The Sonoma County Economic Development Board (EDB), in partnership with the Sonoma County Workforce Investment Board (WIB), is pleased to present the **Fall 2014 Local Economic Report**. Our research partner, Moody’s Analytics, provided the research for this report. Highlights from this Local Economic Report include:

- Sonoma County’s economic growth has slowed this year, but it is still keeping pace with the U.S. average. The unemployment rate has hovered around an enviable 5.4%, and the rate of job growth exceeds its average of the past 15 years.

- Homebuilding is accelerating, although the number of new permits issued for construction is still about half its long-term pace during the 15 years before the housing market downturn in 2006.

- The potential to attract high-tech industries creates some upside potential. Among notable companies, Agilent’s electronic measurement division was spun off as Keysight Technologies and is benefiting from increased investment by broadband communications firms.

- Sonoma County is expected to emerge next year even stronger. Improved regional and U.S. income gains will support tourism and the wine industry. Near-term growth will be augmented by business services, construction and healthcare, while the tech sector stabilizes and creates upside potential for the outlook.

Thank you for your interest in the Economic Development Board’s research. For additional information, questions, comments, or suggestions please contact us at (707) 565-7170 or visit www.sonomaedb.org.

Sincerely,

Pamela Chanter
Chair
Economic Development Board

Ben Stone
Executive Director
Economic Development Board

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**SONOMA COUNTY CA**

### ANALYSIS

**Recent Performance.** Sonoma County’s economic growth has slowed this year, but it is still keeping pace with the U.S. average. The county trails the hot San Francisco and San Jose economies but leads the rest of the North Bay and East Bay regions. The unemployment rate has hovered around an enviable 5.4%, and the rate of job growth exceeds its average of the past 15 years. Wineries, commercial builders, and professional and business services firms are hiring at a brisk pace, but other industries have slowed their hiring in recent months. According to Keegan and Coppin, office and industrial vacancy rates improved in the third quarter, continuing a trend that began in early 2013.

**Tourism.** Tourism is strong, supported by rising employment and income in California, the western states and elsewhere. The runway extension at the Charles Schulz airport will accommodate regional jets and thereby attract larger aircraft, additional carriers and more arrivals in the coming year, particularly if nationwide income growth and consumer spending accelerate as expected. The only downside risk to visitor arrivals is the possible slowdown of international visitors, given the lethargy of the European economy and slower growth in Asia.

**Housing.** Homebuilding is accelerating, although the number of new permits issued for construction is still about half its long-term pace during the 15 years before the housing market downturn in 2006. Permits also appear low compared with the current pace of population growth, indicating that new residential construction should expand. If it does, it will contribute to job growth as construction employment still amounts to a meager 5.3% of total employment, nearly a record low.

Although the California Finance Department’s Demographic Research Unit estimates that Sonoma County’s population growth slowed during the year ending January 1, 2014, Moody’s Analytics still projects only a modest slowdown in population and will await the U.S. Census Bureau’s midyear estimate before making any forecast revisions. If population growth slows, homebuilding will remain modest.

**Drought.** The prolonged drought is hurting viticulture and poses further risk if it intensifies next year. After two years of bumper crops, the size of this year’s grape harvest has been merely average because of a combination of reduced planting and increased pruning. Grape quality is expected to survive the dry conditions, but a more severe drought next year would further curtail quantity and likely damage quality. The risks to drought are difficult to quantify given the uncertainty of the forecast. In 2013 rainfall was well below normal, but the fortunate timing of the rainfall that did come offset the lack of quantity.

**Technology.** The potential to attract high-tech industries creates some upside potential. With a cost of doing business index slightly below the national average, the county has an advantage over San Francisco and San Jose with regard to office rents and unit labor costs. But the local tech concentration is average at best and the industry no longer drives the economy. Among notable companies, Agilent’s electronic measurement division was spun off as Keysight Technologies and is benefiting from increased investment by broadband communications firms.

