

### COMMUNITY INDICATORS

# Welcome to the Orange County Community Indicators.

The indicators in this report, released annually since 2000, track a range of topics important to the county's health and prosperity. They highlight areas in which the county is performing well and making progress, as well as those where improvement is needed and where community efforts may positively influence Orange County's future.

The data compiled on the following pages allow stakeholders to ask whether a certain practice or trend is sustainable. In other words, are we making decisions to foster and maintain Orange County's vitality? The issues we face are complex and interrelated. By investing wisely, communities and individuals alike can provide for a thriving and sustainable place for us, our children, and our children's children to call home.

We hope you will find the report useful and thought provoking. Please share it with others interested in sustaining Orange County's long-term health and quality of life.

### **Indicator Selection**

Good indicators are measurements that reflect how a community is doing and indicate whether key attributes are improving, worsening, or remaining constant. The indicators included in this report:

- Reflect broad countywide interests which impact a significant percentage of the population
- Illustrate fundamental factors that underlie long-term regional health
- Can be easily understood and accepted by the community
- Are statistically measurable and contain data that is both reliable and available over the long-term
- Measure outcomes, rather than inputs whenever possible

### **Peer Regions**

To place Orange County's performance in context, many indicators compare the county to the state, nation or other regions. Specifically, we compare ourselves to our neighbors to better understand our position within the Southern California region. We also compare ourselves to "peer" regions, both within California and nationwide, because they are economic competitors or good barometers for comparison due to the many characteristics we have in common. Each section of the report includes slightly different peer regions based on the characteristics considered relevant to that topic.

### **Indicator Performance**

Orange County's performance on each indicator is summarized using a "green, yellow, red" continuum, where green indicates strong performance and red indicates poor performance. The ratings are illustrated on the title pages for each section (e.g., Business, Technology and Employment or Education). The rating selected for each indicator is based on the combination of Orange County's performance in relation to the nation, state, and/or peer regions as well as Orange County's performance over the course of five to ten years. In the event an indicator includes more than one measure, the rating aims to measure performance on all measures.

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## 2014 Orange County Community Indicators Report Highlights

Significant gains have shown in both the job market and educational attainment, yet the region continues to see challenges in family poverty and household income. Below are key takeaways from the 2014 Orange County Community Indicators Report.

### **Employment is growing.**

Among 10 key industries in Orange County, eight saw job growth in 2013.



Orange County is well-positioned to continue to grow, boasting a higher high-tech job concentration than some states.



Small businesses with less than five employees have recovered their employment losses since the recession.

## Despite this growth, many families and neighborhoods are struggling financially.

More than 1/3 of Orange County neighborhoods have high levels of family financial instability.



### Lowest-Scoring vs Highest-Scoring Neighborhoods

### **Orange County's Family Financial Stability Rankings**

| 11%           | 24%      | 30%               | 24%    | 12%         |
|---------------|----------|-------------------|--------|-------------|
| Very Unstable | Unstable | Moderately Stable | Stable | Very Stable |

One driving factor of this issue could be that household income has not kept up with inflation, following a nationwide trend. In fact, it has moved in the opposite direction.





## More skilled workers are on their way.



**6**<sup>0</sup>

Home prices are up

16% in just one year.

18% of all locally granted graduate and undergraduate degrees are in science, technology, engineering and mathematics. High school dropout rates are down... 2012 9.0%\* 2010 12.3% ...and more students are better positioned to increase their earning potential.



## What does Orange County's future hold?

Our population is aging and living with more chronic disease. At the same time, the proportion of children—who will grow up to address these challenges—is shrinking due to a 15% decline in births in the past 10 years. The wellbeing of our communities and youth is imperative for continued growth and prosperity.

# **County Profile**

Orange County is located on the Southern California coast, with Los Angeles County to the north, San Diego County to the south, and Riverside and San Bernardino counties to the east. There are 34 cities within the county and several unincorporated areas.



### POPULATION

### Growth

Orange County is the third largest county in California and the sixth largest in the nation:

- With a population of 3,104,680 in July 2013, Orange County falls behind Los Angeles (10,019,365) and San Diego (3,182,072) counties.<sup>1</sup>
- Orange County has more residents than 20 states, including Mississippi, Arkansas, Kansas, Utah, and Nevada.<sup>2</sup>
- Between 2012 and 2013, the population growth rate was 1%.<sup>3</sup>
- This rate of growth is slow, but because Orange County's population is already large, even 1% growth translates to many more residents. Therefore, in terms of the number of people added to the county annually, Orange County ranks 8th in the nation.<sup>4</sup>
- Most growth in Orange County is through natural increase (births minus deaths) and a smaller proportion is due to migration, either from international immigration or people moving to Orange County from other states.<sup>5</sup>
- Long-range projections suggest this pattern will continue, with natural increase becoming the sole contributor to growth.
- The county's population is projected to reach 3.4 million by 2035.
- In terms of percent change, that translates to 13% growth between 2010 and 2035, supported by 12% growth in housing and 19% growth in employment over the same period.<sup>6</sup>



Projected Change in Population, Housing, and Employment Orange County, 2010-2035

Source: Center for Demographic Research, California State University, Fullerton, Orange County Projections 2010 Modified

### Density

Orange County remains one of the most densely populated areas in the United States, falling 19th out of over 3,000 counties in the nation:

- Orange County's population density is 3,822 persons per square mile, an increase of 6% since 2000.<sup>7</sup>
- Densities vary by location among Orange County's incorporated areas, from a low of 2,007 persons per square mile in Seal Beach to a high of 12,505 in Stanton.
- Population density is much lower in unincorporated areas, which include parts of the Cleveland National Forest (435 persons per square mile).<sup>8</sup>
- The average household size in Orange County is 3.0 persons, with variation among cities, ranging from an average of 4.5 persons per household in Santa Ana to 1.9 in Seal Beach.<sup>9</sup>
- Orange County's average household size is larger than California's (2.93) and the United States' (2.61). Only 108 counties in the nation have a larger average household size than Orange County.<sup>10</sup>

### Population Density Ranking County Comparison, 2012

| Rank out<br>of all U.S.<br>Counties | County (Major City)             | Persons per<br>Square Mile<br>of Land Area |
|-------------------------------------|---------------------------------|--|
| 5                                   | San Francisco (San Francisco)   | 17,234                                     |
| 7                                   | Suffolk County (Boston)         | 12,459                                     |
| 19                                  | Orange County (Santa Ana/Irvine | e) 3,822                                   |
| 27                                  | Dallas County (Dallas)          | 2,731                                      |
| 31                                  | Los Angeles (Los Angeles)       | 2,425                                      |
| 38                                  | Hennepin (Minneapolis)          | 2,092                                      |
| 68                                  | Sacramento (Sacramento)         | 1,474                                      |
| 77                                  | Santa Clara (San Jose)          | 1,386                                      |
| 105                                 | Travis (Austin)                 | 1,045                                      |
| 121                                 | King (Seattle)                  | 917  |
| 146                                 | San Diego (San Diego)           | 737  |
| 249                                 | Maricopa (Phoenix)              | 418  |
| 349                                 | Riverside (Riverside)           | 304  |
| 825                                 | San Bernardino (San Bernardino) | 102  |

Sources: U.S. Census Bureau, GCT-PH1-R: Population, Housing Units, Area, and Density, Census 2010 (land area) and 2012 American Community Survey, 5-Year Estimates (population)

### Population Density Ranking

Orange County City Comparison, 2012

| City             | Persons per<br>Square Mile | City                   | Persons per<br>Square Mile |
|------------------|----------------------------|------------------------|----------------------------|
| Stanton          | 12,505                     | Laguna Woods           | 5,000                      |
| Santa Ana        | 12,085                     | Dana Point             | 4,980                      |
| Garden Grove     | 9,669                      | Lake Forest            | 4,673                      |
| Westminster      | 8,938                      | Laguna Hills           | 4,652                      |
| La Habra         | 8,384                      | Laguna Niguel          | 4,358                      |
| Buena Park       | 8,114                      | Rancho Santa Margarita | 3,706                      |
| La Palma         | 7,909                      | San Clemente           | 3,527                      |
| Placentia        | 7,845                      | Irvine                 | 3,486                      |
| Costa Mesa       | 7,184                      | Newport Beach          | 3,416                      |
| Aliso Viejo      | 7,171                      | Yorba Linda            | 3,339                      |
| Tustin           | 7,089                      | Brea                   | 3,338                      |
| Huntington Beach | 7,066                      | Laguna Beach           | 2,962                      |
| Cypress          | 7,036                      | Villa Park             | 2,810                      |
| Anaheim          | 6,882                      | Los Alamitos           | 2,704                      |
| Fullerton        | 6,117                      | San Juan Capistrano    | 2,470                      |
| Fountain Valley  | 5,852                      | Seal Beach             | 2,007                      |
| Orange           | 5,508                      | Unincorporated         | 435                        |
| Mission Viejo    | 5,450                      |                        |                            |

Source: Orange County Progress Report 2012 (land area) and California Department of Finance, January 2012, Table E-2 (population)

### Ethnicity

Orange County is a racially and ethnically diverse region:

- 43% of Orange County residents self-identify as White, followed by 34% Latino, and 19% Asian/Pacific Islander.
- African Americans comprise 1.4% of the total population, while 2.4% are two or more races, and the remaining 0.4% are American Indian/Alaska Native or any other single race.<sup>11</sup>

### **Population by Race and Ethnicity**

Orange County, 2003-2012



Note: All other races (American Indian/Alaska Native and any other single race) total less than one percent annually over the period shown and are not included in the chart. All races shown are non-Latino; the ethnicity Latino is of any race.

Source: U.S. Census Bureau, American Community Survey, 2003-2012

### Foreign-Born and Primary Language

Orange County has a substantially higher proportion of foreign-born residents (31%) than the nationwide average (13%) and only somewhat higher than the statewide average (27%):

- Half (50%) of the foreign-born population in Orange County are U.S. citizens.
- Among all Orange County residents at least five years of age or older, 46% speak a language other than English at home.
- Of those, the majority speak Spanish (58%) followed by Asian/Pacific Islander languages (31%), and other Indo-European languages (9%). The remaining 2% speak some other language.
- 20% of Orange County residents over age five report that they do not speak English "very well."12

### Age

Orange County's population is growing older:

- Over the past 10 years, the county has seen an increase in the older adult population and a decrease in the child population.
- In 2012, 24% of Orange County's population was under 18 years (compared to 27% in 2003) and 12% were 65 years and older (compared to 10% in 2003).
- The median age has risen from 35 in 2003 to 37 in 2012.<sup>13</sup>
- Looking forward, projections suggest the aging trend will continue, with a 142% increase in the older adult population and a 7% decrease in the non-senior population.<sup>14</sup>



### Projection of Older Adult Population (65+) Compared to Remainder of Population (0-64) Orange County, 2010-2060



Source: Calfornia Department of Finance, State and County Population Projections by Race/Ethnicity, Age, and Gender, 2010-2060

### Education

High school diploma and college degree rates have made slow progress:

- Over the past 10 years, the percentage of the Orange County population over age 25 with a Bachelor's degree grew from 34% in 2003 to 37% in 2012.
- The rate of 37% outperforms the statewide average (31%) and the national average (29%) for adults over 25 with a Bachelor's degree.
- The percentage of residents over age 25 with a high school diploma has also grown, from 82% in 2003 to 85% in 2012.
- Orange County's rate of 85% is higher than the statewide average of 82%, but slightly under the national average of 86%.<sup>15</sup>

### LAND USE AND HOUSING

Orange County covers 799 square miles of land, including 42 miles of coastline:

- The county's two main land uses are divided equally between residential housing (28%) and land classified as Governmental/Public, including open space and parks (28%).
- Agricultural uses comprise 12% of the county's land use, as do commercial and industrial uses (12%).
- Transportation infrastructure (e.g. roads, rails) accounts for another 12% of county land, followed by 8% of land that is classified as Uncommitted, meaning it is either vacant or there is no data available.<sup>16</sup>

As of January 2013, there were 1,056,195 housing units available to Orange County residents:<sup>17</sup>

- A majority of occupied units were owner-occupied (57%) compared to renter-occupied (43%).<sup>18</sup>
- Two-thirds (63%) of the existing housing units in Orange County are single-family homes, while 34% are multi-family homes and 3% are mobile homes.<sup>19</sup>
- Driven largely by increases in multi-family unit development, building permits issued for new construction continue to rebound since the record low numbers in 2009.
- In recent years, multi-family permits comprised the majority of permits issued.<sup>20</sup>
- Going forward, the county's total housing stock is projected to grow 12% between 2010 and 2035.<sup>21</sup>

Percent Over Age 25 with a High School Diploma/GED or Bachelor's Degree Orange County, 2003-2012



Source: U.S. Census Bureau, 2003-2012 American Community Survey

Land Use by Category





Source: Orange County Public Works

### Building Permits Granted and Existing Housing Stock Orange County, 2004-2013



\*2013 permit data is preliminary.

