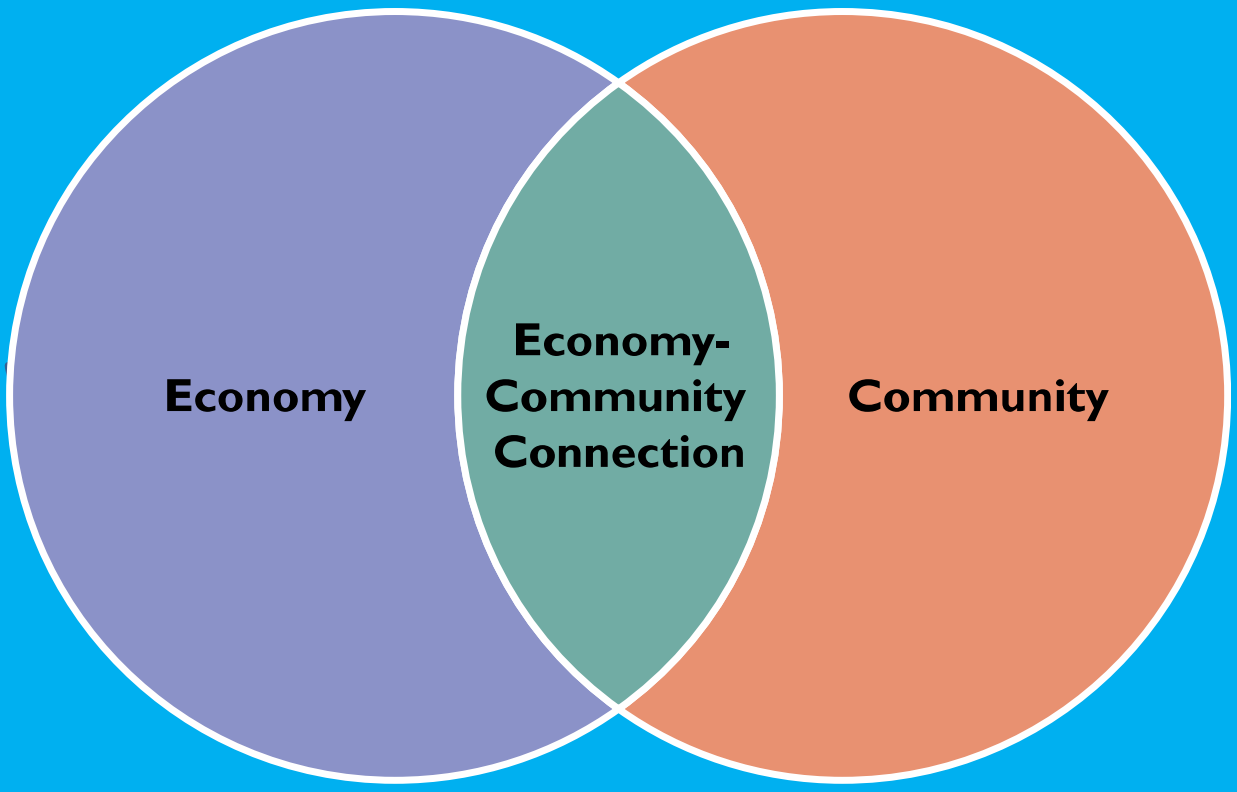
Solano County 2017

Index of Economic and Community Progress

County of Solano and Solano Economic Development Corporation

June 2018



Solano County 2017
Index of Economic and Community Progress

The *Solano County Index of Economic and Community Progress* is a project that was launched in 2007 after a series of economic summits identified a need for more fact-based information to guide efforts by public and private sector leaders to expand Solano County's economy and support its long-term viability.

Three comprehensive editions were produced for 2008, 2009 and 2010 by the consultant Collaborative Economics for the County of Solano and the Solano Economic Development Corporation. These insightful documents provided an objective analysis of key indicators shaping the local economy.

In 2011, the Index became a project for County staff, in cooperation with the Solano EDC, to maintain and update throughout the year. The Index was expanded to include comparisons in many instances to the Sacramento Area, the Bay Area, California and the United States. The 2012 to 2017 editions include the objective analysis of Dr. Robert Eyler from Economic Forensics and Analytics (www.econforensics.com).

All of the annual index reports, as well as several in-depth analyses of local industry clusters, can be found at www.solanocounty.com/economicindex.

Index of Economic and Community Progress

We are proud to provide to you our 10th annual Solano County Index of Economic and Community Progress. Developed in 2007, this annual report provides a comprehensive reporting of various indicators, capturing trends shaping our local economy and providing long-term perspective and consideration for economic development. Our hope is that you will not only see the underlying data, but a thoughtful and clear analysis of what the numbers mean, and why this is important to our community.

Solano Job Growth Continues

Solano County's economy continued moving forward at a strong pace in 2017, nearly reaching what most would consider full employment with an unemployment rate of 4.1%. Simply put, this continued downward trend of the unemployment rate shows that job growth has strongly outpaced labor force growth in recent years.

With a job growth rate of roughly 1.6% during the last year, Solano is trending with the employment growth rates of California and the U.S. Industry growth was led by Healthcare with roughly 1,000 new jobs, Manufacturing adding 400, and Construction with 300 new jobs. Some of this overall gain, however, was reversed by employment reductions in the Local Government Education, Finance and Wholesale sectors.

The Bigger Picture

While job growth and unemployment rates are important indicators, they don't tell the entire story. Key issues such as affordability, income, workforce skills, and general economic and industry dynamics help to provide a clearer picture of the regional economy's health. As an example, while Solano remains relatively affordable compared to several of our neighbors in the San Francisco Bay Area, real estate costs are increasing with growing demand for housing and business facilities. The 2017 index fully explores these issues and more, from Solano's income and cost growth, to educational attainment, to our changing demographics. These all not only determine the economic trends, but gauge our region's competitiveness and the quality of life for our residents, visitors, and workers.

The 2017 launch of our countywide campaign *Solano Means Business* encompasses the idea of a collegiate approach to economic development – a regional approach to economic development that will bring more economic opportunity to the Cities and County of Solano than solely pursuing independent and separate strategies. When we promote Solano as a region, we promote us all!

The 2017 Index shows us that our economy has come a long way since the "great recession", however there are challenges that remain, and those that are on the horizon. It is our mission to use this information to help guide our region's leadership toward positive change.

Sincerely,

John Vasquez
Chairperson
Solano County Board of Supervisors

Robert Burris
President
Solano Economic Development Corporation

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Index of Economic and Community Progress

Contents

Solano County Key Facts 1
Key Highlights from the 2017 Index 2
Index Overview 3
Our Changing Economy 10
Labor Markets 11
Annual Local Industry Employment 11
Total Non-Farm Employment 12
Solano County Jobs by Industry 13
Unemployment Rate Comparisons 14
Total Employed Residents Comparisons 15
Cities Overview: Labor Markets 16
Employment in Base Industries and Locally-Serving Industries 17
Long-Term Jobs Forecast to 2026 18
Businesses and Incomes 19
Non-Employer Businesses 19
Gross Product Change by Industry Sector 20
Gross Product Deflator and Local Cost of Living 22
Tourism Industry: Supporting Visitors 23
Personal Income 24
Sources of Personal Income 25
Business Affordability: Wages 26
Median Household Income Comparisons 27
Poverty Rates 28
Agriculture 29
Housing and Commercial RE Demand 30
Commercial Real Estate Pricing and Vacancy 30
Median Home Prices, Home Sales Volume, and Rental Prices 31
Building Permits 33
Housing Prices Versus Median Household Income 34
Our Changing Community 35
People 36
Population Growth 36
Population Growth Projections 37
Population Pyramid for 2050 38
Dependency Ratios 39
Components of Population Change 40
Workforce Readiness and Supply 41
Labor Force Participation Rates 41
City Overview: Education, Housing and Income 42
High School Graduation Rates 44
UC/CSU-Readiness 45
Broadband and Computer Access 46
Commuting 47
Quality of Place Index 48
Data Sources and Methodology 49

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Index of Economic and Community Progress

Solano County Key Facts

Area	
Rural land area	675 square miles
Urban land area	150 square miles
Water area	84 square miles

2017 Population (January 1, 2017)	436,023
Benicia	27,695
Dixon	19,293
Fairfield	114,157
Rio Vista	9,019
Suisun City	29,295
Vacaville	98,456
Vallejo	117,322
Unincorporated	19,823

Population Change: 2016 to 2017	+4,525
Solano County 2050 Population Est. (CalTrans/CA Econ Project)	546,145

Top 5 Employment Sectors (as of Dec. 2017)	
Education & Health Services	26,700
All Government (incl. US Military)	25,000
Retail Trade	18,600
Leisure & Hospitality	15,100
Manufacturing	12,300
Construction	10,600

Total Industry Jobs (Dec. 2017)	139,900
Jobs-Housing Ratio (2017)	88.1%
Jobs-Housing Ratio (2010)	79.6%

Educational Attainment (2012–16 Avg.)	
Less than high school	12.5%
High school graduate	23.5%
Some college, no degree	28.9%
Associate's degree	9.9%
Bachelor's degree	17.6%
Graduate or Professional degree	7.5%

Age Distribution (2012–16 Avg.)	
Under 5 years old	6.2%
5 to 19	19.3%
20 to 44	33.2%
45 to 64	27.3%
65 and older	13.6%

Ethnic Composition (2012–16 Avg.)	
White	39.4%
Hispanic	25.4%
Asian	14.8%
African-American	13.6%
Other (incl. mixed race/Pacific Islander)	6.8%

Building Permits Issued, New Housing Units (2016–17)	950

Sources:
1. Population data come from the California Department of Finance (www.dof.ca.gov), as of Feb 2018 availability.
2. Employment data come from the California Employment Development Department (www.edd.ca.gov), Feb 2018.
3. Demographic data from the Census Bureau's American Community Survey (factfinder.census.gov), Jan 2018.
4. Building Permits data were provided by the County of Solano for fiscal year 2016-17, ending June 30, 2017.

Key Highlights from the 2017 Index

Our Changing Economy

- Solano County private-sector employers hired 2,100 more workers in 2017; this is a 1.6 percent increase from 2016.
- Total Solano County business, government, and nonprofit employment was 141,300 as of January 1, 2018; the average employment level for 2017 was 139,900 jobs.
- Solano County's unemployment rate is 4.1 percent as 2018 began.
- Based on the most recent available data, Gross County Product grew by 3.1 percent in 2016, slightly less than the state of California.
- Farm jobs growth saw no change and agriculture values slipped again in 2016 (the latest year for which data are available), likely due to continued drought conditions.
- Personal income per person increased in 2016, based on the most recent available data. While other income measures were flat in 2016, suggesting that Solano County's cost of living is rising and catching up to recent income growth, a rise in standards of living took place in 2016.
- Employment in export-focused industries increased between 2016 and 2017 by 2,740 jobs, led by non-durable manufacturing and logistics jobs.
- Solano County wages continue to provide a local competitive advantage versus core Bay Area counties, where wages are rising more quickly due to both local minimum wage ordinances and market forces.
- Poverty rates are reported in this index, and five-year averages for Solano County, California and the nation show increasing proportions of households facing poverty, even with economic recovery across all these areas.
- Regional cost of living shows moderation in the rise of prices, but steady growth as Solano County's economy expands.

Our Changing Community

- Solano County's population added 4,525 residents in 2016; this is a 1.1 percent increase.
- Solano and Sacramento counties are forecasted to be fast-growing counties from 2017 to 2050, faster than the state average.
- In the 2015–16 academic year, Solano County's graduation rate continues to increase and remains ahead of the statewide average.
- Slightly more Solano County students were UC/CSU-ready in the 2015–16 academic year than the previous academic year.
- Housing prices increased 6.8 percent in 2017 to $416,000 at the median and housing affordability fell slightly. Rental prices continued to rise; homes for rent have a median cost of $2,090 in January 2018.
- For residential housing units, building permits increased more slowly in fiscal year 2016-17 than 2015-16. Over 1.28 million square feet of commercial space was permitted during fiscal year 2016-17, up 41.6 percent from 2015-16.
- Solano County government revenue from property and sales taxes continued to rise in 2017, due to rising personal income levels and assessed property values rising to over $51 billion in 2017.

Considerations for the Future

The coming year holds many new economic - challenges. Fiscal expansion in both late 2017 with a new tax bill and in early 2018 with a federal, omnibus spending package means more government debt, more pressure on interest rates and prices, with the positive by-product of growth stimulus. California faces challenges with the new tax laws in the face of continued growth coming mainly from the Bay Area. As of March 2018, there are no forecasts of recession for either the national or state economies through 2021; Solano County is only going to experience recession if the state and national economies falter.

Index Overview

Solano County is close to full employment.

In 2017, Solano County employment grew by 1.6%, adding approximately 2,100 jobs.

Non-farm employment grew by 1.6 percent in 2017, with approximately 2,100 more jobs at local employers. From 2010 to 2017, since the Great Recession ended, Solano County employers added a total of 18,900 jobs. Construction jobs showed an increase in 2017, generating 300 more jobs for 3.9 percent growth. Health care, including county government health systems, increased by 1,000 jobs in 2017. Manufacturing jobs grew again in 2017 by 400 jobs, the sixth year of growth in a row. Jobs in wholesale and finance fell back a bit in 2017, 100 fewer jobs each. Jobs in agriculture and software were flat.

Data available as of March 2018, suggest another recession is unlikely before 2021.

The state of California's economy showed continued expansion, with California employment growing by 2.5 percent. Forecasts for California's economy through 2021 are available from the California Department of Finance (www.dof.ca.gov). Forecasts point to the national economy growing at just over 2.2 percent and to the California economy growing at just over 3.0 percent, assuming no unexpected events occur to disrupt more growth. Expectations about growth have increased due to the Tax Cuts and Jobs Act of 2017 (the 2017 Tax Bill).

This 2017 Tax Bill provides more tax breaks for businesses, lower corporate and personal income tax rates, and increased fiscal stimulus for the national economy. Solano County businesses are likely to expand their capital spending and construction efforts in 2018 and 2019 due to these changes. Capital spending's connection to more jobs depends on the types of business that make such investments and how such businesses utilize labor.

Anticipate at least three interest rate increases by the Federal Reserve in 2018.

The Federal Reserve upheld its promise to raise interest rates three times in 2017. The new Federal Reserve Chair, Jerome Powell, has hinted that there may be three or four rate increases in 2018. Data on wage and inflation growth are likely to dictate how interest rates are affected. The key is that policy makers change interest rates in predictable ways and any faster pace of change is due to unexpected price or wage growth. Rising tariffs on imported goods into the United States may pressure consumer prices upward as 2018 continues and affect port activity throughout California.

The regional fires of October 2017 exacerbated rising costs of living throughout the Bay Area, but may have a positive effect on Solano County housing markets. Santa Clara, San Francisco and San Mateo counties have experienced quick increases in their housing prices since 2016 (Santa Clara County had home-price growth of 15 percent since 2016 according to the California Association of REALTORS®). The median sale price for single-family homes in Solano County was $425,000 in December 2017, up 6.8 percent on average in 2017 from

the previous year. Comparatively, median single-family home prices in California overall grew only 6.6 percent in 2017.

Housing prices went up 6.8 percent in Solano County in 2017 and Zillow Research is predicting 5.4 percent growth for 2018.

Solano County's housing and commercial real estate stocks grew in 2017. Residential building permits activity in fiscal year 2016-17 was for 950 new housing units. Commercial square feet under construction was up by 1.3 million square feet; 67 percent of the growth was in Fairfield and Vacaville, and only 2,800 square feet in Vallejo.

Industry clusters are that are now the foci of Solano Economic Development Corporation (EDC) and its economic development strategy include:

- Advanced Materials;
- Biotech/Biomed and Life Sciences;
- Food and Beverages;
- Logistics; and
- Travis Air Force Base.

Economic development efforts in Solano County are focused on expanding infrastructure to support future business growth.

Available office space in Solano County is vacant between 15 percent for Class A space, and less than 9 percent for Class B. Industrial space, including manufacturing space and warehousing, had 6.0 percent vacancy as of Q4 2017, little changed since 2016. Prices remained basically flat for both Class A and B space during 2017 (up about $0.06 per square foot since Q4 2016). San Francisco is over $8 per square foot as of Q4 2017.

Solano County's goods-producing industries (building houses or making products by adding value to raw materials) grew by 1,000 jobs in 2017. Hiring in health care, bars, restaurants, and hotels also grew. Retail and many personal and professional services jobs grew slightly or had small losses of jobs in 2017.

Jobs that primarily produced goods and not services in Solano County increased by 1,000 workers in 2017.

Solano County's Labor Force

Population growth and resident employment are tied together within the local labor force. Since 2010, the number of employed residents has grown by 15.6 percent in Solano County while the labor force has grown by only 0.6 percent. These data suggest conversion of unemployed residents to employed continues.

Comparison of Solano County Labor Force Components, 2010 to 2017
Number of Workers and Percent Change Annual Averages

	Number of Workers			*Percent Change*	
	2010	***2016***	***2017***	***2010***	***2016***
Labor Force	202,400	207,900	209,300	3.4%	0.7%
Employed Residents	177,000	196,500	199,300	12.6%	1.4%
Unemployment Residents	25,400	11,400	10,000	-60.6%	-12.3%
Industry Employment	121,000	137,800	139,900	15.6%	1.5%

Source: EDD (http://www.labormarketinfo.edd.ca.gov/), Labor Market Information, Annual Averages; a new benchmark of 2015 was set with some revisions

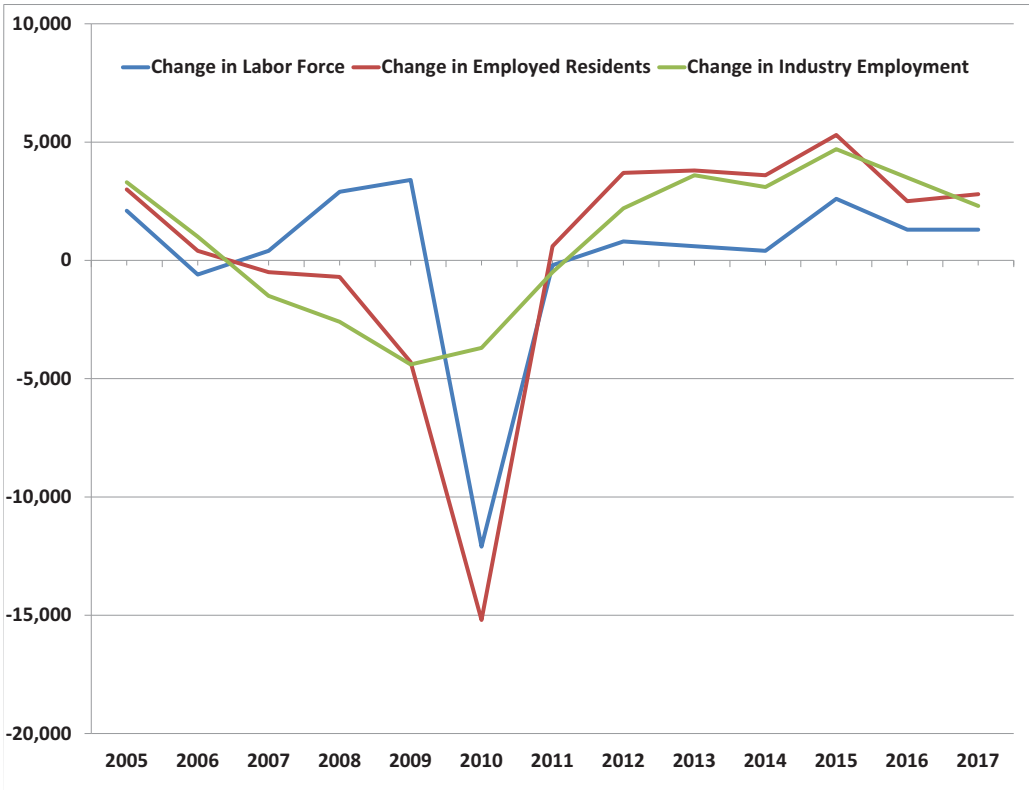
Index of Economic and Community Progress

Solano County Employment
Gains and (Losses) of Jobs Since 2010, 2015 and 2016 as of January 1, 2018

Industry	Since 2010		Since 2015		Since 2016	
	Gain/(Loss)	% Chg	Gain/(Loss)	% Chg	Gain/(Loss)	% Chg
Agriculture	**400**	28.6%	0	0.0%	0	0.0%
Bars and Restaurants	**1,600**	15.8%	500	4.5%	200	2.6%
Construction	**3,400**	47.2%	1,600	17.8%	300	3.9%
Federal Government (incl. Travis AFB)	**-900**	-19.6%	0	0.0%	0	0.0%
Financial Activities	**-100**	-1.9%	200	4.1%	-100	-1.9%
Health Care	**6,300**	33.9%	2,200	9.7%	1,000	4.2%
Information (Software and Publishing)	**-200**	-15.4%	0	0.0%	0	0.0%
Local Government Education	**800**	9.2%	0	0.0%	-200	-2.1%
Manufacturing	**2,600**	26.8%	600	5.1%	400	4.2%
Retail Trade	**2,200**	13.4%	300	1.6%	100	0.5%
State Government Excl. Education	**100**	2.1%	100	2.1%	0	0.0%
Wholesale Trade	**0**	0.0%	-200	-4.5%	0	0.0%
All Other Industries	**2,700**	14.2%	700	3.0%	400	1.3%
Total, All Industries	**18,900**	**15.6%**	**6,000**	**4.5%**	**2,100**	**1.7%**

Source: EDD (http://www.labormarketinfo.edd.ca.gov/), Labor Market Information

Solano County Annual Changes in the Labor Force, 2005–2017, Number of Workers



Source: EDD (http://www.labormarketinfo.edd.ca.gov/), Labor Market Information

The California Employment Development Department (EDD) reports that there were 10,836 (+325 employers since 2016 Quarter 2) Solano County payroll businesses as of 2017 Quarter 2. "Non-employer" businesses (i.e., businesses that are usually self-owned and operated) are also an important segment of the Solano County business sector. For

Solano County, there were an estimated 6,000 more jobs in such businesses since 2010, according to the most recent data on self-employed firms as of 2015. The growth of new businesses continues for Solano County.