Sonoma County is expected to emerge next year even stronger. Improved regional and U.S. income gains will support tourism and the wine industry. Near-term growth will be augmented by business services, construction and healthcare, while the tech sector stabilizes and creates upside potential for the outlook.

Steven G. Cochran | 1-866-275-3266 | help@economy.com

### MOODY’S RATING

**Aa2**

CITY

**AS OF JAN 30, 2013**

| 22.8 | 21.4 | 21.7 | 22.2 | 22.3 | 22.5 | Gross metro product (C09$ bil) | 22.7 | 23.6 | 24.3 | 24.9 | 25.4 | 25.9 |
| 188.3 | 173.5 | 169.8 | 171.6 | 175.0 | 182.5 | Total employment (ths) | 188.3 | 193.6 | 199.1 | 201.8 | 203.0 | 203.9 |
| 5.8 | 9.6 | 10.5 | 9.8 | 8.5 | 6.7 | Unemployment rate (%) | 5.6 | 5.5 | 5.4 | 5.2 | 5.1 | 5.1 |
| 64.1 | 61.6 | 59.7 | 58.3 | 58.2 | 59.8 | Median household income ($ ths) | 61.5 | 64.0 | 66.6 | 69.2 | 71.5 | 73.6 |
| 1.2 | 1.4 | 1.1 | 0.6 | 0.6 | 0.9 | % change | 0.8 | 0.8 | 0.9 | 0.8 | 0.9 | 0.8 |
| 544 | 371 | 287 | 449 | 312 | 453 | Single-family permits (#) | 399 | 428 | 651 | 1,034 | 1,356 | 1,498 |
| 4078 | 348.6 | 362.3 | 332.7 | 356.0 | 438.1 | Existing-home price ($ ths) | 497.8 | 523.2 | 541.7 | 558.4 | 576.6 | 596.8 |
EMPLOYMENT & INDUSTRY

TOP EMPLOYERS
Kaiser Permanente 2,827
Graton Resort & Casino 2,000
Sutter Medical Center of Santa Rosa 1,797
St. Joseph Health System 1,491
Safeway Inc. 1,200
Agilent Technologies 1,175
Amy’s Kitchen 872
Medtronic CardioVascular 840
Wal-Mart Stores Inc. 650
Kendall-Jackson Wine Estates 640
AT&T 600
Lucky 550
River Rock Casino 539
Hansel Auto Group 525
Pacific Gas and Electric Co. 500
Petaluma Acquisitions 455
The Home Depot U.S.A. Inc. 390
Korbel 368
Exchange Bank 392

Source: North Bay Business Journal: Book of Lists, February 2014

EMPLOYMENT VOLATILITY

Due to U.S. fluctuations Relative to U.S.
100% 80% 60% 40% 20%

SON U.S.

Due to U.S. Not due to U.S.
100% 80% 60% 40% 20%

SON U.S.