Sources: U.S. Department of Housing and Urban Development; California Department of Finance, Tables E-5 and E-8

### EMPLOYMENT

Orange County is a job center, evidenced by having the state's third highest population but the second highest number of jobs and the second highest number of firms:

- At 1.55 million jobs in December 2013, Orange County is on its way to exceed employment levels not seen since before the recession.
- At the height of the pre-recessionary boom in 2006, Orange County sustained a high of 1.57 million jobs, followed by a post-crash low in January 2010 of 1.43 million jobs.
- Since then, employment has grown relatively steadily.<sup>22</sup>
- Long-range projections anticipate 1.78 million jobs by 2035, an increase of 19% from 2010 and growing at a faster rate than the county's population growth (13%) over the same period.<sup>23</sup>

Small businesses thrive in Orange County's entrepreneurial climate:

- The largest proportion of businesses in Orange County have under five employees.
- · Furthermore, very small businesses with under five employees have recovered the employment losses sustained since the economic crash.<sup>24</sup>
- As a group, businesses with five or more employees had not yet reached pre-recessionary employment levels as of 2012.
- Orange County's larger firms with 100 or more employees witnessed the most significant employment losses since 2003.
- In 2012, fewer Orange County residents worked in large firms of 500+ employees (16%) than the statewide average (21%).25





Number of Employees by Business Size Category Orange County, 2003-2012



Note: Data are third quarter and for private industry only. Business size is measured by the number of employees in the company.

Source: California Employment Development Department

<sup>5</sup> California Department of Finance, Table E-2

- <sup>6</sup> Center for Demographic Research, California State University, Fullerton, Orange County Projections 2010 Modified
  <sup>7</sup> U.S. Census Bureau, Census 2010, Table GCT-PH1. Population, Housing Units, Area, and Density and 2012 American Community Survey, 5-Year Estimates

\* Calculated from land area data presented in the Orange County Progress Report 2012 by the Center for Demographic Research, California State University, Fullerton, and California Department of Finance, Table E-1, January 1, 2013 population figures.

<sup>9</sup> U.S. Census Bureau, 2012 American Community Survey, 3-Year Estimates <sup>10</sup>U.S. Census Bureau, 2012 American Community Survey, 5-Year Estimates

11 The Census tracks race (White, Black or African American, Asian, Native Hawaiian and other Pacific Islander, Native American/Alaska Native) and ethnicity (Hispanic/Latino or non-Hispanic/Latino). The data shown for races are all non-Hispanic/Latino and the ethnicity data shown is Hispanic or Latino of any race. U.S. Census Bureau, 2012 American Community Survey, 1-Year Estimates <sup>12</sup>U.S. Census Bureau, 2012 American Community Survey, 1-Year Estimates

<sup>13</sup>U.S. Census Bureau, 2003-2012 American Community Survey, 1-Year Estimates

<sup>14</sup>Calfornia Department of Finance, State and County Population Projections by Race/Ethnicity, Age, and Gender, 2010-2060 (www.dof.ca.gov/research/demographic/reports/view.php) <sup>15</sup>U.S. Census Bureau, 2003-2012 American Community Survey, 1-Year Estimates

- <sup>21</sup>Center for Demographic Research, California State University, Fullerton, Orange County Projections 2010 Modified
- <sup>22</sup>Employment Development Department, Employment by Industry Data for Orange County (www.calmis.ca.gov/htmlfile/county/orange.htm)
  <sup>23</sup>Center for Demographic Research, California State University, Fullerton, Orange County Projections 2010 Modified
  <sup>24</sup>Reflects change between 2012 and 2005 (when size of business data shows the highest employment figures).

<sup>&</sup>lt;sup>1</sup> California Department of Finance, Demographic Research Unit, Table E-2 (www.dof.ca.gov/research/demographic/reports/view.php). July 2013 estimates are considered preliminary. <sup>2</sup> U.S. Census Bureau, Population Estimates Program, Vintage 2012 County Population Datasets, CO-EST2012-alldata (www.census.gov/popest/data/datasets.html) <sup>3</sup> California Department of Finance, Demographic Research Unit, Tables E-2

<sup>&</sup>lt;sup>4</sup> Ranking based on change between 2011 and 2012 population estimates. U.S. Census Bureau, Population Estimates Program, Vintage 2012 County Population Datasets

<sup>&</sup>lt;sup>6</sup>County of Orange Public Works

<sup>&</sup>lt;sup>17</sup>California Department of Finance, Table E-5

<sup>&</sup>lt;sup>18</sup>U.S. Census Bureau, 2012 American Community Survey, 1-Year Estimates

<sup>&</sup>lt;sup>19</sup>California Department of Finance, Table E-5 <sup>20</sup>U.S. Department of Housing and Urban Development (http://socds.huduser.org/permits/index.html)

<sup>&</sup>lt;sup>25</sup>Employment Development Department, Size of Business Data, 2001-Present (www.labormarketinfo.edd.ca.gov/?PAGEID=138)

# Business, Technology and Employment

| Business Climate                  |  |  |
|-----------------------------------|--|--|
| High-Tech Growth and Diversity    |  |  |
| Venture Capital and Patent Grants |  |  |
| World Trade                       |  |  |
| Tourism-Related Spending and Jobs |  |  |
| Employment                        |  |  |

## Orange County Ranking Inches Up

### **Description of Indicator**

This indicator measures Orange County's business climate through *Forbes* magazine's "2013 Best Places for Business" regional rankings. The *Forbes* ranking compares metropolitan areas using 12 metrics related to job growth, business and living costs, income growth, projected economic growth, educational attainment, cultural and recreational opportunities, number of highly ranked colleges, and net migration patterns.

### Why is it Important?

A region's business climate reflects its attractiveness as a location, the availability of business support and resources, opportunities for growth, and barriers to doing business. Since businesses provide jobs, sales tax revenue, economic growth, and entrepreneurship opportunities, a strong business climate is important for maintaining Orange County's economic health and quality of life.

### How is Orange County Doing?

Orange County's ranking improved slightly in 2013:

- *Forbes*' 2013 national rankings placed Orange County at 97th out of 200 metro areas ranked, up two places from the previous year.
- The county remains behind all peers compared except Riverside/San Bernardino and Los Angeles.
- *Forbes* gives the greatest weighting to business costs and educational attainment in their overall ranking. Orange County ranks well in educational attainment (26 out of 200), but poorly in the cost of doing business (175 out of 200).
- Forbes calculates Orange County's cost of living at 42.8% above the national average.
- Orange County's peak ranking in the past 10-years was 27th. The county's peak ranking since tracking began was 10th in 2002.





Note: Through 2005, the ranking was out of 150 metro areas. In 2006, the ranking was expanded to include 200 metro areas.

Source: Forbes magazine, August 17, 2013 (www.forbes.com/best-places-for-business/)

### Best Places for Business Ranking Regional Comparison, 2009-2013

|                          | 2009         | 2010 | 2011 | 2012    | 2013       |
|--------------------------|--------------|------|------|---------|------------|
| Seattle                  | 17           | 18   | 13   | 16      | 9          |
| Dallas                   | 32           | 26   | 10   | 8       | 13         |
| Austin                   | 8            | 10   | 7    | 9       | 14         |
| San Francisco            | 127          | 38   | 37   | 23      | 21         |
| Minneapolis              | 76           | 57   | 34   | 22      | 23         |
| Boston                   | 90           | 67   | 52   | 45      | 38         |
| San Jose                 | 115          | 48   | 35   | 28      | 41         |
| San Diego                | 104          | 89   | 64   | 75      | 78         |
| Orange County            | 107          | 79   | 109  | 99      | 97         |
| Riverside/San Bernardino | 94           | 88   | 99   | 103     | 103        |
| Los Angeles              | 180          | 120  | 114  | 123     | 134        |
|                          | Highest Bank |      |      |         | Lowest Ban |
|                          |              |      |      | 124.460 | Lowest Kan |

Bottom 40

Source: Forbes magazine, August 17, 2013 (www.forbes.com/best-places-for-business/)

Top 40

## Tech Output Growth Rebounds

### **Description of Indicator**

This indicator measures high-tech industry diversity, employment concentration, and output growth. Regions with employment concentration values higher than 1.0 in a particular industry have a greater concentration than the national average. A larger number of concentrated high-tech industries indicates a more diversified technology employment base. High-tech sector output growth is relative to the national average (100.0). Approximately 11% of all Orange County employment falls into the high-tech clusters analyzed.

### Why is it Important?

High-tech industries provide strong economic growth potential, offer higher than average wages, and support a broad range of skilled workers and professional services. Regions with a large and diverse high-tech economy have an edge in attracting and retaining high-tech firms because of their deep employment pool and other factors that encourage industry clustering. A diverse high-tech sector is also more resilient during economic downturns than markets that are more reliant on a particular industry.

### How is Orange County Doing?

Orange County has a more diverse tech-sector than many states with notable high-tech centers:

- Among the states compared, California was most diverse.
- Orange County was second most diverse with 16 high-tech industries with higher employment concentration than the national average.
- This is the same as the previous year but lower than the fiveyear high of 18 industry concentrations in 2009.

Orange County's overall high-tech employment concentration was above average:

- At 1.53, Orange County has higher high-tech employment concentration than California, North Carolina and Texas, but a lower level than Washington and the same as Massachusetts.
- Orange County's employment concentration value has not changed significantly over the past five years.

Orange County's high-tech output growth is rebounding:

- At 102.3, Orange County's one-year level of relative hightech output growth rose above the national average of 100.0 between 2011 and 2012, the highest one-year growth rate in at least eight years.
- As of 2012, Orange County's five-year relative high-tech output growth is still below the national average at 98.3, but it improved from the previous year.





Note: Data not available for 2005.

Source: Milken Institute, Best Performing Cities Report (www.milkeninstitute.org)

Number of High-Tech Industries with Employment Above the National Average (out of 22)





Source: Community Indicators Report analysis of data from the U.S. Bureau of Labor Statistics using high-tech industry selection by Milken Institute in the Best Performing Cities Report

### High-Tech Sector Employment Concentration Orange County and Selected State Comparison, 2012



Source: Community Indicators Report analysis of data from the U.S. Bureau of Labor Statistics using bigb-tech industry selection by Milken Institute in the Best Performing Cities Report

## Patents Increase; Venture Capital Declines

### **Description of Indicator**

This indicator measures the number of utility patents, or "patents for inventions," granted to inventors based in Orange County. It also measures Orange County businesses' access to venture capital (financing for new companies) by tracking early-stage and emerging business investment among metro areas.

### Why is it Important?

Innovation and the development of new technology are critical for a regional economy's long-term viability. Venture capital facilitates new business growth and exploits new technologies. The number of patent grants awarded for county businesses and residents is one barometer of the ingenuity of the local workforce and businesses' commitment to research and development.

### How is Orange County Doing?

Orange County patents are growing:

- In 2012, there were 2,546 patents granted to Orange County inventors, up 58% from five years ago in 2008.
- Orange County's patent grant rate of 8.2 per capita is on par with the statewide average (8.4), but significantly higher than the nation overall (3.9).
- Patents granted to Orange County residents rose 12% between 2011 and 2012, which was a larger increase than the nation (11%) but smaller than the statewide average (14%).

Venture capital investment continued to decline in 2013:

- Venture capital funding in 2013 was \$613.3 million, down 19% from \$757.3 million in 2012. In contrast, national venture capital investment grew 9% between 2012 and 2013.
- Despite the recent declines, the 2013 investments are over double the investments made in 2004 (\$254.1 million) the lowest level of venture capital investment since at least 2000.
- Local companies in the software sector led investments in 2013, garnering 42% of the total venture capital invested in Orange County.
- In 2013, Orange County's share of national venture capital was approximately 2.1%, below 2.9% in 2012 and 3.1% in 2011.