Forecasts mentioned above, in combination with the historic links of Solano County's economy to California's economy, suggest that more jobs are coming to Solano County in 2018 and perhaps to 2020.

Solano County's goods-producing jobs are a greater share of productivity than California.

Solano County is a microcosm of the California economy. Economies produce goods, provide services, and government also hires workers. Businesses that produce goods and provide services pay their owners, workers, creditors, and governments from revenue they make, adding up to what is called gross product. Economists use the percentage change in inflation-adjusted, gross product data to assess an economy's growth rate.

As an economy's expands, the government sector should be less a proportion of overall gross product. Notice that the public sector (government) in Solano County is falling as a share of the overall economy, a sign of such economic expansion; the private sector is replacing the public as driving the local economy.

Sector Shares of Gross Product at the County, State, and National Levels
Percent of Total Gross Product in 2009 Dollars, 2010–2016

	Goods-Producing			*Services-Producing*			*Public Sector*		
Year	***Solano County***	*CA*	*US*	***Solano County***	*CA*	*US*	***Solano County***	*CA*	*US*
2010	27.8%	16.8%	19.0%	50.1%	69.9%	67.5%	22.1%	13.3%	13.5%
2014	30.7%	16.4%	19.2%	48.4%	71.5%	68.5%	20.9%	12.1%	12.3%
2015	30.3%	16.5%	19.2%	49.5%	71.7%	68.8%	20.2%	11.8%	12.1%
2016	30.3%	16.6%	19.0%	49.6%	71.6%	69.0%	20.1%	11.8%	12.0%

Source: Bureau of Economic Analysis (http://www.bea.gov/regional/index.htm)

Standard of Living: Three Measures

In this year's index, we are adding cost of living measures to show more data on the relative costs of doing business and where Solano County may have a regional advantage. Standards of living fall when costs of living rise quickly versus income growth. Standard of living measures are best seen as **real** (inflation-adjusted) and higher values are considered better. Beyond real gross product per person, real personal income per person is another indicator of changing incomes and standards of living, as is real median household income. The Bureau of Economic Analysis tracks gross product and personal income; median household income is estimated by the Census Bureau, based on a household of four people.

In 2016, personal income per person grew faster in Solano County than for the US or California economies overall. Median household income (MHI) grew a bit in 2016. Solano County continues to have a MHI level above the statewide average, meaning Solano County households have higher income levels than the average California household, but Solano County remains below state averages for gross product per capita and personal

income per capita in after adjustments for inflation. These three measures of living standards show mixed results for how Solano County residents and households are gaining versus statewide averages. Median household incomes may be larger due to multiple workers in a household and also the use of household wealth to supplement income versus rising gross product.

Standard of Living Measures at the County, State, and National Levels
2010, 2015 and 2016 (latest available data), in 2009 Dollars

	Gross Product per Capita			*Personal Income per Person*			*Median Household Income*		
Place	***2010***	***2015***	***2016***	***2010***	***2015***	***2016***	***2010***	***2015***	***2016***
United States	$47,287	$47,595	$48,173	$39,627	$43,856	$44,020	$49,238	$48,167	$48,002
California	$51,871	$52,099	$52,974	$42,781	$49,123	$49,481	$56,950	$55,106	$54,882
Solano County	**$36,412**	**$34,613**	**$35,562**	**$36,865**	**$39,811**	**$40,508**	**$62,169**	**$60,701**	**$58,321**

Sources: Bureau of Economic Analysis (www.bea.gov) and Census Bureau (http://factfinder.census.gov)

Community Indicators: Continued Gains and Some Challenges

In 2016, Solano County's population grew by 4,525 people. Housing affordability continues to face upward price pressure. Education data show Solano County schools continue to produce more graduates at a rate higher than the state, both those who enter the workforce directly and those who continue on to college. City-level demographic data show that Solano County's population continues to age, but with more educated, working residents. A projected, aging population in Solano County is behind a recent California Department of Education prediction that between the 2016-17 academic year and the 2026-27 academic year, Solano County's K-12 enrollments are to fall by over 2,100 pupils or a 3.4 percent loss.

The California Department of Finance is predicting Solano County to have 2,100 fewer K-12 students in local schools

Solano County's population grew approximately 1.1 percent.

Foreign immigration remained steady in 2016 with another 1,420 residents coming to Solano County from overseas. Domestic immigration (i.e., new residents from other parts of the United States) also grew, while births exceeded deaths by 1,856 in 2017. Jobs and population growth for all 58 counties in California were forecasted by CalTrans and the California Economy Project recently from 2017 to 2050, projecting Solano County's population to be 546,145 in 2050 or 24.4 percent versus 21 percent growth for California overall.

Solano County's graduation rate increased to 84.7 percent, up from the 2014-15 academic year.

During the 2015-16 academic year (the latest year for which data are available), Solano County's graduation rate was 84.7 percent, higher than the state average once again. Students that were UC/CSU-ready students increased to 40 percent of Solano County graduates in 2015–2016. The share of UC/CSU-ready students in the state of California overall increased to over 45 percent of graduates. Given population growth, Solano County continues to make progress in education.

Housing markets continued to surprise and grow regionally in 2017.

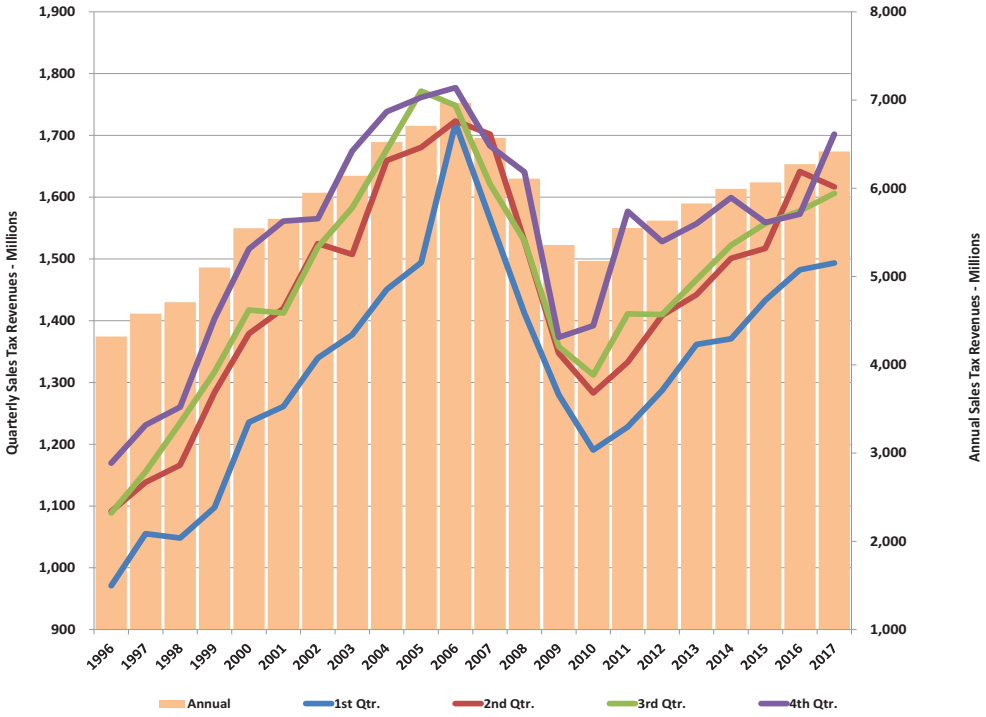
According to the California Association of REALTORS®, Solano County housing prices grew at 6.8 percent on average in 2017 and over 18 percent as a two-year average; as of December 2017, Solano County's single-family home market prices grew to reach $450,000 at the median. California median home prices also grew at 6.6 percent during 2017, but only 12 percent from 2015 to 2017. Rental prices increased approximately 6.1 percent countywide in 2017 from 2016 prices according to Zillow Research, suggesting sustained demand as available inventory levels remain relatively low. As of January 2018, vacancy rates in Solano County housing were at 6.4 percent average; the statewide average was 7.4 percent vacancy.

Government revenue continues to rise

The combination of rising home prices and more taxable sales suggests continued revenue increases for Solano County's city and county governments. Overall, taxable sales grew slightly after inflation adjustments; inflation-adjusted, taxable sales have grown by 23.9 percent since 2010 when taxable sales hit bottom during the Great Recession.

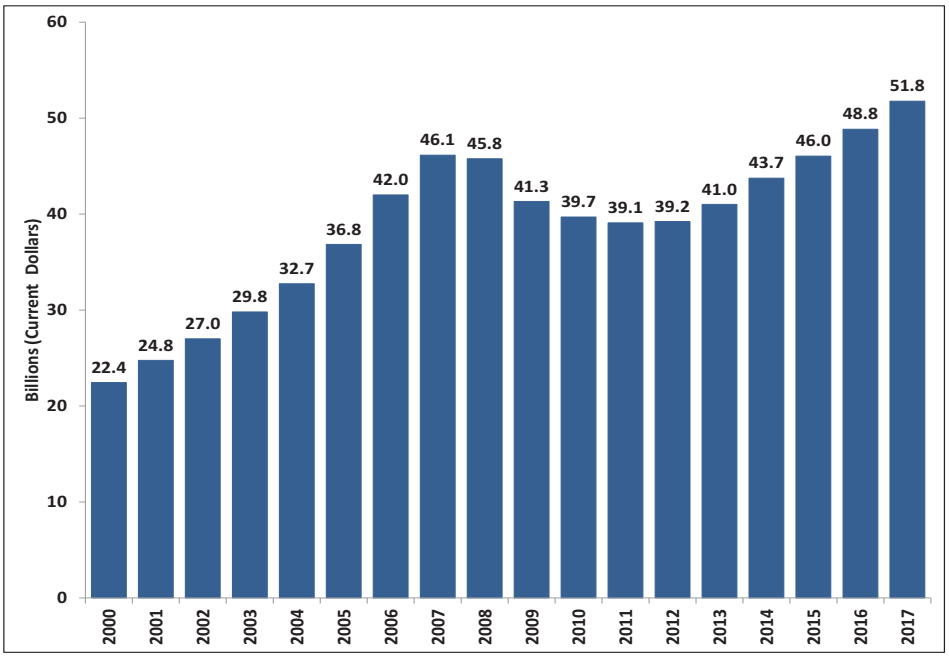
The assessed value of properties in Solano County continues to grow in both inflation-adjusted (2009) dollars and current values; current values are used by the Solano County Assessor's Office to set the annual tax roll. Property tax revenue for the County of Solano continued to rise in 2017; as of June 30, 2017, the assessed value of property in Solano County was $51.8 billion.

Solano County Taxable Sales, 1996 to 2016 (estimated to year end), in 2009 Dollars



Sources: County of Solano and California Board of Equalization (http://www.boe.ca.gov/news/tsalescont.htm)

Solano County Assessed Values for Property Tax Purposes, 2000 to 2017, in Current Dollars



Source: Solano County Assessor's Office (current assessed value) and California Department of Finance (CPI forecast)

Commuting

By the end of 2015 (the latest year for which data are available), more than 119,500 Solano County residents were commuting every week to work outside Solano County. There were also 77,570 people coming into Solano County for work every week. Commuting is part of any regional economy, as workers seek to balance where they live with where employers demand their skills and pursuing relatively high wages. While commuting levels are rising, approximately 35.6 percent of Solano County's working residents both live and work in Solano County as of 2015, the largest percentage of working residents since 2011.

Geographic Comparisons

Unless stated otherwise, the 2017 Index groups counties into the following three areas in California for the purpose of making comparisons. All of these counties, including Solano County, can also be defined as a "super region".

- Bay Area Other: San Francisco, Santa Clara, Alameda, San Mateo, Contra Costa, and Marin counties;
- North Bay: Sonoma and Napa counties;
- Sacramento Metropolitan Statistical Area (MSA): Sacramento, Placer, El Dorado, and Yolo counties.

Takeaways and What Is Important

In the pages that follow, each subsection of this report provides a brief "TAKEAWAY" and either an "OPPORTUNITY" (in green) or a "CHALLENGE" (in red) as Moving Solano Forward looks to identify both using these data. The next report section takes a look at Solano County's changing economy, and it is followed by a section on community indicators.

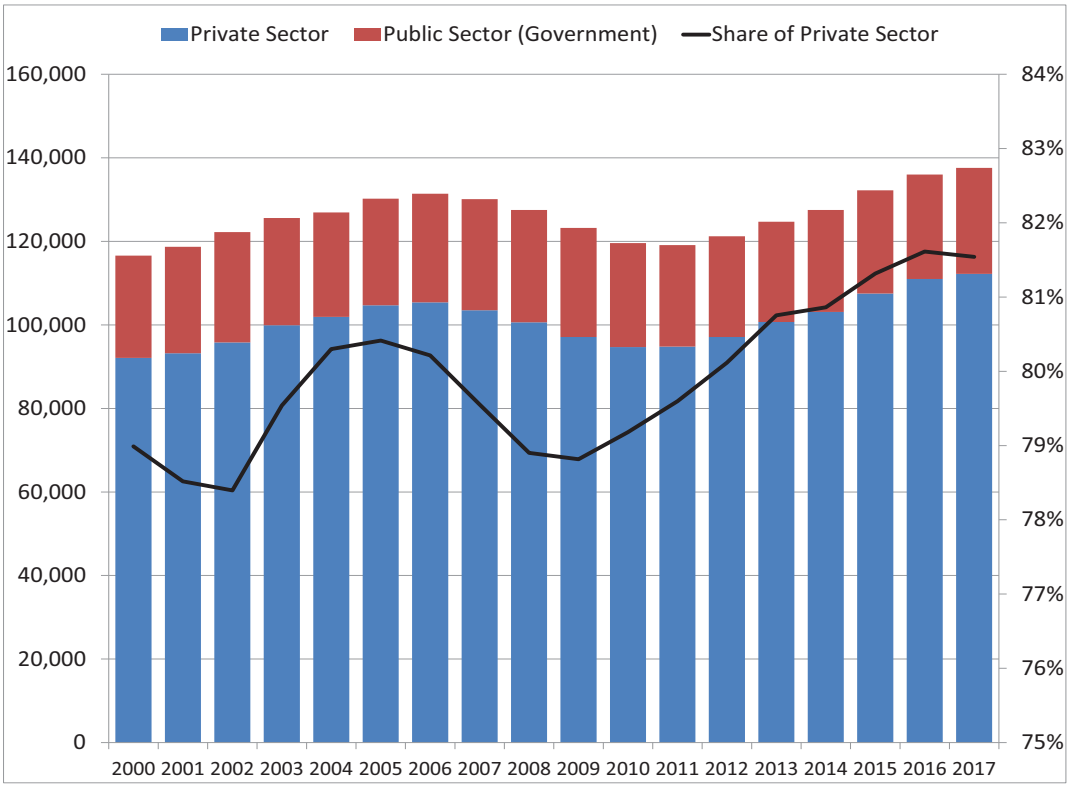
Our Changing Economy

Labor Markets

Annual Local Industry Employment

Solano County growth of jobs continues; total industry employment was 139,900 in 2017. This is a 1.6 percent increase, 2,100 more jobs. While jobs growth is slower than in 2016 and 2015, the continued expansion of jobs in 2017 (6,000 more jobs since 2015) is one of many signs that Solano County is closing in on full employment.

Solano County Private and Public Sector Employment Annual Averages, 2000–2017



*Source: California Employment Development Department (www.edd.ca.gov); *2016 is a 12-month average of data from January 2016 through December 2016. Private and Public Sector Employment Levels are indicated on the left-hand axis; Private Sector share of Total Employment is indicated on the right-hand axis.*

In 2017, local and state government workers comprised 85.4 percent of public-sector workers across Solano County, while federal government workers (predominantly Travis Air Force Base personnel) made up the rest of 25,000 government jobs. Private-sector jobs grew in 2017 as a percentage of non-farm employment to just under 82 percent of workers.

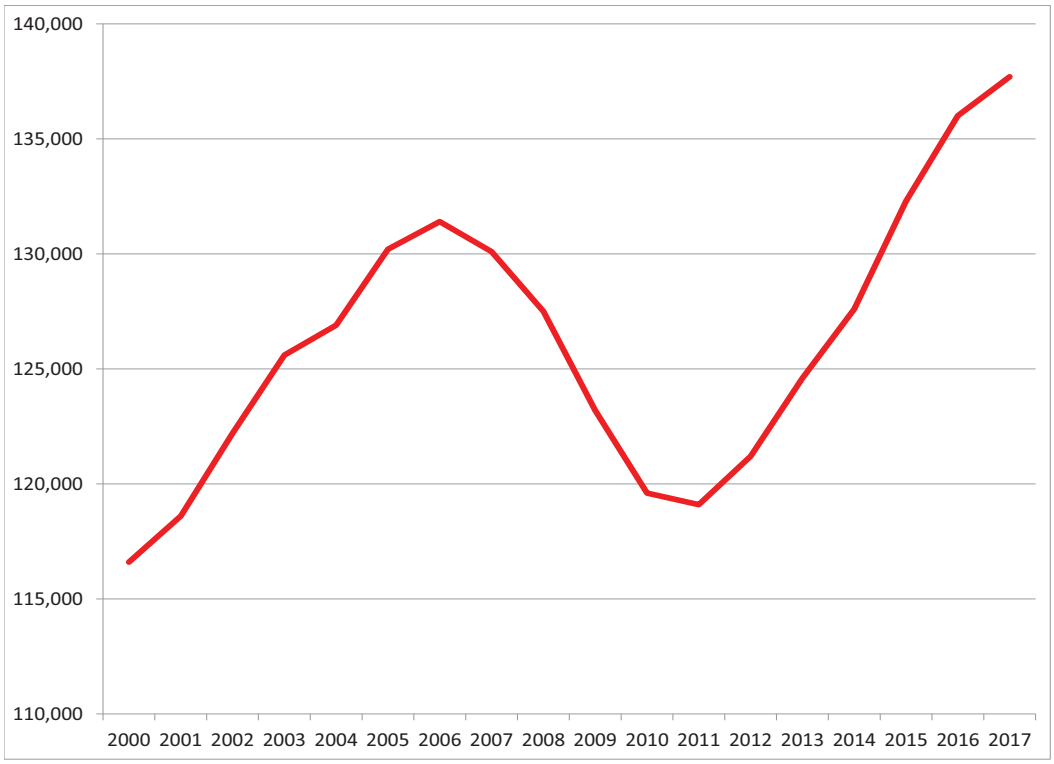
TAKEAWAY: Solano County employers hired over 2,100 more workers in 2017.

OPPORTUNITY: As we will see later, almost 119,500 Solano County residents work outside the county. Some of these workers could be employed here in Solano County and add to the potential labor force for Solano County employers.

Total Non-Farm Employment

Solano County has generated over 18,900 non-farm jobs since 2010, 15.6 percent growth. Solano County jobs growth in 2017 took place in all sectors except professional services and retail. Information, including software, had more jobs. Solano County had 1.5 percent of non-farm jobs growth in 2017, which is greater growth than all comparison areas except the Bay Area Other at 1.8 percent since 2016. The North Bay counties of Sonoma and Napa showed slower growth (1.1 percent) that was less than the state average (2.0 percent). Sonoma County alone, however, grew at 2.1 percent in 2017.

Solano County Non-Farm Employment, 2000–2017



Source: California Employment Development Department Source (http://www.edd.ca.gov)

TAKEAWAY: Non-farm job growth in Solano County continued in 2017.

CHALLENGE: As non-farm jobs growth takes place, upward pressure on county wage levels build; employment growth across the region and increases in other costs of doing business and living provide further price pressure, such as rising housing prices.

The next table explores employment data at the industry level within Solano County, including federal government jobs and local and state government jobs.

Solano County Jobs by Industry

These data show the jobs growth by major industry sector since 2010, 2015 and 2016. The idea here is to show jobs growth since the Great Recession as of December 2017. Comparing 2015 and 2016 to 2017 shows growth slowing down across some sectors. For example, construction jobs have increased by 3,400 jobs, 18 percent of the overall jobs growth since 2010. However, only 300 more construction jobs came to Solano County employers in 2017. Since 2015, health care jobs grew by 2,200, which was 36.7 percent of overall jobs growth since 2015 in Solano County.

Change in Jobs, Sectors in Solano County, 2010-2017, Number of Jobs and Share of Total Growth
Sorted by 2010-17 Change in Jobs

Sector	2010-17		2015-17		2016-17	
	Change In Jobs	Share of Growth	Change In Jobs	Share of Growth	Change In Jobs	Share of Growth
Health Care	6,300	33.3%	2,200	36.7%	1,000	47.6%
Construction	3,400	18.0%	1,600	26.7%	300	14.3%
Retail	2,200	11.6%	300	5.0%	100	4.8%
Non-Durable Goods	1,900	10.1%	600	10.0%	300	14.3%
Restaurants	1,900	10.1%	500	8.3%	300	14.3%
Other Services	1,100	5.8%	300	5.0%	0	0.0%
Local/State Government	1,000	5.3%	200	3.3%	-100	-4.8%
Durable Goods	700	3.7%	0	0.0%	100	4.8%
Prof and Business Services	600	3.2%	-100	-1.7%	100	4.8%
Agriculture	400	2.1%	0	0.0%	0	0.0%
Education	300	1.6%	300	5.0%	0	0.0%
Logistics/Utilities	300	1.6%	200	3.3%	0	0.0%
Hotels/Motels	0	0.0%	-100	-1.7%	0	0.0%
Wholesale	0	0.0%	-200	-3.3%	0	0.0%
Financial Services	-100	-0.5%	200	3.3%	0	0.0%
Information	-200	-1.1%	0	0.0%	0	0.0%
Federal Government	-900	-4.8%	0	0.0%	0	0.0%
Overall Change	**18,900**	**100.0%**	**6,000**	**100.0%**	**2,100**	**100.0%**

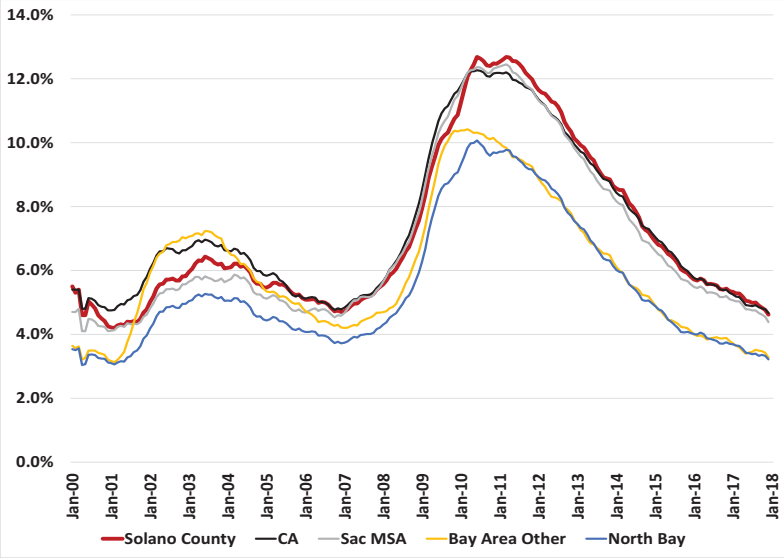
Source: California EDD (http://www.labormarketinfo.edd.ca.gov/data/employment-by-industry.html)

This table shows the stages of recovery, and how the last two years have been relatively slow for some industries, but faster for others in Solano County.