COMPARATIVE EMPLOYMENT AND INCOME

Sector % of Total Employment Average Annual Earnings

<table>
<thead>
<tr>
<th>Sector</th>
<th>SON</th>
<th>CA</th>
<th>U.S.</th>
<th>SON</th>
<th>CA</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>0.1%</td>
<td>0.2%</td>
<td>0.6%</td>
<td>$33,285</td>
<td>$122,981</td>
<td>$126,685</td>
</tr>
<tr>
<td>Construction</td>
<td>5.4%</td>
<td>4.2%</td>
<td>4.3%</td>
<td>$61,006</td>
<td>$63,002</td>
<td>$58,586</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>11.0%</td>
<td>8.3%</td>
<td>8.8%</td>
<td>$76,118</td>
<td>$93,432</td>
<td>$77,169</td>
</tr>
<tr>
<td>Durable</td>
<td>43.3%</td>
<td>62.4%</td>
<td>62.8%</td>
<td>nd</td>
<td>$103,893</td>
<td>$78,430</td>
</tr>
<tr>
<td>Nondurable</td>
<td>56.7%</td>
<td>37.6%</td>
<td>37.2%</td>
<td>nd</td>
<td>$76,417</td>
<td>$75,058</td>
</tr>
<tr>
<td>Transportation/Utilities</td>
<td>2.3%</td>
<td>3.3%</td>
<td>3.7%</td>
<td>nd</td>
<td>$67,969</td>
<td>$64,250</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>4.0%</td>
<td>4.6%</td>
<td>4.2%</td>
<td>$72,113</td>
<td>$78,807</td>
<td>$79,805</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>12.9%</td>
<td>10.6%</td>
<td>11.1%</td>
<td>$35,244</td>
<td>$37,913</td>
<td>$32,229</td>
</tr>
<tr>
<td>Information</td>
<td>1.4%</td>
<td>3.0%</td>
<td>2.0%</td>
<td>$63,876</td>
<td>$123,337</td>
<td>$96,294</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>4.0%</td>
<td>5.2%</td>
<td>5.8%</td>
<td>$267,366</td>
<td>$43,094</td>
<td>$47,849</td>
</tr>
<tr>
<td>Prof. and Bus. Services</td>
<td>10.4%</td>
<td>15.4%</td>
<td>13.6%</td>
<td>$44,409</td>
<td>$71,540</td>
<td>$63,688</td>
</tr>
<tr>
<td>Educ. and Health Services</td>
<td>16.4%</td>
<td>15.2%</td>
<td>15.5%</td>
<td>$57,392</td>
<td>$57,549</td>
<td>$51,543</td>
</tr>
<tr>
<td>Leisure and Hosp. Services</td>
<td>12.4%</td>
<td>11.0%</td>
<td>10.4%</td>
<td>$22,645</td>
<td>$29,215</td>
<td>$24,522</td>
</tr>
<tr>
<td>Other Services</td>
<td>3.6%</td>
<td>3.4%</td>
<td>4.0%</td>
<td>$37,394</td>
<td>$35,401</td>
<td>$33,733</td>
</tr>
<tr>
<td>Government</td>
<td>16.1%</td>
<td>15.6%</td>
<td>16.0%</td>
<td>$77,971</td>
<td>$89,944</td>
<td>$71,281</td>
</tr>
</tbody>
</table>

Sources: Percent of total employment — BLS, Moody’s Analytics, 2013, Average annual earnings — BEA, Moody’s Analytics

PER CAPITA INCOME

<table>
<thead>
<tr>
<th>Year</th>
<th>Per Capita Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>$25,977</td>
</tr>
<tr>
<td>2003</td>
<td>$27,611</td>
</tr>
<tr>
<td>2004</td>
<td>$29,412</td>
</tr>
<tr>
<td>2005</td>
<td>$31,213</td>
</tr>
<tr>
<td>2006</td>
<td>$32,991</td>
</tr>
<tr>
<td>2007</td>
<td>$34,702</td>
</tr>
<tr>
<td>2008</td>
<td>$36,361</td>
</tr>
<tr>
<td>2009</td>
<td>$37,938</td>
</tr>
<tr>
<td>2010</td>
<td>$39,438</td>
</tr>
</tbody>
</table>

Sources: Moody’s Analytics, BEA

LEADING INDUSTRIES BY WAGE TIER

<table>
<thead>
<tr>
<th>Industry</th>
<th>Location Quotient</th>
<th>Employees (ths)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6221 General medical and surgical hospitals</td>
<td>0.6</td>
<td>3.9</td>
</tr>
<tr>
<td>6214 Outpatient care centers</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>6211 Offices of physicians</td>
<td>0.8</td>
<td>2.8</td>
</tr>
<tr>
<td>5511 Management of companies and enterprises</td>
<td>0.7</td>
<td>1.9</td>
</tr>
<tr>
<td>GVL Local Government</td>
<td>1.3</td>
<td>25.9</td>
</tr>
<tr>
<td>3121 Beverage manufacturing</td>
<td>26.6</td>
<td>7.2</td>
</tr>
<tr>
<td>GVS State Government</td>
<td>0.7</td>
<td>4.9</td>
</tr>
<tr>
<td>2382 Building equipment contractors</td>
<td>0.9</td>
<td>2.3</td>
</tr>
<tr>
<td>7225 Restaurants and other eating places</td>
<td>1.1</td>
<td>14.8</td>
</tr>
<tr>
<td>6241 Individual and family services</td>
<td>2.4</td>
<td>6.6</td>
</tr>
<tr>
<td>4451 Grocery stores</td>
<td>1.8</td>
<td>6.3</td>
</tr>
<tr>
<td>FR Farms</td>
<td>1.6</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Source: Moody’s Analytics, 2014