Number of Patent Grants Awarded per 10,000 Residents Orange County, California and United States, 2008-2012



Sources: U.S. Patent and Trademark Office (www.uspto.gov); U.S. Census Bureau, American Community Survey 1-Year Estimates (www.census.gov)

### Venture Capital Investment Orange County, 2004-2013



Source: MoneyTree Report prepared by National Venture Capital Association and PricewaterbouseCoopers, based on data provided by Thomson Reuters (www.pwcmoneytree.com/MTPublic/ns/index.jsp)

Venture Capital Investment by Sector Orange County, 2013



Source: Money Tree Report prepared by National Venture Capital Association and PricewaterbouseCoopers, based on data provided by Thomson Reuters (www.pwcmoneytree.com/MTPublic/ns/index.jsp)

## **Regional and Local Exports Remain Strong**

### **Description of Indicator**

This indicator measures the change in dollar value of Orange County exports, including exports by destination as well as the leading exports by type of commodity. It also tracks exports from the Los Angeles-Long Beach-Santa Ana metro area, which includes Orange County (referred to as Los Angeles/Orange County).

### Why is it Important?

The ability to access international markets is important for a strong and growing local economy. Exports comprise over 10% of Orange County's Gross Metropolitan Product and generate thousands of local manufacturing jobs. Trade agreements like the North American Free Trade Agreement (NAFTA) and the U.S.-Korea Free Trade Agreement continue to expand markets for Orange County businesses. The county's location on the Pacific Rim, proximity to the Ports of Long Beach and Los Angeles, and diverse foreign-born population with international networks make Orange County well positioned for international trade.

### How is Orange County Doing?

Orange County exports rose significantly in 2010 and 2011:

- After declining in 2009, Orange County exports increased to \$20.4 billion in 2010 and to \$24.6 billion in 2011, surpassing pre-recession levels.
- This growth translates to a 20.2% increase from 2010 export levels, on top of a 22.2% increase the prior year.
- In 2011, Orange County's largest single-country export destinations included Mexico (\$5.8 billion), Canada (\$2.8 billion), China (\$2.6 billion), Japan (\$2.0 billion) and South Korea (\$1.0 billion).
- Orange County exports are concentrated in high-tech industries dominated by computer and electronic products. Other top exports include transportation equipment, chemicals, food, machinery, and petroleum and coal products.

The larger Los Angeles/Orange County metropolitan area was third among the 50 top metro exporters in 2012:

- The Los Angeles/Orange County metro area exported merchandise totaling \$75.0 billion, up \$2.3 billion (3.2%) from the previous year, behind only Houston and New York metro areas.
- Mirroring Orange County data, in 2012, the Los Angeles/ Orange County metro area's largest single-country export destinations included Mexico (\$18.3 billion), Canada (\$8.9 billion), China (\$7.2 billion), Japan (\$6.0 billion) and South Korea (\$3.1 billion).
- The top export sectors for Los Angeles/Orange County also line up with Orange County exports, with computer and electronic products topping the list in 2012, along with transportation equipment and chemicals.

### Total Exports Worldwide

Orange County and Los Angeles/Orange County, 2003-2012



Note: 2003 and 2004 data unavailable for Los Angeles/Orange County; 2012 data unavailable for Orange County.

Sources: Institute for Economic and Environmental Studies, California State University Fullerton; International Trade Administration (http://tse.export.gov/metro/SelectReports.aspx?DATA=Metro)

### Orange County Exports by Destination, 2011



Source: Institute for Economic and Environmental Studies, California State University Fullerton

### Orange County Exports by Sector, 2011



Source: Institute for Economic and Environmental Studies, California State University Fullerton

## Tourism Employment and Spending Continue to Grow

### **Description of Indicator**

This indicator measures visitor spending on accommodations, food, recreation, retail products, and travel arrangements, as well as tax revenue generated within the county by visitor spending. Travel industry employment trends are also included.

### Why is it Important?

Visitors traveling to Orange County for recreation and business generate revenue and jobs for the local economy. Tourism is one of the leading industries in Orange County, accounting for nearly 15% of the county's employment (see Employment). Hotels, shops, restaurants, and entertainment venues rely on the tourism market for a significant percentage of their business. Moreover, local jurisdictions benefit from tax revenue generated by visitor spending.

### How is Orange County Doing?

The number of tourism-related jobs rose:

- In 2012, tourism-related employment grew 4% (6,366 jobs), to a total of 175,595 jobs.
- The average annual salary for jobs in the tourism sector was estimated at \$23,707 in 2012, a 5% increase over 2011 (see Employment).

Overall travel spending and tax receipts have grown steadily since 2009:1

- Visitor spending in Orange County totaled \$9.5 billion in 2012, up from \$8.1 billion in 2009.
- Over the past five years, growth in visitor spending has kept pace with the cumulative rate of inflation.
- Orange County tourism generated \$590 million in tax receipts in 2012, compared to \$508 million in 2009.
- At \$191, Orange County generates more tax revenues per resident than Los Angeles (\$148 per resident) and Riverside/San Bernardino (\$73 per resident), but less than the San Francisco Bay Area and San Diego, which generate \$245 and \$236 per resident, respectively.



### Tourism-Related Employment Orange County, 2008-2012

Source: California Employment Development Department

### Total Direct Travel Spending

Orange County, 2008-2012



Source: California Division of Tourism, California Travel Impacts by County, 1992-2011 and 2012 Preliminary State & Regional Estimates, May 2013

### Tax Receipts Generated by Travel Spending Regional Comparison, 2012



Note: "San Francisco Bay Area" includes Alameda, Marin, San Francisco, San Mateo, Santa Clara, Santa Cruz, and western Contra Costa and Solano counties.

Sources: California Division of Tourism, California Travel Impacts by County, 1992-2011 and 2012 Preliminary State & Regional Estimates, May 2013; U.S. Census Bureau, 2012 American Community Survey, 1-Year Estimates

<sup>1</sup> Data have been revised since previously published. 2012 data are preliminary.

## **Biomed Leads Employment Growth**

### **Description of Indicator**

This indicator calculates average employment and salaries in 10 major Orange County industry clusters, which account for over half of Orange County jobs. It also shows unemployment rates in Orange County.

### Why is it Important?

The dynamics of employment size and composition illustrate how Orange County's economy is evolving and responding to macro economic forces. Tracking salary levels by cluster shows whether jobs in these clusters can provide a wage high enough for workers to afford to live in Orange County.

### How is Orange County Doing?

Between 2011 and 2012, employment grew in eight out of the 10 industry clusters tracked:

- Biomedical had the fastest rate of growth (+10%) during this period, followed by Computer Hardware and Tourism (both up 4%).
- Construction, Business and Professional Services, and Health Services posted modest gains of 3%.
- Computer Software and Defense and Aerospace grew by 1%.
- Employment in Energy and Environment (-6%) and Communication (-4%) continued to shrink.

Between 2011 and 2012, average salaries rose in nine of the 10 major clusters:

- Salary growth in six clusters outpaced the rate of inflation between 2011 and 2012, which was 2.1%.
- Over the past five years, salaries in Energy and Environment, Computer Hardware, and Biomedical had the strongest rate of growth, outpacing inflation by five to 10 percent.

The unemployment rate for Orange County has improved substantially:

- Ending the year at 5.2% in December 2013, Orange County's unemployment rate continues to improve from the 10-year high of 9.9% in January 2010 and is only two points from the 10-year low of 3.1% in December 2006.
- Orange County's December 2013 unemployment rate falls below the state and national rates of 7.9% and 6.5%, respectively.

### **Employment in Selected Orange County Clusters,** 2008-2012





Source: California Employment Development Department

### Average Annual Salaries in Selected Clusters Orange County, 2012

|                           | 2012      | Change from 2011 |
|---------------------------|-----------|------------------|
| Computer Software         | \$104,444 | 3.0%             |
| Defense and Aerospace     | \$98,932  | 2.1%             |
| Computer Hardware         | \$87,129  | 3.4%             |
| Energy and Environment    | \$80,389  | 7.7%             |
| Communication             | \$78,138  | 2.0%             |
| Biomedical                | \$74,356  | 5.5%             |
| Construction              | \$60,708  | 5.0%             |
| Business and Professional | \$59,432  | 0.0%             |
| Health Services           | \$55,595  | 2.1%             |
| Tourism                   | \$23,707  | 5.1%             |

Source: California Employment Development Department

#### 14% 12% - California United States 10% **Orange County** 8% 6% Note: Not seasonally adjusted Sources: California Employment Develop-۵% ment Department (www.labormarketinfo. edd.ca.gov) and Bureau of Labor Statistics 2% (www.bls.gov/data/) 0% Dec-03 Dec-04 Dec-05 Dec-06 Dec-07 Dec-08 Dec-09 Dec-10 Dec-11 Dec-12 Dec-13

#### Unemployment Rate

Orange County, California and United States, December 2003-December 2013

# Income and Housing

| Household Income and Cost of Living |  |  |
|-------------------------------------|--|--|
| Poverty                             |  |  |
| Family Financial Stability          |  |  |
| Housing Market                      |  |  |
| Rental Affordability                |  |  |
| Family Housing Security             |  |  |

## Real Household Income Declines for Fifth Consecutive Year

### **Description of Indicator**

This indicator tracks change in inflation-adjusted median household income and compares it to cost of living.<sup>1</sup> Household income is annual income of all members of a household age 15 or older, whether related or unrelated. The Cost of Living Index compares the prices of housing, consumer goods, and services in Orange County and peer metro areas.

### Why is it Important?

An above average and growing household income for Orange County residents is crucial in the context of high housing costs and an overall high cost of living. Lower wage workers or those just starting out, like young workers, may decide to move to more affordable areas if they cannot earn an income high enough to afford living in Orange County. In addition, a high cost of living relative to peer markets can make Orange County less attractive as a destination for businesses and workers, and may push existing businesses to relocate to more affordable regions.

### How is Orange County Doing?

Real household income declined for the fifth year in a row:

- In 2012, median household income in Orange County was \$71,983, down 2% since 2011 and 7% since 2005.
- The inflation-adjusted decline is due to lackluster median income growth combined with a cumulative inflation rate of 18% between 2005 and 2012.
- Orange County has a higher median household income than the state and nation, and all but two of Orange County's peer regions.

Orange County's cost of living remained third highest among peer markets:

- With 100.0 being average, Orange County measured 143.8 on the Cost of Living Index in 2013. This represents an increase after two years of declines in the cost of living.
- Orange County's high cost of living is driven by high housing prices relative to other markets.

When looking at the relationship between income and cost of living, Orange County is more aligned than many peer and neighboring regions:

- Despite Orange County's relatively high cost of living (44% higher than the national average), at 40% higher than the national median, the county's median household income has roughly kept pace.
- However, high cost of living regions like Orange County pose challenges for the half of households earning less than median income.
- Among peers, Los Angeles has the least favorable differential between income and cost of living due to a low median household income.
- Austin and San Jose have the most favorable differential owing to low cost of living (Austin) or high median income (San Jose).

### Median Household Income (Inflation-Adjusted to 2012 Dollars) Orange County, California and United States, 2005-2012



Sources: U.S. Census Bureau, American Community Survey, 1-Year Estimates (2005-2012), Census 2000 (Summary File 3); U.S. Bureau of Labor Statistics, Inflation Calculator (http://data.bls.gov/cgi-bin/cpicalc.pl)

### Median Household Income Compared to Cost of Living Index Regional Comparison, 2012 (Income) or 2nd Quarter 2013 (COL)



Sources: U.S. Census Bureau, American Community Survey, 1-Year Estimates; Council for Community and Economic Research (www.c2er.org)

<sup>1</sup> All income data in this indicator are inflation-adjusted to 2012 dollars, such that \$1,000 earned in 2005, for example, has the same buying power as \$1,176 in 2012. "Real" refers to income after adjusting for inflation.

## Poverty is Rising, but is Lower than State and Nation

### **Description of Indicator**

This indicator measures poverty in Orange County by age group and over time. Poverty is measured by income thresholds as well as enrollment in the public assistance programs, CalWORKs and CalFresh.

### Why is it Important?

There are multiple challenges associated with poverty including stress, strained family relationships, poor health, substandard housing, lower educational attainment, limited employment skills, inability to afford childcare, and transportation difficulties. Economic security can help alleviate these challenges, and as a result, have lasting and measureable benefits.