Unemployment Rate Comparisons

Solano County's unemployment rate was 4.1 percent as of December 2017, compared to 5.1 percent for December 2016. Fewer working residents Solano County (the basis of the unemployment rates measure) were looking for work in 2017 (the labor force fell by 200 people but 1,200 more Solano County residents found jobs). Solano County's cities have also seen unemployment fall across the board. The state of California had 4.5 percent unemployment and the United States had 4.1 percent as of December 2017.

Unemployment Rate, 2000-17
Comparisons Between Selected Areas, Monthly Data



Source: California Employment Development Department (www.edd.ca.gov)

City-Level Unemployment Rates, December of Each Year

Place	*2010*	*2015*	*2016*	*2017*
Solano County	**12.5%**	**5.7%**	**5.1%**	**4.1%**
Benicia	7.8%	3.4%	3.2%	**2.5%**
Dixon	10.8%	4.7%	4.5%	**3.5%**
Fairfield	13.2%	5.9%	5.6%	**4.4%**
Rio Vista	10.3%	4.5%	4.3%	**3.3%**
Suisun City	10.0%	4.4%	4.1%	**3.2%**
Vacaville	9.4%	4.1%	3.9%	**3.0%**
Vallejo	16.0%	7.3%	6.9%	**5.4%**

Source: California Employment Development Department (www.edd.ca.gov)

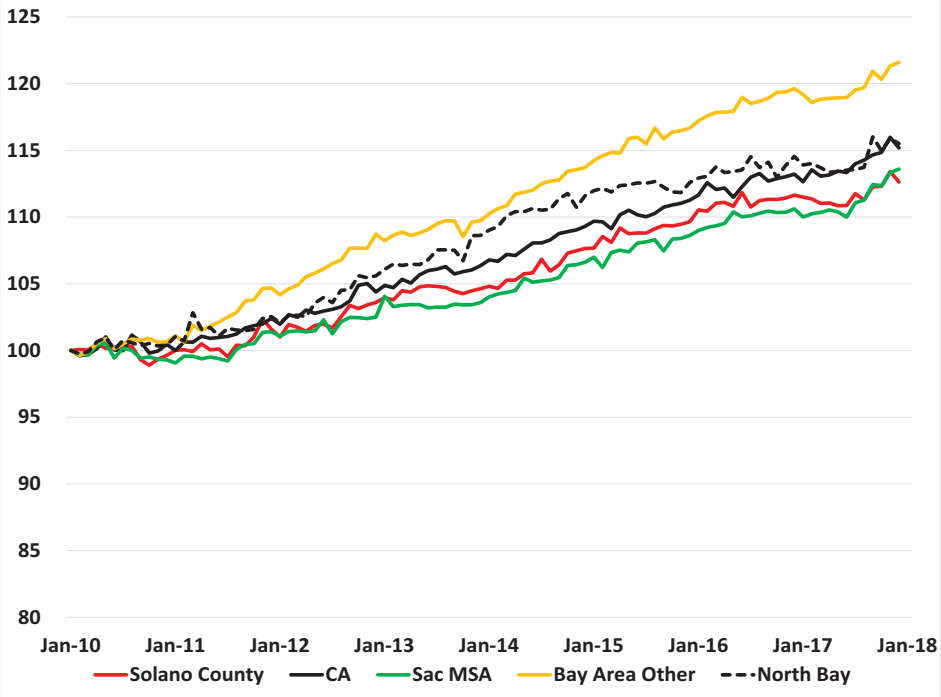
TAKEAWAY: The low unemployment rate is a good sign that Solano County is close to full employment.

OPPORTUNITY: High unemployment rates in Vallejo and Rio Vista have come down suggesting Solano County's economic expansion is now creating economic opportunity throughout all Solano County's communities.

Total Employed Residents Comparisons

In 2017, Solano County experienced 0.7 percent growth in its number of employed residents. Since the recession ended for Solano County and its regional county neighbors, the recovery has a smooth transition to higher levels of employment. Compared to 2016, 2,800 more Solano County residents were employed in 2017, while the county's labor force grew by approximately 1,400. The index number allows a comparison of places with different sizes of employment but similar trends. The numbers are percentage growth from the index base of 100 in January 2010.

Total Employed Residents, 2010-17, Index Jan 2010 = 100
Comparisons Between Selected Areas, Seasonally-Adjusted Monthly Data



Source: California Employment Development Department Source: (http://www.edd.ca.gov)

Percent Change in Employed Residents, As Compared to 2017

Employed Residents	*2010-17*	*2016-17*
Solano County	9.5%	0.7%
California	13.5%	1.3%
Sacramento MSA	10.9%	1.0%
Bay Area Other	19.8%	1.2%
North Bay (Napa/Sonoma counties)	12.7%	0.6%

Source: California EDD (http://www.edd.ca.gov)

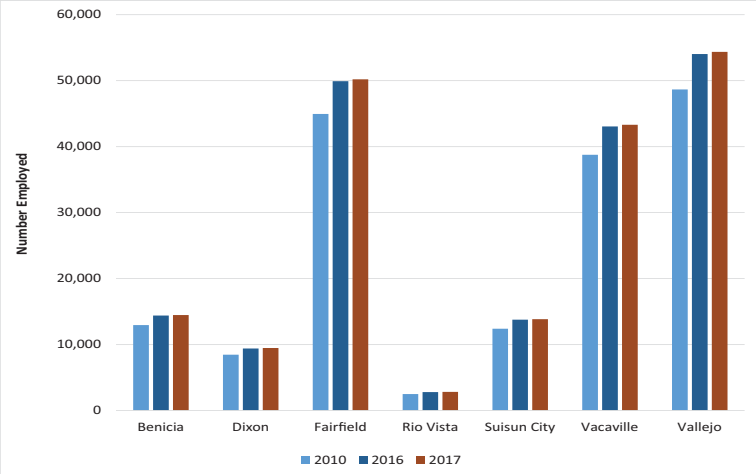
TAKEAWAY: 2,800 more Solano County residents found jobs in 2017, slower growth than 2016, but continued growth.

CHALLENGE: The faster growth in Sacramento and the Bay Area suggest that both areas may still be drawing in Solano County residents for jobs; new residents do not necessarily become new local workers.

Cities Overview: Labor Markets

Data for Solano County's incorporated cities and labor markets come from California's Employment Development Department (EDD), showing employment growth and unemployment rates. Continuing post-recession trends, each city had more residents working in 2017 than 2016 and a continued drop in unemployment rates.

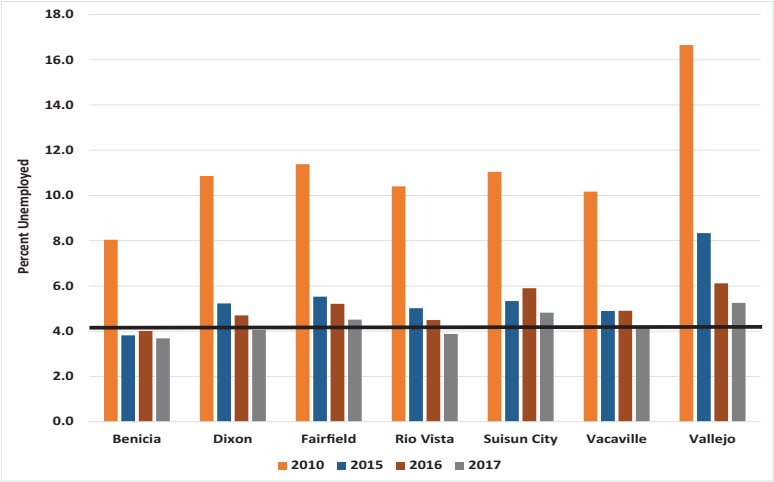
Solano County Employed Residents by City; 2010, 2016, and 2017



Source: California EDD (http://www.edd.ca.gov)

All cities continue trending toward full-employment levels, following Solano County overall. Solano County's unemployment rate in December 2017 was 4.1 percent, the solid line in the figure below.

Solano County Unemployment Rate by City, 2010, 2015, 2016 and 2017
(4.1% as Solano County Average at solid line)



Source: California EDD (http://www.edd.ca.gov)

TAKEAWAY: Employment growth took place across all of Solano County's communities.

CHALLENGE: Vallejo remains a challenge in terms of unemployment, but throughout Solano County employment is improving across all cities.

Employment in Base Industries and Locally-Serving Industries

Base industries are comprised of businesses that build wealth and income due to drawing in revenue from customers and clients outside the local area. Solano County's data shows a mix of industries with components that are export-focused, thus making them "base industries".

Locally-serving jobs generally dominate job markets. Their multiplier effect on the local economy when there are more jobs is less than the same number of new goods-producing jobs, but these jobs are an important foundation for any economy.

"Unassigned" jobs in industries that serve a mix of local and export markets. Outside of Travis Air Force Base, the state and federal government levels of employment are unlikely to be foci of economic development activities.

Solano County Base Industry Employment
Second Quarter Data for 2010, 2015, 2016, and 2017

	2010 Q2	2016 Q2	2017 Q2
Base Industries Total	***32,401***	***36,170***	***36,740***
Agriculture	1,489	1,871	1,919
Mining	223	251	240
Wholesale Trade	3,986	4,137	4,098
Information	612	435	244
Finance and Insurance	991	964	1,001
Real Estate and Rental and Leasing	119	217	241
Professional, Scientific, Technical Services	266	236	263
Management/Consulting	1,217	796	966
Arts, Entertainment, and Recreation	2,455	2,887	2,860
Accommodation and Food Services	701	839	703
Federal government	4,975	3,705	3,702
State government	4,618	5,926	6,043
Manufacturing	6,109	9,107	9,378
Retail Trade	2,334	2,135	2,360
Transportation and Warehousing	2,306	2,664	2,722
Locally-Serving Industries Total	***68,902***	***80,687***	***80,491***
Utilities	480	575	586
Construction	7,119	10,040	9,993
Information	586	435	244
Finance and Insurance	2,323	964	1,001
Real Estate and Rental and Leasing	1,218	217	241
Professional, Scientific, Technical Services	3,121	236	263
Admin/Waste Management Services	6,579	5,718	5,607
Educational Services	1,537	1,739	1,217
Health Care and Social Assistance	12,777	19,249	19,960
Arts, Entertainment, and Recreation	222	2,887	2,860
Accommodation and Food Services	438	381	349
Other Services	3,097	3,787	3,847
Local Government	15,380	16,055	16,061
Local Portion of Retail Trade	13,281	15,740	15,540
Local Portion of Transportation and Warehousing	744	2,664	2,722
Jobs in industries unassigned	21,332	19,456	21,587

Sources: Bureau of Labor Statistics (http://www.bls.gov) and its Quarterly Census of Wages and Employment (QCEW), Calculations by Author

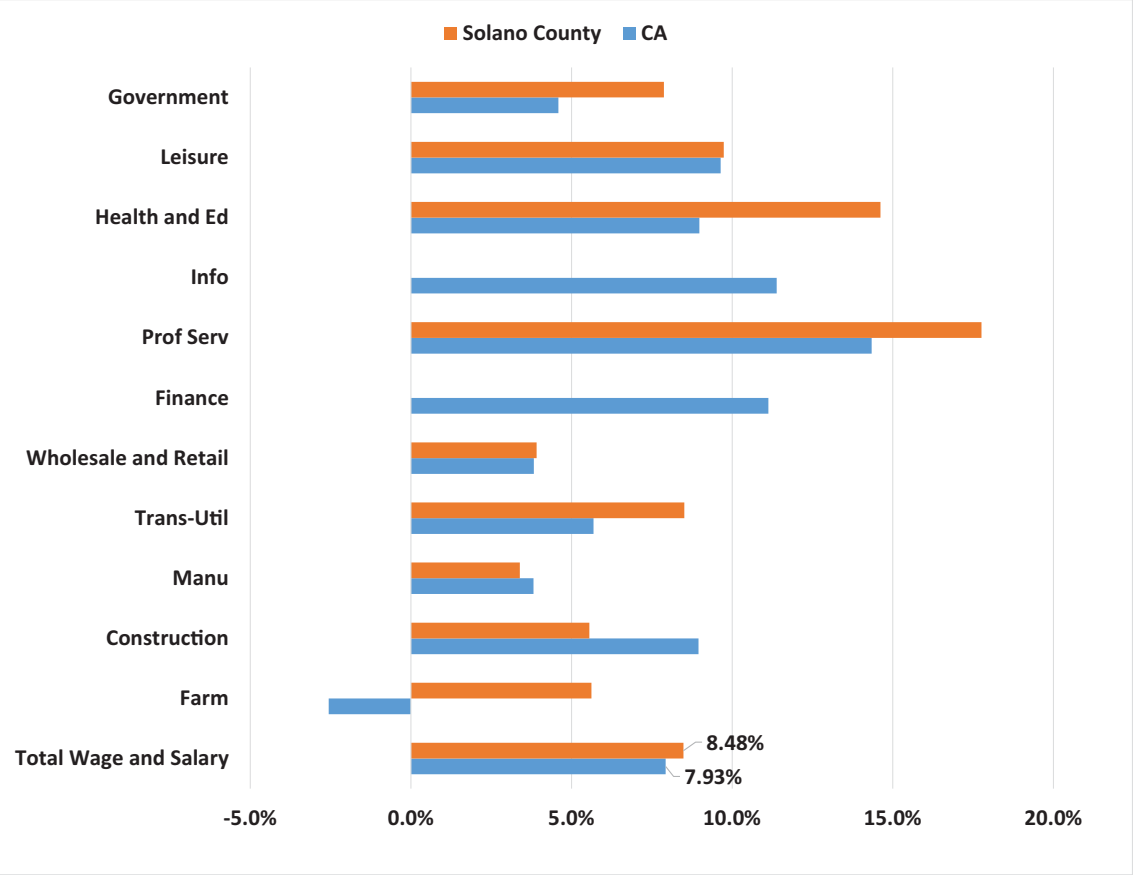
TAKEAWAY: Base industries increased employment by 560 jobs in 2017. The percentage change in locally-serving jobs is larger in 2017 than base employment growth.

OPPORTUNITY: As Solano County's employers continue to hire more workers, looking at employees in locally-serving jobs through aligning local workforce development with working residents of Solano County reduces job search costs and commuting.

Long-Term Jobs Forecast to 2026

CalTrans and the California Economic Forecast (from the UCLA Anderson School of Business) have released a joint forecast for all 58 counties in California from 2017 to 2050. Three ideas stand out. First, jobs growth to 2026 in Solano County should outpace the state overall. Second, both Solano County and California overall are forecasted to see jobs growth of less than one percent per year through 2026. As a comparison, from 2008 to 2017, Solano County jobs grew by 8.23 percent, inclusive of a major recession. Finally, while farm jobs look to be falling in California overall, growth is estimated for Solano County specifically; finance and information (software) jobs are seen as no growth in Solano County in contrast. The following graph shows the forecast through 2026 for Solano County and California (CA).

Solano County Estimated Total Employment (Number of Jobs), 2017 to 2026



*Sources: California EDD (*www.labormarketinfo.edd.ca.gov*) and CalTrans (www.caltrans.org)*
Information and Finance Industry Sectors are expecting zero (0) growth from 2017 to 2016, so no bar exists for those sectors.

TAKEAWAY: Over the next ten years, Solano County is expected out outpace statewide jobs growth in percentage terms and have no industries with job reductions.

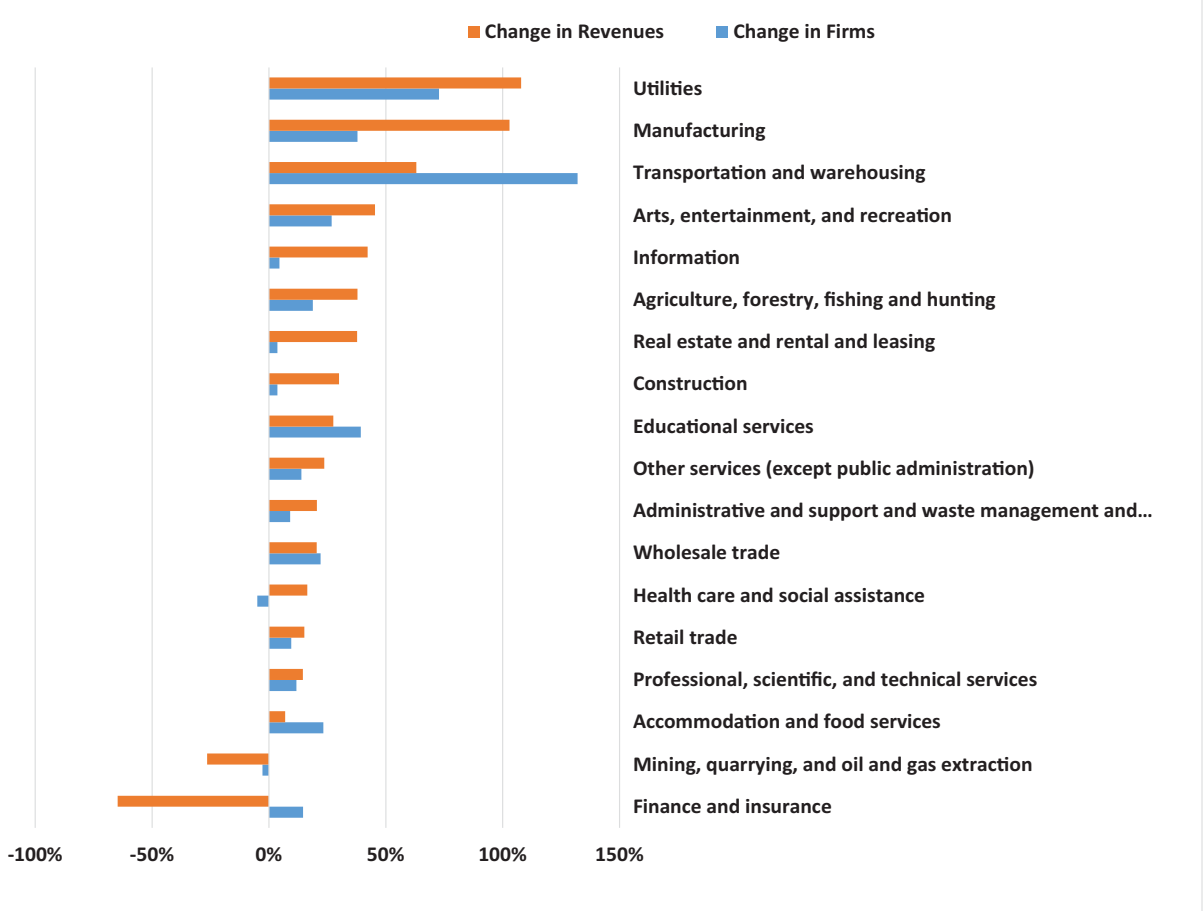
OPPORTUNITY: With jobs growth in Solano County looking to outpace growth in California overall, Solano County has an opportunity to attract more workers and export-focused jobs over the next ten years and shape its own labor market reality.

Businesses and Incomes

Non-Employer Businesses

Non-employer businesses hire fewer than four (4) workers and are mainly self-employment businesses. The Census Bureau tracks non-employer businesses as part of its estimates for total business entities by zip code. The following charts compare 2010 to 2015, the latest year for which data are available. Finance and insurance firms continue to struggle in terms of revenue when self-employed, a lingering effect of the recent recession. Of the 1,168 new self-employed businesses that opened in Solano County in 2015, 68 percent were transportation businesses, where drivers for Uber and Lyft are examples. Changes in manufacturing reflect increases from the depths of the Great Recession more than an expansion of small business manufacturing. Transportation and warehousing are linked through logistics and trucking.

