	1,273	18%
Under Construction	0	0	0%	1	135	2%
Unknown	1	15	2%	9	267	4%
Total	7	771	100%	103	7,122	100%

Source: STR, 2020; Sonoma County Economic Development Board, 2021; Strategic Economics, 2021.

Performance and Development Activity

Before the COVID-19 Pandemic, Transient occupancy tax (TOT) revenues were increasing, driven by both increases in room rates and the openings of new hotels. Figure 39 shows that annual TOT rose in Petaluma by a total of 62 percent between 2015 and 2019, but fell by 21 percent from 2019 to 2020, showing the impact of the COVID-19 pandemic on hotel stays. Petaluma's TOT rate was unchanged throughout this period, at 10 percent.

Two new hotels recently opened in Petaluma, and there are two proposed hotel development projects totaling 205 rooms. Prior to the COVID-19 pandemic, hotel occupancy rates were exceptionally high throughout the Bay Area, and a number of new hotels were under construction or planned for development. In Petaluma, a new Hampton Inn opened in 2019, and a Marriott Courtyard hotel opened in 2021. The Hotel Petaluma also recently completed a refurbishment. Figure 40 shows that one boutique hotel and one extended stay hotel are in the initial planning phases.

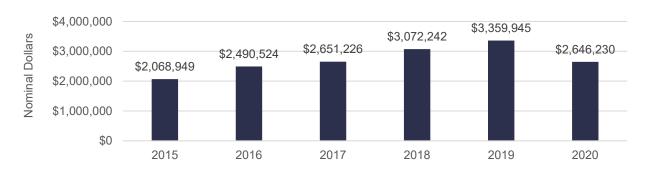


Figure 39: Petaluma Transient Occupancy Tax Revenues, 2015 to 2020

Source: City of Petaluma, 2021; Strategic Economics, 2021.

Figure 40: Petaluma Hotel Development Projects Under Construction, Approved, or Planned/Proposed, 2021

Property Name	Property	Status	Details	Hotel
	Address			Rooms
Petaluman Hotel	2 Petaluma	Planned/Proposed	Construction of a boutique	65
	Blvd. S		hotel	
Home 2 Suites	1205 Redwood	Planned/Proposed	85,802 sq. ft. hotel on a	140
	Way		vacant pad established by	
			the Redwood Technology	
			Center PUD.	

Petaluma Hotel Demand Estimate

Market and economic indicators suggest consistent long-term demand for additional hotel rooms in the Sonoma County market and Petaluma submarket area. Historical trends indicate that hotel development activity and growth rates in Sonoma County are generally consistent over longer periods of time, regardless of cyclical variations from year to year.

Given that the general economy and tourism activity are projected to continue growing in the coming decades in Sonoma County, the demand analysis assumes that the county will continue adding hotel rooms in the coming decades at a rate comparable to the pace of past inventory growth. It is important to note that future development activity may be especially limited in the next three to five years as tourism and business travel gradually recover from the COVID-19 pandemic. However, multiple economic cycles—and greater and lesser periods of development activity—will occur by 2050.

Two factors could potentially reduce the ability of Petaluma to attract the estimated growth in hotel demand. First, an unforeseen worsening of the COVID-19 pandemic would constrain hotel recovery for longer than anticipated. Second, increases in the inventory of vacation rental units—i.e., units listed on Airbnb, VRBO, etc.—would also compete for visitor stays and potentially slow hotel recovery.

The demand projections shown in Figure 41 estimate that Petaluma can potentially capture demand for approximately 244 and 383 additional hotel rooms by 2050. The estimates are based on continuation of historical long-term hotel room inventory growth Sonoma County. Scenario 2—the "high estimate" scenario—assumes that Petaluma captures 11 percent of growth in hotel rooms based on the city's share of existing inventory and recent development activity. The lower demand estimate applies a more conservative seven percent capture rate as a conservative scenario to account for the large share of overall demand that could be absorbed by just one or two hotel properties built in or outside of Petaluma.

Figure 41: Hotel Demand Estimate, Petaluma, 2050

Assumptions	
Average Annual Sonoma County Inventory Growth, 1980-2021 (Rooms)	116
Sonoma County Growth, 2020-2050	3,481
Hotel Demand Estimate, 2020-2050	
Scenario 1 (Low Estimate)	
Petaluma Capture of Sonoma County Projected Hotel Rooms	7%
Petaluma Total Room Growth, 2050	244
Scenario 2 (High Estimate)	
Petaluma Capture of Sonoma County Projected Hotel Rooms	11%
Petaluma Total Room Growth, 2050	383
Source: Strategic Economics, 2021.	

Conclusions: Hotel Market Conditions and Demand

- Petaluma is likely to attract long-term growth in hotel stays and demand for additional hotel rooms. Although the hotel industry is still recovering from the effects of the COVID-19 pandemic, Petaluma's primary drivers of hotel stays—tourists visiting wine country and business travelers with destinations in Petaluma and communities along Highway 101—are well-positioned for recovery and growth. Long-term hotel development trends in Petaluma and Sonoma County show consistent long-term growth rates in hotel rooms as the economy has expanded over time. Petaluma can potentially capture demand for approximately 244 and 383 additional hotel rooms by 2050.
- Two issues could potentially reduce Petaluma's ability to attract this growth in hotel demand. First, an unforeseen worsening of the COVID-19 pandemic would constrain hotel recovery for longer than anticipated. Second, increases in the inventory of vacation rental units—i.e., units listed on Airbnb, VRBO, etc.—would also compete for visitor stays and potentially slow hotel recovery.

Industrial Market Conditions and Demand

This section provides an overview of the market conditions for industrial space in Petaluma. The analysis was based on market and development activity data provided by the CoStar Group and interviews with local industrial real estate brokers. This section concludes with a range of estimates for future demand for industrial space in Petaluma. The primary competitive market area examined in this analysis consists of the communities of Petaluma and the communities of Rohnert Park, Cotati, and Novato.

Historic Context

Petaluma's historical and evolving economic strengths largely support robust demand for industrial space in the city. Food processing and production, related food and wine products, medical device manufacturing, and specialized technology R&D and production all create demand for manufacturing and flex space. These ongoing strengths also require distribution facilities to reach the region and Port of Oakland, while Petaluma's residential base also requires distribution facilities to access homes and businesses.

Industrial Supply and Performance

Petaluma contains a significant share of the market area's and Sonoma County's industrial space. In 2020, Petaluma contained approximately 6,700,000 square feet of industrial space, which accounted for about half of all industrial space in the market area and 19 percent of total industrial space in Sonoma County (Figure 42). Figure 43 shows that most industrial space in Petaluma consists of warehouse and distribution space (61 percent), with flex space as the next largest category (27 percent). The remaining share of industrial space consists of manufacturing uses (9 percent), and "Other" industrial property types (3 percent).

Most of Petaluma's industrial space is located within large commercial business parks. Industrial spaces are concentrated in business parks in the northern and southern Petaluma along Highway 101, such as Redwood Industrial park in the north and Oakmead Northbay Industrial Park along Lakeville Highway in the south. Southern Petaluma business parks contain the highest concentration of industrial space and the largest sized industrial spaces.

Since 2007, net absorption of industrial space has remained mostly positive, demonstrating a stable demand for industrial space. Figure 44 shows that net absorption in Petaluma and Sonoma County overall has remained consistent since 2007. Between 2007 and 2020 the average annual net absorption was 266,862 square feet in Sonoma County and 65,705 square feet in Petaluma.

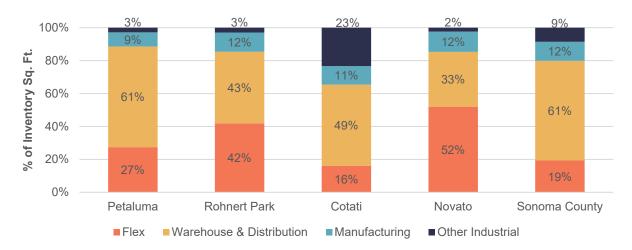
Rising rents and declining vacancies across the market area indicate increasing demand for industrial space. In the last decade, industrial rents increased in Petaluma, the market area, and Sonoma County (Figure 45). In Petaluma, rents rose by 45 percent during this period. Industrial vacancy also declined from 2010 to 2020, decreasing by 45 percent in Petaluma (Figure 46). Local industrial brokers interviewed for this report suggested that competition for industrial space is partially the result of constrained supply, with limited large developable parcels within the city's urban growth boundary, and Figure 47 shows that the total amount of industrial square footage in the market area has remained unchanged since 2010.