### How is Orange County Doing?

The poverty rate has grown along with CalFresh enrollment, but CalWORKs enrollment has declined in recent years:

- More Orange County residents were in poverty in 2012 (12.7%) than in 2005 (8.8%).
- CalFresh enrollment mirrored the increase in poverty, growing by an average of 14% annually over the past 10 years. Currently, approximately 7.5% of the county's population receives CalFresh benefits.
- In addition to growing need, rising CalFresh enrollment reflects expanded eligibility and greater efforts to enroll income-eligible residents.
- In spite of the rise in poverty, CalWORKs enrollment fell for the second consecutive year. Adults timing out of the program after four years may be contributing to this trend.

Tracking poverty by age group shows that young adults and families with children are struggling:

- One in five young adults (age 18-24) is living in poverty (19.7%).
- 18.1% of children ages birth to five and 17.0% of children ages six to 17 are in poverty.
- Seniors are least likely to be in poverty (9.4% in 2012), but their rate of poverty has increased in recent years (see Wellbeing of Older Adults).
- Orange County's overall poverty rate of 12.7% is less than the state (16.4%) and nation (15.7%).

### **Poverty Thresholds**

Poverty thresholds vary depending on the make up of the household and the number of children. For a household of four individuals when two of the four are children, the poverty threshold was an annual income of \$23,283 or less in 2012. For a single person under 65 living alone, the 2012 poverty threshold was an income of \$11,945 or less annually. The threshold was \$11,011 for one person over 65 and \$13,892 for two.

CalWORKs and CalFresh Enrollment Compared to Poverty Rate Orange County, 2004-2013



Sources: Orange County Social Services Agency; U.S. Census Bureau, American Community Survey, 3-Year Estimates (2007-2012), 1-Year Estimates (2005 & 2006)

### Residents in Poverty by Age

Orange County, California and United States, 2012



Source: U.S. Census Bureau, American Community Survey, 3-Year Estimates

### **Program Descriptions**

Most programs require income and asset limitations, as well as citizenship or permanent legal resident status. Other eligibility factors may apply such as county or state residency, age, or time in the program (time-limits).

- CalFresh (formerly Food Stamps) provides low-income households with assistance for the purchase of food. Due to a federal waiver in 2010, there are no longer asset limitations in this program.
- CalWORKS provides cash benefits and employment services for low-income families.

## Families in One-third of Orange County Neighborhoods are Financially Unstable

### **Description of Indicator**

This indicator uses the Orange County United Way's Family Financial Stability Index (FFSI) to assess the economic stability of families in Orange County. It measures financial stability at the neighborhood level using a composite of three metrics, including employment (percent of families with children with one or more unemployed adults who are actively seeking employment), income (percent of families with children with an income less than 185% of the federal poverty level), and rent burden (percent of households that are paying 50% or more of income on rent). A score of one represents the lowest concentration of financially stable families and 10 represents the highest concentration of financially stable families.

### Why is it Important?

Economic insecurity is a risk factor for low educational attainment, food insecurity, lack of access to health care, and poor family functioning due to stress about money and the inability to give children lifestyle benefits associated with having a satisfactory income. Assuring families have the tools to improve their financial stability, along with social supports to aid family functioning when needed, can provide lasting positive outcomes for families and children.<sup>1</sup>

### How is Orange County Doing?

Over one-third of neighborhoods in Orange County have a high concentration of families that are financially unstable:<sup>2</sup>

- 11% of neighborhoods have the highest level of family financial instability (very unstable a score of one or two). There are 63 neighborhoods in this range.
- Another 24% of neighborhoods fall in the next highest level of financial instability (unstable – a score of three or four). There are 137 neighborhoods in this range.
- 36% of families live in neighborhoods considered stable or very stable (scores between seven and 10). There are 205 neighborhoods in this range.
- Most financially unstable neighborhoods are in north and north/ central Orange County, while there are pockets in the south and southeast areas of the county.
- The cities with the highest levels of family financial instability are Anaheim, Stanton, Westminster, San Juan Capistrano and Santa Ana.
- Orange County's overall FFSI score is four, the same as California but worse than the United States' FFSI score of five.<sup>3</sup>
- Orange County and California's index scores are driven down by high housing costs.

Family Financial Stability Index (FFSI) Distribution Orange County, 2012



Note: Percentages total over 100% due to rounding. Source: Orange County United Way

### **FFSI Score**

| V<br>Uns | Very<br>Unstable |   | Moderately<br>stable Stable |   | Sta | ble | Ve<br>Sta | ery<br>ble |    |
|----------|------------------|---|-----------------------------|---|-----|-----|-----------|------------|----|
|          |                  |   |                             |   |     |     |           |            |    |
| 1        | 2                | 3 | 4                           | 5 | 6   | 7   | 8         | 9          | 10 |

### Family Financial Stability Index Scores (1-10), Percent and Count of Neighborhoods Orange County, 2012

range County, 201



Source: Orange County United Way

- Families, *Family Relations* (March 2004)
   <sup>2</sup> Orange County is comprised of 583 neighborhoods (census tracts); data are unavailable for five census tracts, thus the percentages are calculated using the 578 tracts with data.
- census tracts, thus the percentages are calculated using the 578 tracts with data. <sup>3</sup> FFSI values for California and the U.S. use the thresholds developed for Orange County census tracts.

<sup>1</sup>Orthner, DK. Jones-Sanpei, H. Williamson, S. The Resilience and Strengths of Low-Income

### Family Financial Stability Index Orange County, 2012



a low income, spend more than 50% of their income on rent, and/ or have one or more adults unemployed who are seeking employment. Areas on the map which are green represent areas with a lower concentration of families that are financially unstable.



Source: Orange County United Way

## Home Prices Rise; Affordability Declines

### **Description of Indicator**

This indicator measures change in the median sale price of an existing single-family detached home and uses the California Association of Realtors' First-Time Homebuyer Housing Affordability Index to measure the percentage of Orange County households that can afford a home. Annual salaries in common or growing occupations are compared to the minimum income needed to qualify for financing.<sup>1</sup>

### Why is it Important?

High relative housing prices, particularly challenging for first-time buyers, adversely impacts our workforce by discouraging young workers from moving to or remaining in Orange County. A lack of affordable housing results in longer commutes, leading to increased traffic congestion and pollution, decreased productivity and diminished quality of life. Homeownership increases stability for families and communities, and may provide long-term financial benefits.

### How is Orange County Doing?

Housing prices are rising:

- In December 2013, the median home sale price in Orange County was \$677,660, a 16% increase from the previous year (\$582,930 in December 2013), on top of a 20% increase the year before that (\$484,630 in December 2011).
- On average, median home sale prices in 2013 were over \$100,000 higher than in 2012.
- Orange County's median price was \$240,000 more than the state's median price.

Housing became less affordable in 2013:

- The minimum household income needed for a first-time homebuyer to purchase an existing single-family home at the entrylevel price of 85% of the Orange County median price is approximately \$82,180.
- 43% of households in Orange County can afford an entry-level priced home priced at \$570,090.
- This is 14 points less affordable than in 2012 when 57% of residents could afford an entry-level home.
- Orange County is less affordable than all peers compared except the San Francisco Bay Area, which was affordable to only 35% in 2013.

### Median Single-Family Home Sale Price

Orange County and California, December 2004-December 2013



Source: California Association of Realtors (http://www.car.org/marketdata/data/housingdata/)

### Income Needed to Afford a Home Compared to Salaries in Selected Occupations

Orange County, Third Quarter 2013



Sources: California Association of Realtors; California Employment Development Department

### First-Time Homebuyer Housing Affordability Index Regional Comparison, Third Quarter 2004-2013



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

<sup>1</sup> The California Association of Realtors' First-Time Buyer Housing Affordability Index parameters for 2013 are 10% down and the prevailing 1-year adjustable interest rate as reported by Freddie Mac (www.freddiemac.com/pmms/pmms/pmms/arm.htm) used towards the purchase of an existing single-family detached home priced at 85% of the county median price.

## Rent is Unaffordable for Low Wage, Full-Time Workers

### **Description of Indicator**

This indicator measures the Housing Wage – the hourly wage a resident needs to afford "Fair Market Rent" (the median rent in the Orange County market). The Housing Wage is also compared to median wages among selected common and/or growing occupations in Orange County. "Affordable" is defined as spending 30% or less of total income on rent.<sup>1</sup>

### Why is it Important?

Lack of affordable rental housing can lead to overcrowding and household stress. Less affordable rental housing also restricts the ability of renters to save for a down payment on a home, limiting their ability to eventually realize the long-term advantages of owning a home. Ultimately, a shortage of affordable housing for renters can perpetuate a cycle of poverty.

### How is Orange County Doing?

Orange County's Housing Wage rose:

- In 2014, the hourly wage needed to afford a one-bedroom unit rose to \$25.23, up from \$24.88 in 2013, but lower than \$26.62 in 2012 and \$25.52 in 2011.
- The 2014 Housing Wage is equivalent to an annual income of \$52,480.
- Orange County continues to have the second highest Housing Wage (less affordable housing) compared to peer metro areas.
- A minimum-wage worker must work 126 hours per week to afford a one-bedroom unit at fair market rent in Orange County.
- Unskilled workers earning above minimum wage, but below the Housing Wage of \$25.23, may experience increased economic insecurity as a larger proportion of their earnings must go towards housing (see Family Financial Stability).

Hourly Wage Needed to Afford a One-Bedroom Unit Regional Comparison, 2014



### 2-1-1 Orange County

In 2013, the largest proportion of calls to 2-1-1 Orange County was for housing-related concerns (such as shelters, rental assistance, mortgage payment assistance, or motel vouchers). Fully 36% of all calls, or 33,043 calls out of 63,788 calls, were related to these topics.

### **Renting in Orange County**

|   | 2013    | 2014    |
|---|---------|---------|
| Fair Market Rent (Monthly)  |         |         |
| One Bedroom   | \$1,294 | \$1,312 |
| Two Bedroom   | \$1,621 | \$1,644 |
| Three Bedroom   | \$2,268 | \$2,300 |
| Amount a Household with One Minimum Wage<br>Earner Can Afford to Pay in Rent (Monthly)        | \$416   | \$416   |
| Number of Hours per Week a Minimum Wage Earner<br>Must Work to Afford a One-Bedroom Apartment | 124     | 126     |

Sources: Community Indicators Report analysis of Fair Market Rent data from the U.S. Department of Housing and Urban Development (www.buduser.org) using the methodology of the National Low Income Housing Coalition (www.nlibc.org); California Employment Development Department (www.edd.ca.gov)

<sup>1</sup> The Housing Wage data in this indicator reflect 2014 Fair Market Rent as reported by the U.S. Department of Housing and Urban Development (HUD).

Hourly Wage Needed to Afford a One-Bedroom Unit in Orange County Compared to Local Wages in Selected Occupations



Note: Wage data are for third quarter 2013. Hourly wage needed (Housing Wage) is for 2014.

## Federal Budget Challenges Lead to Rental Assistance Freeze

### **Description of Indicator**

This indicator measures Orange County family housing stability by tracking the number of children that are homeless or living in insecure housing arrangements, as well as the availability of rental assistance.<sup>1</sup>

### Why is it Important?

High housing costs force many families into living conditions they would not choose otherwise. Living doubled- or tripled-up with another family due to economic constraints can place stress on personal relationships, housing stock, public services, and infrastructure. When shared housing is not an option – or if other factors arise such as foreclosure, financial loss, or domestic violence – the result can be homelessness. Housing insecurity among young children is associated with food insecurity and a greater likelihood of poor health and developmental delays.<sup>2</sup>

### How is Orange County Doing?

Housing insecurity continues to grow for school-age children:

- In 2012/13, the number of PreK-12 students who were identified as homeless or living in unstable housing arrangements rose by 7%, bringing the total to 30,542.
- Most of these students (27,491) live in families that are doubled- or tripled-up with another family.
- Since 2008/09, the number of students living in motels rose 38% from 892 to 1,235 in 2012/13, while the number students living in shelters rose 268% from 441 to 1,621 and the number of unsheltered students rose 36% from 143 to 195.
- At 6.1% of total enrollment, Orange County has proportionately more students with insecure housing than the statewide average and all California regions compared except Riverside/San Bernardino.

No new households could be assisted with rent in 2013:

- The four housing authorities in Orange County provided rental assistance for approximately 22,700 low-income households as of October 2013.
- There are over 50,000 applicants on the waiting list for rental assistance with the Orange County Housing Authority, which assists over half of households receiving rental assistance countywide.
- In response to federal budget sequestration in 2013, all local housing authorities were unable to reissue rental assistance vouchers when someone left the program and a voucher became available. The freeze on issuing vouchers to new households on the waiting list will likely carry into 2014.