Solano County Non-Employers,
Percent Change in Number of Firms and Business Revenues, 2010 to 2015



Source: Census Bureau (www.census.gov)

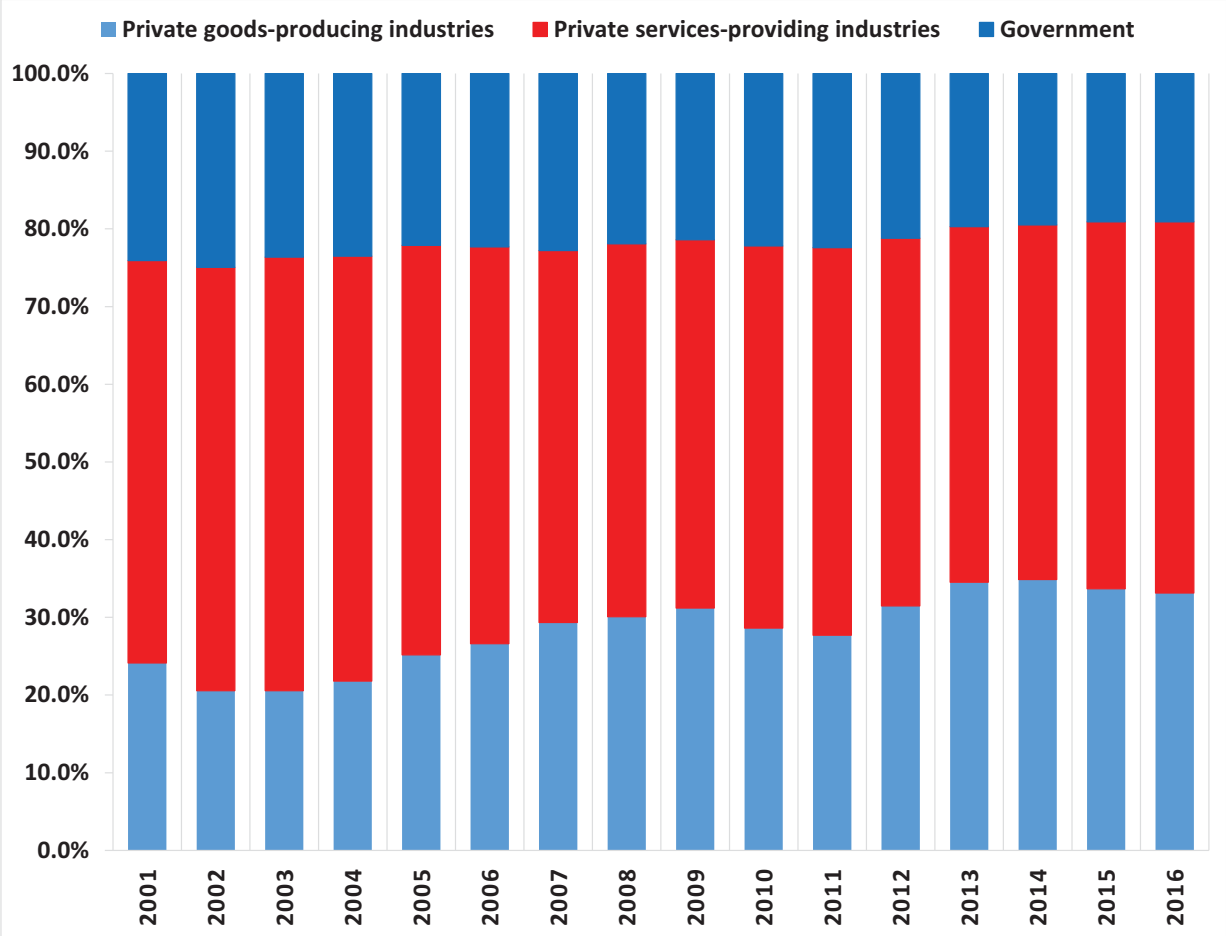
TAKEAWAY: Small business formation continues to show strength, as contract employment businesses like Uber and Lyft continue to proliferate regionally.

OPPORTUNITY: Small business remains the national economy's engine, and Solano County's growth of new, small businesses needs to continue as part of county economic development.

Gross Product Change by Industry Sector

Gross product is a measure of how businesses add value to raw materials and land. Gross County Product (GCP) data show that Solano County is growing across its industry sectors. The shift away from government toward private industries suggests that private sector growth continues to move the local economy forward. Travis Air Force Base provides a key example of how governmental organizations in Solano County continue to bring in revenue from state and federal funding.

Gross Product Share by Major Sector, 2001-16
Proportions in Solano County Over Time, in 2009 Dollars



Source: Bureau of Economic Analysis (http://www.bea.gov)

TAKEAWAY: Goods-producing businesses provide more value-add or gross product per job to the county economy, and Solano County continues to expand these businesses and jobs.

OPPORTUNITY: While government is less important to the overall economy as Solano County had expanded since 2010, Travis Air Force Base remains an important economic development engine and partner for Solano County.

Notice that gross product growth in Solano County increased in 2015 and in 2016 at a faster pace than 2014 and faster than the US economy overall. California, on average, continues to outpace the economic growth of Solano County, but Solano County's growth rate is getting closer to California's. The spike in growth in 2013 was a recovery increase in jobs from the recession's bottom, mainly health care and construction jobs. Since 2012, Solano County has seen compounding growth, even though the annual rate of growth has slowed on average since 2013.

Gross Product Growth Annually, 2002–2016
Solano County, California and the United States Overall, in 2009 Dollars

Source: Bureau of Economic Analysis (http://www.bea.gov)

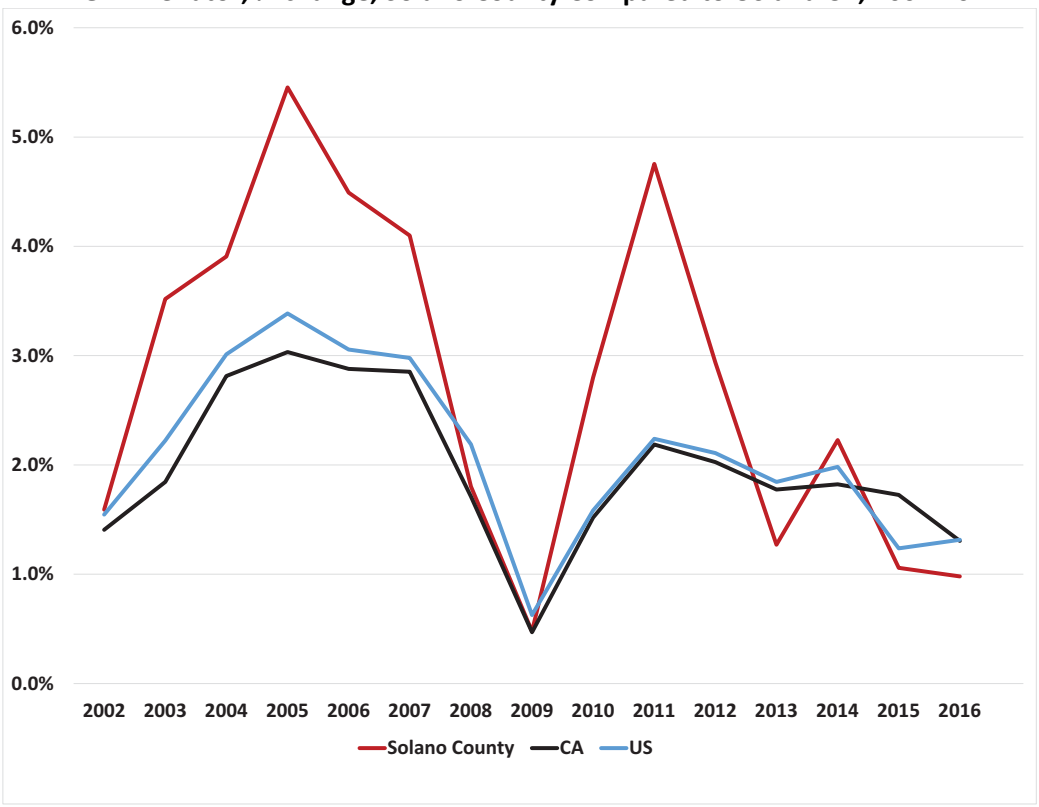
TAKEAWAY: Solano County's continued gross product growth in 2016 (3.1 percent) was faster than the national economy in 2016 (1.5 percent), but slightly slower than California (3.3 percent).

CHALLENGE: Retaining and expanding businesses is something all counties attempt to do, and Solano County must remain competitive as a place to do business for gross product to continue to grow as it has since 2012.

Gross Product Deflator and Local Cost of Living

These are new data for the 2017 Index. Because real gross product is an inflation-adjusted measure of nominal gross product, the ratio (or the Gross Product Deflator) of nominal to real variables is a measurement of price levels. The Consumer Price Index (CPI) is a classic way to consider costs of living; The CPI and GDP deflator for California and the United States are highly correlated. The Bureau of Labor Statistics follows the CPI for the US and many large metropolitan areas around the country, but no official CPI data are available for Solano County. The Bureau of Economic Analysis (BEA), in estimating gross product for all metropolitan areas across the United States, is now estimating both nominal **and** real gross product for Solano County. The figure here shows how prices in Solano County rose quickly before the recent recession, quickly fell during recession, bounced back and moderated since 2013. The deflator, as a measure of prices, may or may not suggest expansion or contraction alone. The key is slow and steady growth; slow inflation rates are less likely to slow down real economic growth.

GDP Deflator, % change, Solano County Compared to US and CA, 2002-16



Source: Bureau of Economic Analysis, Regional Data (http://www.bea.gov/regional)

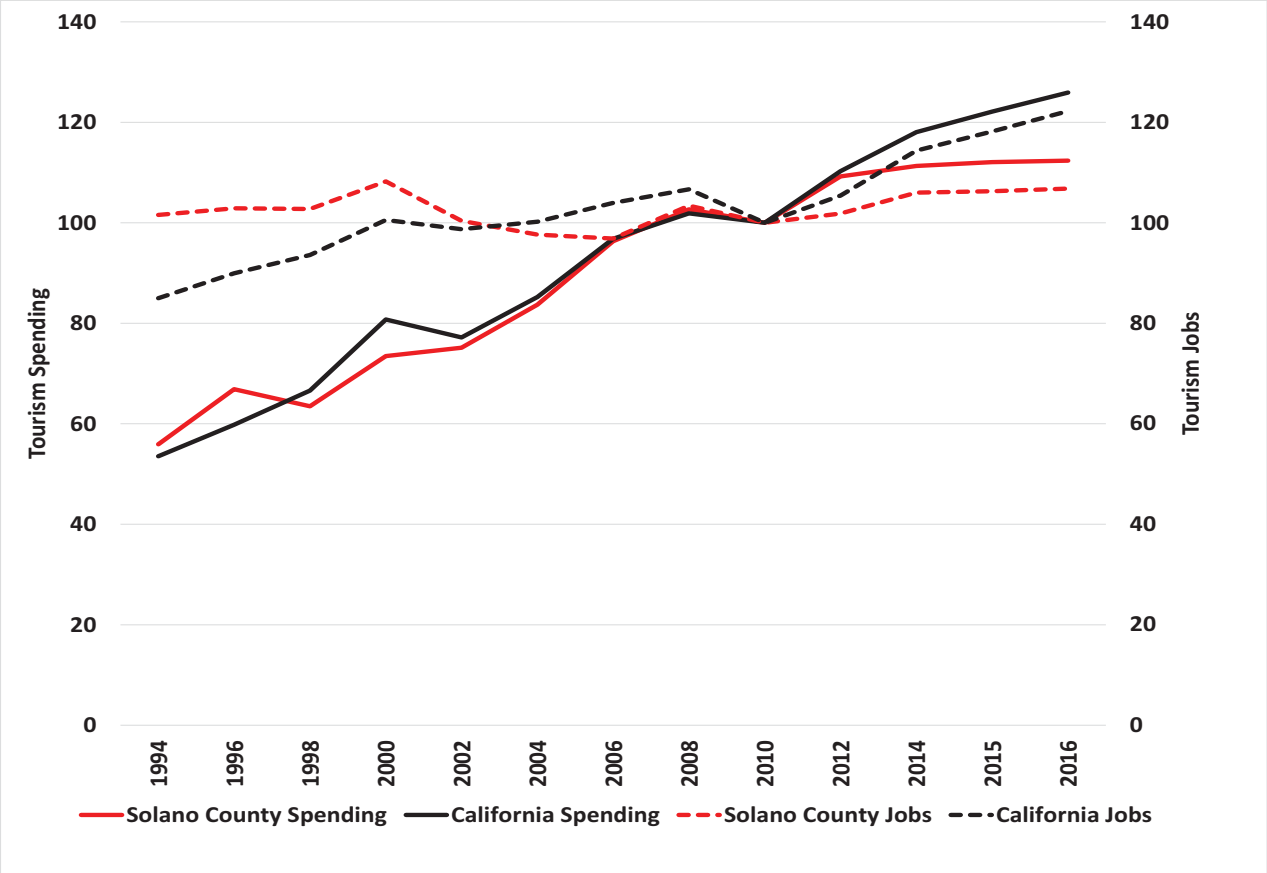
TAKEAWAY: While cost of living is more volatile for local areas than the national and state economies, like the broader areas of comparison, Solano County's recovery is also characterized by slow, steady price growth.

CHALLENGE: As Solano County's economy continues its expansion, pressure of these costs to rise more quickly become higher wages and rising costs of doing business, an economic and workforce development challenge.

Tourism Industry: Supporting Visitors

Hotel, motel, restaurant, and tourist attraction businesses are the core employers that support visitors in a local area. Visitors come in two forms: pleasure and business visitors. Dean Runyan Associates provides estimates of both the number of jobs and the income levels made by supporting visitors for all 58 counties of California. Solano County has about six (6) percent of total county economy jobs in 2016 (the latest tourism analysis data) supporting visitors. Notice Solano County jobs and spending have flattened a bit since 2012; part of this is explained by increased regional competition, the remainder is an opportunity for growth given the statewide trends. Income growth has been faster than employment growth suggesting hotels and restaurants are able to do more with fewer workers, including utilizing more technology.

Tourism Jobs and Spending, Visitors Spending in Solano County and California
1994 to 2016, Index 2010 = 100



Source: Dean Runyan Associates (http://www.deanrunyanassociates.com)

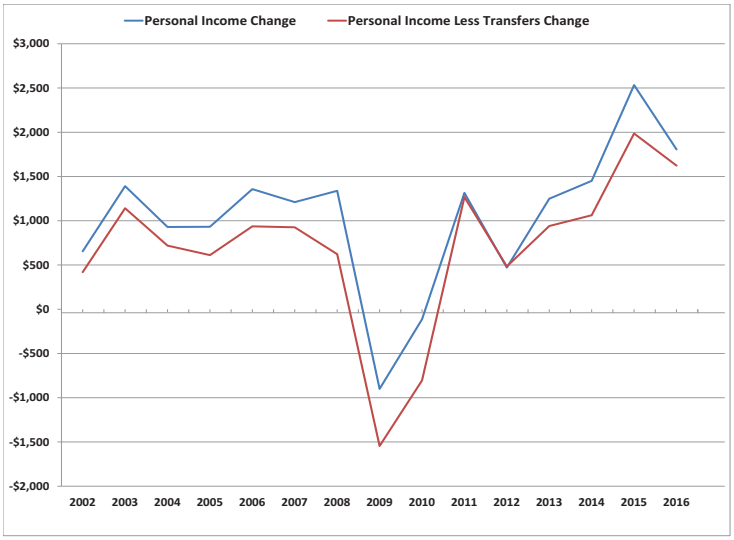
TAKEAWAY: While tourism jobs and spending have grown in Solano County since 1994, and a greater increase since 2012, while California overall has a faster pace of growth.

OPPORTUNITY: Solano County is beset on all sides by tourism destinations, and the county has many destinations that could lead to more hotel stays, more spending, and more overall revenue based on the flow of visitors in all directions.

Personal Income

Personal income is what households use from gross product to pay taxes, buy goods and services, and also save. Personal income is made up of wages and salaries, transfer payments from all levels of government, investment income (dividends, interest, and rents), income from owning a business (proprietor's income), and other income sources. Solano County saw further personal income gains in 2016 (the latest year for which data are available). As a percentage of total personal income, transfer payments increased slightly in 2016, as did earned and investment income gains rose. As taxable sales data suggest, continued personal income growth supports sales.

Percent Change in Per Capita Personal Income (PI), Solano County, 2002–2016, in 2009 Dollars



Source: Bureau of Economic Analysis (www.bea.gov)

Percent Change in Per Capita PI 2009 Dollars, Compared to 2016 Solano County, California, and US

Comp to 2016	*Solano County*	*CA*	*US*
2010	**9.9%**	**15.7%**	**11.1%**
2014	**6.4%**	**5.8%**	**4.5%**
2015	**1.8%**	**0.7%**	**0.4%**

Source: Bureau of Economic Analysis (www.bea.gov)

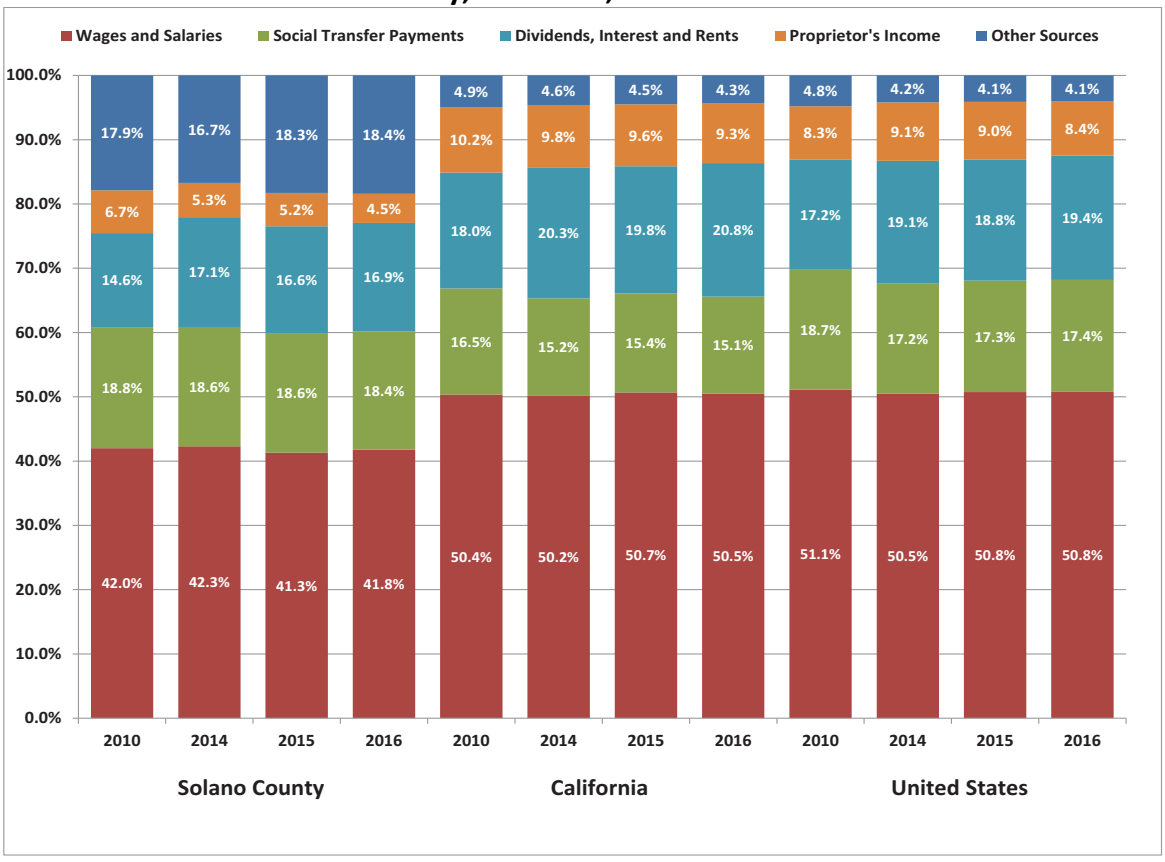
TAKEAWAY: Personal income less transfer payments continued to grow, but at a slower pace in 2016, reflecting both slower wage growth and volatility in returns on financial investments.

CHALLENGE: Per-capita, personal income growth can take place due to transfer payments from the government alone. Solano County may have as many as one in four households that rely on government transfers for a portion of their personal income, a workforce development challenge to create higher wage jobs.

Sources of Personal Income

Households generate personal income primarily due to earnings at work. Including Bureau of Economic Analysis adjustments for commuting residents, other sources of income saw some growth in Solano County. This "Other Sources" category is relatively large in Solano County versus California and the US overall. This difference is due to accounting for the flow of income from other areas, so-called "Adjustments for Residence", as more people leave Solano County for work than come in to work. For example, when a large number of local residents leave a county for work elsewhere, the income they bring home can be a significant portion of a county's personal income in total. This net flow of positive, personal income for Solano County suggests large outbound commuting in net, which is corroborated by commuting data shown later in this Index; California and the United States overall have little of this, as do large state and national economies. Transfer payments fell to 18.4 percent of personal income in Solano County, still higher than the national and state average, but less than 2015. Investment income from dividends, interest and rents increased in all areas, as equity markets gained in 2016 (the latest data).

Sources of Personal Income, 2010–2016, in 2009 Dollars
Solano County, California, and the United States



Source: Bureau of Economic Analysis (www.bea.gov)

TAKEAWAY: Wage growth overall in Solano County helped personal incomes rise, a sign of labor market growth, as social transfers become a smaller percentage of income.

OPPORTUNITY: Given the amount of commuter flows out of Solano County to work, workforce and economic development opportunities can increase average wages and reduce the number of potential workers on social transfers/assistance.

Business Affordability: Wages

Occupational wage data in California allow a comparison of Solano County to regional counties otherwise in what employers pay for specific skills or occupations. The California Employment Development Department (EDD) publishes occupational wage survey results annually. Sacramento's MSA surged ahead of the state average wage level in 2017, a reflection that 2016 was a major year of jobs growth in Sacramento. Solano County's wages have increased since 2016; labor in 2017 remains less expensive than the state average and Bay Area county counterparts.