MOODY’S ANALYTICS / Précis® U.S. Metro / West / August 2014

www.sonomaedb.org
Potential Worries

BY MARK ZANDI

Recent Performance

The U.S. economy’s sustainable growth rate appears to have increased, from just more than 2% throughout much of the recovery to closer to 3%. Job growth has also accelerated, with gains averaging nearly 225,000 per month across industries, regions, firm sizes and pay scales.

The fading of fiscal austerity has helped. The private economy, including consumers, businesses and financial institutions, has been growing by more than 3% for most of the recovery, but this was masked by the effect of government spending cuts and tax increases. As the fiscal situation has stabilized, the private economy’s strength has grown more evident in headline data.

Businesses also seem to have ramped up. The number of job openings has risen sharply since the beginning of 2014, which should lead to more hiring. Investment spending has also been robust in recent months. The Moody’s Analytics weekly business survey shows U.S. businesses are as upbeat as they have been since the survey began more than a decade ago.

How much slack?

Unemployment is falling rapidly as growth picks up ahead of gains in the size of the labor force. If current trends continue, the jobless rate could approach 5% a year from now, below most estimates of full employment, including the Moody’s Analytics estimate.

Just how much slack remains in the job market is a key question. Even if everyone considered unemployed by the Bureau of Labor Statistics returns to work, a large number of people remain, including those who stepped out of the workforce in recent years but say they want jobs, and part-timers who would like full-time work. The consensus among policymakers, financial market participants, and economists appears to be that a considerable amount of slack remains. An apparent lack of wage growth supports this. Most measures of labor compensation from the BLS show compensation growth stuck near the 2% inflation rate (see Chart 1).

Yet this perspective is challenged by newly released data, collected by the human resource management firm ADP and developed by Moody’s Analytics, which show a definitive, broad acceleration in wages. The hourly wage rate for those who have not switched jobs is most telling, rising 4.5% in the third quarter from a year earlier. This pace shows a strong and steady acceleration from the low two years ago.

Wages for this group, as opposed to those who have switched jobs or recently entered the workforce, have risen across the board. Pay is up most for younger workers, those with one to five years on the job and at lower pay scales, and those who work at small companies. The largest gains occurred in financial services and construction in the West and South. Baby boomers who work at big companies in the healthcare and leisure and hospitality industries in the Northeast and Midwest have experienced the slowest ramp-up in wages.

Though the ADP dataset has various idiosyncrasies that overstate the overall pickup in wage growth, the picture it paints is hard to reconcile with the view that the labor market has significant slack. If the economy is approaching full employment and wage growth is accelerating, workers may finally enjoy the fruits of the recovery, supporting that recovery in turn through stronger consumer spending and housing activity. The Federal Reserve may also need to begin normalizing monetary policy sooner than policymakers or financial markets currently expect.

Poor potential

That slack in the economy is being worked down so quickly also highlights a possibly disconcerting development, namely that the economy’s long-run potential growth rate has downshifted significantly. An economy’s potential growth rate is equal to the sum of labor force growth and the rise in its productive capacity. Since World War II, the U.S. economy’s potential rate has av
eraged around 3% per year—approximately 1% from labor force growth and 2% thanks to productivity gains (see Chart 2). But since the recovery began just more than five years ago, this potential growth rate has been paltry, at just above 1% per year. Most of this has come from productivity, with the labor force growing only marginally.

If this poor potential growth rate is sustained for long, the economy’s actual growth rate will have to throttle back significantly by mid-decade, or inflation pressures will develop quickly. Slower potential growth also has serious implications for everything from the competitiveness of U.S. companies to asset values and household wealth, to the government’s fiscal outlook, and, most critically, to the nation’s standard of living.