Homeless and Housing Insecure School Age Students by Primary Nighttime Residence



Source: California Department of Education, 2012/13

### Homeless and Housing Insecure School Age Students by Percent of Total Enrollment





Source: California Department of Education, 2012/13

### **Homeless in Orange County**

On any given night in Orange County, the 2013 County of Orange Point-in-Time (PIT) count estimates that approximately 4,300 people are homeless. More than 12,700 people are homeless over the course of the year. About one-third of the homeless population live in households with children; among the 1,553 people living in these households, 58% are children (approximately 900). Virtually all households with children are housed in either emergency or transitional shelters. The PIT estimates are based on the U.S. Housing and Urban Development (HUD) department definition of homelessness, which does not include families housed in motels or hotels, or those doubled- or tripled-up (unlike the federal law that governs the identification of homeless and housing insecure school age students presented elsewhere this indicator). The County's PIT estimate of 900 sheltered children is less than the California Department of Education estimate of 1,816 sheltered and unsheltered students; however, the two are not directly comparable since one is measured at a single point-in-time and the other is cumulative.

Sources: Orange County Community Services and Point-in-Time Orange County, Orange County Homeless Count and Survey Report, July 2013 (www.pointintimeoc.org); California Department of Education, 2012/13

<sup>1</sup> Federal law requires public school districts to report the number of students living in shelters or unsheltered in cars, parks or campgrounds, as well as students living in motels or temporarily with another family due to economic hardship. Homeless student data are subject to revision due to the ability of districts to make changes to reported counts.
<sup>2</sup> Children's HealthWatch (www.childrenshealthwatch.org/page/policyactionbriefs)

# Education

| Academic Performance |  |
|----------------------|--|
| Dropout Rate         |  |
| College Readiness    |  |
| STEM-Related Degrees |  |
| Career Preparation   |  |

## Proficiency Rates Dip; Fewer Schools Improve API Scores

### **Description of Indicator**

This indicator measures academic performance using two metrics: the California Academic Performance Index (API), which summarizes progress toward achievement of academic growth targets for K-12 public schools and districts; and the California Standards Test in Englishlanguage arts (ELA) and mathematics, which reports the proportion of students testing proficient or better.

### Why is it Important?

Tracking academic performance enables school administrators and the public to evaluate how well Orange County schools are meeting state standards and how well students are performing in core academic disciplines.

### How is Orange County Doing?

Academic improvement was not at typical levels in 2013:

- While 23 out of 27 school districts (or 85%) continue to have API scores above the statewide target of 800, only 13 (or 48%) increased their API scores in 2013 compared to a 10-year average of 25 districts (or 93%) improving scores each year.
- Since 2004, Anaheim City Elementary School District demonstrated the fastest rate of improvement, increasing their API score by 20%. This rapid rate of growth contributed to a 59 point narrowing of the API point gap between Anaheim City and the highest performing elementary district, Fountain Valley, from a 202 point gap in 2004 to a 143 point gap in 2013.
- 75% of Orange County public schools met their individualized, state-identified API improvement target in 2013, down from 85% in 2012 (districts do not have individualized improvement targets).

Academic proficiency rates fell slightly for the first time in at least 10 years:

- In 2013, 65% of Orange County students were proficient or better in ELA and 61% were proficient or better in math.
- Despite the approximate one percentage point drop from the previous year, since 2004, proficiency has increased by 22 points in ELA and 18 points in math.
- Compared to the state, more Orange County students tested proficient or above in both ELA and math; however, over the past 10 years, students statewide have improved at a faster rate than Orange County students.

### District Academic Performance Index Scores Orange County, 2013

| clementary Districts      |    |
|---------------------------|----|
| Fountain Valley 91        | 2  |
| Huntington Beach City 91  | 0  |
| Cypress 88                | 88 |
| Centralia 87              | 8  |
| Fullerton 86              | 6  |
| Ocean View 86             | 64 |
| Westminster 84            | 1  |
| Magnolia 82               | 21 |
| Savanna 81                | 9  |
| Buena Park 81             | 7  |
| La Habra City 77          | 3  |
| Anaheim City 76           | 59 |
| High School Districts     |    |
| Huntington Beach Union 83 | 37 |
| Fullerton Joint Union 83  | 33 |
| Anaheim Union 77          | 77 |
| Unified Districts         |    |
| Irvine 92                 | 25 |
| Los Alamitos 92           | 22 |
| Laguna Beach 91           | 8  |
| Capistrano 87             | 4  |
| Placentia-Yorba Linda 87  | '3 |
| Brea-Olinda 87            | '1 |
| Saddleback Valley 86      | 8  |
| Tustin 86                 | 57 |
| Newport-Mesa 84           | 10 |
| Orange 83                 | 88 |
| Garden Grove 82           | 20 |
| Santa Ana 74              | 13 |

At or Above State API Target (800)

Below State API Target

Note: Data reflect API Growth scores.

Source: California Department of Education (http://data1.cde.ca.gov/dataquest)

## Percentage of Students Proficient or Above in English-Language Arts or Mathematics

Orange County and California, 2004-2013



Source: California Department of Education, California Standards Test, DataQuest (http://data1.cde.ca.gov/dataquest)

### **Academic Achievement Data Transition**

As California transitions to the Common Core State Standards (a nationwide education initiative to bring diverse state curricula and educational standards into alignment with each other), a new statewide assessment will be implemented called the Smarter Balanced Assessment (SBA). As a result, the testing that forms the Academic Performance Index, including the reading and math proficiency assessments from the California Standards Test (CST), will not be performed after 2012/13. Academic performance results in 2014/15 based on the SBA will not be comparable to prior API or CST results.

## **Dropout Rate Improves Again**

### **Description of Indicator**

This indicator measures the percentage of students who drop out of public high school, including detailed comparison by race/ethnicity and school district.

### Why is it Important?

A high school diploma increases the range of career opportunities available, enabling residents to seek out higher paying fields. Conversely, dropouts have significantly higher rates of poverty, incarceration, teen pregnancy, early death, and unemployment (and lower earnings when employed). Over their working lives, the average high school dropout will contribute less in taxes than they will receive in benefits and correctional costs, resulting in a net fiscal burden on society.<sup>1</sup>

### How is Orange County Doing?

More Orange County students are staying in school:

- 8.9% of the class of 2011/12 dropped out of high school before graduating, compared to 9.5% of the class of 2010/11 and 12.3% of the class of 2009/10.<sup>2</sup>
- These rates are lower than the statewide cohort dropout rates of 13.1% in 2011/12, 14.7% in 2010/11, and 16.6% in 2009/10.
- In 2011/12, Latino students had the highest dropout rate at 14.0%, but they showed substantial improvement over previous years.
- Compared to enrollment, the dropout rate among Latino students is disproportionately high.
- The dropout rate varies considerably by school district. Laguna Beach Unified posted the lowest dropout rate in the county (1.2%) while Anaheim Union High posted the highest (12.1%).





### Dropout Rate by Race/Ethnicity Orange County, 2009/10-2011/12



Note: "Asian" includes Asian, Pacific Islander, and Filipino. "Other" includes Native American/ Alaskan Native, African American, two or more races, or not reported.

Source: California Department of Education, DataQuest (http://data1.cde.ca.gov/dataquest/)

### **Dropout Rate by School Districts with a High School** Orange County, 2011/12



Note: Dropout rate data by school district do not include public charter schools. Individual public charter school dropout rates are available from the data source.

Source: California Department of Education, DataQuest (http://data1.cde.ca.gov/dataquest/)

<sup>&</sup>lt;sup>1</sup> "Left Behind in America: The Nation's Dropout Crisis" and "The consequences of dropping out of high school," Center for Labor Market Studies, Northeastern University, 2009; Alliance for Excellent Education, Issue Brief, October 2007

<sup>&</sup>lt;sup>2</sup> Data from 2010/11 have been revised since reported in the 2013 Indicators Report. The California Longitudinal Pupil Achievement Data System (CALPADS), initiated in 2006, allows tracking a class of students through their four years of high school to determine what proportion of that class dropped out over that period. The class of 2009/10 is the first class for which the cohort dropout rate could be calculated.

## UC/CSU Eligibility Varies by District, from 34% to 69%

### **Description of Indicator**

This indicator measures the number of public high school graduates who have fulfilled minimum course requirements to be eligible for admission to University of California (UC) or California State University (CSU) campuses.<sup>1</sup> It also includes the percentage of high school graduates taking the SAT and/or the ACT (both are standardized college entrance exams; most colleges and universities require students to take one of them for admission).

### Why is it Important?

A college education is important for many jobs in Orange County and can lead to higher lifetime earnings. To gain entry to most four-year universities, high school students must complete the necessary coursework and take a standardized entrance exam.

### How is Orange County Doing?

UC/CSU eligibility improved slightly:

- In 2011/12, 43% of Orange County students completed the necessary coursework to be UC or CSU eligible.
- This rate is up 0.5% from the previous year, well above the previous 15-year average of 39%, and surpassing the statewide rate of 38%.
- The gap between the race or ethnic groups with the highest and lowest eligibility rates (Asian and Latino students, respectively), narrowed from a 44 point gap in 2007/08 to a 40 point gap in 2011/12.
- The gap has narrowed in previous years as well, only to widen again in a subsequent year, yet the overall longterm trend is toward gradual improvement among most races and ethnicities, with Latino students showing the fastest rate of increase.

### Percentage of Graduates that are UC/CSU Eligible Orange County, 2011/12



Source: California Department of Education, DataQuest (http://data1.cde.ca.gov/dataquest/)

Percentage of High School Graduates Eligible for UC/CSU by Race/Ethnicity Orange County, 2007/08-2011/12



Note: "Asian" includes Asian, Pacific Islander, and Filipino.

Source: California Department of Education, DataQuest (http://data1.cde.ca.gov/dataquest/)

### Percentage of Graduates that are UC/CSU Eligible by District Orange County, 2011/12



Source: California Department of Education, DataQuest (http://data1.cde.ca.gov/dataquest/)

1 To be UC/CSU eligible at graduation, high school students must successfully complete a specified number of courses in so-called "a-g" subjects. For more information, visit: www.ucop.edu/agguide/.

There are wide geographic and racial/ethnic disparities in UC/CSU eligibility:

- Among districts with high schools, the highest rate of UC/CSU eligibility is 69% of graduates at Laguna Beach Unified, while the lowest rate of eligibility is 34% at Santa Ana Unified.
- Asian students are the most likely to be UC/CSU eligible (67%), but comprise only 19% of all high school graduates.
- Latino students are the least likely to be UC/CSU eligible (27%), but comprise 41% of all high school graduates.

The SAT-taking rate did not change, but more students are taking the ACT:

- In 2011/12, 44% of 12th graders took the SAT and 20% took the ACT.
- More Orange County seniors take the SAT or ACT than the statewide average (39% and 18%, respectively).
- Orange County's SAT-taking rates have not changed significantly over the past 10 years, but the ACT has become increasingly popular.

### Percentage of 12th Grade Students Taking the SAT and/or ACT and Percentage of High School Graduates Eligible for UC/CSU Orange County, 2003-2012



Note: ACT data prior to 2004/05 are not available.

Source: California Department of Education, DataQuest (http://data1.cde.ca.gov/dataquest/)

## Total Number of Graduates Compared to the Number of Graduates that are UC/CSU Eligible by Race/Ethnicity Orange County, 2011/12



Note: "Asian" includes Asian, Pacific Islander, and Filipino. "Other" includes African American, Native American/Alaskan Native, two or more races, or not reported.

Source: California Department of Education, DataQuest (http://data1.cde.ca.gov/dataquest/)

The ACT and SAT are two popular college entrance exams used by colleges to assess prospective students. Most colleges accept either the ACT or the SAT as a component of their admissions criteria, so it is up to the student to decide which to take depending on the characteristics of each test.

Source: MyFuture (www.myfuture.com)

## Proportion of STEM Degrees Steady at 18%

### **Description of Indicator**

This indicator measures the number of science, technology, engineering and mathematics (STEM) graduate and undergraduate degrees conferred by large Orange County universities, including California State University, Fullerton, Chapman University and University of California, Irvine.

### Why is it Important?

A workforce trained in the STEM disciplines (science, technology, engineering and mathematics) supports Orange County's high-tech sector, nurtures innovation, and contributes to the county's overall economic wellbeing. High-tech jobs provide good wages for employees and a technically-skilled pool of local graduates helps employers reduce the need to recruit workers from outside the county.