Solano County and California 2017 Wages and Occupations (2010 shown in summary)
Compared to Other Areas as a Percent of Average Wages in California, 2017

	Wage Comparisons									*2010*	*2010*
Occupational Categories	*CA*	*Solano*	*Solano Wages*	*Napa*	*Sonoma*	*Sacra-mento MSA*	*Alameda*	*San Francisco*	*San Jose*	*CA*	*Solano*
Total all occupations	**$19.49**	**98.7%**	**$19.24**	**94.2%**	**97.1%**	**104.1%**	**118.8%**	**137.6%**	**147.9%**	**$24.10**	*94%*
Management Services	**$54.33**	86.9%	$47.20	90.2%	86.6%	89.2%	109.0%	127.8%	141.0%	**56.64**	88%
Business and Financial Operations	**$35.92**	95.5%	$34.31	96.9%	90.5%	90.8%	107.8%	120.1%	125.6%	**34.98**	93%
Computer and Mathematical	**$48.21**	85.1%	$41.01	77.6%	87.3%	83.4%	104.3%	111.1%	127.1%	**42.16**	88%
Architecture and Engineering	**$45.20**	92.5%	$41.79	86.9%	93.8%	99.6%	102.5%	107.1%	121.6%	**41.56**	84%
Life, Physical, and Social Science	**$36.26**	110.6%	$40.09	108.2%	96.8%	98.1%	111.6%	126.7%	106.8%	**35.36**	102%
Community and Social Services	**$23.13**	106.1%	$24.53	108.6%	99.8%	95.4%	106.0%	101.8%	104.3%	**24.59**	117%
Legal Services	**$49.58**	90.5%	$44.85	75.3%	68.1%	96.1%	99.0%	126.5%	134.4%	**56.00**	86%
Education, Training, and Library	**$25.83**	98.0%	$25.32	97.4%	85.3%	91.2%	101.9%	106.5%	110.0%	**27.46**	98%
Arts, Design, Entertainment, Sports, and Media	**$27.30**	70.8%	$19.33	84.8%	91.2%	82.1%	84.7%	118.5%	112.1%	**31.60**	70%
Healthcare Practitioners and Technical	**$41.12**	123.6%	$50.82	105.5%	86.8%	115.8%	123.3%	131.3%	125.4%	**40.21**	99%
Healthcare Support Services	**$15.87**	106.4%	$16.88	106.7%	111.2%	108.9%	115.7%	117.9%	115.8%	**14.62**	104%
Protective Services	**$20.62**	180.4%	$37.20	95.5%	90.2%	91.1%	93.5%	102.5%	93.1%	**25.37**	128%
Food Preparation and Serving-Related	**$10.70**	96.6%	$10.34	112.7%	106.6%	95.2%	101.9%	118.5%	107.1%	**10.66**	95%
Building and Grounds Cleaning and Maintenance	**$12.95**	107.3%	$13.90	102.9%	108.3%	101.1%	116.8%	115.8%	101.0%	**13.23**	104%
Personal Care and Services	**$11.42**	91.6%	$10.46	103.4%	111.3%	94.5%	105.3%	123.7%	108.1%	**12.97**	96%
Sales and Related Services	**$13.81**	86.6%	$11.96	117.7%	103.6%	97.1%	109.1%	132.7%	124.5%	**18.93**	82%
Office and Administrative Support	**$18.17**	102.2%	$18.57	101.8%	103.3%	101.8%	112.8%	123.7%	120.5%	**17.82**	100%
Farming, Fishing, and Forestry	**$9.67**	101.2%	$9.79	128.2%	124.8%	104.9%	131.0%	153.5%	109.4%	**10.11**	109%
Construction and Extraction	**$25.00**	106.7%	$26.67	108.1%	110.7%	97.6%	116.7%	124.6%	113.8%	**24.62**	105%
Installation, Maintenance, and Repair	**$22.84**	104.2%	$23.81	103.9%	104.6%	99.0%	114.6%	126.0%	114.7%	**22.86**	110%
Production Jobs	**$14.70**	114.4%	$16.81	124.6%	111.3%	107.8%	117.3%	123.3%	120.1%	**15.95**	119%
Transportation and Material Moving Services	**$14.47**	100.0%	$14.47	100.5%	104.4%	105.4%	124.3%	118.7%	107.0%	**$16.06**	102%

Source: Employment Development Department, Occupations Data (www.edd.ca.gov), Q1 2017 and Q1 2010
Wages in GREEN are for occupations where Solano County wages are greater than California wages.

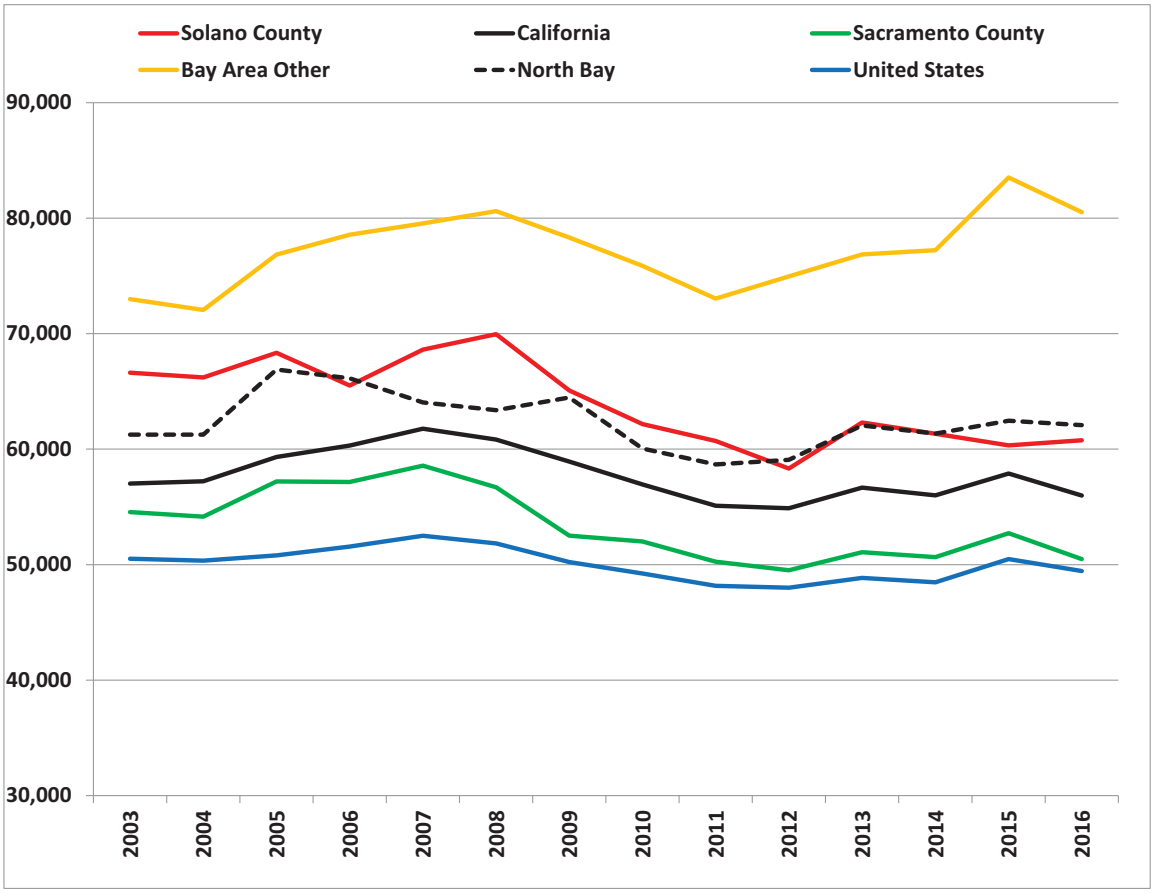
TAKEAWAY: Solano County wages continue to be a competitive advantage across the state and in neighboring communities.

OPPORTUNITY: With the cost of living rising in the core Bay Area, relatively lower wages in Solano County can be an attractant for both new businesses and existing businesses moving from other parts of the region, along with lower-priced housing and commercial spaces.

Median Household Income Comparisons

Median household income is another measure of rising or falling incomes, typically representing four people forming a household. For Solano County, inflation-adjusted, median household income increased a bit in 2016 while all other comparison areas fell slightly. As shown above, personal income growth in Solano County for 2016 was stronger than surrounding counties for Solano County; the Bay Area Other counties, mainly San Francisco and San Mateo counties, fell back a bit in real terms in 2016 despite personal income gains.

Median Household 2003–2016, Comparisons Between Selected Areas, in 2009 Dollars



Sources: Median Household Income, Census Bureau (http://factfinder.census.gov); CPI Data is from California Department of Finance (http://www.dof.ca.gov/Forecasting/Economics/Indicators/Inflation/)

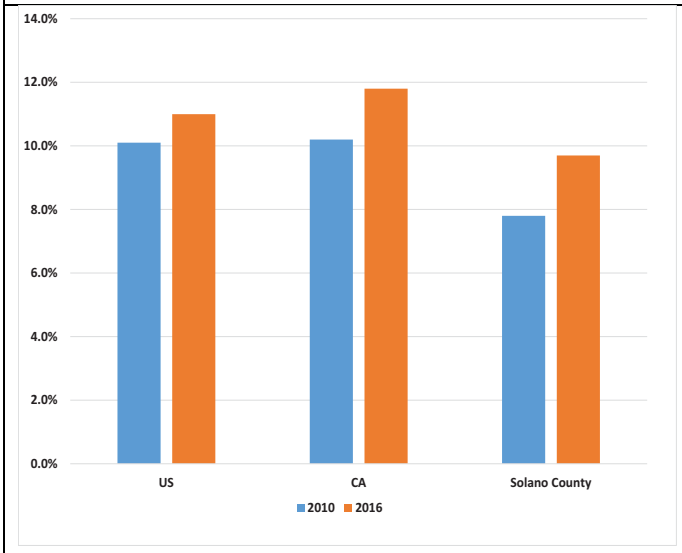
TAKEAWAY: In Solano County, 2016 was the first increase in median household income after inflation adjustments since 2013 (+$430 in 2016), with all other comparison areas falling slightly.

CHALLENGE: While Solano County's MHI in real terms is higher than the state average, the Bay Area income levels are generally higher as a reflection of higher wages. This difference provides a reason for Solano County residents to commute into the Bay Area other counties for work versus lower-wage jobs in Solano County.

Poverty Rates

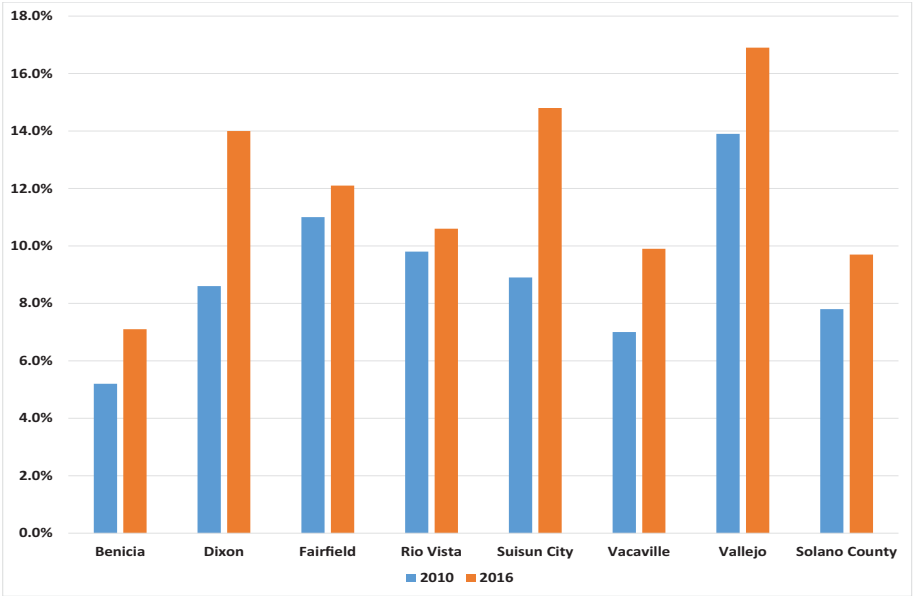
These data are new in this Index version. As incomes grow during economic recovery and expansion, not all households rise out of poverty conditions. The American Community Survey (ACS) of the Census Bureau tracks poverty rates along with other demographic and economic data cited in this Index. These are five-year averages, ending in the year shown in the following graphs. Solano County has a lower poverty rate than both the United States and California on average since 2010. However, cities in Solano County have relatively high percentages of households in poverty. In 2010, the baseline year, the income threshold for a household of four people was $22,314 and then $24,563 in 2016.

Poverty Rates, 2010 and 2016, Percentage of all Households, Solano County, California and The United States



Source: American Community Survey (ACS) Table DP03: http://factfinder.census.gov

Poverty Rates, 2010 and 2016, Percentage of all Households, Solano County Cities and County Overall



Source: American Community Survey (ACS) Table DP03: http://factfinder.census.gov

TAKEAWAY: Even with economic recovery, poverty rates on a five-year average are rising.

CHALLENGE: Many of Solano County's communities have poverty concerns, which reduces personal income and median household income per capita, and pressures government resources to provide assistance to county households (perhaps as much as 1 in 4) to fill gaps in income.

Agriculture

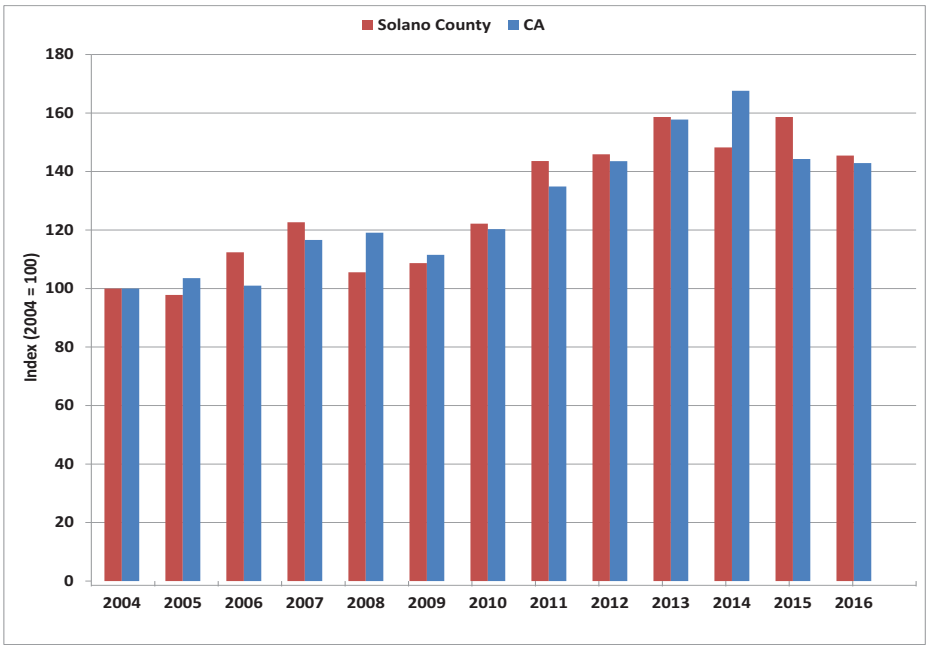
Agriculture comes in many forms, and has many links to local manufacturing for food and beverages, and is also an export industry for Solano County. The Solano County Agricultural Commissioner publishes annual data on agricultural outcomes in the county. Wine grapes continued to increase in value in 2016 (the latest data). Calves and cattle saw a sharp decline as did processed tomatoes, but other major agricultural industries saw growth. The effects of drought may explain the continued downturn for 2016, such as hay prices rising becoming reduced cattle values and farming, these conditions may continue to suppress growth in 2017's crop and agricultural values.

Solano County Top 10 Agricultural Industries and Revenues 2010, 2014, 2015, and 2016, Sorted by 2016 Value

Agricultural Product	*2010*	*2014*	*2015*	*2016*
Total Solano County	**$259,398,000**	**$378,645,000**	**$353,869,000**	**$347,172,000**
Walnuts	$31,161,700	$45,422,000	$37,912,000	$44,822,000
Nursery Products	23,352,000	35,594,000	37,648,000	39,754,000
Almonds	8,468,100	14,156,000	23,603,000	35,917,000
Tomatoes (Processed)	36,901,400	46,124,000	42,156,000	33,843,000
Alfalfa	19,742,700	43,700,000	34,821,000	22,267,000
Grapes	9,274,800	17,621,000	14,988,000	19,560,000
Sunflower Seeds	7,845,300	14,455,000	6,904,000	11,414,000
Sheep	6,355,600	7,912,000	6,684,000	9,339,000
Cattle/Calves	22,608,000	31,673,000	27,556,000	9,192,000
Wheat	9,672,700	13,789,000	9,092,000	7,428,000
All Other Ag Products	$81,895,800	$113,988,000	$112,505,000	$113,636,000

Source: Solano County Agricultural Commissioner (http://solanocounty.com/depts/agriculture/crop_report/2009_2018.asp)

Total Agricultural Value, Solano County and California, 2004–2016, Index 2004 = 100



Sources: Bureau of Economic Analysis (www.bea.gov) and Solano County Agricultural Commissioner (https://www.solanocounty.com/depts/agriculture/crop_report/2009_2018.asp)

TAKEAWAY: Agricultural values fell again in 2016, likely due to continued, low commodities prices and drought conditions reducing yields and herds.

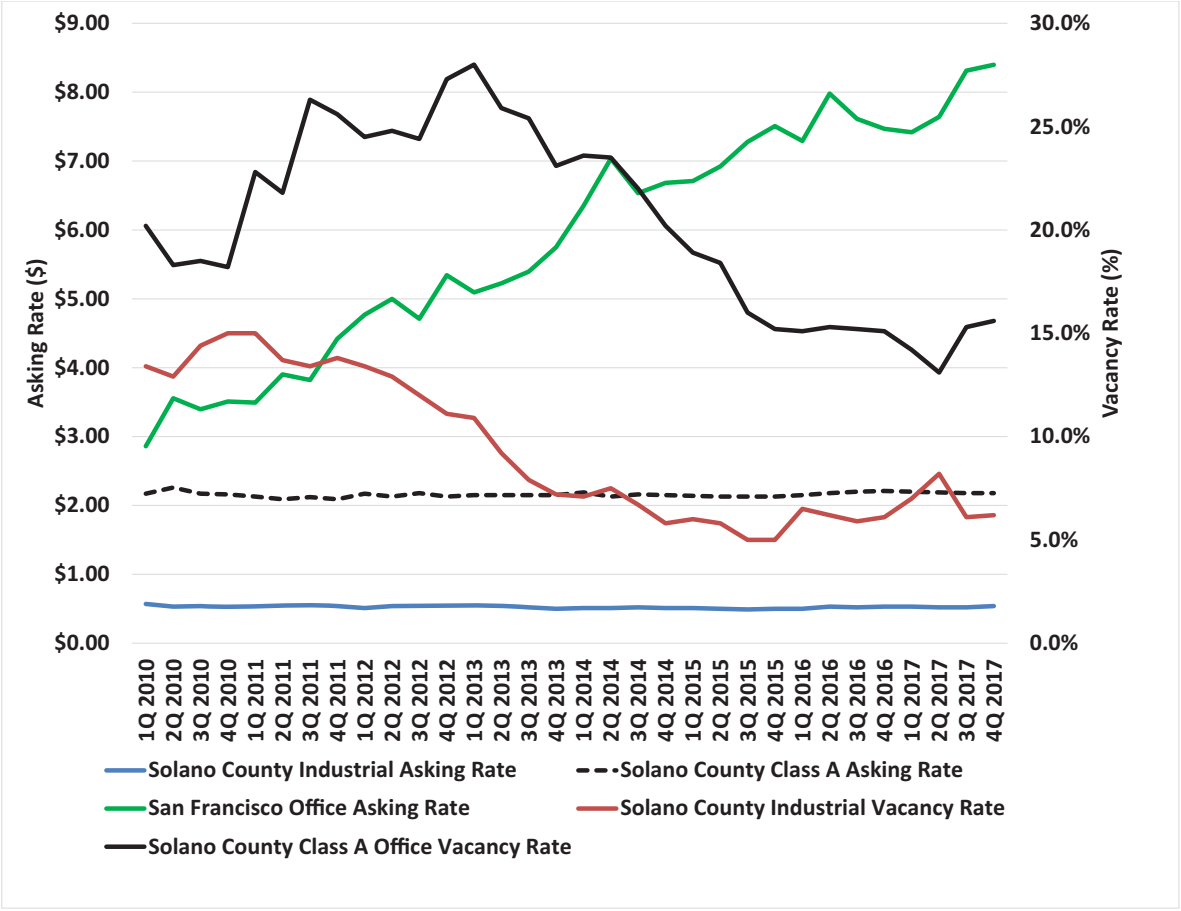
OPPORTUNITY: Food and beverage manufacturing throughout the world can use local agriculture in Solano County as a raw input, expanding support for local farmers.

Housing and Commercial RE Demand

Commercial Real Estate Pricing and Vacancy

Commercial real estate data track available infrastructure for companies operating (or wishing to operate) in the region. The figures here show industrial and office space, two of the most common types. As with other markets, the commercial real estate market is regional. There was 1.28 million square feet of space permitted in fiscal year 2016-17 for Solano County, 67 percent of this new space was permitted in Fairfield and Vacaville.

Solano County Industrial Space Asking Price/Sq Ft and Vacancy Rate, 2010-2017 Q4



Source: Colliers International (http://www.colliers.com/en-us/fairfield/insights)
Asking Price is indicated on the left-hand axis; Vacancy Rate is indicated on the right-hand axis.

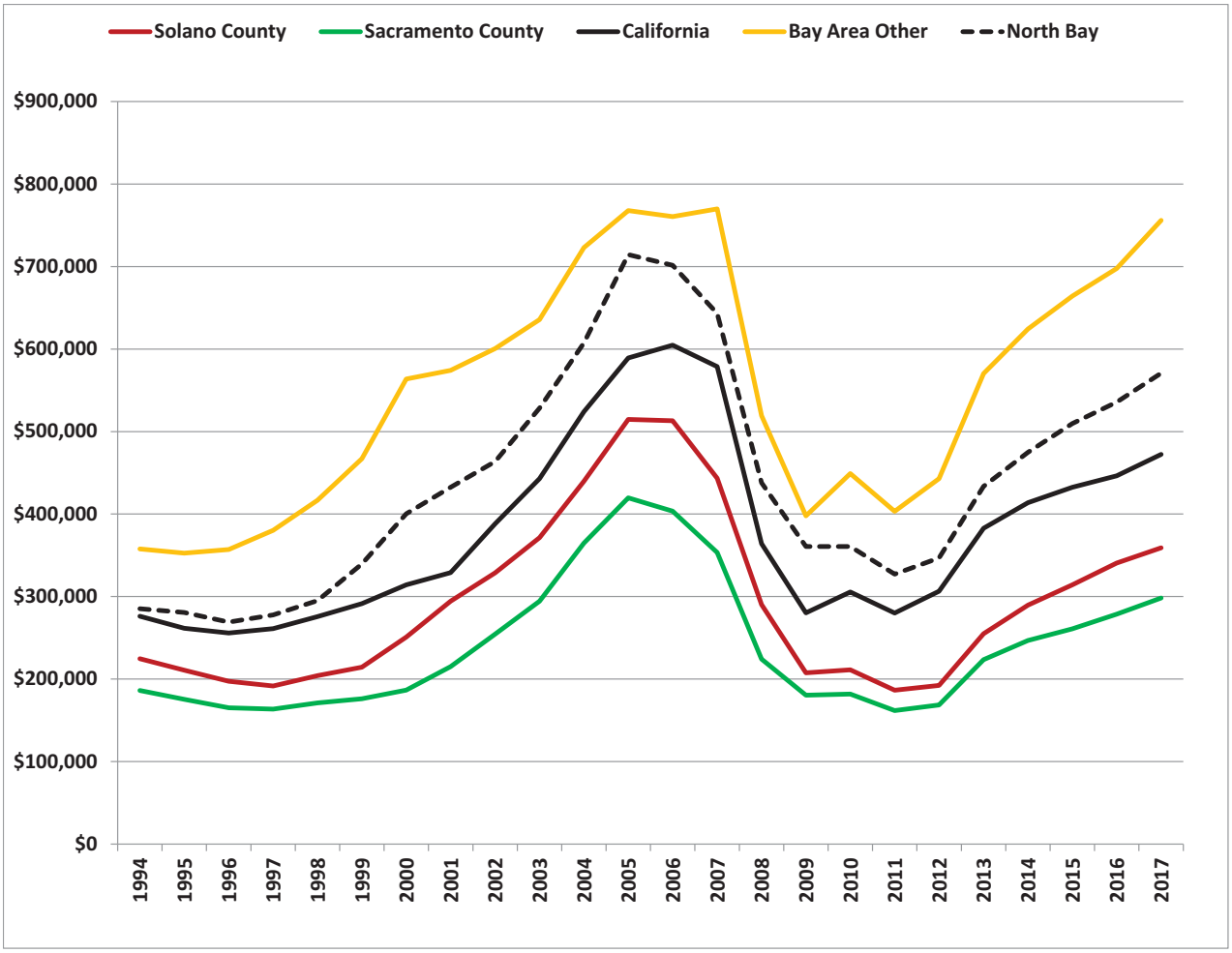
TAKEAWAY: Vacancy rates increased slightly in 2017, while prices remained flat and industrial space is close to fully utilized. Low vacancy rates means more productive spaces.