Figure 42: Industrial Inventory, Vacancy Rate, and Rents, Petaluma, Market Area Cities, Sonoma County, 2020

erage Monthly NNN Rent
\$1.19
\$1.10
\$1.44
\$1.52
N/A
\$1.18
_

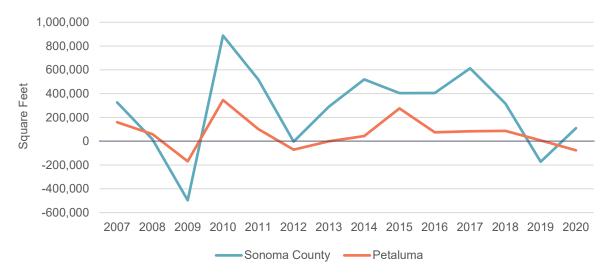
Source: CoStar, 2021; Strategic Economics, 2021.

Figure 43: Industrial Subcategories, Petaluma, Market Area Cities, Sonoma County, 2020



Note: Industrial subcategories are based on building characteristics, but actual uses and activities vary within any subcategory of

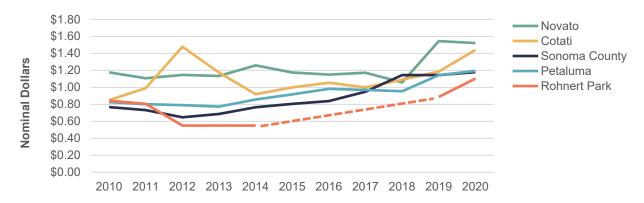
Figure 44: Annual Net Absorption of Industrial Space, Petaluma and Sonoma County, 2007 to 2020



Note: Between 2007 and 2020 the average annual net absorption was 266,862 square feet in Sonoma County and 65,705 square feet in Petaluma.

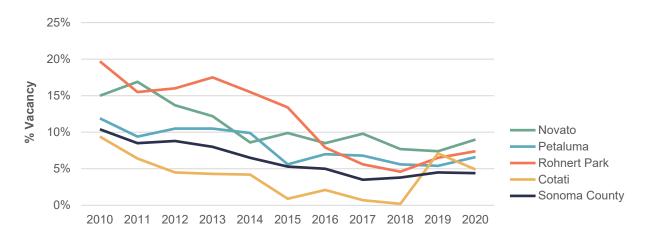
Source: CoStar, 2021; Strategic Economics, 2021.

Figure 45: Industrial Rent, Petaluma, Market Area Cities, Sonoma County, 2010 to 2020



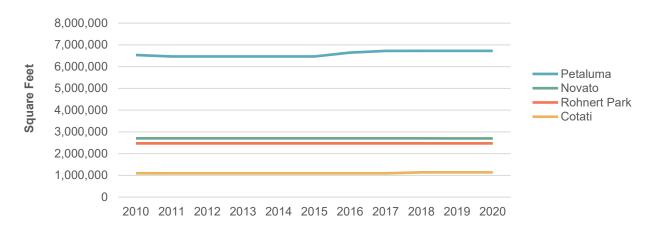
Note: Dashed line represents unavailable data. Rents are shown on a "triple-net" basis.

Figure 46: Industrial Vacancy Rates, Petaluma, Market Area Cities, Sonoma County, 2010 to 2020



Source: CoStar, 2021; Strategic Economics, 2021.

Figure 47: Industrial Supply Sq. Ft., Petaluma, Market Area Cities, Sonoma County, 2007 to 2020



Industrial Development Activity

A small number of industrial projects in Petaluma are planned or under construction. Local industrial brokers interviewed for this report indicated that new industrial projects are financially feasible to build in the city, but limited current development activity likely reflects constrained land supply and/or lack of large or well-located development opportunity sites. Brokers interviewed for this study noted that the typical industrial tenant in Petaluma occupies 15,000 to 25,000 square feet of space, and demand is also strong for 50,000 to 75,000 square foot spaces.

Figure 48: Industrial Development Projects Under Construction, Approved, or Planned/Proposed in Petaluma, Market Area Cities, Sonoma County, 2021

	Planned/Proposed		Approved		Under Construction	
	Sq. Ft.	Projects	Sq. Ft.	Projects	Sq. Ft.	Projects
Petaluma	85,517	3			40,000	1
Rohnert Park	44,600	3			69,431	1
Cotati	-	-	-	-	-	-
Novato	-	-	-	-	40,080	1
Total	130,117	6	-	-	149,511	3

Source: City of Petaluma, 2021; City of Rohnert Park, 2021; City of Cotati, 2021; City of Novato, 2021; CoStar, 2021; Strategic Economics, 2021.

Figure 49: Selected Petaluma Industrial Development Projects Under Construction, Approved, or Planned/Proposed, 2021

Property Name	Property	Status	Details	Industrial
	Address			Sq. Ft.
1 C St	1 C St	Planned/Proposed	13,517 sq. ft. of light	13,517
			manufacturing space	
BioMarin	1700 S	Under	R&D facility including two	40,000
	McDowell	Construction	buildings: 32,000 sq. ft. for	
	Blvd		research and office and	
			40,000 sq. ft. of warehouse	
			space on the vacant 5.89-	
			acre project site.	
Source: City of Per	taluma, 2021; Stra	tegic Economics, 202	1.	

Petaluma Industrial Demand Estimate

Figure 50 summarizes two scenarios of estimated growth in demand for industrial space that can potentially be captured in Petaluma by 2050. The demand estimates were calculated in two steps.

Methodology

The step of the estimate used ABAG/MTC's 2050 jobs projections to calculate growth in demand for industrial square footage in Sonoma County by 2050. ABAG/MTC estimates that Sonoma County will add a total of 30,000 new jobs between 2015 and 2050, an average annual increase of 857 jobs. At the time of this analysis, ABAG/MTC's projections were not segmented by industry sectors; in order to create an estimate of new industrial-based jobs, the current share of Sonoma County's industrial-based jobs was calculated as a share of the total projected job growth. In 2018, 17 percent of jobs in Sonoma County were in manufacturing, wholesale trade, and transportation and warehousing, and these jobs were assumed to be industrial-based. Therefore, 4,365 new industrial-based jobs were estimated to be added to Sonoma County between 2020 and 2050. To calculate the demand for additional square feet of industrial space in Sonoma County, an assumption of 500 square feet per new employee was used to create an industrial demand estimate of 2,182,688 square feet.

In the second part of the analysis, a high and low estimate of demand for industrial space in Petaluma was calculated based on Petaluma's potential share of Sonoma County's future industrial demand.

- Low Estimate Scenario: This scenario applied a local capture rate based on Petaluma's historical share of Sonoma County's net absorption of industrial space from 2007 to 2020. This approach assumed that Petaluma would continue to capture a similar rate of growth in demand for industrial space as in the 2007 to 2020 period. This would result in an average annual growth in local demand for industrial space in Petaluma of 17,914 square feet, or 537,410 square feet total from 2020 to 2050.
- High Estimate Scenario: This scenario applied a local capture rate based on an assumption that Petaluma's local capture of growth in demand for industrial space in Sonoma County would increase from approximately 25 percent during the 2007 to 2020 period to 30 percent. This more aggressive scenario recognizes the recent rapid growth of manufacturing and wholesale trade jobs in Petaluma compared to Sonoma County, and strong ongoing interest in industrial space in Petaluma generally. Scenario 2 results in an average annual growth in demand for industrial space in Petaluma of 21,827 square feet, or 654,807 square feet total from 2020 to 2050.