### How is Orange County Doing?

In 2011/12, roughly 17% of all undergraduate degrees granted were STEM-related, unchanged from the prior year:

- The number of STEM-related undergraduate degrees granted increased 25% over the past five years.
- Since 2007/08, undergraduate degrees granted in physical sciences grew the most (55%), followed by biological sciences (27%), engineering (25%), and information and computer sciences (10%).
- During the same period, undergraduate degrees granted in mathematics fell 3%.

Slightly more than the previous year, 23% of all graduate degrees granted in 2011/12 were STEM-related:

- The number of STEM-related graduate degrees increased 30% over the past five years.
- Since 2007/08, graduate degrees granted in mathematics grew the most (47%), followed by information and computer sciences (40%), engineering (23%), and physical sciences (7%).
- During the same period, graduate degrees granted in biological sciences fell 28%.

STEM-related degrees as a proportion of all degrees granted remains unchanged:

- While the number of tech-related degrees granted has increased, so has the overall number of degrees granted by local universities.
- As a result, the proportion of all degrees granted (both undergraduate and graduate) that were STEM-related (18%) has not changed in the past three years.
- Combined by subject, the highest average annual growth rates for the past five years for all degrees granted were in physical sciences and engineering.





Sources: California State University, Fullerton; Chapman University; and University of California, Irvine

### Proportion of Degrees Granted that are Tech-Related Orange County, 2011/12



Sources: California State University, Fullerton; Chapman University; and University of California, Irvine

## Job Placement Showing Signs of Recovery

### **Description of Indicator**

This indicator aggregates and reports career technical education (CTE) performance data from the Orange County Regional Occupational Programs (ROP) and Orange County community colleges to enable the community to assess the ability of CTE providers to supply the local economy with a diverse and appropriately trained labor force.<sup>1</sup>

### Why is it Important?

Career technical education helps high school students connect their academic learning to real-world training and prepares graduates to enter a career or advanced education. CTE allows adults to acquire specialized job skills, providing opportunities for those reentering the workforce, changing careers, or needing on-thejob skill upgrades.

### How is Orange County Doing?

Nearly a quarter of high school students are in ROP:

- Approximately 23% of all Orange County high school students participate in ROP, and 94% of ROP students graduate from high school.
- Due in part to new limitations on adult enrollment, adult ROP enrollment continues to fall (from a 10-year high of about 26,000 to 3,400 in 20011/12), currently making up 8% of overall ROP enrollment.
- Over the past 10 years, ROP enrollment among high school students has grown from about 30,000 to the 2011/12 level of 39,674.
- Community college enrollment fell 6% between 2010/11 and 2011/12.
- 9% of all adult residents are enrolled in an Orange County community college.

More students were placed, but fewer in jobs related to their course of study:

- In 2011/12, 89% of ROP students were placed within six months of graduating. This reflects growth for the third consecutive year after the 10-year low of 80% placed in 2007/08.
- Of the 89% of ROP students placed, 51% obtained jobs related to their field of study, down from 57% the previous year and below the 10-year average of 58%.
- For community college CTE students in 2010/11, 79% were placed within a year of completing their course of study, the same as in 2009/10.
- In addition to finding a job or joining the military, "placement" for ROP includes pursuing further education, which is not the case for community college CTE graduates. This might contribute to the improving placement rate for ROP students and, until recently, the declining placement rate for community college students.

### Regional Occupational Programs Student Performance Orange County, 2003-2012



Note: "Placement" and "Job Related to Studies" include both high school and adult students. Data for 2011/12 do not include Coastline ROP adult completers. Source: California Department of Education

### Community College CTE Student Performance Orange County, 2002-2011



Note: The core performance indicators are defined as follows: "Technical Skill Attainment" is earning a "C" grade or better; "Completion" is receiving a credential, certificate or degree; "Persistence and Transfer" is remaining in education at the community college level or transferring to a four-year college, and "Placement" is finding employment, an apprenticeship, or joining the military.

Source: California Community Colleges, Chancellor's Office, Vocational Education (https://misweb.cccco.edu/perkins/main.aspx)

# Community Health and Wellbeing



## Uninsured More Likely to be Young Adults, High School Dropouts and/or Low Income

### **Description of Indicator**

This indicator measures the proportion of Orange County residents that are uninsured, including details about access to care and coverage by age, race and ethnicity, educational attainment and income.<sup>1</sup>

### Why is it Important?

Access to quality health care is heavily influenced by health insurance coverage. Due to the high cost of health care, individuals who have health insurance are more likely to seek routine medical care and to take advantage of preventive health screening services than those without such coverage. This results in a healthier population and more cost-effective health care.

Uninsured (All Ages)

### How is Orange County Doing?

Estimates indicate approximately one in six Orange County residents are uninsured, a proportion that has not changed significantly over the past four years:

- In 2012, 17.2% of Orange County residents were uninsured.
- This proportion is higher than the United States average (14.8%) and lower than the California average (17.9%).
- Young adults were the age group most likely to be uninsured (28%).
- Latino residents were the race or ethnic group most likely to be uninsured (30%).
- When broken out by household income, those with incomes in the lower-middle range (\$25,000-\$49,000) were the most likely to be uninsured (29%).
- 43% of those with less than a high school diploma were uninsured.

According to the 2011-12 California Health Interview Survey, uninsured residents are considerably less likely to access timely health care or have a usual place to go when they are sick or need health advice:

- 17% of uninsured individuals in Orange County reported they delayed or didn't get medical care in the 12 months prior to the survey. This is seven percentage points higher than the 10% of individuals with insurance delaying or forgoing care.
- 38% of uninsured residents had no usual source of medical care, compared to 9% of insured residents.
- Orange County had slightly better health care utilization rates than the statewide average.



Source. O.S. Gensus Bureau, rimer aun Community Survey, 1-1eur Estimates (http://jacijuaer.z.tensus.go

### Percentage of Population Delaying Medical Care or Without a Usual Source of Care, by Insurance Status Orange County, 2012



Source: University of California, Los Angeles, Center for Health Policy Research, 2011-12 California Health Interview Survey



### Uninsured by Race/Ethnicity, Income, Education and Age Orange County, 2012

<sup>1</sup> Data represents the civilian, non-institutionalized population.

## Prenatal Care Rates Continue to Rebound

### **Description of Indicator**

This indicator measures the percentage of live births to Orange County women who began prenatal care during the first three months of pregnancy. Detail for the largest racial and ethnic groups in the county is provided, as well as a comparison to the statewide average. The number of live births in Orange County by race and ethnicity is also included.

### Why is it Important?

Early prenatal care provides an effective and cost-efficient way to prevent, detect and treat maternal and fetal medical problems. It provides an excellent opportunity for health care providers to offer counseling on healthy living habits that lead to optimal birth outcomes. Late or no prenatal care substantially increases the likelihood that an infant will require admission to a neonatal intensive care unit or require a longer stay in the hospital at substantial cost to the family and the health care system.<sup>1</sup> Assessing Orange County's total live births by race and ethnicity provides a perspective on the future school age population and overall demographic shifts in the county.

### How is Orange County Doing?

Early prenatal care rates rose in 2012:

- While still below the 10-year high of 91.6% in 2004, Orange County's early prenatal care rate is inching back up, resting at 89.9% overall in 2012.
- Orange County's overall early prenatal care rate is well above the statewide average, which was 81.9% in 2012.
- Levels of early prenatal care improved between 2011 and 2012 for mothers of all racial and ethnic groups in Orange County with the exception of Latina mothers who maintained a rate of 87.1%.
- The national Healthy People 2020 target for early prenatal care is 77.9% – a level Orange County has surpassed for many years.
- The majority of births in Orange County in 2012 were to Latina mothers (46.5% or 17,738 births), followed by White mothers (29.3% or 11,186 births), and Asian mothers (19.5% or 7,428 births).
- Over the past 10 years, the number of live births in Orange County has dropped 16%, from 45,354 in 2003 to 38,186 in 2012.

Percentage of Mothers Receiving Early Prenatal Care by Race and Ethnicity Orange County, 2003-2012



Note: The ethnic category Latina includes any race; the racial categories White and Asian are non-Hispanic.

Sources: County of Orange Health Care Agency; California Department of Public Health, Vital Statistics Query System (www.apps.cdph.ca.gov/vsq)

### Live Births by Race and Ethnicity Orange County, 2003-2012



Note: The ethnic category Latina includes any race; the racial categories White and Asian are all non-Hispanic. The category Other includes two or more races, African American, Pacific Islander, American Indian, and other or unknown.

Source: County of Orange Health Care Agency

#### Healthy People 2020

Healthy People 2020 is a health promotion and disease prevention initiative which establishes national objectives to improve the health of all Americans, eliminate disparities, and increase the years and quality of healthy life. For more information, visit: www.healthypeople.gov.

<sup>1</sup> Saeid B, Amini, Patrick AA, Catalano and Leon I. Mann, "Effect of Prenatal Care on Obstetrical Outcome," Journal of Maternal-Fetal and Neonatal Medicine 1996 5:3, 142-150

## Immunization Rate Falls Below State and Nation

### **Description of Indicator**

This indicator measures immunization rates for children at two years of age and reported cases of vaccine-preventable disease (VPD) among children less than six years of age.

### Why is it Important?

Immunization is one of the most important interventions available for preventing serious diseases among infants and children.

### How is Orange County Doing?

Orange County's immunization rate for young children falls short:

- According to the analysis of kindergarten immunization records from spring 2013, 75.7% of Orange County children were adequately immunized at age two.<sup>1</sup>
- The 2013 rate is 2.4 points below the 2012 rate of 78.1% and below both the national rate of 76.8% and the statewide rate of 78.8%.
- The Healthy People 2020 national target is for 80% of children ages 19 to 35 months to be protected by universally recommended vaccines.<sup>2</sup>

The incidence of VPD was at a 10-year low in 2012:

- There were 45 cases of VPD in 2012.
- 38 of the 45 cases were pertussis (whooping cough), down from 54 cases of pertussis in 2011 and 194 cases in 2010.<sup>3</sup>
- 42% of VPD cases were children under age one and 16% were age one.
- Typically, infants under age one are most at risk of contracting a VPD until they receive full vaccination coverage by age two.
- However, another 42% of the VPD cases were among children ages two to five, suggesting that some children are not receiving recommended vaccinations on schedule, putting younger and more vulnerable siblings at increased risk of contracting a VPD.

### Adequately Immunized (4:3:1 or Better)

To be considered adequately immunized by age two, children need at least the 4:3:1 immunization series, which includes: four or more doses of diphtheria/tetanus/pertussis (DTaP) vaccine, three or more doses of poliovirus vaccine, and one or more doses of measles/mumps/rubella (MMR) vaccine. Other vaccines recommended by age two include: hemophilus influenza type B (Hib), hepatitis A, hepatitis B, pneumococcal disease, varicella (chicken pox), and annual flu shots.

Source: California Department of Public Health

Percentage of Children Adequately Immunized by Age Two Orange County, California and United States, 2013



--- Healthy People 2020 Target (80%)

Sources: County of Orange Health Care Agency, Immunization Program, 2013 Kindergarten Retrospective Survey; Centers for Disease Control and Prevention, National Immunization Survey, 2009 (www.cdc.gov/vaccines/stats-surv/nis/default.htm#nis)

### Immunization Registry

Roughly 73% of Orange County children ages birth to five were enrolled in the web-based California Immunization Registry as of May 2013 – a total of 168,453 children. This is approximately the same number of children enrolled in the registry the prior year, but a 38% increase since June 2009. The Healthy People 2020 objective is for 95% of children ages 0-5 to be enrolled in an immunization registry. The registry was launched locally in March 2005 and is coordinated by the Orange County Immunization Coalition.

Source: Orange County Children's Partnersbip, 19th Annual Report on the Conditions of Children in Orange County (www.occhildrenandfamilies.com); Department of Finance, Report P-3: State and County Population Projections by Race/Ethnicity, Detailed Age, and Gender, 2010-2060, January 2013

### Vaccine-Preventable Disease (VPD) Cases or Hospitalizations Among Children Under Six



<sup>1</sup> See the text box for the definition of "adequately immunized." Since this is a retrospective survey of kindergarten students, the estimates reflect students when they were two years old, which was mostly in 2009, depending on the age the child started kindergarten.

<sup>2</sup> The Healthy People 2020 target includes recommended doses of Hib, hepatitis B, varicella and pneumococcal disease, as well as DTaP, polio, MMR. See page 41 for a description of Healthy People 2020.

<sup>3</sup> Pertussis totals include 30 confirmed cases and eight suspected cases.