OPPORTUNITY: With office vacancy relatively high and prices relatively low (flat for some time), attraction and expansion of business is less costly in Solano County. High prices in San Francisco County (in excess of $8 per sq ft.) also act as an economic development opportunity for Solano County.

Median Home Prices, Home Sales Volume, and Rental Prices

Housing markets continued their recovery and expansion in 2017 in terms of median home price. Sales volume was estimated at 9,452 single-family home units in Solano County for 2017, basically the same volume as 2016. There are 4,800 more housing units built in net in Solano County since 2010 (the end of the Great Depression as a reference point) on the supply side. Prices increased by 6.8 percent in Solano County between 2016 and 2017; according to the California Association of REALTORS®, Solano County's median home price was approximately $450,000 as of December 2017. The statewide median was $549,650 for a single-family home as 2017 ended according the California Association of REALTORS®.

Median Home Price, 1994–2017, Comparisons Between Selected Areas, in 2009 Dollars, Monthly

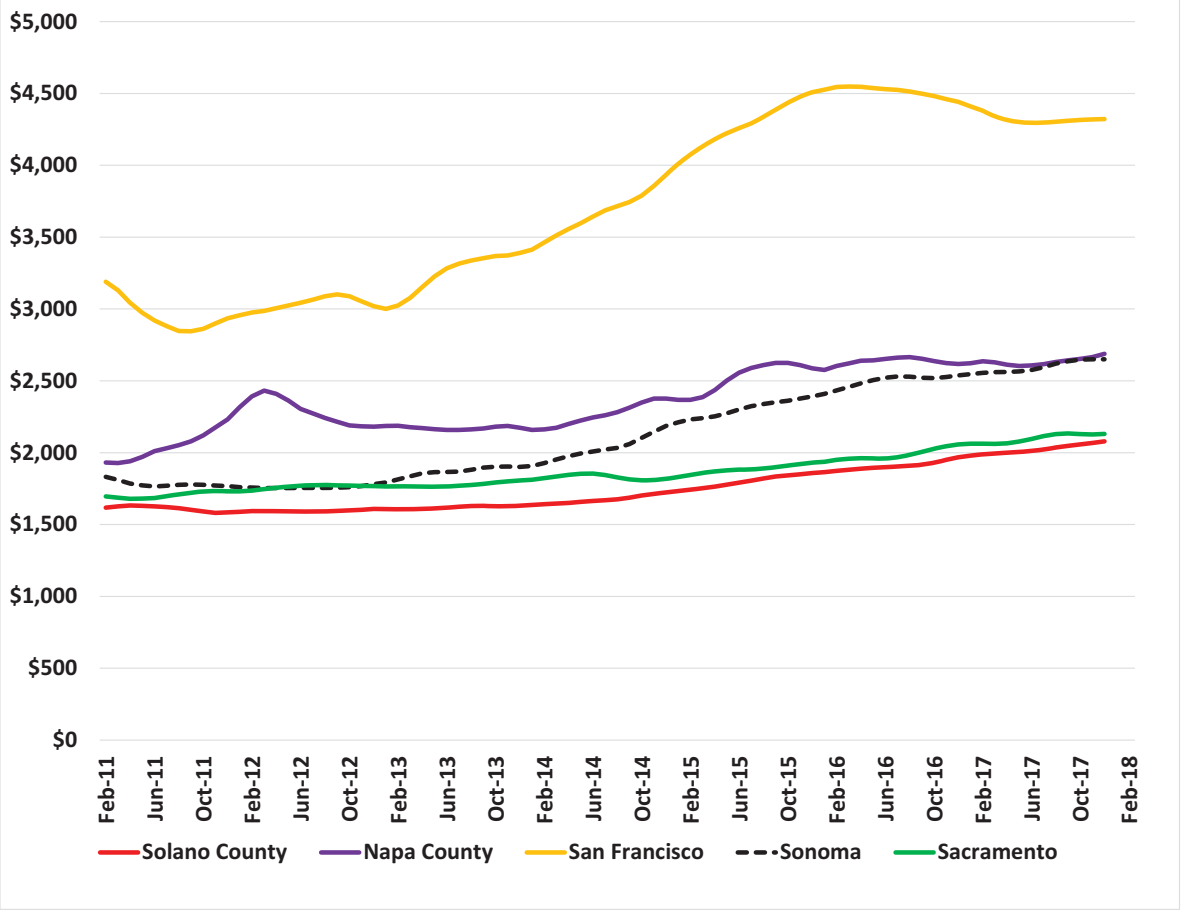


Sources: California Association of Realtors (www.car.org)

Note: Sacramento County is shown alone (rather than the Sacramento MSA) because there is not similar data over time for Placer, Yolo, and El Dorado counties.

Rental prices have also slowly increased, another sign of both excess demand for housing. In February 2011, the average rental price for one- and two-bedroom apartments in Solano County was $1,687 per month, according to Zillow Research. The regional fires of late 2017 have put more pressure on both home purchase and rental pricing such that 2018 is a year where prices are likely to rise regionally for both market and post-fire reasons. Rental prices are $2,100 at the median as of January 2018 in Solano County, and should increase throughout 2018 due to regional supply constraints and rising demand.

Rental Prices for 1-Bedroom, 2-Bedroom, and Average of All Rental Units, 2011–2017, Monthly



Source: Zillow Research (http://www.zillow.com/research/data/#rental-data)

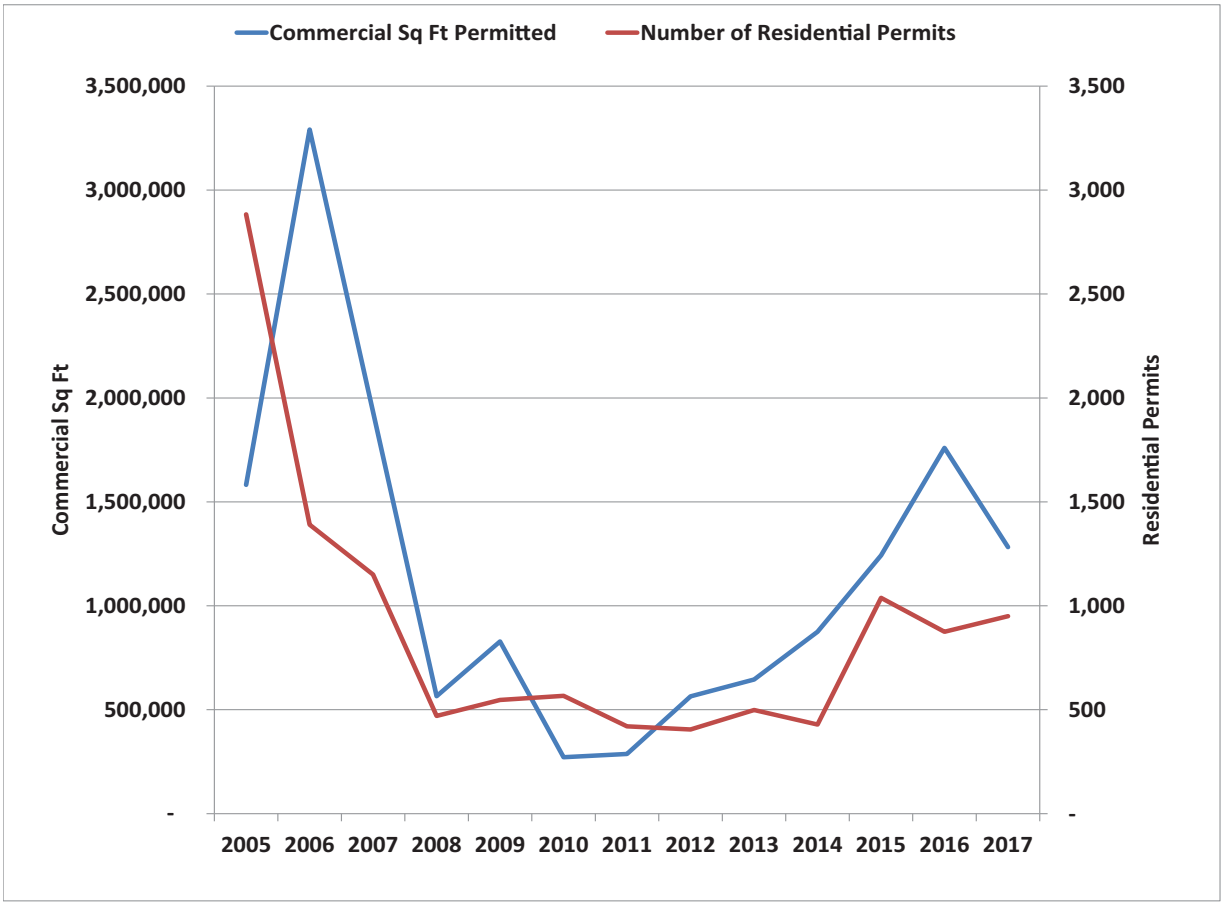
TAKEAWAY: 2017 the sixth straight year of home price growth at the median in Solano County, 6.8 percent higher than 2016; statewide median home prices increased by 6.6 percent in 2017. Rental prices continued to slowly climb regionally.

CHALLENGE: The regional fires of late 2017 have exacerbated a short supply of housing. Economic development professionals need to watch housing and rental markets closely as an indicator of rising cost of living locally.

Building Permits

Residential building permits data are a way to forecast an increase in housing units, construction activity around housing, and subsequent impacts on the local economy. Commercial space construction is an indicator of confidence in the local and regional economies, as employers build or occupy more space as a business grows. The County of Solano tracks both data series as shown here. Approximately 1.28 million square feet of new commercial space was permitted in fiscal year 2016-17. There were also 950 residential building permits issued.

Solano County Residential and Commercial Building Permits, Fiscal Years 2004-05 to 2016-17
Commercial Square Feet and Residential Units Permitted



Sources: Census Bureau (http://www.census.gov/const) and County of Solano (via e-mail with staff)

TAKEAWAY: Building permits for both residential and commercial space continue to grow as Solano County's economy expands in fiscal year 2016-17.

OPPORTUNITY: Given regional housing shortfalls due to slow building and 2017 fires that destroyed housing stock, Solano County is poised to be a place where businesses and residents can grow simultaneously as more people look at Solano County as a place to live after the recent fires, but remain in the greater Bay Area.

Housing Prices Versus Median Household Income

The California Association of REALTORS® provides a way to measure housing affordability through a "Housing Affordability Index" or HAI. The HAI takes median household income levels and estimates of the cost of owning a home (mortgage, average cost of utilities and maintenance, etc.); these data become a ratio to determine and compare what percentage of the population can afford to buy a home at the current median home price.

If household income does not keep pace with local housing prices, affordability falls; as of 2017 Q3, 43 percent of households in Solano County can afford to purchase a home at the median household income, given current rates of interest and the average cost of home ownership.

Housing Affordability Index, 2010 Q3 to 2017 Q3
Percent of the Population That Can Afford a Median-Priced Home

Quarter	*Solano*	*Sacramento*	*Calif.*	*Sonoma*	*Napa*	*Santa Clara*	*Alameda*	*Contra Costa*	*Marin*	*San Francisco*
2010.Q3	71%	68%	46%	40%	41%	30%	31%	21%	23%	22%
2011.Q3	75%	72%	52%	46%	48%	34%	36%	27%	25%	26%
2012.Q3	77%	73%	49%	46%	45%	32%	34%	28%	27%	25%
2013.Q3	56%	50%	32%	31%	28%	22%	21%	22%	18%	16%
2014.Q3	49%	48%	29%	29%	21%	21%	21%	20%	15%	12%
2015.Q3	44%	46%	29%	24%	21%	19%	20%	34%	19%	10%
2016.Q3	45%	45%	31%	27%	25%	22%	22%	35%	19%	14%
2017.Q3	43%	43%	28%	25%	26%	17%	20%	33%	18%	13%

Source: California Association of Realtors (http://www.car.org/marketdata/data/haitraditional/), Quarter 3 2017 is the latest data

TAKEAWAY: Solano County's affordability is large than most regional counties and the state, but is dramatically reduced since emerging from the Great Recession.

CHALLENGE: Continued pressure on affordability is coming as regional housing shortages pressure housing costs due mainly to the 2017 fires.

Our Changing Community

People

Population Growth

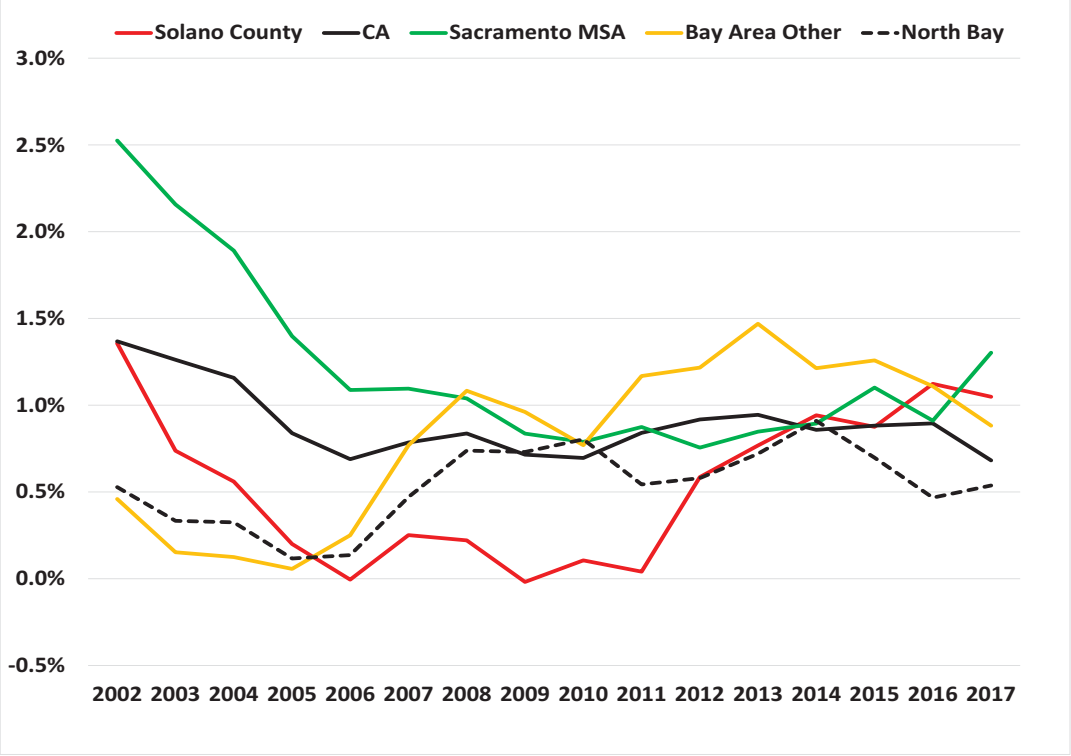
Population growth creates workforce and housing demand. Solano County's population grew by 4,525 residents from January 1, 2016 to January 1, 2017; the growth rate was approximately 1.1 percent. The Bay Area Other counties grew by 55,677 people, with a growth rate that was also 1.1 percent in contrast.

Change in Total Population, Compared to 2017

Place	*2010*	*2016*	*2010*	*2016*
Solano County	22,755	4,525	4.4%	1.1%
California	2,299,713	267,730	5.5%	0.9%
Sacramento MSA	97,511	19,473	5.5%	0.9%
Bay Area Other	505,265	55,677	7.7%	1.1%
North Bay	39,576	4,871	4.0%	0.5%

Source: California Department of Finance, Demographic Research Unit (www.dof.ca.gov)

Population Growth Percent Change from the Previous Year, 2002–2017, January 1 Estimates



Source: California Department of Finance, Demographic Research Unit (www.dof.ca.gov)

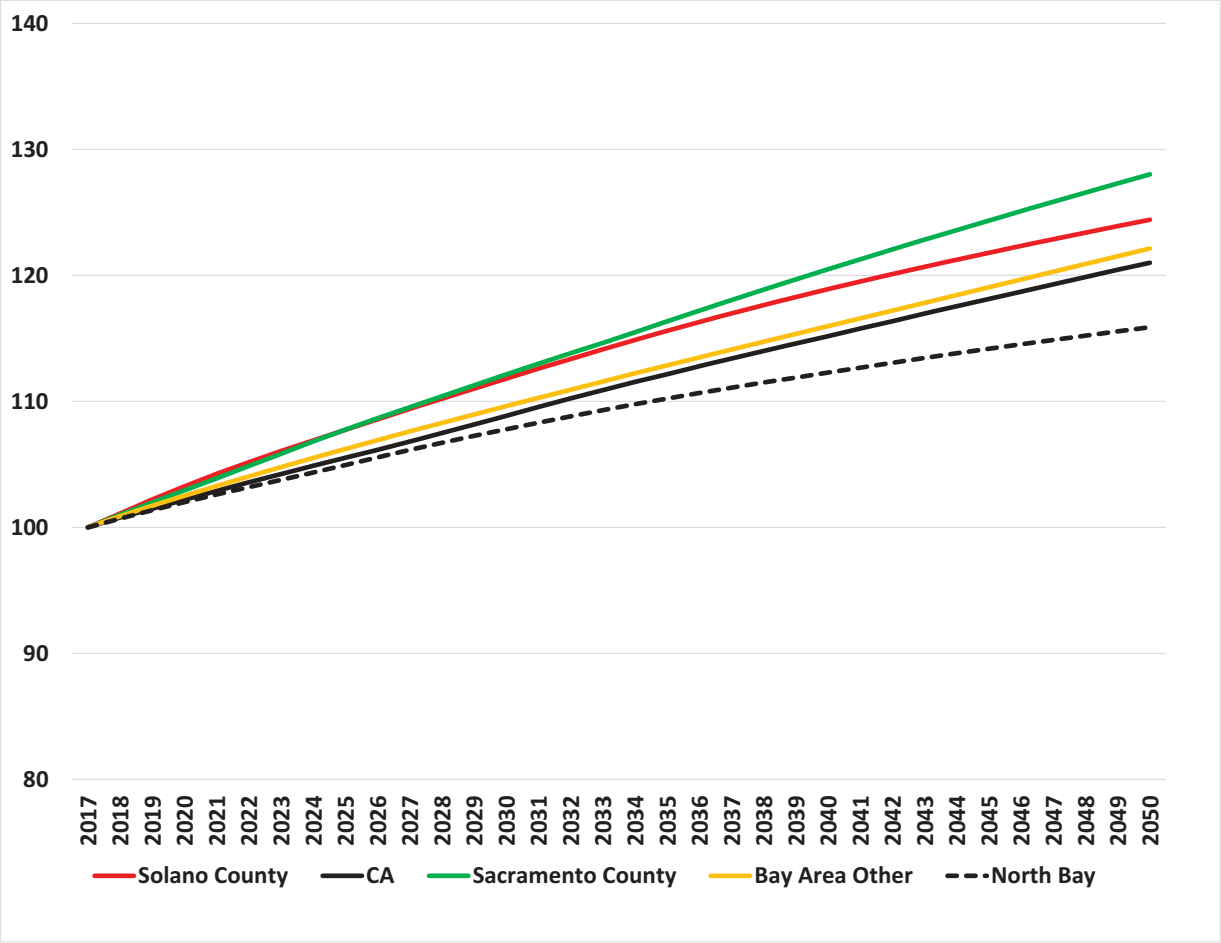
TAKEAWAY: Population growth for Solano County continues as the Bay Area other counties also grow and compete for regional workforce.

OPPORTUNITY: As the regional population grows, there are more, potential labor force participants and thus more opportunities for local employers to utilize this resource, including aging residents.

Population Growth Projections

Like the jobs forecast earlier in this Index from a joint project by CalTrans and the California Economic Forecast. Projected population growth data for Solano County from 2017 to 2050 are shown here, with other areas shown for comparison. Population forecasts help build employment forecasts based on assumed labor-force participation rates and ultimately the number of workers available in a broad area (see more below on labor force participation). California's Department of Finance (DOF) does a similar forecast, shown in past editions of this Index.

Population Growth Estimated Percent Change from the Previous Year, Selected Areas, 2010–2050



Source: CalTrans and CA Economic Forecast, Sept 2017
(http://www.dot.ca.gov/hq/tpp/offices/eab/socio_economic_files/2017/FullReport2017.pdf)

TAKEAWAY: Solano County's population growth is faster than all comparison areas except for Sacramento.