Results and Drivers of Future Industrial Demand

Petaluma could capture demand for between approximately 537,000 and 654,000 square feet of new industrial space. From 2020 to 2050, Petaluma could potentially capture demand for between 537,410 and 654,807 square feet of new industrial space. However, the city's ability to capture this demand will depend on the availability of development opportunity sites and land use policy decisions made by Petaluma and competing cities within the market area.

Competitive rents and access to workers have historically made Petaluma an attractive location for industrial-based firms relocating from Marin County. According to local industrial brokers interviewed for this report, Petaluma's industrial rents have historically been lower than areas in Marin

County, generating interest for companies to locate in Petaluma. Today, Petaluma's industrial rents remain on par with Sonoma County and are still lower than in Novato (Figure 46). Petaluma also historically served as a residential community for employees working in firms located in Marin County because housing prices were lower in Sonoma County than Marin County. However, increases in home prices and rents in the last decade in Petaluma and Sonoma County have now made these locations less affordable for workers, resulting in a reduction in the local workforce with the diverse variety of technical skills required for employers engaged in manufacturing and goods movement.

A major driver of demand for industrial space is from local food and beverage manufacturing and distribution firms. In both Petaluma and Sonoma County, food and beverage manufacturing and distribution are the primary drivers of demand for industrial space, followed by a diverse variety of hightech and life sciences-related manufacturing businesses. According to commercial brokers interviewed for this report, most of the demand for new industrial space comes from existing companies in Petaluma that are looking to expand. Warehousing and distribution space is also desirable in Petaluma due to the city's strategic location near the inner Bay Area and along Highway 101.

Figure 50: Industrial Demand Estimate, 2020 to 2050

Sonoma County Industrial Demand Estimate, 2020-2050	
Total Projected Job Growth in Sonoma County, 2015-2050	30,000
Average Annual Job Growth in Sonoma County, 2015-2050	857
Sq. Ft. per Industrial-based Job	500
Share of Sonoma County Industrial-based Jobs, 2018	17%
Projected New Industrial-based Jobs in Sonoma County, 2020-2050	4,365
Projected New Sq. Ft. Industrial in Sonoma County, 2020-2050	2,182,688
Petaluma Industrial Demand Estimate, 2020-2050	
Scenario 1 (Low Estimate)	
Petaluma Share of Average Net Absorption in Sonoma County 2007-	25%
2020	
Projected New Sq. Ft. in Petaluma, 2020-2050	537,410
Projected New Sq. Ft. in Petaluma per Year, 2020-2050	17,914
Scenario 2 (High Estimate)	
Petaluma Share of Average Net Absorption in Sonoma County 2007-	30%
2020	
Projected New Sq. Ft. in Petaluma, 2020-2050	654,807
Projected New Sq. Ft. in Petaluma per Year, 2020-2050	21,827
Source: Strategic Economics, 2021.	•

Conclusions: Industrial Market Conditions and Demand

- Demand for industrial space is high and likely to continue growing in Petaluma, driven by a combination of demand for flex spaces that combine R&D and production for technology industries; flex and manufacturing spaces for food- and beverage-related businesses and medical equipment production; and distribution facilities to support manufacturing businesses and distribution to local homes and businesses. Petaluma could potentially capture demand for between approximately 537,000 and 654,000 square feet of new industrial space by 2050.
- Petaluma continues to compete for businesses seeking industrial land on the basis of the community's location on Highway 101 (which provides access to a diverse workforce), to the larger Bay Area population, and to the Port of Oakland. However, new challenges are emerging for capturing future growth in demand: 1) costs for industrial space in Petaluma have increased to the point that the city is not necessarily a "value" destination within the county (though still less expensive than many Marin County communities), 2) rising housing costs in Petaluma and throughout Sonoma County could make it increasingly difficult for manufacturing employers to attract a diverse workforce, especially in middle-wage jobs that require technical training, 3) traffic congestion on Highway 101 could reduce the city's access to the larger Bay Area region and Port of Oakland, and 4) the supply of well-located and accessible development opportunity sites is decreasing as development occurs.

Office Market Conditions and Demand

This section provides an overview of office space market conditions in Petaluma. This analysis was based on market and development activity data provided by the CoStar Group and interviews with local commercial brokers. This section concludes with a range of estimates for future demand for office space in Petaluma. The primary competitive market area examined in this analysis consists of the communities of Petaluma and the communities of Rohnert Park, Cotati, and Novato.

Historic Context

Historically, the production of office space in Petaluma can be tied to several elements and shifts in the city's economy. The city has always included a subset of office space to accommodate professional services for local residents and businesses (such as accountants, attorneys, medical offices, banking offices, real estate, etc.); this space has grown throughout the city's history in response to changes in population growth, with much of this space concentrated in Downtown Petaluma. A separate and significant expansion of office space occurred in Petaluma's major business parks during the "Telecom Valley" era in which Petaluma accommodated a number of businesses related to data communications and networking during the first dot-com boom of the late-1990s. The decline of that industry in the 2000s left the city with a large supply of office space that has been slowly absorbed by a variety of businesses since. Meanwhile, the businesses headquartered in Petaluma have sought office space for their headquarters operations as required—a trend that holds true today, as described below.

Office Supply and Performance

Petaluma's office inventory accounts for a significant share of the market area's total supply of office space. Figure 51 shows that Petaluma has approximately 2.37 million square feet of office space, which represents 34 percent of the market area.

Office space is mostly concentrated in Petaluma's northern business parks and downtown.

Petaluma's northern businesses parks contain the largest amount of the city's office space, with the largest quantity of space in Redwood Business Park. Much of the office space in the north was built in the mid to late 1990s during the rise of the telecom industry in southern Sonoma County, including in Petaluma. The main type of office users in Downtown include finance, insurance, and real estate (FIRE) businesses and other professional services (e.g. engineering, consulting) that typically require small increments of office space and primarily serve local businesses, residents, and institutions. A small concentration of office space is located in Petaluma's southern business parks.

The market area's office inventory has remained flat in the last decade Figure 52 shows that from 2010 to 2020 there has been little office space inventory growth in the market area, including Petaluma. Commercial brokers interviewed for this report noted that office demand has remained flat in the last ten years as Petaluma overcame a high vacancy rate caused by overbuilding of office space during the "Telecom Valley" era of the early 2000s. Commercial brokers noted that today most prospective office tenants are smaller professional businesses typically seeking relatively small increments of space.

Petaluma has the second-highest office rents in the market area, and rents have increased slightly since 2010. Office rents in Petaluma average \$2.03 per square foot (Figure 51 and Figure 53). Rental rates for office space are typically highest in the southern portion of the market area—including Novato—but gradually decline northward along the Highway 101 corridor as distance from the central Bay Area grows. From 2010 to 2020 office rents have also increased at a faster pace in cities further south; rents increased by nine percent in Rohnert Park, 13 percent in Petaluma, and 25 percent in Novato.

The overall office vacancy rate has declined in Petaluma but has been more volatile across the market area than other market indicators. The vacancy rate is currently high in Novato due to a loss of a large tenant, the Fireman's Fund, in 2015 after Allianz acquired the company, reduced the staff, and relocated to Petaluma. The 700,000 square foot building has remained vacant since the Fireman's Fund's departure but was purchased in early 2021 with potential plans to convert the site for housing and retail uses.11

Net absorption has remained mostly positive in Petaluma and Sonoma County since 2007. Between 2007 and 2020 the average annual net absorption was 56,110 square feet in Sonoma County and 19,361 square feet in Petaluma.

Figure 51: Office Inventory, Vacancy Rate, and Rents, Petaluma, Market Area Cities, Sonoma County, 2020

	Rentable Building Area (Sq Ft)	Vacancy Rate	Average Monthly Gross Rent
Petaluma	2,368,510	11.0%	\$2.03
Rohnert Park	951,710	13.1%	\$1.66
Cotati	95,432	3.7%	N/A
Novato	3,485,269	32.1%	\$2.60
Total Market Area	6,900,921	N/A	N/A
Sonoma County	16,854,257	7.3%	\$1.94
Source: CoStar, 2021	; Strategic Economics, 20)21.	