Note: VPD includes polio, tetanus, diphtheria, pertussis, suspected pertussis, hepatitis A, hepatitis B, HIB, mumps, measles, and rubella, plus pneumococcal disease (as of 2003), varicella (chicken pox) hospitalization (as of 2004), and serious influenza hospitalization (as of 2008).

Source: County of Orange Health Care Agency, Epidemiology and Assessment

## More Adults are Overweight

### **Description of Indicator**

This indicator measures the weight status of Orange County's children and adults. Children's weight status is based on the California Department of Education (CDE) Physical Fitness Test, which evaluates the proportion of students in fifth, seventh and ninth grades with an unhealthy body composition (an estimate of the percent of a student's weight that is fat, in contrast to lean body mass made up of muscles, bones, and organs). The weight status of adults is measured using the California Health Interview Survey and the National Health Interview Survey.

### Why is it Important?

Children with an unhealthy body composition are more likely to become overweight or obese adults. A sedentary lifestyle and being overweight are among the primary risk factors for many chronic diseases and premature death. Building a commitment to fitness, healthy eating and maintaining a healthy body weight can have positive impacts on both physical and mental health.

### How is Orange County Doing?

There was little change in student weight status in 2013:

- In 2013, an average of 38.6% of Orange County students in the grades tested had an unhealthy body composition, compared to 43.9% statewide.
- This represents a slight decrease in Orange County, from 38.9% in 2012, but an increase from 37.8% in 2011.
- Of the Orange County students with an unhealthy body composition in 2013, 25.5% were considered to be significantly outside the healthy range and designated "Needs Improvement Health Risk," while the remaining 13.1% were designated as "Needs Improvement."
- Santa Ana and Anaheim school districts had the highest proportion of overweight youth in 2013, while Laguna Beach and Capistrano school districts had the lowest proportion.

Orange County adults are becoming more overweight:

- In 2011-12, only 43% of Orange County adults had a healthy weight, down from 48% in 2009.
- 32% were overweight in 2011-12 and 23% were obese.
- While weight status has worsened in Orange County, the county continues to perform better than the state and nation, where 39% and 36% have a healthy weight, respectively.

### Weight Status of Adults



Sources: University of California, Los Angeles, Center for Health Policy Research, California Health Interview Survey (www.chis.ucla.edu); Centers for Disease Control and Prevention, National Health Interview Survey (www.cdc.gov/ncbs/products/series/series10.htm)

Percent of Students with Unhealthy Body Composition Orange County, 2011-2013



### Percent of Students with Unhealthy Body Composition by School District Orange County, 2013



School districts and their feeder school districts. Anaheim includes Anaheim Union High School District and the elementary districts of Cypress, Centralia, Magnolia, Savanna, and Anaheim City. Fullerton includes Fullerton Joint Union High School District and the elementary districts of Fullerton, Buena Park, and La Habra City. Huntington Beach includes Huntington Beach Union High School District and the elementary districts of Fountain Valley, Huntington Beach, Ocean View, and Westminster.

Source: California Department of Education Physical Fitness Test (http://data1.cde.ca.gov/dataquest/)

## More Residents are Living with Diabetes and Heart Disease

### **Description of Indicator**

This indicator tracks the prevalence of and deaths due to chronic diseases. Prevalence rates are shown for heart disease, diabetes, asthma and stroke. Heart disease, diabetes and asthma reflect the percentage of adults ever diagnosed with one of these conditions. Stroke reflects the percentage of adults who ever experienced a stroke. The age-adjusted death rates are shown for heart disease, stroke, diabetes, cancer, chronic obstructive pulmonary disease (e.g. asthma or emphysema), and chronic liver disease and cirrhosis.<sup>1</sup>

### Why is it Important?

Chronic diseases, which are long lasting and generally slow to progress, are a significant burden on both the individual and society. Chronic illnesses contribute to approximately 60% of deaths in Orange County each year and, nationwide, account for about 75% of health related costs.<sup>2</sup> Four modifiable behaviors – lack of physical activity, poor nutrition, tobacco use, and excessive alcohol consumption – are responsible for much of the illness, suffering, and early death related to chronic diseases.

### How is Orange County Doing?

Deaths due to most of the chronic diseases tracked are declining, but the percentage of people diagnosed with chronic diseases is generally rising:

- In 2011-12, 7.4% of Orange County adults had been diagnosed with diabetes in their lifetimes, compared to 6.6% of adults in 2003.
- While more residents are living with diabetes, fewer are dying of the disease than 10 years ago; there has been a 24% decline in the diabetes death rate between 2002 and 2011.
- In 2011-12, 7.6% of Orange County adults had been diagnosed with heart disease in their lifetimes, compared to 6.4% in 2001.
- Despite the rise in heart disease cases, medical advances have lead to a 48% decline in the death rate for heart disease in the 10-year period between 2002 and 2011.
- The percentage of Orange County adults who have experienced a stroke rose from 1.9% in 2005 to 2.5% in 2011-12; however, fewer are dying from a stroke. Between 2003 and 2011, the death rate for stroke fell 37%.
- Asthma prevalence has fluctuated since 2001, but is generally trending upward, whereas deaths due to chronic lower respiratory disease (which includes asthma) have fallen 9% between 2005 and 2011.
- Chronic liver disease deaths, often associated with alcohol abuse and obesity, grew 9% between 2004 and 2011.

### Prevalence of Selected Chronic Diseases Orange County, 2001-2012

14% 12% 10% 8% 6% 4% 2% % 5 troke Diabetes Heart Disease Asthma 2001 2003 2005 2007 2009 2011-12

Note: Prevalence data is not available for all years for all diseases.

Source: California Health Interview Survey (http://ask.chis.ucla.edu/main/)

### Death Rates for Selected Chronic Diseases Orange County, 2002-2011



Note: Death data is not available for all years for all causes of death.

Source: California Department of Public Health, County Health Status Profiles (www.cdph.ca.gov/programs/obir/Pages/CHSP.aspx)

2014

<sup>&</sup>lt;sup>1</sup>The latest prevalence data reflect adults surveyed in 2011 and 2012 and are referred to as "2011-12" data; previous prevalence data were collected in a single year. Death data reflect three-year averages. For example, "2011" is an average of 2009, 2010, and 2011 data. Counties with varying age compositions can have widely disparate death rates since the risk of dying is largely a function of age. Ageadjusted rates control for this variability.

<sup>&</sup>lt;sup>2</sup> Orange County Health Care Agency, and Centers for Disease Control and Prevention (www.cdc.gov/chronicdisease/overview/index.htm)

## Children's Mental Health Hospitalizations Increase

### **Description of Indicator**

This indicator tracks hospitalizations due to serious mental health and substance abuse problems.

### Why is it Important?

Emotional health and substance addiction have profound impacts on individuals and their families, as well as the workplace and community. Tracking mental health and substance abuse hospitalization data allows public health officials to understand the magnitude of serious behavioral illness and develop strategies to address needs in the community.

### How is Orange County Doing?

Over the past 10 years, the hospitalization rate for serious mental health and substance abuse conditions declined for seniors and rose for youth:

- Overall in 2011, there were 49.5 behavioral health hospitalizations per 10,000 residents, which is similar to the rate of 48.9 per 10,000 in 2000.
- However, the hospitalization rate among adults age 65 and over declined a dramatic 45% between 2000 and 2011 (see Wellbeing of Older Adults for more information on this trend).
- During this same period, the hospitalization rate among children and youth rose 34%.
- The rate rose 8% among adults ages 18-64.

The principal diagnoses for mental health and substance abuse hospitalizations vary for different age groups:

- Among children and youth, major depression was the most common diagnosis leading to hospitalization (9.9 out of 10,000 children in 2011).
- Among adults, substance related hospitalizations were most common (15.8 per 10,000 adults ages 18-64), followed by bipolar disorder and major depression (both 11.4 per 10,000 adults).
- Among older adults, conditions falling in the "other" category factor highest. In that category, 46% of diagnoses are for cognitive disorders, including dementia.

Compared to the statewide average, Orange County residents have a lower mental health and substance abuse hospitalization rate:

- 45.3 per 10,000 Orange County residents were discharged from the hospital with a psychiatric or substance-related diagnosis.
- This is less than the statewide rate of 59.5 per 10,000 California residents with a behavioral health discharge.

Mental Health and Substance Abuse Hospitalizations by Age Orange County, 2000-2011



Sources: Office of Statewide Planning & Development Patient Discharge Data prepared by Orange County Health Care Agency, Research and Planning; California Department of Finance; U.S. Census Bureau, American Community Survey

### Mental Health and Substance Abuse Hospitalizations by Age and Disorder



Note: Schizoaffective disorder is a condition in which a person experiences a combination of schizophrenia symptoms — such as hallucinations or delusions — and of bipolar mood disorder symptoms, such as mania or depression (Mayo Clinic).

Mental Health and Substance Abuse Hospitalizations Orange County and California, 2011



Note: Data in this chart are not comparable to the other Orange County data presented due to differing databases.

## Alzheimer's Death Rate Above Statewide Average

### **Description of Indicator**

This indicator measures the economic, emotional, and social wellbeing of adults aged 65 years and older by tracking poverty, caseloads for key support services, behavioral health hospitalizations, and deaths due to Alzheimer's disease.

### Why is it Important?

Older adults are the fastest growing age group in Orange County, projected to increase by 142% between 2010 and 2060, compared to a 7% decrease among residents ages 0-64. This "age tsunami" will increase demand on social supports and healthcare, which will in turn place a greater burden on younger residents to fund and provide these services. Ensuring seniors are thriving contributes to their quality of life and reduces the burden of caring for an aging population.

### How is Orange County Doing?

The poverty rate for Orange County older adults fell slightly in 2012, but it rose for the state and nation:

- 8.3% of Orange County older adults were living below the poverty level.
- This is equivalent to approximately 31,200 Orange County residents age 65 and older living with annual incomes under \$11,000 (living alone) or \$14,000 (two people).
- Orange County's senior poverty rate is lower than both the state and nation, but it has grown faster than the state and nation, from 5.4% in 2003 to 8.3% in 2012.

Enrollment in social supports has outpaced population growth:

- There was a 282% increase in older adult CalFresh enrollment between 2009 and 2013, a 25% increase in Medi-Cal enrollment, and a 19% increase in the in-home supportive services caseload.
- Over the same period, the older adult population grew 13%.
- Home delivered and congregate meals served fell in 2013, owing to the sequester (federal spending cuts that began in March 2013).
- However, many cities partnered with the County to help fund meals at senior centers and some restaurants also provided meals.

### Percentage Age 65 and Over in Poverty Orange County, California and United States, 2003-2012



Source: U.S. Census Bureau, American Community Survey, 1-Year Estimates

### Older Adult Support Services Orange County, 2009-2013



Sources: County of Orange Social Services Agency (IHSS, Medi-Cal, CalFresh); Orange County Community Services/Office on Aging (C/IHMS)

Mental health hospitalizations among older adults declined substantially between 2000 and 2011:

- In 2011, 54.3 per 10,000 older adults were hospitalized for a mental health condition compared to 99.3 per 10,000 in 2000.
- A substantial decline in hospitalizations for major depression is behind the 45% decrease in the rate of mental health hospitalizations among older adults.
- Initial research suggests a few reasons for the decline in depression hospitalizations: a reduction in depressive symptoms among the oldest residents (age 80+), an increase in seniors with no symptoms, and an increase in prescription drug coverage by Medicare leading to more older adults taking anti-depressant medications.<sup>1</sup>
- There was a modest decrease in substance abuse hospitalizations between 2000 and 2011, from 9.3 per 10,000 in 2000, down to 6.9 per 10,000 older adults in 2011.

Direct costs of Alzheimer's disease and other dementias were estimated to be \$203 billion in 2013 and cause of death data suggests this figure will rise:

- The age-adjusted death rate due to Alzheimer's is rising faster in Orange County than statewide increasing 49% in Orange County between 2005 and 2011, compared to a 38% increase statewide.
- Orange County ranks 40th out of 58 counties for its death rate due to Alzheimer's disease (1 is best; 58 is worst).

### 2-1-1 Orange County

In 2013, "housing and utilities" was the most frequent problem or need that prompted a resident age 55 and older to contact 2-1-1 Orange County. This was followed by food and meals. Together, these needs accounted for over 50% of calls by older adults.



Older Adult Behavioral Health Hospitalizations per 10,000



Note: Schizoaffective disorder is a condition in which a person experiences a combination of schizophrenia symptoms — such as hallucinations or delusions — and of bipolar mood disorder symptoms, such as mania or depression (Mayo Clinic).