To be sure, the poor performance of potential growth in recent years may be overstated because of the difficulty of accurately measuring GDP. There is no smoking gun data to prove this, but it is intuitively apparent that gains today are driven less by goods production and more by ideas and services. Measuring the output of corn or oil is far easier than measuring the value of online dating services or crowd-funding.

Another possible source of upward revision is healthcare: The growth of insurance coverage under the Affordable Care Act has lifted healthcare spending, but this has not yet to show up in the numbers. It would not be surprising to see GDP revised meaningfully higher once all the revisions are in, years from now.

**AWOL entrepreneurs**

However, the productivity slump goes beyond measurement issues, and may be the result of more persistent forces such as the decline in new business formation. The number of new U.S. enterprises started each year had been trending lower since the late 1990s tech boom, but it took a sharp dive during the recession. Business starts have stabilized in the recovery but show few signs of rebounding (see Chart 3). Recent research shows that job creation depends heavily on new firms. They are the principal source of innovation and long-term growth, turning new ideas into products and services. The longer businesses remain depressed, the dimmer the country’s longer-term prospects look.

Weak business starts are a problem across nearly all industries. The energy sector is an exception, reflecting the boom in hydraulic fracturing and other technologies. The pace of business formation has also held up in healthcare, thanks to changes forced by Obamacare. But significantly fewer new firms are being formed in manufacturing, retail and financial services.

The tough economy is one impediment. Starting a business is nerve-racking even in the best of times. The nightmare of the recession surely dampened entrepreneurial spirits so vital to risk-taking. Also weighing on new business formation is the age composition of the population. Most new businesses are formed by people in their 30s. Currently, the share of thirtysomethings in the U.S. population is at a cyclical low. This is the baby-bust generation, the small cohort between the baby boomers and their children, now the twentysomethings, millennials.

Starting businesses takes capital, which has been in short supply. Until recently, getting a bank loan for a startup was difficult. It is still tough to find venture capital funding unless you live in Silicon Valley and write computer code, or are working on the next big app for smartphones (see Chart 4).

Moreover, though new inventions continue to emerge, this may be happening less quickly than in the past and with less impact on society. Robert Gordon of Northwestern University argues that although the iPhone is impressive, acquiring one is not nearly as life-changing as was the arrival of indoor toilets for past generations.

**American dynamism**

This perspective seems overstated. Who knows what will come from 3-D printing, nanotechnology, drones, driverless cars or genomics? Moody’s Analytics expects business formations to slowly revive and for productivity growth to snap out of its slump, averaging close to 1.5% per year over the next decade. Combined with labor force growth of just more than 0.5%, the economy’s potential growth should come in just above 2% per year. However, the outlook rests on a key assumption—that lawmakers agree on immigration reform by mid-decade. This is vital to sustaining labor force gains and fueling entrepreneurship.

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**Depressed Entrepreneurship Is a Worry**

New companies as a % of all companies

**Capital for New Ventures Is Concentrated**

Venture capital spending

Sources: Census Bureau, Moody’s Analytics

Sources: PWC, Moody’s Analytics

www.sonomaedb.org
Forecast Assumptions
BY MARK ZANDI

Monetary policy
The Federal Reserve has begun what is expected to be a slow process to normalize monetary policy. The first step is to end its bond-buying program, which it is on track to do this month. After four rounds of quantitative easing, the Fed has more than $4 trillion of assets on its balance sheet. It should be closer to $1 trillion in a well-functioning economy.

The outlook is based on a steady but orderly rise in long-term rates, with 10-year Treasury yields rising from the current nearly 2.5% to almost 3% by the end of 2014 and 4% by the end of 2015. Ten-year yields are expected to peak near 5% in late 2016, before settling near 4.75%—the normalized 10-year Treasury yield consistent with an economy at full employment.