¹¹ https://www.northbaybusinessjournal.com/article/industrynews/new-owners-of-former-firemans-fund-office-campus-eye-63-acrenovato-site-f/



Figure 52: Office Supply Sq. Ft., Petaluma, Market Area Cities, Sonoma County, 2010 to 2020

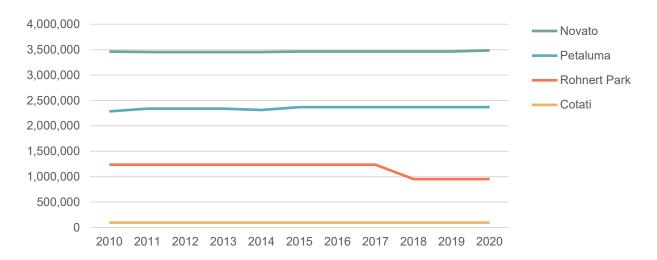
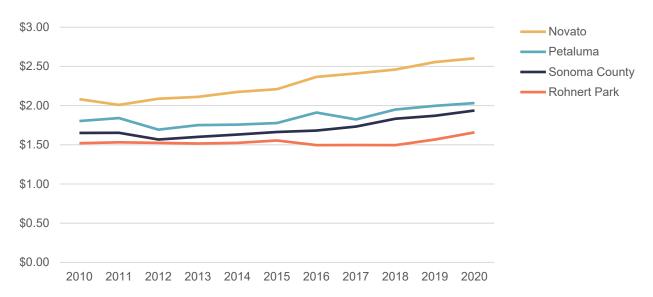
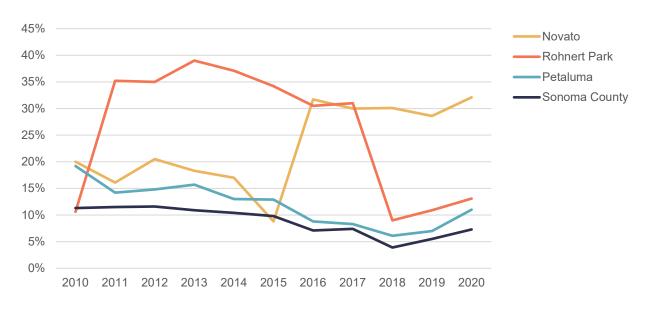


Figure 53: Gross Office Rents per Square Foot, Petaluma, Market Area Cities, Sonoma County, 2007 to 2020



Source: CoStar, 2021; Strategic Economics, 2021.

Figure 54: Vacancy Rates, Petaluma, Market Area Cities, Sonoma County, 2007 to 2020



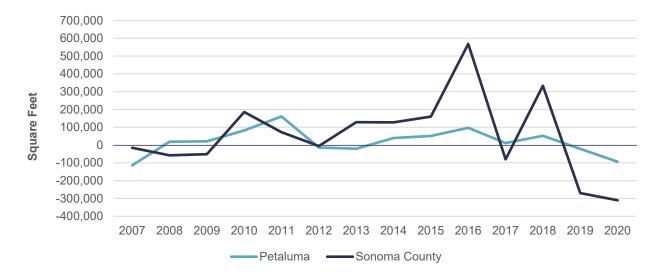


Figure 55: Office Annual Net Absorption, Petaluma, 2007 to 2020

Note: Between 2007 and 2020 the average annual net absorption was 56,110 square feet in Sonoma County and 19,361 square feet in Petaluma.

Source: CoStar, 2021; Strategic Economics, 2021.

Office Development Activity

Despite limited growth in rents and occupancy rates, a relatively large amount of office space is currently planned or under construction in Petaluma. Figure 56 shows that 96,000 square feet of office space is currently under construction in Petaluma, and approximately 196,000 square feet is in the early stages of planning. From 2010 to 2020, Petaluma added approximately 83,300 square feet of office, and therefore the amount of office space under construction alone would represent a larger increase in office space than the net gain of office space in the last decade (Figure 52).

The majority of new office development projects in Petaluma are being built-to-suit for employers in or near Petaluma. Figure 57 lists major office development projects in Petaluma; most of these projects are not being built on a speculative basis, but instead are already pre-leased to major tenants already located in or near Petaluma. For example, 32,000 square feet of mixed office and R&D space are being built to accommodate a new facility for BioMarin, which is located in Novato.

Figure 56: Office Recent, Planned/Approved, and Under Construction, Petaluma, **Market Area Cities, Sonoma County, 2021**

	Planned/Proposed		Approved		Under Construction	
	Sq. Ft.	Projects	Sq. Ft. Project		Sq. Ft.	Projects
Petaluma	196,378	2	-	-	96,000	3
Rohnert Park	-	-	-		130,000	1
Cotati	-	-	131,116	1	-	-
Novato	82,388	2	=	-	-	-
Total	278,766	4	131,116	1	226,000	4

Source: City of Petaluma, 2021; City of Rohnert Park, 2021; City of Cotati, 2021; City of Novato, 2021; CoStar, 2021; Strategic Economics, 2021.

Figure 57: Selected Petaluma Office Development Projects Under Construction, Approved, or Planned/Proposed, Petaluma, 2021

Property Name	Property	Project	Details Office	
	Address	Status		Ft.
1395 N. McDowell	1395 N.	Planned/	New 6,378 sq. ft. 4-unit	6,378
Boulevard SPAR	McDowell	Proposed	commercial building on a	
	Blvd.		vacant building pad	
			established by the Redwood	
			Technology Center PUD.	
Scannell Mixed-Use	500 Lakeville	Planned/	A 39 acre site with a mix of	190,000
Development	Street and 500	Proposed	commercial office and	
	Hopper Street		residential uses: 190,000 sq.	
			ft. of commercial office use	
			and 275 residential units.	
Petaluma Poultry	2700 Lakeville	Under	Addition of office space,	4,000
Expansion	Hwy.	Construction	parking, and site design	
			modifications.	
BioMarin	1700 S	Under	Commercial research and	32,000
	McDowell Blvd	Construction	development facility including	
			two buildings, approx. 32,000	
			sq. ft. for research and office	
			and 40,000 sq. ft. of	
			warehouse space on the	
			vacant 5.89-	
			acre project site.	
Source: City of Petalu	ma, 2021; Strategi	c Economics, 2021	l.	

Petaluma Office Demand Estimate

Methodology

Figure 58 summarizes two scenarios of estimated growth in demand for industrial space in Petaluma by 2050, which were calculated in two parts.

The first part of the analysis used ABAG/MTC's 2050 jobs projections to calculate the demand for office square footage in Sonoma County by 2050. ABAG/MTC estimates that Sonoma County will add a total of 30,000 new jobs between 2015 and 2050, an average annual increase of 857 jobs. At the time of this analysis, ABAG/MTC's projections were not segmented by industry sectors; in order to create an estimate of new industrial-based jobs, the current share of Sonoma County's industrial-based jobs was calculated as a share of the total projected job growth. In 2018, 11.5 percent of jobs in Sonoma County were in the industry sectors of information, finance and insurance, real estate and rental and leasing, professional, scientific, and technical services, and management of companies and enterprises; the analysis assumed these jobs are primarily office-based. Therefore, 3,465 new office-based jobs were estimated to be added to Sonoma County between 2020 and 2050. To calculate the demand for additional square feet of office space in Sonoma County, an assumption of 250 square feet per new employee was used to create an office demand estimate of 866,194 square feet.

In the second part of the analysis, a high and low estimate of demand for office space in Petaluma was calculated based on Petaluma's potential share of Sonoma County's future office demand.

- Low Estimate Scenario: This scenario applied a 35 percent local capture rate of new Sonoma County demand based on Petaluma's historical share of Sonoma County's net absorption of office space from 2007 to 2020. This approach assumes that Petaluma continues to capture a similar rate of growth as it has in that period. This would result in an average annual growth in demand of 9,963 square feet, or 298,890 square feet total from 2020 to 2050.
- High Estimate Scenario: This scenario applied a 40 percent capture rate based on Petaluma's increasing volume of planned and proposed office development activity in recent years. This would result in an average annual growth in demand of 11,644 square feet, or 349,308 square feet total from 2020 to 2050.