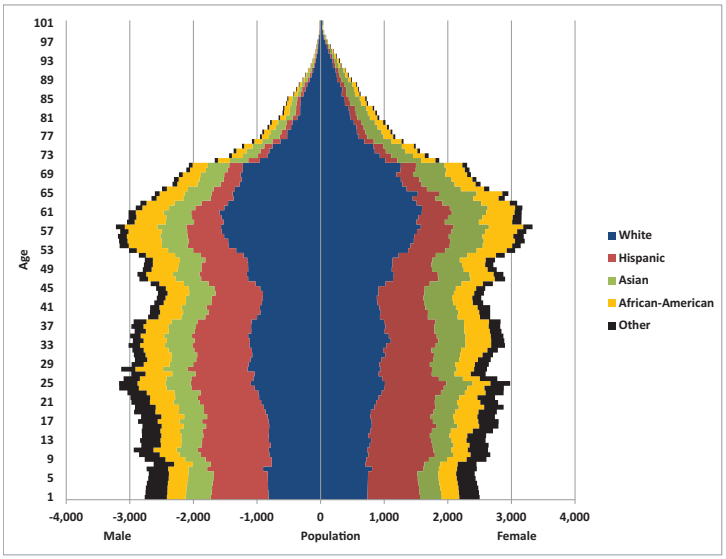
CHALLENGE: Housing units and available jobs must keep up with a rising population to either provide economic opportunity or support the growing populace or both.

Population Pyramid for 2050

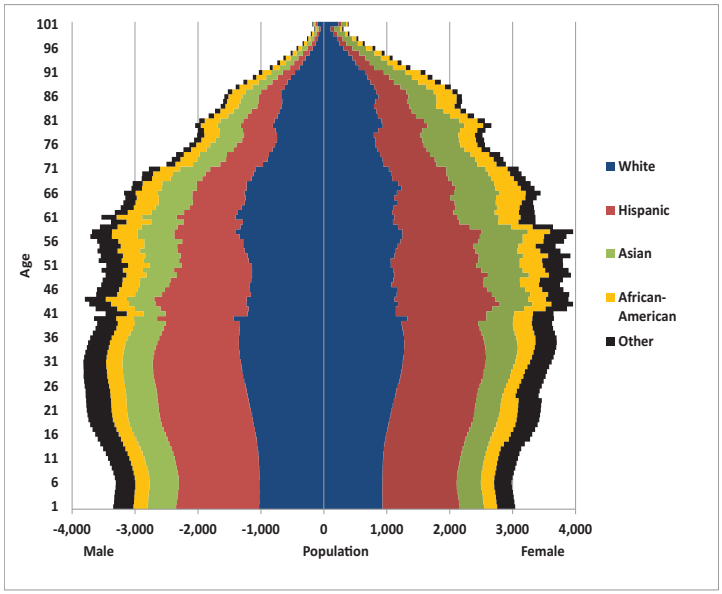
One way to compare and contrast population projections by using population pyramids. These pyramids are graphics used in demographic research to look at comparisons of age (on the vertical axis), gender mix (where females are positive values and males are negative values on the horizontal axis), and ethnicity (where shaded areas reflect each ethnicity's population proportion).

Population pyramids do not change wildly from year to year unless the underlying demographic assumptions and realities change. Notice the top of the 2050 pyramid (older residents) gets broader suggesting an aging populace; these figures remind us that Solano County is projected to become older and more ethnically diverse through 2050.

2017 Solano County Population Pyramid



2050 Solano County Population Pyramid



Source: California Department of Finance, Demographic Research Unit (www.dof.ca.gov)

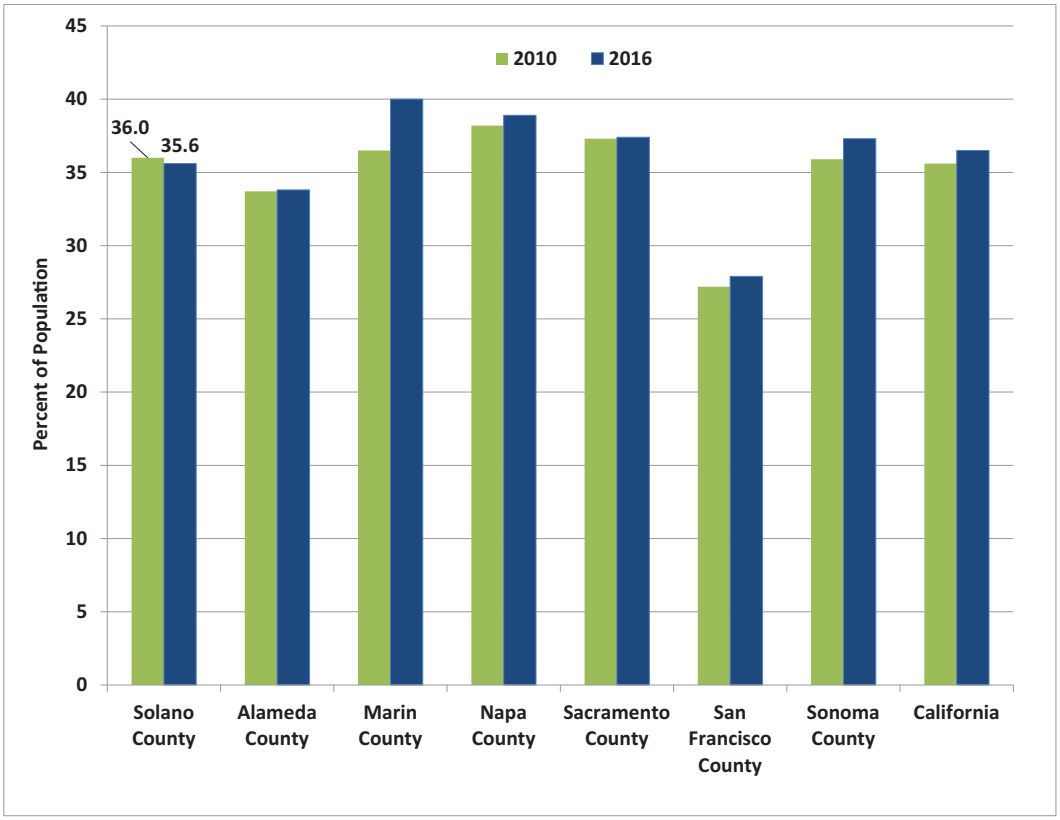
TAKEAWAY: Ethnic diversity remains a theme throughout California as population grows, and Solano County mirrors that diversity.

OPPORTUNITY: Workforce development programs that are culturally diverse and recognize a wide array of possible careers.

Dependency Ratios

An area's total dependency ratio measures the percentages of area residents 65 and older and under 18 years of age. As this ratio rises, fewer residents are of classic working age (18–64 years old); more young and old residents considered "dependent" on working-age residents to provide resources or to redistribute income through social programs. Solano County's dependency ratio was 36.0 percent in 2010 and was 35.6 percent in 2016, the latest data available. San Francisco County remains less dependent than other regional counties, with Napa, Marin and Sacramento counties experiencing an increase.

Total Dependency Ratio, Comparison Between Selected Areas, 2010 and 2016
Sum of Percentages of the Population Under 18 and 65 and Older



Source: Census Bureau (http://factfinder.census.gov)

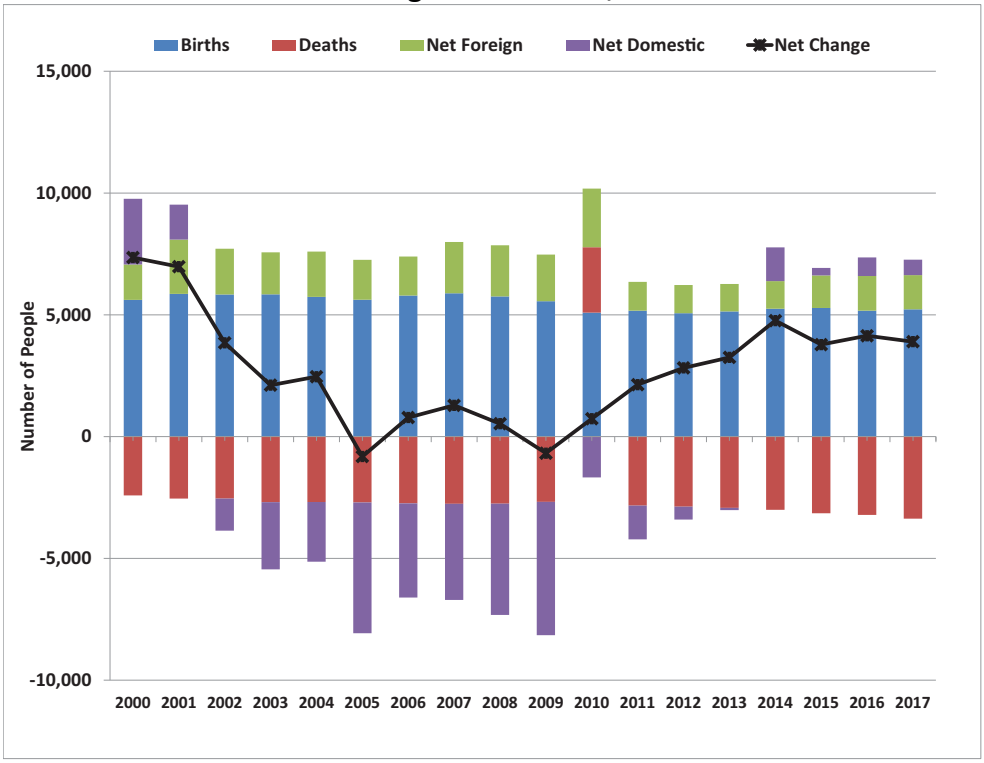
TAKEAWAY: Solano County is not aging as fast in this decade as expected, but monitoring these data help watch for shifts in the working age population.

CHALLENGE: Population forecasts expect the aging (thus the dependent population to rise); the challenge is to provide workforce and entrepreneurial opportunities for aging workers, especially if more, aging workers remain in the labor force.

Components of Population Change

Solano County has seen a slight increase in the growth rate of its population, which has increased overall more due to births versus deaths than from immigration. However, immigration has been a key reason for population growth since 2010. In 2017, more people came to Solano County from other parts of the United States and other countries as "net foreign or domestic" migration than in 2016, with over 2,000 new county residents.

Solano County Components of Population Change from Previous Year and Net Change in Residents, 2000–2017



Source: California Department of Finance, Demographic Research Unit (www.dof.ca.gov)

Solano County Change in Population Compared to 2017, Number of People

Year	*Births*	*Deaths*	*Net Foreign*	*Net Domestic*	*Net Migration*
2010	36,309	-21,373	8,763	1,085	9,848
2013	20,930	-12,738	5,295	3,090	8,385
2014	15,678	-9,733	4,162	1,708	5,870
2015	10,397	-6,585	2,823	1,402	4,225
2016	5,224	-3,368	1,403	638	2,041

Source: California Department of Finance, Demographic Research Unit (www.dof.ca.gov)

TAKEAWAY: Migration to Solano County has accounted for a rising proportion of county population growth since 2013, as the local economy continues to expand.

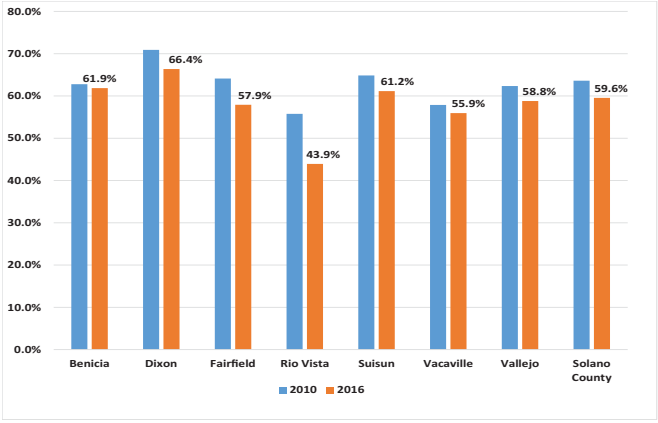
OPPORTUNITY: With more new residents coming from abroad, economic development efforts to find ties to global markets and a wide array of new businesses may expand.

Workforce Readiness and Supply

Labor Force Participation Rates

The labor force participation rate measures the percentage of the working age population that is actually working. For Solano County, this rate has slowly fallen as has the national and state participation rates.

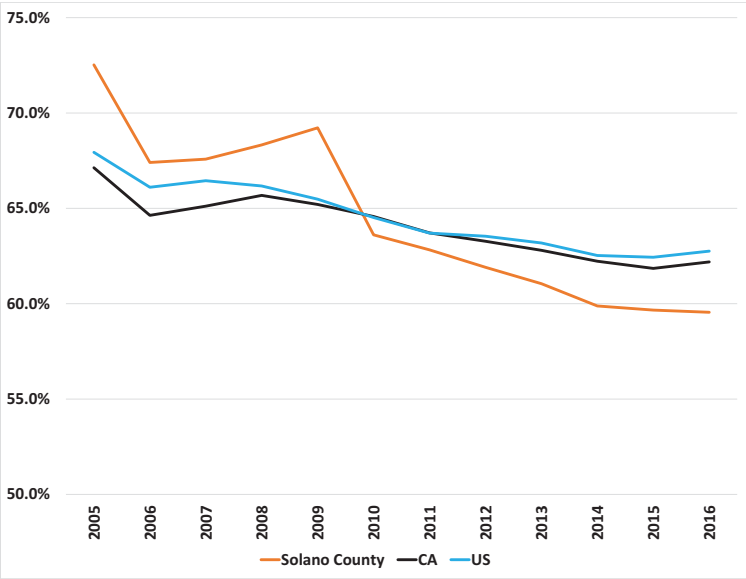
Labor Force Participation Rates, 2005 to 2016
Solano County and its Incorporated Areas



Source: Census Bureau (http://factfinder.census.gov)

When the economy is growing, more people tend to make themselves available for work. When the economy is not going well, the labor force may fall because people are struggling to find work, retire or a combination of reasons. As the national, state and county economies approach full employment, some local residents may consider re-entry into the labor force, as new entrants are attracted to rising wages. The data here show the national, state and Solano County data.

Labor Force Participation Rates, 2005 to 2016, Solano County, California and US
Percentage of Working Age Population, 16 and older, in Labor Force



Source: American Community Survey for Population, Bureau of Labor Statistics for Labor Force (2016 the latest population estimates), Source: Census Bureau (http://factfinder.census.gov)

TAKEAWAY: Labor force participation in Solano County follows national and state trends.

OPPORTUNITY: As new and expanding businesses come to Solano County, a potential labor force exists for new businesses, where building training programs and linking to local education is a growing need and opportunity if people are going to re-enter the labor force and employees are going to find employers.

City Overview: Education, Housing and Income

Solano County continues to show improvements in occupied housing, housing units, and the population's education level. These data are five-year averages (2012-16 is the latest data available); as predicted in the last Index, the 2012-16 data shows higher inflation-adjusted incomes, given actual employment growth and inflation discussed elsewhere in this Index. Data shown here are median age; housing units and occupancy; income and education levels; and household size.

Median Age in Solano County and Its Cities, 2000, 2010, 2015, and 2016

Place	*2000*	*2010*	*2015*	*2016*
Solano County	**33.9**	**36.5**	**37.3**	**37.7**
United States	35.3	36.9	37.6	37.5
California	33.3	34.9	35.8	36.0
Benicia	38.9	45.0	43.0	44.2
Dixon	31.5	32.3	34.1	34.0
Fairfield	31.1	32.8	34.1	34.4
Rio Vista	40.7	55.8	60.0	62.3
Suisun City	31.7	32.7	33.2	33.1
Vacaville	33.9	36.7	37.3	37.1
Vallejo	34.9	37.5	38.3	38.3

Source: Census Bureau (http://factfinder.census.gov)

Housing and Occupancy, 5-Year Averages Ending in Stated Year: 2010, 2015 and 2016
(How many homes are there and how many are occupied or vacant.)

	Total Housing Units			*Occupied*			*Vacant*		
Place	*2010*	*2015*	*2016*	*2010*	*2015*	*2016*	*2010*	*2015*	*2016*
Solano County	**151,616**	**154,380**	**155,091**	**91.7%**	**93.0%**	**93.7%**	**8.3%**	**7.0%**	**6.3%**
United States	130,038,080	133,351,840	134,054,899	87.8%	87.7%	87.8%	12.2%	12.3%	12.2%
California	13,552,624	13,845,790	13,911,737	91.4%	91.9%	92.1%	8.6%	8.1%	7.9%
Benicia	11,905	11,459	11,653	91.7%	94.6%	94.6%	8.3%	5.4%	5.4%
Dixon	6,124	6,172	6,116	94.2%	95.1%	95.0%	5.8%	4.9%	5.0%
Fairfield	36,283	36,576	37,055	91.7%	94.7%	95.0%	8.3%	5.3%	5.0%
Rio Vista	3,592	4,096	4,395	92.7%	90.5%	90.0%	7.3%	9.5%	10.0%
Suisun City	9,291	9,086	9,192	93.3%	96.3%	97.0%	6.7%	3.7%	3.0%
Vacaville	31,780	33,567	33,339	94.4%	94.7%	95.4%	5.6%	5.3%	4.6%
Vallejo	45,297	45,894	45,612	88.9%	89.8%	91.2%	11.1%	10.2%	8.8%

Source: Census Bureau (http://factfinder.census.gov)

Index of Economic and Community Progress

Income, Household Size, and Education, 2010, 2015, and 2016, Five-Year Averages

Place	Median Household Income (2009 Dollars)			Average Household Size			Percent of Residents with HS Diploma or Better			Percent of Residents with Bachelor's Degree or Better		
	2010	2015	2016	2010	2015	2016	2010	2015	2016	2010	2015	2016
Solano County	**$67,562**	**$61,335**	**$59,995**	**2.83**	**2.89**	**2.88**	**85.8%**	**87.5%**	**87.4%**	**24.0%**	**24.9%**	**25.1%**
United States	$51,076	$48,467	$48,778	2.61	2.64	2.64	85.0%	86.7%	87.0%	27.9%	29.8%	30.3%
California	$60,129	$56,005	$55,497	2.93	2.96	2.95	80.7%	81.8%	82.1%	30.1%	31.4%	32.0%
Benicia	$85,941	$81,148	$79,356	2.53	2.55	2.52	94.7%	95.7%	95.5%	41.2%	43.3%	42.5%
Dixon	$68,879	$60,859	$64,807	3.00	3.22	3.29	82.1%	78.1%	78.9%	19.6%	21.8%	20.6%
Fairfield	$67,167	$60,287	$60,476	3.00	3.10	3.09	84.8%	85.6%	85.3%	22.2%	24.1%	25.2%
Rio Vista	$53,893	$57,031	$55,731	2.04	2.11	2.03	93.1%	92.1%	91.9%	25.3%	26.9%	24.4%
Suisun City	$70,906	$64,946	$59,657	3.23	3.28	3.25	86.1%	87.5%	88.4%	19.3%	18.8%	19.0%
Vacaville	$69,961	$67,589	$66,434	2.71	2.76	2.79	85.4%	88.4%	88.8%	21.0%	22.2%	23.0%
Vallejo	$60,720	$53,257	$51,197	2.85	2.85	2.84	84.7%	87.4%	87.2%	24.7%	24.5%	24.4%

Source: Census Bureau (http://factfinder.census.gov)

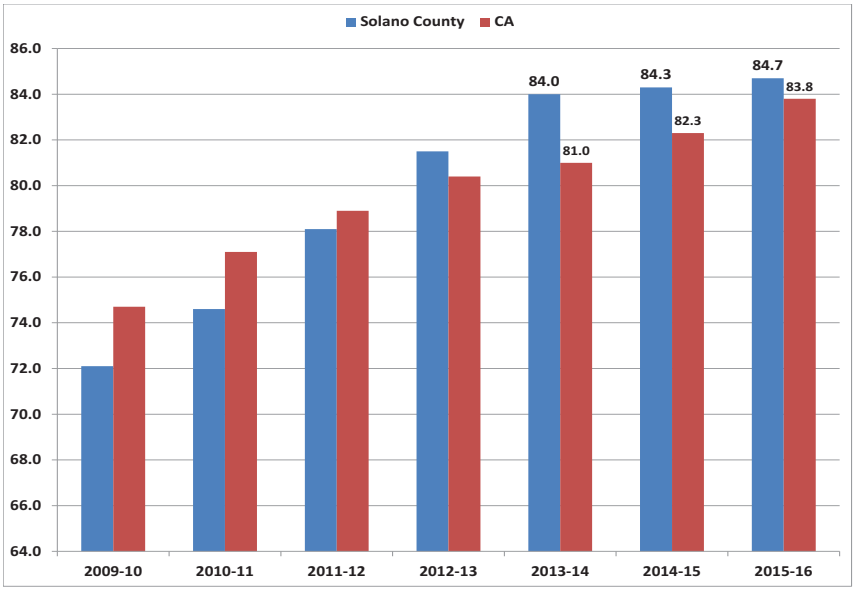
TAKEAWAY: Benicia and Rio Vista remain different from the other cities in Solano County, based on age and median household income. These cities remind us about Solano County's contrasts between rural characteristics and ties to the greater Bay Area.

CHALLENGE: Economic and workforce development efforts must recognize the economic disparity in Solano County and work with cities and in partnership to fit new and expanding businesses to the local areas.

High School Graduation Rates

Increasing high-school graduation rates indicate strength in local education and more labor force entrants. Solano County saw its graduation rates rise above the state of California's rate in 2015–16 (the latest data). These data monitor changes based on evolving labor-market incentives to stay or leave high school; these data also show continued progress for education and workforce development in Solano County.

Solano County and California Graduation Rates, 2009–10 to 2015–16 Academic Years



Source: California Department of Education (cde.ca.gov)

Note: There was a methodological change at the Department of Education that does not allow a comparison before 2009-10 with the most recent data from academic year 2015-16.

Solano County and California Graduation Rate by Ethnicity, 2015–16 Academic Year

Ethnicity	*Solano County*	*California*	*Difference*
American Indian or Alaska Native	**91.7%**	73.1%	18.6%
African American	**77.8%**	70.8%	7.0%
Two or More Races	**89.0%**	86.0%	3.%0
White	**87.3%**	88.0%	-0.7%
Asian	**92.4%**	92.6%	-0.2%
Hispanic or Latino	**80.0%**	78.5%	1.5%
Filipino	**92.7%**	93.0%	-0.3%
Pacific Islander	**82.1%**	82.2%	-0.1%

Source: California Department of Education (http://cde.ca.gov)

Note: There was a methodological change at the Department of Education that does not allow a comparison before 2009-10 with the most recent data from academic year 2015-16.