If interest rates take approximately this path, the economy should be able to handle the increase reasonably gracefully. Faster job creation should largely trump the impact of higher mortgage rates on the housing market, and steadily rising corporate earnings should keep stock prices moving up, albeit much more slowly than they have over the past several years.

Fiscal policy
The federal government’s fiscal situation is improving. The budget deal reached at the end of 2013 to keep the government open for at least two years is holding firm. Government spending growth is flat. This, combined with strong tax revenue increases, has lowered the budget deficit. The deficit is on track to approach $550 billion this year and should stabilize at just over $500 billion in the next several years. As part of the budget deal, lawmakers also agreed to increase the Treasury debt limit sufficiently that it should not be an issue until mid-2015. Fiscal policy is fading as a drag on growth. Austerity, which reduced real GDP by close to 1.5 percentage points of GDP in 2013, will reduce growth this year by no more than 0.4 percentage point. The drag in 2015 and 2016 will be minimal. Much of the fiscal drag this year is due to the expiration of the emergency unemployment insurance program. It is unprecedented for lawmakers to allow this program to lapse given an unemployment rate that is still above 6%. This is near the average peak unemployment rate in recessions since World War II, to which emergency UI has typically been part of the policy response. The end of the emergency UI program is responsible for fiscal drag of 0.15 percentage point this year, much of it occurring in the first quarter.

Under current fiscal policy, Washington will approach the goal of achieving fiscal sustainability: future budget deficits that are small enough—near 3% of GDP—that the nation’s debt-to-GDP ratio stabilizes through the remainder of the decade. This will be enough to satisfy financial markets and allow the recovery to gain traction as anticipated in the Moody’s Analytics baseline outlook.

U.S. dollar
The value of the U.S. dollar has been buoyed in recent weeks by disappointing growth in much of the rest of the world. Europe’s prospects in particular have dimmed, as has the outlook for a number of emerging economies. The value of the real broad trade-weighted U.S. dollar is expected to appreciate somewhat through mid-decade. Much of the dollar’s strength will be against the euro. Behind this outlook is the expectation that the Fed will normalize U.S. monetary policy by late 2017, but the ECB will not be able to normalize European rates until near decade’s end. Though the long-run fair value dollar-euro exchange rate is near its current $1.25 per euro, the euro is expected to fall as low as $1.10 during this period.

The dollar should appreciate more modestly against the British pound over the next several years, as the dollar is currently modestly undervalued against the long-run fair value of $1.75 per pound. The U.K. economy is expected to perform similarly to the U.S. economy, and the Bank of England should thus normalize British monetary policy along a similar path as the Federal Reserve.

The sharp depreciation of the yen to near ¥110 per dollar puts the Japanese currency back closer to its fair value. The yen is not expected to depreciate much further in the near term, but in the longer run, further yen depreciation is likely as a result of the struggles of the Japanese economy.

The dollar will remain strong against the currencies of most emerging economies through mid-decade as the Fed normalizes monetary policy, but it will depreciate slowly and unevenly against these currencies over the long run. Against the yuan, the dollar is expected to weaken over the next several years. On a real broad trade-weighted basis, the dollar’s relative stability is expected to prevail in the long run. It will remain the global economy’s principal reserve currency for the foreseeable future.

Energy prices
Oil prices as measured by the cost of a barrel of West Texas Intermediate crude have recently slumped to less than $90 per barrel because of weaker global growth and thus oil demand, while U.S. and Canadian shale oil production continues to increase. WTI will rise near $100 per barrel by early next year, assuming that Saudi Arabia will curtail production if oil prices fall much further. Oil demand from emerging economies is also expected to pick up from its recent slump. Longer run, oil and gasoline prices are expected to trend higher, increasing at a pace that is just above the overall rate of inflation. Driving this outlook is the difficulty the supply side of the global oil market will have keeping pace with increasing demand from faster-growing, less energy-efficient emerging economies. This view is clearly being challenged by the recent substantive gains in technologies used to extract oil and natural gas from shale. Given the large deposits of shale in the U.S. and many other parts of the world, this could have a significant impact on long-term oil prices.