Results and Drivers of Future Office Demand

From 2020 to 2050, Petaluma could potentially capture demand for between approximately 299,000 and 349,000 square feet of new office space. While office has performance has been relatively weak in the last decade, office-based employment has also increased and more recently there has been a significant amount of new office space under construction, planned, and proposed in Petaluma.

Demand for additional office space in Petaluma is likely to continue being driven primarily by existing large employers in and near the city. As described previously, most new office development in Petaluma is being driven by build-to-suit projects for existing large employers. Meanwhile, according to commercial brokers, demand for smaller increments of office space in Petaluma is mostly driven by smaller professional office tenants in the city's downtown.

Opportunities may expand over time to attract new office tenants based on the presence of the Downtown Petaluma SMART station, increasing traffic congestion to major Bay Area employment centers, and changes resulting from remote work. Petaluma and other market area cities form a secondary office market within the Bay Area, especially compared to major employment centers like Downtown San Francisco. However, the city now has a new asset in the SMART station, which allows a congestion-free commute. Petaluma could potentially attract additional office demand by leveraging SMART accessibility, while also taking advantage of ongoing traffic congestion challenges in reaching other employment centers via Highway 101.

A longer-term expansion of remote work could both constrain office growth and lead to new opportunities. The COVID-19 pandemic significantly expanded use of remote work by employers and employees. More workers will return to physical offices as the pandemic recedes, but it appears likely that a higher share of workers will continue to work remotely some or all of the time compared to prepandemic conditions. The impacts of remote work are difficult to predict. If workers come into offices less frequently, then employers may shift to using shared workspaces and therefore reduce their demand for space per employee. Alternatively, employee preferences for extra space to avoid transmission of disease could lead to an increase in space per employee. Office demand could also potentially increase in Petaluma if major Bay Area employers establish satellite offices outside the central Bay Area, or if employees work from co-working spaces.

Figure 58: Office Demand Estimate, 2020-2050

Sonoma County Office Demand Estimate, 2020-2050	
· · · · · · · · · · · · · · · · · · ·	00.000
Total Project Job Growth in Sonoma County, 2050	30,000
Average Annual Job Growth	857
Sq. Ft. per Industrial-based Job	250
Share of Sonoma County Office-based Jobs, 2018	11.5%
Projected New Office-based Jobs in Sonoma County, 2020-2050	3,465
Projected New Sq. Ft. Office in Sonoma County, 2020-2050	866,194
Petaluma Office Demand Estimate, 2020-2050	
Scenario 1 (Low Estimate)	
Petaluma Share of Average Net Absorption 2007-2020	35%
Projected New Sq. Ft. in Petaluma, 2020-2050	298,890
Projected New Sq. Ft. in Petaluma Annually	9,963
Scenario 2 (High Estimate)	
Petaluma Share of Average Net Absorption 2007-2020	40%
Projected New Sq. Ft. in Petaluma, 2020-2050	349,308
Projected New Sq. Ft. in Petaluma Annually	11,644
Source: Strategic Economics, 2021.	ı

Conclusions: Office Market Conditions and Demand

The Petaluma office market can anticipate modest ongoing growth in demand, driven by expansion and relocation needs by larger employers in the market area, and by gradual

increases in demand driven by smaller medical and professional service businesses that serve the city's residents and businesses.

- While demand for office space in Petaluma has historically been weaker compared to industrial space—with the exception of the "Telecom Valley" era of the late-1990s to 2000s—the presence of the Downtown Petaluma SMART station and potential addition of a second SMART station could potentially generate additional interest from employers and developers. From 2020 to 2050, Petaluma could potentially capture demand for between approximately 299,000 and 349,000 square feet of new office space.
- A longer-term expansion of remote work in the post-COVID-19 era could both constrain office growth and lead to new opportunities. More workers will return to physical offices as the pandemic recedes, but it appears likely that a higher share of workers will continue to work remotely some or all of the time compared to pre-pandemic conditions. If workers come into offices less frequently, then employers may shift to using shared workspaces and therefore reduce their demand for space per employee. Alternatively, employee preferences for extra space to avoid transmission of disease could lead to an increase in space per employee. Office demand could also potentially increase in Petaluma if major Bay Area employers establish satellite offices outside the central Bay Area, or if employees work from co-working spaces.

Retail Market

This section describes current trends and conditions in the Petaluma retail market. It provides an overview of national trends affecting retail, information on Petaluma's retail supply and performance, the competitive trade areas within which Petaluma's Downtown and retail centers compete for customers. The findings also include a review of taxable sales performance based on data from the California Department of Tax and Fee Administration. This section concludes with demand estimates for growth in additional retail space by 2050.

The retail findings primarily compare Petaluma against a retail trade area consisting of the communities of Petaluma, Rohnert Park, Cotati, and Novato. This trade area recognizes that Petaluma's retail mix serves shoppers from these communities, but the city also features few centers and tenants that serve a large regional trade area, such as Santa Rosa's two malls. However, it is important to recognize that each shopping center and destination within Petaluma also has its own specific trade area—i.e., the area within which the shopping center primarily attracts its customers.

Historic Context

Petaluma's current mix of retail formats and locations—described in detail in this section—can largely be understood as representing two historic phases of the industry. Downtown Petaluma represents the preautomobile era in which pedestrian access was critical and "megastores" did not exist. In contrast, the shopping centers and freestanding retail buildings constructed from the mid-20th century onward in Petaluma (especially east of Highway 101) represent an automobile-oriented era of design in which retail uses are centralized and isolated from low-density, largely single-family home housing developments. These shopping centers form a hierarchy based on frequency of need, with grocery store-anchored centers located closer to homes and serving day-to-day needs, versus larger centers for occasional needs, with "big box" or department store anchors. However, the retail industry is now transforming in response to the rise of e-commerce, as described below, and communities are increasingly recognizing the traffic congestion, environmental, and equity challenges created by placement of retail such that automobile trips are required to access even the most basic goods and services.

National Retail Trends

Demand for retail spaces in Petaluma is affected by broader shifts in the global retail industry. Americans continue to shop, but where and how they shop have impacts on the performance and location of existing and future brick-and-mortar businesses. Major trends that affect the demand for new retail space include both the long-term effects of the rise in e-commerce, and the shorter-term but significant effects of the COVID-19 pandemic.

Nationally, the retail industry is growing and reorganizing in response to the rise of e-commerce. In 2020¹², consumer expenditures in the U.S. hit an all-time high, but virtually all of this growth in expenditures occurred from online sales rather than at brick-and-mortar stores. This transition is reducing the demand for products sold in physical stores, particularly in large-format retail stores and malls and thus for retail space overall. In contrast to traditional retailers, "experiential" businesses (such as eating and drinking establishments, gyms, and interactive retail concepts) are adding demand for retail space. Additionally, store categories that fulfill non-discretionary, daily household needs, such as grocery stores

¹² https://www.oberlo.com/statistics/us-retail-sales

and general merchandise stores, continue to perform well and to date have not been dramatically disrupted by changing consumer spending habits.

In response to changing consumer purchasing habits, several major national retailers that anchor retail space in malls, such as Sears, have declared bankruptcy or are rapidly closing stores. Many of the nation's malls are coping with empty anchor tenant spaces by repurposing them for experiential uses, such as entertainment, or are redeveloping some of their space as housing and hotel uses.

The COVID-19 pandemic has impacted retail and restaurant sales across the country, although the full and lasting impacts are still unknown. However, long-term impacts from COVID-19 likely include an acceleration of the shift to online sales and acceleration of the corresponding shift towards experiential tenants.

Citywide Retail Supply and Performance **Overview**

Petaluma has a large inventory of retail space relative to the city's overall retail trade area. Figure 59 shows that Petaluma has approximately 4.1 million square feet of retail space, a relatively large amount compared to the city's neighboring cities. Figure 60 also shows that Petaluma added a significant amount of retail in the last decade. Since 2010, Petaluma added around 570,000 square feet of retail, most of which can be attributed to the development of two large commercial centers, East Washington Place and Deer Creek Village.