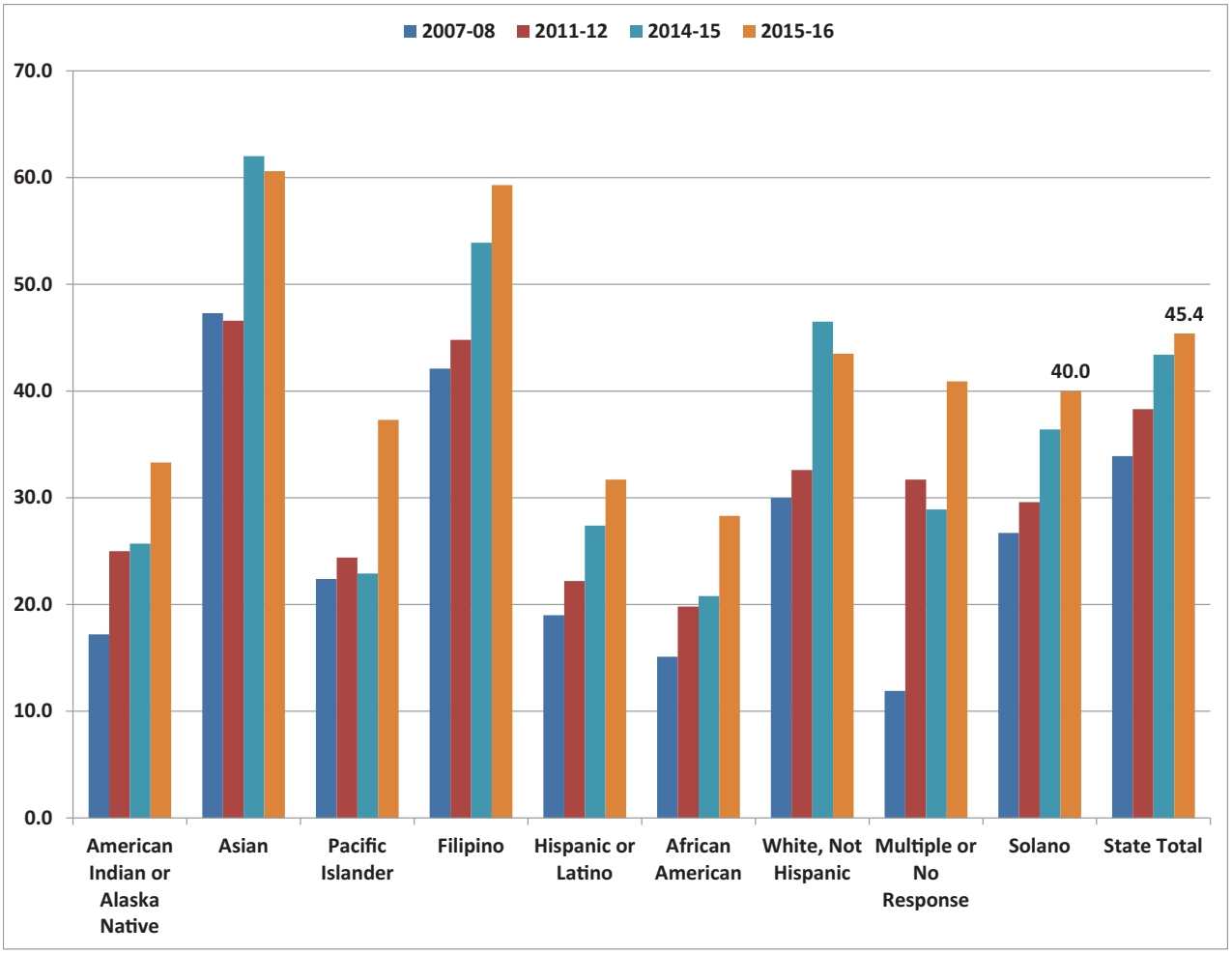
TAKEAWAY: Overall, Solano County had 84.7 percent of those eligible to graduate do so, while California's rate was 83.8 percent.

OPPORTUNITY: Matching high-school graduates to local college programs or internships early prepares for careers connected to local employers and expands a local labor force in the face of an aging population and lower participation rates.

UC/CSU-Readiness

California's public university systems extend workforce development from high schools and community colleges. Solano County houses higher learning campuses at CSU Maritime, Touro University and Solano Community College; UC Berkeley and UC Davis are close or adjacent to Solano County. Solano County has growth of college-ready students similar to growth in California overall since the 2007-08 academic year. In the 2015–2016 academic year (the latest data available), Solano County experienced an increase in the number of college-ready graduates from 36.4 percent to 40.0 percent. The state overall increased but by a smaller percentage change.

Comparisons of Percentages of UC/CSU-Ready Solano County High School Graduates
Selected Academic Years, 2007-08 to 2015-16



Source: California Department of Education (http://www.cde.ca.gov)

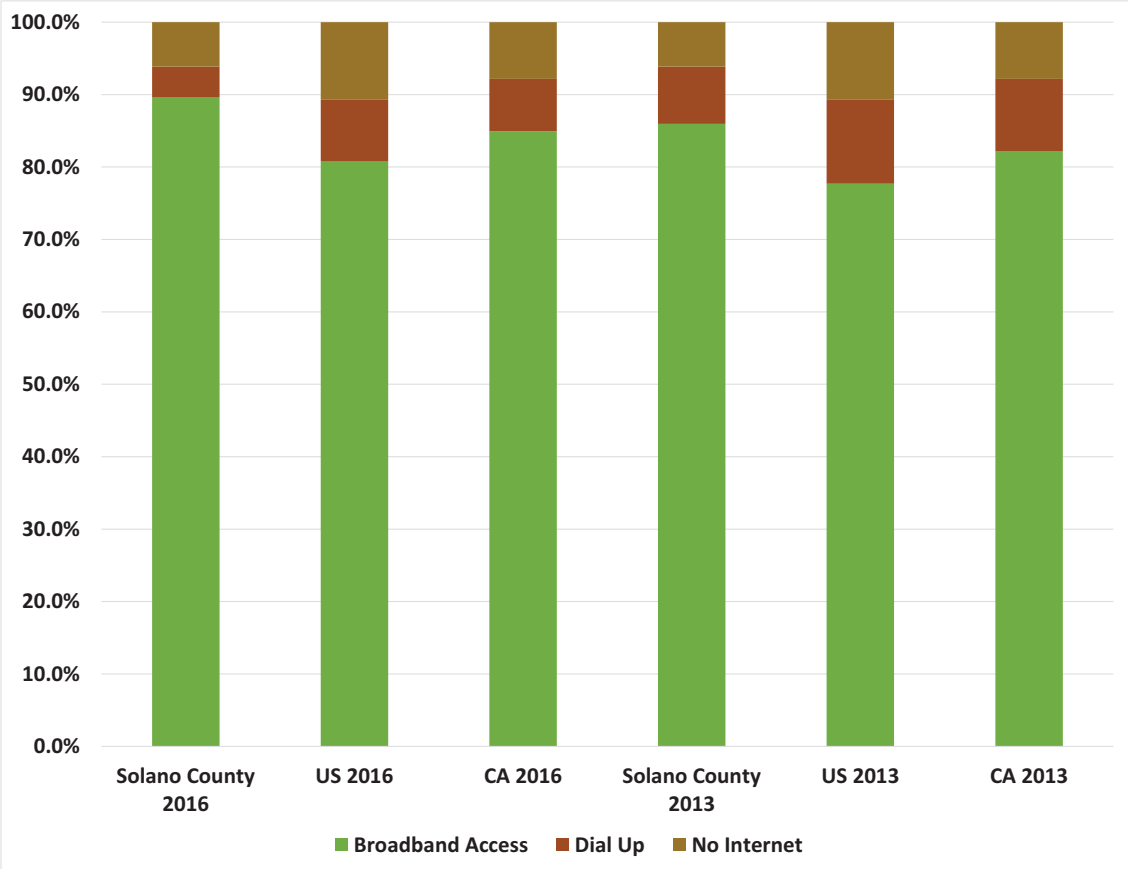
TAKEAWAY: Solano County continues to show progress in local high-school graduates being UC and CSU ready.

CHALLENGE: Solano County continues to be behind the state average in terms of college readiness.

Broadband and Computer Access

To track how communities support education and provide more people ready for work in the local economy, the American Community Survey of the Census Bureau is now following broadband and computer access in homes. Such access not only provides a household with access to global business opportunities, such access enhances the ability of students to do well in school and communicate with teachers and others as part of education. Distance learning, certificate programs, and other online education are less accessible when broadband is not available in the home. Data here compare Solano County to the national and state economies overall.

Broadband and Computer Access, 2013 and 2016,
Solano County Compared to CA and US, Percentage of Households



Source: American Community Survey, 1-year Samples (http://factfinder.census.gov)

TAKEAWAY: Broadband and computer access is higher in Solano County than both the state and national average for households.

OPPORTUNITY: Distance learning, classes on using computers and program coding, and many other skill-building classes can take place at home online due to broadband access.

Commuting

Solano County has experienced a net outflow of workers over time (shown here are data from 2007 to 2015). Data from the US Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) project estimate commute-flow information for all census blocks in the United States. The data show the proportion and number of Solano County residents who work and where they work. In 2015 (the latest year for which data are available), 35.9 percent of working residents of Solano County worked for employers within Solano County; this implies that 64.1 percent of the county's working residents commute outside the county to work in 2015 (in-bound commuters).

Where Solano County Residents Go to Work, 2007, 2010, 2014, and 2015

	2007		2010		2014		2015	
County	**Count**	**Share**	**Count**	**Share**	**Count**	**Share**	**Count**	**Share**
Solano County	**63,531**	**35.9%**	**59,782**	**35.9%**	**62,431**	**34.8%**	**66,899**	**35.8%**
Contra Costa County	25,064	14.2%	21,165	12.7%	22,412	12.5%	23,431	12.5%
Alameda County	16,268	9.2%	14,110	8.5%	15,037	8.4%	15,720	8.4%
Sacramento County	9,570	5.4%	11,318	6.8%	12,065	6.7%	12,288	6.6%
Napa County	9,824	5.5%	9,613	5.8%	11,397	6.3%	12,207	6.5%
San Francisco County	11,084	6.3%	10,506	6.3%	11,355	6.3%	11,635	6.2%
Santa Clara County	6,387	3.6%	5,364	3.2%	6,097	3.4%	6,432	3.4%
San Mateo County	5,635	3.2%	4,844	2.9%	5,293	2.9%	5,300	2.8%
Marin County	4,403	2.5%	4,327	2.6%	4,791	2.7%	5,001	2.7%
Sonoma County	4,261	2.4%	3,851	2.3%	4,731	2.6%	5,514	3.0%
Other Locations in Laborshed	21,048	11.9%	21,450	12.9%	23,989	13.4%	22,322	12.0%
Total Outbound Commuters	**113,544**	**100.0%**	**106,548**	**100.0%**	**117,167**	**100.0%**	**119,850**	**100.0%**
Total Inbound Commuters	**56,028**	**64.1%**	**62,394**	**64.1%**	**64,786**	**65.2%**	**77,574**	**64.2%**

*Source: LEHD (*http://onthemap.ces.census.gov/*)*

TAKEAWAY: Solano County is a place where a majority working residents access both the greater Bay Area's and Sacramento Valley's labor markets.

OPPORTUNITY: Given the level of outbound commuters, Solano County linking workforce and economic development together can lead to fewer Solano County residents driving outside the county for work, potentially at higher wages.

Quality of Place Index

This final section looks at comparison data that includes variables describing quality of place compared to California generally (the Bay Area in the case of housing prices) on average: high-school graduation rates; commute times; air quality; educational attainment; home purchase and rental prices; and taxable sales per person. Many variables and combinations are possible; this combination shows Solano County's progress along many social concerns. There are 58 counties in California; the data below in many cases are rankings out of these 58 counties. Key takeaways are given by element.

Quality of Place Elements, 2017 (2016 is the latest data in some cases)

Element		Key Takeaway
Graduation Rates for High School		**Graduation rates have steadily increased since the Great Recession ended (2010).**
2010 44th in CA	**2016** **38th in CA**	
Commute Times		**Commute times have increased across California since 2010, and Solano County remains a place with long commutes.**
2010 49th in CA	**2016** **48th in CA**	
Air Quality		**A function of many issues, rising traffic and commute times as examples, air quality has worsened in Solano County.**
2010 20th in CA	**2017** **25th in CA**	
Educational Attainment: % of Pop over 25 years old with a BA or higher		**Solano County has attracted a more education populace since the Great Recession relative to California's counties on average.**
2010 **29th in CA**	**2016** **24th in CA**	
Home and Rental Prices (as a % of San Francisco County)		**While home prices and rental costs have increased since 2010, Solano County continues to be a relatively affordable place to live in the Bay Area.**
2010 **Rent: 50% of SF** **Buy 47% of SF**	**2017** **Rent: 48% of SF Buy 48% of SF**	
Taxable Sales/Capita		**Perhaps a function of outbound commuting and workers making taxable purchases where they work, Solano County remains under the state average for taxable sales per person since 2010.**
2010 **98.6% of State Average**	**2017** **98.8% of State Average**	

Sources: California Department of Education; American Community Survey; Environmental Protection Agency; Zillow Research; California Board of Equalization and County of Solano

Quality of Index indicators suggest opportunities when in green and challenges for policy makers and the community when in red.

OVERALL TAKEAWAY: Quality of place metrics for Solano County are close to the statewide average and above in many cases. As an example of place in California, Solano County shows progress as a place to live since the Great Recession.

Data Sources and Methodology

Solano County Key Facts

Area

Data provided by the Solano Economic Development Corporation (EDC).

Population

Data are from the E-I: City/County Population Estimates with Annual Percent Change report by the California Department of Finance and for Solano County. Estimates are for July 1, 2017.

Jobs

Solano County employment data are provided by the California Employment Development Department, Current Employment Statistics (CES). The industry data may include employees who live outside the county. 2017 annual data are preliminary.

Adult Educational Attainment, Age Distribution, and Ethnic Composition

Data are provided by the U.S. Census Bureau American Community Survey in 2016 is an average of data over the years 2012 to 2016 for Solano County.

County Revenue and Assessed Property Value

Data for sales tax revenue are from the State of California Board of Equalization and the Solano County Department of Finance. Data on the assessed value of residential properties are from the Solano County Assessor's office.

Our Changing Economy

Annual Employment

Solano County employment data are provided by the California Employment Development Department Current Employment Statistics (CES). The industry data reflects the number of jobs in the county that may pay employees who live outside of the county.

Change in Annual Jobs

Solano County employment data are provided by the California Employment Development Department Current Employment Statistics (CES). The industry data reflect the number of jobs in the county that may pay employees who live outside of the county. The data are through 2017 as annual averages and are estimates.

Total Employed Residents and Total Unemployed Residents

Solano County resident employment data is provided by the California Employment Development Department (EDD) Local Area Unemployment Statistics (LAUS). The data reflects the number of residents employed and unemployed in the county. Monthly data reports for Solano County and selected areas originate at the Bureau of Labor Statistics (www.bls.gov) and EDD reports the estimates.

Non-Employer Firm Growth and Percentage of Non-Employers by Industry

Data for Non-employers are from the U.S. Census Bureau. Non-employer statistics originate from tax return information of the Internal Revenue Service. The data are subject to tax forms data, as well as errors of response, non-reporting and coverage. Values provided by each firm are slightly modified to protect the respondent's confidentiality. The latest data are from 2015.

Median Household Income

Data for Median Household Income are from the 2003-2016 American Community Survey data reports from the U.S. Census Bureau, including the decennial Census in 2010. All income values are inflation-adjusted and reported in 2009 dollars, using the California CPI from the California Department of Finance. This California CPI is a weighted average of consumer price index (CPI) data that the Bureau of Labor Statistics (BLS) reports for the San Francisco, Los Angeles, and San Diego metropolitan areas.

Tourism and Visitor Support

Estimated data on visitor spending, jobs that support visitors and tax receipts generated from tourism and hotel stays are provided for all 58 California counties and the state overall by Dean Runyan Associates. Data are from 1994 to 2016.

Gross Product

Data are provided by the U.S. Bureau of Economic Analysis through 2016 Bureau of Economic Analysis (www.bea.gov). Values are inflation-adjusted and reported in 2009 dollars.

Real Per Capita Personal Income

Total personal income and population data are from the Bureau of Economic Analysis (www.bea.gov). Income values are inflation-adjusted and reported in 2009 dollars, using the California CPI from the California Department of Finance.

Sources of Personal Income

Data are provided by the Bureau of Economic Analysis (BEA). Data are from Personal Income by Major Source and Earnings by NAICS Industry (CA05N). Personal income has been adjusted into 2009 dollars using either the California CPI from the California Department of Finance or the U.S. City Average Consumer Price Index (CPI) of all urban consumers, published by the Bureau of Labor Statistics, when data are national.

Economic Base and Locally-Serving Industries: Moving Solano Forward Phase II

These data come from the Quarterly Census of Employment and Wages (QCEW) which allows for a look at employment, wages, and establishments data at the NAICS-4-digit level. The North American Industry Classification System (NAICS) allows for a drill down to major industry sector. Wages are adjusted to 2009 dollars using the California CPI from the California Department of Finance or the U.S. City Average Consumer Price Index (CPI) of all urban consumers, published by the Bureau of Labor Statistics, when the data are national.

Agriculture

Data on county agriculture and the industries within that sector come from the Solano County Agricultural Commissioner and the Bureau of Economic Analysis (BEA). The BEA tracks farm incomes, almost like an income statement, annually with a one-year lag.

Poverty Rates

Poverty rates represent the percentage of households under the federal poverty level in terms of household income in a given year. Five-year averages for Solano County are provided by the American Community Survey of the Census Bureau. The latest data are from 2016.

Wages by Occupation

Wages data are available from The California Employment Development Department (www.edd.ca.gov) and the U.S. Bureau of Labor Statistics (www.bls.gov) by occupation following Standard Occupation Classification (SOC) codes.

Commercial Real Estate

Data on Solano County's commercial real estate comes from Colliers International and their research department. The tracking of office space, both class A and B, as well as industrial space, is from a survey instrument that is proprietary to Colliers. Other commercial real estate firms, such as Cushman-Wakefield, will likely have different estimates, but there is not a governmental source for these data. Data are through 2017 Q4.

Our Changing Community

Population Growth and Domestic and Foreign Immigration

Data are from the E-6: Population Estimates and Components of Change by County – July 1, 2000–2017 report by the California Department of Finance and are for Solano County, the Bay Area Other (including Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Santa Clara counties), the North Bay (Napa and Sonoma counties) and California overall.

Net migration includes all legal and unauthorized foreign immigrants, residents who left the state to live abroad, and the balance of hundreds of thousands of people moving to and from California from within the United States. Estimates for 2017 are provisional. Net migration includes all legal and unauthorized foreign immigrants, residents who left the state to live abroad, and the balance of hundreds of thousands of people moving to and from California from within the United States.

For the population pyramids, the data used comes from the California Department of Finance, P-3 report (State and County Population Projections by Race/Ethnicity, Detailed Age, and Gender, 2010–2060 (by year)).

Dependency Ratios

Data for the dependency ratios, which are the percentage of the population that is either under 18 years of age or over 65 years of age, come from the American Community Survey from the U.S. Census Bureau, including the decennial Census in 2010, covering years between 2005 and 2016.

High School Dropout Rates

Data for the 2015–2016 academic year are provided by the California Department of Education Educational Demographics Office. The 4-year derived dropout rate is an

estimate of the percent of students who would drop out in a four-year period based on data collected for a single year.

High School Graduation Rates and UC/CSU-Readiness

Data for the 2015–2016 academic year are provided by the California Department of Education. There has been a recent change in methodology such that time periods before 2009 are not comparable to those after 2009. In theory, the methodology used calculates an approximate probability that one will graduate on time by looking at the number of 12th grade graduates and number of 12th, 11th, 10th and 9th grade dropouts over a four-year period.

Home Sales and Housing Affordability

Data were provided by the California Association of REALTORS® (CAR) for median home prices, sales volume of single-family homes and also by Zillow Research (Rental Prices). CAR also calculates the percentage change in homes sales by county, compares numerous counties across the state, and also has a housing affordability index (HAI) it publishes quarterly at www.car.org.

Labor Force Participation Rates

This is a ratio of the population over 16 years old and under 65 years of age to the total population traditionally. Some measures have expanded that to 16 years and above as a way of measuring local working-age residents and their engagement in local labor markets.

Broadband and Computer Access

The Census Bureau, in its American Community Survey, is now tracking the number of households with a computer or with broadband access of both. These data are shown here as a way to consider Solano County versus the state and nation and the ability to use tools at home to increase labor supply readiness and learning opportunities. The latest data is as of 2016.

Building Permits

Building permits data are available from both the County of Solano and the Census Bureau at the metropolitan statistical area (MSA) level. The County of Solano provided both residential permit counts and square footage of new commercial construction permitted. The building permits database at the Census Bureau can be found at the following website:
http://www.census.gov/construction/bps/

City Data: Economics and Demographics

Data on the cities and their demographics come from the American Community Survey (ACS) of the Census Bureau (http://factfinder.census.gov). While this survey has some data limitation for smaller municipalities and the unincorporated portions of counties, it is the best current source of information on cities and towns between the ten-year Census dates. Date shown here are five-year averages per the ACS methodology.

CalTrans/CA Economic Forecast

Data for the forecasts of jobs and population for all 58 California counties has been performed by CalTrans in partnership with the California Economic Forecast from the UCLA Anderson School of Business. This forecast is to provide CalTrans with planning data for new roadways and infrastructure as California's economy and population grow. The 2017 to 2050 version is available at http://www.dot.ca.gov/hq/tpp/offices/eab/socio_economic_files/2017/FullReport2017.pdf

Rental Home Prices

Home rental prices come from Zillow Research, which has information on rental price estimates for most metropolitan areas and counties in the United States.
http://www.zillow.com/research/data/#rental-data

Commuting

Data on commuting workers come from the Census Bureau and its partnership with the Bureau of Labor Statistics and the QWI called the Longitudinal Employer-Household Dynamics (LEHD) database. These data are from 2002 to 2015 as of January 2018.

Air Quality

Data on comparative air quality comes from the Environmental Protection Agency and its daily monitor by county for comparison. https://www.epa.gov/outdoor-air-quality-data/air-quality-index-report

The 2017 Solano County Index of Economic and Community Progress can be found at:

www.solanocounty.com/economicindex

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