Taxable sales per household in Petaluma are relatively high, indicating capture of sales from visitors and residents from outside the city. Figure 61 shows that in 2015 and 2018, Petaluma's total taxable sales per household were higher than Sonoma County's total taxable sales per household. 13 Petaluma's outsized capture of spending is likely attributable to visitors, non-resident workers, and residents of the surrounding trade area that shop and dine in Petaluma.

Retail space in Petaluma performs well overall. Vacancy rates for retail in Petaluma are low relative to the trade area cities and comparable to Sonoma County (Figure 59). Overall retail rents were highest in Petaluma compared to the trade area cites and the County, although retail rents typically vary based on specific location and storefront size.

Automobile dealers, restaurants, and bars perform particularly well in Petaluma. As shown in Figure 62, sales at businesses in the categories of "motor vehicle and parts" and "food services and drinking places" represent the largest shares of the city's taxable sales per household. Additionally, Figure 63 shows that sales in these categories were higher per household in the city compared to Sonoma County; this comparison to the county is a useful gauge of categories in which Petaluma is attracting a "surplus" of sales from outside the city, or is experiencing "leakage" of sales to other communities. Along Highway 101 in the northern section of the city, Petaluma has a concentration of automobile dealers that competes against an auto row in Santa Rosa. Petaluma also has a collection of restaurants serving residents and visitors.

¹³ Taxable transactions data are only shown through 2018 due to changes in data reporting protocols by the California Department of Tax and Fee Administration (CDTFA) that began in 2019.

Petaluma residents are likely to shop outside the city for certain goods and services. While Petaluma has higher taxable sales per household than Sonoma County overall, the city has relatively low sales per household in "building materials and garden equipment and supplies dealers," "general merchandise stores," "home furnishing and appliance stores," and "other retail" (Figure 63). This indicates that Petaluma residents may be shopping outside the city for goods and services within these categories and that there may be potential opportunities to capture additional spending in these categories.

Figure 59: Retail Inventory, Vacancy Rate, and Rents, Petaluma, Market Area Cities, Sonoma County, 2020

	Rentable Building Area	Vacancy Rate	Average Monthly
	(Sq. Ft.)		NNN Rent
Petaluma	4,131,752	4.2%	\$1.87
Rohnert Park	2,633,569	5.7%	\$1.45
Cotati	622,368	5.8%	\$1.67
Novato	2,511,970	2.5%	\$1.57
Total Neighboring Cities (including Petaluma)	9,899,659	N/A	N/A
Sonoma County	24,641,299	3.7%	\$1.65
CoStar, 2021; Strategic Economics,	2021.		

Figure 60: Retail Supply Sq. Ft., Petaluma, Market Area Cities, Sonoma County, 2007 to 2020

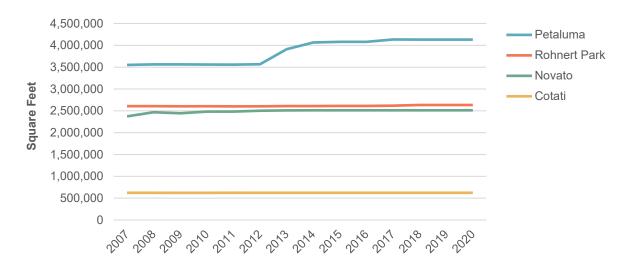
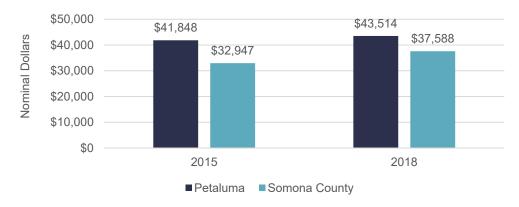


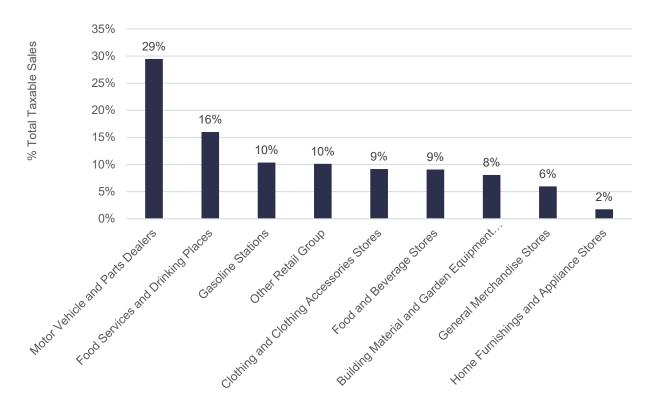
Figure 61: Taxable Transactions per Household in Petaluma and Sonoma County, 2015 and 2018



Note: Taxable transactions data are only shown through 2018 due to changes in data reporting protocols by the California Department of Tax and Fee Administration (CDTFA) that began in 2019.

Sources: American Community Survey 5-Year Estimates; California Department of Tax and Fee Administration 2021; Strategic Economics, 2021.

Figure 62: Retail and Food Services Taxable Sales, Petaluma, 2019



Sources: California Department of Tax and Fee Administration 2021; Strategic Economics, 2021.

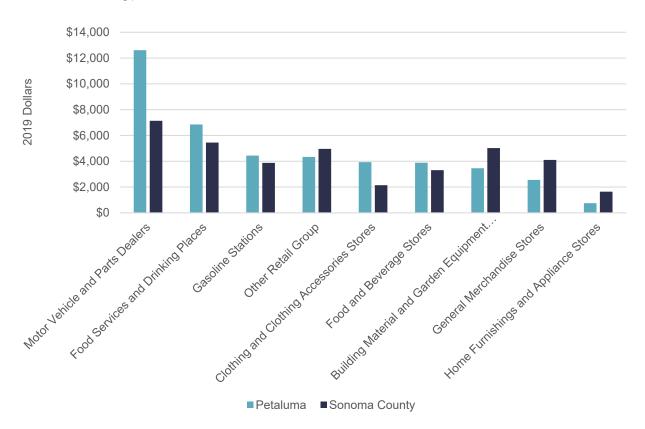


Figure 63: Retail and Food Services Taxable Sales per Household, Petaluma and Sonoma County, 2019

Sources: California Department of Tax and Fee Administration 2021; Strategic Economics, 2021.

Shopping Centers and Destinations

Petaluma's retail supply can be further differentiated by development or product type. The city's older retail spaces tend to be either in the downtown or in small strip centers along major arterial streets. This retail product type is typically classified as "general commercial" space and typically produces a very low share of a community's overall retail sales, despite other contributions to the community's character and reputation. The more significant retail development types—from a taxable sales and size perspective include a range of shopping center formats that vary by size, tenant mix, and trade area size. Petaluma contains or is located close to multiple large shopping centers which draw customers from the city's local trade area or from a larger regional trade area. The city also contains several local serving retail centers that primarily serve residents; these include community centers, neighborhood centers, and strip or convenience centers. Figure 64 describes typical characteristics of shopping centers by category. The map in Figure 65 shows the locations of major regional shopping centers by location, and Figure 66 shows the location of local retail centers and general retail space in Petaluma.

Petaluma contains two large, regional serving shopping centers, one of which is integrated with Downtown Petaluma. As shown in Figure 65, Petaluma contains an outlet center and a lifestyle center. The Petaluma Village Premium Outlets is the only outlet center in the local region. Petaluma Village, like other outlet centers, sells discounted brand name goods and attracts shoppers from far distances.

Petaluma Village contains large brands such as Adidas, Nike, Brooks Brothers, Levi's, and Vans. Petaluma's Theatre District, in Downtown Petaluma, is classified as a lifestyle center because of its openair walkable design, although its actual retail tenant mix essentially makes the area function as an extension of the overall Downtown Petaluma retail destination.

There are several regional malls to the north and south of Petaluma that serve Petaluma residents; this proximity makes it unlikely that Petaluma could attract similar tenants that serve a comparably large regional trade area. Santa Rosa contains the Coddingtown Mall and Santa Rosa Plaza, both of which are indoor malls with large anchor tenants, such as Macy's, and are located near Highway 101 (Figure 65). The Coddingtown Mall contains several large tenants, including a brewhouse, JC Penney, Target, and a newer Whole Foods. Santa Rosa Plaza has a variety of apparel tenants as well as brands like Apple and Disney. To the south of Petaluma, Corte Madera contains two malls, the Town Center Corte Madera and the Village at Corte Madera, which are outdoor malls and are located adjacent to each other. Town Center Corte Madera contains a Barnes and Noble Booksellers, Crate & Barrel, and an REI, and The Village at Corte Madera contains a Nordstrom, Macy's, Apple, Iululemon athletica, and large restaurants like The Cheesecake Factory. Additionally, the Northgate Mall is located in San Rafael, although this mall is planned to be redeveloped into housing.

Most of Petaluma's local retail is located along Highway 101 or in Downtown. Figure 66 shows that Petaluma contains six community centers along Highway 101, and several neighborhood centers Downtown. Most of Petaluma's general retail, which includes businesses not located within retail centers, is concentrated in the city's Downtown. Petaluma's Downtown contains many amenities such as walkable streets, access to the Petaluma River, integration with the Theatre District, proximity to a SMART train station, a mix of restaurants, nightlife establishments, small-scale retail, and resident-serving professional service businesses.

Figure 64: Standard Shopping Center Categories and Characteristics

Type of Shopping Center	Typical Size (sq. ft.)	Acres	Typical Anchors	Trade Area Size/ Drive-time	Examples
Regional and Super Regional Malls	400,000 to 800,000	40 to 100	General merchandise or fashion-oriented anchors may include department stores, mass merchants, and/or fashion apparel	5-15 miles/ 15-20 minutes	Coddingtown Mall; The Village at Corte Madera
Lifestyle Centers	150,000 to 500,000	10 to 40	Large format upscale specialty stores	8-12 miles/ 15-20 minutes	Montgomery Village; Theatre District
Power Centers	250,000 to 600,000	25 to 80	Category-dominant anchors, often in more than one freestanding structure, with only a few small tenants	5-10 miles/ 15-20 minutes	Santa Rosa Marketplace; The Vintage Oaks at Novato
Outlet Centers	50,000 to 400,000	10 to 50	Manufacturers' and retailers' outlet stores selling brand name goods at a discount	25 to 75 miles	Petaluma Village Premium Outlets
Community Center	125,000 to 400,000	10 to 40	General merchandise or convenience-oriented anchors may include discount stores, grocery stores, drug stores, and/or large specialty stores (home improvement/ furnishings, sporting goods, etc.)	3-6 miles/ 10-15 minutes	East Washington Place; Petaluma Plaza South
Neighborhood Center	30,000 to 125,000	3 to 5	Convenience-oriented, typically anchored by a grocery and/or drug store	3 miles/ 5-10 minutes	Leghorn Marketplace; River Plaza
Strip or Convenience Center	Less than 30,000	Less than 3	Unanchored, or anchored by a small convenience store (e.g. 7-Eleven)	<1 mile/ < 5 minutes	Petaluma Town Plaza; Lakeville Square

101 Coddingtown Mall Montgomery Village Santa Rosa Plaza Santa Rosa Santa Rosa Marketplace Ronert Park Target Center 5 miles Cotati Napa Petaluma` Sonoma Petaluma Village Theatre Dist Cornerstone Sonoma [101] Vallejo Vintage Oaks Novato at Novato Northgate Mall San Rafael The Village at Corte Madera The Marketplace Corte Madera Town Center Corte Madera [101] Miles San Francisco Retail Type Rentable Building Area Sq. Ft. 1,500 - 150,000 City Limit Power Center 0 150,001 - 200,000 Lifestyle Center Outlet Center 200,001 - 500,000 Regional Mall Greater than 500,000

Figure 65: Regional Retail Centers Near Petaluma, 2021

Skillman Ln 0 0.25 0.5 Legend Retail Type Rentable Building Area Sq. Ft. 0 186 - 5,000 General Retail City Limit + Railway 5,001 - 20,000 Urban Growth Boundary / Sphere of Influence Strip Center 20,001 - 60,000 Major Streets Neighborhood Center Lifestyle Center Parks / Open Space 60,001 - 200,000 Community Center **Outlet Center** 200,001 - 500,000

Figure 66: Shopping Centers and General Retail Locations in Petaluma, 2021

Retail Development Activity

A few small increments of retail space are currently planned to be built in Petaluma, consisting primarily of retail spaces in mixed use projects or small stand-alone uses. Figure 67 shows that there are five development projects with a total of approximately 45,000 square feet of retail currently planned to be built in Petaluma. Should all the retail space be completed, it would represent only about a one percent increase in the city's total retail space. The planned projects include two mixed-use projects, two wine tasting rooms, and one standalone retail development. The listed square feet for the Adobe Road Winery includes the production facility, and the actual tasting room square footage will be a portion of the total 15,848 square feet.

Figure 67: Recent, Planned/Approved, and Under Construction Retail, Petaluma, 2021

Property	Property	Status	Details	Retail
Name	Address			Sq. Ft.
Haystack	215 Weller	Approved	178 new residential units with	14,516
Pacifica	Street		14,516 sq. ft. of commercial at	
			corners.	
Brooks Note	426	Approved	The project proposes a winery	7,000
Winery	Petaluma		production facility with an ancillary	
	Blvd		tasting room and events. The	
			project will utilize the existing	
			structure at 426 Petaluma	
			Boulevard North, with some exterior	
			modifications to the facades. The	
			proposed production facility will be	
			approximately 4700 sq ft and	
			tasting room will be 2300 square feet.	
Folov	131 Liberty	Planned/Proposed	1,500 sq. ft. commercial and 10	1,500
Foley- Omahony	Street	Planned/Proposed	residential units	1,500
Mixed Use	Sileet		residential diffis	
Building				
Adobe Road	1 C Street	Planned/Proposed	New construction of a two-story	15,848
Winery	100000	Tidililed/Troposed	15,848 square foot building	10,040
Viniony			containing a winery, tasting room,	
			private event space, and a	
			motorsports gallery, collectively	
			operated as the Adobe Road	
			Winery.	
5128 Old	5128 Old	Planned/Proposed	Retail building subdivided into four	6,380
Redwood Hwy	Redwood		tenant spaces.	
	Hwy			
Source: City of P	Petaluma, 2021; S	trategic Economics, 2	021.	

Petaluma Retail Demand Estimate

This section describes estimated demand for new retail space in Petaluma through 2050. The retail demand analysis assumed that spending associated with new households and workers in Petaluma will be the primary driver of future demand for additional retail space in the city. This is a conservative approach since Petaluma's existing retail mix also serves as a shopping destination within the city's existing trade area and attracts tourists and visitors who contribute to overall retail spending in the city. To estimate future spending by new households and workers, the demand model relied on the previous estimates made for future housing units and office and industrial space by 2050. For this reason, estimates for retail demand are illustrative examples of possible demand for retail space if the city successfully captures the full potential demand for growth in housing, office, and industrial space.

Each Household in Petaluma generates demand for approximately 25 square feet of retail space in the city. Figure 68 shows that the average household in Petaluma spends about \$23,430 on retail goods and services each year, and of this total \$12,014 is spent within Petaluma. This local capture of spending per Petaluma household translates to 24.6 square feet of retail demand per household.

Significant new retail space is unlikely to be built until spending from additional 2,580 new households is added to Petaluma. Figure 69 shows that in 2010 there was about 164 square feet of retail per household in Petaluma. In 2019, this number increased to 182 square feet of retail per household as a result of a large addition of retail space since 2010 (Figure 60). Should Petaluma add 2,576 new households, the square feet of retail space per household would return to 2010 levels, and these new households would generate approximately \$30,952,635 total additional spending each year. This adjustment is especially critical given that less retail space per household will be required over time as more sales occur online.

Each worker employed in Petaluma generates demand for approximately 5 square feet of retail space in the city. Figure 70 shows that each worker in Petaluma spends approximately \$3,337 in Petaluma each year, and this spending translates to 4.8 square feet of retail space demand.

By 2050, there could be demand for between 84,500 and 108,500 square feet of new retail. As an illustrative example, if Petaluma were to capture all new demand for housing units, office space, and industrial space previously described in this report, then new households and workers would generate between approximately 84,512 and 108,522 square feet of demand for additional retail space by 2050.

The retail demand estimates take into consideration the long-term trends in consumer shopping habits discussed in the "National Retail Trends" section and reflected in recent changes within the Petaluma retail landscape. Given that Americans are increasingly spending money at grocery stores and on experiential retail while increasingly purchasing hard and soft goods online, the demand estimates focus on the categories of retail that are best positioned to grow over time, including grocery stores and eating and drinking establishments.

Figure 68: Annual Household Spending Estimate, Petaluma, 2021

Resident-Serving Categories of Retail	Spending per Petaluma Household	Capture Rate	Local Capture of Spending per Petaluma Household	Estimated Sales per Sq. Ft.	Demand Estimate (Sq. Ft. of Retail per Household)
Groceries	\$7,216.19	75%	\$5,412.14	\$600	9.0
Restaurants	\$5,085.43	60%	\$3,051.26	\$350	8.7
Alcoholic Beverages	\$887.18	60%	\$532.31	\$500	1.1
Smoking Products	\$424.76	60%	\$254.86	\$500	0.5
Drugstores	\$2,231.20	75%	\$1,673.40	\$650	2.6
Pets	\$930.03	25%	\$232.51	\$250	0.9
Apparel and Services	\$2,882.42	10%	\$288.24	\$400	0.7
Computer, TV/Audio	\$487.41	5%	\$24.37	\$1,000	0.0
Education and Other	\$748.19	5%	\$37.41	\$200	0.2
Entertainment					
Home Furnishings and	\$2,537.45	20%	\$507.49	\$600	0.8
Equipment					
Total	\$23,430.26		\$12,013.98		24.6

Note: see Figure 73, Appendix A for a detailed breakdown of retail categories breakdown.

Source: Retail Goods and Services Expenditures, ESRI, 2021; HdL ECONSolutions, 2019; Strategic Economics, 2021.

Figure 69: New Households Needed to Reach 2010 Retail Sq. Ft. per Household Ratio

	2010	2019	Households to Reach Retail Sq. Ft. per Household Ratio
Households	21,737	22,655	25,231
Retail Square Feet	3,559,531	4,131,752	4,131,752
Retail Square Feet per Household	164	182	164
Total Retail Spending from Households	\$261,147,970	\$272,176,808	\$303,129,443

Note: This calculation step is used to account for sales absorption by recently-built space in order to avoid overestimating square feet of retail space per household in the future.

Source: US Census 2010; American Community Survey 5-year Est., 2019; CoStar, 2021; Strategic Economics, 2021.

Figure 70: Annual Worker Spending Estimate, Petaluma, 2021

Worker-Serving Retail Categories	Weekly Per Capita Spending (2012 \$)	% Spending Captured in Petaluma	Weekly Per Capita Spending (2021\$)	Annual Per Capita Spending (2021\$)	Estimate d Sales per Sq. Ft.	Demand Estimate (Sq. Ft. of Retail per worker)
Food & Beverage	\$21.58	100%	\$24.82	\$1,241	\$600	2.1
Stores						
Eating and	\$28.86	100%	\$33.19	\$1,659	\$425	3.9
Drinking Places						
Drug Stores	\$7.60	100%	\$8.74	\$437	\$500	0.9
Total	\$58.04		\$66.75	\$3,337		4.8

Notes: Retail categories used for worker and household demand estimates vary slightly because research on worker and household spending patterns are derived from different sources.

Source: ICSC Research, 2012; Strategic Economics, 2021.

Figure 71: Office and Industrial Square Feet and Worker Count Estimates, 2050

	Low Estimate	High Estimate
New Estimate Square Feet		
Estimated New Office sq. ft.	298,890	349,308
Estimated New Industrial sq. ft.	537,410	654,807
New Estimated Workers		
Estimated New Office workers	1,196	1,397
Estimated New Industrial workers	1,075	1,310
Total New Workers	2,270	2,707

Note: Estimates assume 250 square feet per office worker and 500 square feet per industrial

Source: Strategic Economics, 2021.

Figure 72: Retail Demand Estimate, 2050

Assumptions	
New Household Growth Until New Retail Space is Required	2,576
Demand Sq. Ft. of Retail per Household	24.6
Demand Sq. Ft. of Retail per Worker	4.8
Retail Demand Estimate, 2020-2050	
Scenario 1 (Low Estimate)	
Projected New Households in Petaluma, 2020-2050	5,571
Projected Households Generating New Retail Demand (a)	2,995
Projected New Workers in Petaluma, 2020-2050	2,270
Total Demand for Retail Sq. Ft. by 2020-2050	84,512
Scenario 1 (High Estimate)	
Projected New Households in Petaluma, 2020-2050	6,463
Projected Households Generating New Retail Demand	3,886
Projected New Workers in Petaluma, 2020-2050	2,707
Total Demand for Retail Sq. Ft. by 2020-2050	108,522
(a) Deducts the 2,576 households served by recent growth in retail space from the households	total growth of 5,571
Source: Strategic Economics, 2021.	

Conclusions: Retail Market Conditions and Demand

- Petaluma successfully functions as a retail destination meeting the needs of the city's residents, residents of nearby communities, and tourists/visitors, as indicated by the city's "surplus" of retail sales per household overall and in most retail categories. The city does not include a traditional regional mall that serves an especially large regional trade area (since the city falls within the trade areas of malls in Santa Rosa and Corte Madera), but Petaluma's retail supply includes a collection of "big box" retail stores and an outlet mall with regional draw. Meanwhile, Downtown Petaluma attracts additional tourists and visitors from throughout the North Bay for events.
- By 2050, Petaluma could potentially capture demand for between 84,500 and 108,500 square feet of new retail space, but only if the city successfully attracts the numbers of residents and workers that would be associated with new demand for housing, office, and industrial space noted in this report. The retail demand estimate is intentionally conservative, given trends favoring lower quantities of retail space per capita as more sales occur online. The estimate is based solely on growth in Petaluma workers and residents and in retail categories less affected by online sales, and also accounts for absorption of additional sales by recently built shopping centers.

Appendix A

Figure 73: Annual Household Retail Spending Category Breakdown, Petaluma, 2021

Retail Spending Categories	Spending Per Household
Groceries	
Food at Home	\$7,216.19
Restaurants	
Food Away from Home	\$5,085.43
Drug stores	
Nonprescription Drugs	\$184.97
Prescription Drugs	\$390.55
Housekeeping Supplies	\$1,002.72
Personal Care Products	\$652.96
Home Furnishings and Equipment	
Household Textiles	\$138.09
Furniture	\$846.17
Rugs	\$44.31
Major Appliances	\$498.78
Housewares	\$116.02
Small Appliances	\$68.34
Luggage	\$22.79
Telephones and Accessories	\$142.56
Lawn and Garden	\$660.39
Apparel and Services	·
Men's	\$555.80
Women's	\$998.30
Children's	\$403.63
Footwear	\$678.44
Watches & Jewelry	\$169.03
Apparel Products and Services	\$77.22
Computer, TV/Audio	·
Computers and Hardware for Home Use	\$234.63
Portable Memory	\$5.76
Computer Software	\$13.89
Computer Accessories	\$23.32
Televisions	\$141.12
VCRs, Video Cameras, and DVD Players	\$6.16
Video Cassettes and DVDs	\$9.34
Video Game Hardware/Accessories	\$34.20
Video Game Software	\$18.99
Education and Other Entertainment	\$13.00
Sports/Recreation/Exercise Equipment	\$226.02
Photo Equipment and Supplies	\$61.71
Reading	\$143.36
Toys, Games, Crafts and Hobbies	\$144.47
School Books and Supplies	\$172.63
Source: Retail Goods and Services Expenditures, ESRI, 2021; Strategic Economics, 2021.	