Sources: 2000, 2003, 2005, and 2007-2011 Office of Statewide Planning & Development Patient Discharge Data prepared by Orange County Health Care Agency, Research and Planning; U.S. Census Bureau, 2011 American Community Survey, 1-Year Estimates

### Deaths Due to Alzheimer's Disease





<sup>1</sup>Impact of Medicare Part D on anti-depressant treatment, medication choice, and adherence among older adults with depression (American Journal of Psychiatry, December 2011); Trends in Depressive Symptom Burden Among Older Adults in the United States from 1998 to 2008 (Journal of General Internal Medicine, December 2013)

Note: Death data reflect three-year averages. Counties with varying age compositions can have widely disparate death rates since the risk of dying is largely a function of age. Age-adjusted rates control for this variability.

Source: California Department of Public Health (www.cdph.ca.gov)

# Public Safety

| Crime Rate                        |  |  |
|-----------------------------------|--|--|
| Gang-Related Crime                |  |  |
| Child Abuse and Domestic Violence |  |  |
| Drinking and Driving              |  |  |

## Violent and Property Crime Rate up 8%

### **Description of Indicator**

This indicator uses FBI Uniform Crime Reports to compare crime rates among regions and to track crime rate trends. This analysis includes violent felonies (homicide, forcible rape, robbery, and aggravated assault) and property felonies (burglary, motor vehicle theft, and larcenytheft). Also included is the trend in the number of juvenile arrests and proportion of students expelled from school.

### Why is it Important?

Crime impacts both real and perceived safety in a community. It can also negatively affect investment in a community if a neighborhood is considered unsafe. Tracking juvenile arrests helps the community understand the level of major and minor crime in Orange County and the extent to which youth contribute to that crime. Intervening early with at-risk youth can help reduce criminal activity in their adult lives.

### How is Orange County Doing?

After steady improvement since 2004, Orange County's overall crime rate rose for the second consecutive year:

- Crime rose by 8% in 2012, on top of a 0.5% increase the previous year.
- The 2012 increase in overall crime was driven by a 9% increase in the property crime rate, which comprises the majority of crime in Orange County and nationwide.
- The violent crime rate also rose 3% during the same period.
- Despite the rise, over the past 10 years, the crime rate in Orange County dropped 12%.
- Compared to peers, Orange County has the lowest overall crime rate, as well as the lowest violent crime rate.

### **Juvenile Crime and Expulsions**

- Juvenile arrests, and the proportion of all arrests that are juveniles, has fallen dramatically:
- Juvenile arrests in Orange County fell 20% between 2011 and 2012 to 7,324. This was on top of a 24% decline the previous year.
- Juvenile arrests in Orange County have fallen an average of 4% annually since 2003, compared to an average annual decline of 7% statewide.
- A high of 15% of all arrests in 1999 in Orange County were juveniles, compared to only 9% of arrests in 2012.

A lower proportion of Orange County students are expelled than students statewide:

• Orange County's rate of students expelled from school due to violent or defiant behavior, or for committing a drug or weapon offense on school grounds, is less than half of the statewide average (0.7 vs. 1.5 per 1,000 students enrolled).

Note: Due to a change in methodology, explusion data presented this year should not be compared to explusion data provided in previous years.

Sources: California Department of Justice, Criminal Justice Statistics Center (http://oag.ca.gov/crime); California Department of Education, DataQuest (http://data1.ede.ca.gov/Dataquest/)

#### Crime Rate

Orange County, 2003-2012



Source: Federal Bureau of Investigation, Uniform Crime Reporting Program (www.fbi.gov/ucr/ucr.htm)



**Crime Rate** 

per 100,000

Crimes |



Source: Federal Bureau of Investigation, Uniform Crime Reporting Program (www.fbi.gov/ucr/ucr.htm)

## Gang Membership Falls

### **Description of Indicator**

This indicator measures gang-related felony crime filings, homicides, and the percentage of countywide filings that are gang-related.<sup>1</sup> Also measured are the numbers of gang members and gangs known to law enforcement in Orange County.

### Why is it Important?

Tracking gang-related crime can help the community gauge the extent and nature of gang participation in crime. It can also aid policy-makers in decisions regarding the effectiveness of programs designed to combat gang-related crime and the level of funding needed to support these programs now and in the future.

### How is Orange County Doing?

The proportion of serious crime that is gang-related dropped for the third consecutive year:

- In 2012, 7.4% of all felony filings in Orange County were gangrelated – down from the 10-year record high of 10.5% in 2009, but about on par with the previous 10-year average of 7.3%.<sup>2</sup>
- Gang members were responsible for 36% of countywide felony weapons filings, 32% of felony homicide/manslaughter filings, and 22% of all felony robbery charges in 2012.
- Gang-related felony filings rose in 2012, but the number of filings (1,395) remains below the 10-year high of 1,842 filings in 2009.
- There were 18 victims of gang-related homicides in 2012, below the 10-year average of 25 annually.
- The number of gangs and gang members fell significantly in 2012, both declining 7% in one year.



### Gangs and Gang Membership Orange County, 2003-2012

### Gang Membership

Using a detailed set of criteria, law enforcement agencies submit information on gang members to a statewide law enforcement database. Gang members are removed from the state database if they have not had contact with law enforcement in the last five years. Number of Gang-Related Felony Filings and Proportion of All Felony Filings that are Gang-Related Orange County, 2003-2012



Source: County of Orange Office of the District Attorney

### Gang-Related Felony Filings as a Percentage of all District Attorney Filings by Offense, Orange County, 2012



Source: County of Orange Office of the District Attorney

### Number of Victims of Gang-Related Homicides Orange County, 2003-2012



<sup>1</sup>Gang-related data includes crimes filed by anti-gang units, crimes tagged as gang-related by the filing deputy district attorney, or charges specific to gangs. On average, approximately 90% of gang-related crimes are felonies, therefore the indicator focuses on felony filings.

<sup>2</sup>Å filing is a charging document filed with the superior court clerk by a prosecuting attorney alleging that a person committed or attempted to commit a crime.

Source: County of Orange Office of the District Attorney

## Confirmed Child Abuse Reports Continue to Fall

### **Description of Indicator**

This indicator tracks child abuse and neglect reports (allegations), confirmed child abuse and neglect reports (substantiated allegations), and the number of children entering foster care. Domestic violence is tracked by measuring calls for assistance.

### Why is it Important?

Foster care placement is often the final act to protect children from abuse and neglect after repeated attempts to stabilize their families have failed. Domestic violence threatens the physical and emotional wellbeing of children and women in particular, and can have lasting negative impacts. It can also lead to homelessness when the abused flees a dangerous environment.

### How is Orange County Doing?

Child abuse and neglect reports rose over the past 10 years, but confirmed reports and entries to foster care have declined sharply:

- Since 2003, the number of child abuse reports (allegations) has grown 11%, but confirmed reports (substantiated allegations) fell 41%.
- Similarly, entries to foster care over the past 10 years have fallen 40%.
- While Orange County is on the high end among regions compared for overall reports, it has one of the lowest rates of confirmed reports and the lowest rate of children entering foster care (1.7 per 1,000 children).
- When possible, the Orange County Social Services Agency keeps families intact while providing stabilizing services. This may account for the fact that only 20% of confirmed reports in Orange County result in foster care placement, compared to between 34% and 51% in peer regions.

Domestic violence-related calls for assistance rose slightly in 2012:

- After falling steadily from a 10-year high of 12,923 calls in 2004, domestic violence-related calls for assistance began to rise again after hitting the 10-year low of 10,219 in 2008.
- In 2012, there were 10,988 calls for assistance, up 2% from the previous year (10,727).
- In comparison, the statewide number of calls for assistance over the past 10 years have fallen faster than in Orange County (-19% vs. -14%).

### **Domestic Violence Calls for Assistance** Orange County and California, 2003-2012



Child Abuse Allegations, Substantiated Allegations, and Entries to Foster Care

Orange County, 2003-2012



Note: Entries include first-time entries and reentries into the foster care system; not all reentries stem from a substantiated referral.

Source: University of California Berkeley, Center for Social Services Research, Child Welfare Research Center (http://csr.berkeley.edu/uch\_childwelfare/)



### Substantiated Child Abuse Allegations and Entries to Foster Care Regional Comparison, 2012

Source: University of California Berkeley, Center for Social Services Research, Child Welfare Research Center (http://css:.berkeley.edu/ucb\_childwelfare/)

Source: California Department of Justice, Criminal Justice Statistics Center

## 32% of all Vehicular Deaths and Severe Injuries are Alcohol-Related

### **Description of Indicator**

This indicator tracks the number of people killed or severely injured in alcohol-involved collisions in Orange County, neighboring counties and California.

### Why is it Important?

A regional comparison of victims of alcohol-involved collisions can help residents determine if the issue is more or less pronounced in Orange County. Tracking the number of victims over time allows policymakers and law enforcement to assess the effectiveness of measures used to reduce drinking and driving.

### How is Orange County Doing?

In 2011, 32% of all fatalities and severe injuries in vehicular collisions involved alcohol:<sup>1</sup>

- Orange County's proportion of alcohol-related crash victims is higher than the state average and all other counties compared except San Diego (33%).
- At 32%, the 2011 proportion is the same as the 2010 proportion, but lower than the five-year peak of 34% in 2008.
- Over the past 10 years, the total number of alcoholinvolved crash victims in Orange County with fatal or severe injuries decreased 5%, from 267 victims in 2002 to 253 victims in 2011.



Percentage of Vehicular Fatalities and Severe Injuries that Involved Alcohol County Comparison, 2011







Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS)

<sup>1</sup>Data are updated from 2013 Indicators report.

# Environment and Infrastructure

| Renewable Energy           |  |
|----------------------------|--|
| Coastal Water Quality      |  |
| Air Quality                |  |
| Water Use and Conservation |  |
| Transportation             |  |

## 20% of Electricity is from Renewable Sources

### **Description of Indicator**

This indicator assesses the percentage of electricity generated from eligible renewable sources by Orange County's three major electricity suppliers. It also measures grid-connected solar installations completed through the California Solar Initiative (CSI).

### Why is it Important?

Generating energy from domestic, renewable sources reduces a community's impact on the environment. It also addresses resource supply challenges from nonrenewable sources and contributes to national security. Increasing the proportion of electricity from carbon-neutral sources (such as solar) in Orange County's energy portfolio – along with reduced auto emissions – will help the county meet statewide greenhouse gas reduction goals and improve air quality.

### How is Orange County Doing?

In 2012, the percentage of electricity generated from eligible renewable sources declined slightly for two out of three of the utilities that serve Orange County:

- Southern California Edison, which provides most of Orange County's electricity, supplied 20% from renewable energy sources, down slightly from 21% in 2011.
- Sempra, which serves many south county residents, generated 20% from renewables in 2012, also down from 21% in 2011.
- Anaheim Public Utilities increased renewable energy from 13% in 2011 to 20% in 2012.
- The 2012 California average was 20% renewable energy sources, while the U.S. average lagged behind at 11%.

An additional 19,000 kilowatts of grid-connected solar capacity was added in Orange County in 2013:

- New solar capacity in 2013 was led by residential installations, accounting for 73% of total installations.
- Orange County ranks below the California average for the number of kilowatts added per 100,000 residents in 2013.

#### Eligible and Non-Eligible Renewables

California's Renewables Portfolio Standard (RPS) is one of the most ambitious renewable energy standards in the country. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33% of total procurement by 2020. Intermediate targets are 20% between 2011-2013 and 25% from 2014-2016. Eligible renewable sources include geothermal, biomass and waste, wind, small hydroelectric, and solar. Non-eligible sources, such as large hydroelectric projects and customer-owned generation (e.g. rooftop solar panels), do not count toward the 33%.

Source: California Public Utilities Commission (www.cpuc.ca.gov/PUC/energy/Renewables/overview.htm)

### **Electricity Generated from Renewable Sources**



Sources: Anabeim Public Utilities; Sempra; Southern California Edison; California Public Utilities Commission (www.cpuc.ca.gov); U.S. Energy Information Administration (www.eia.gov/renewable/data.cfm#summary)

### Grid-Connected Solar Installations Completed Annually, by Capacity and Sector Orange County, 2009-2013





Source: California Solar Statistics (www.californiasolarstatistics.ca.gov)

### **Completed Grid-Connected Solar Installations** Regional Comparison, 2013

| Region                   | Kilowatts per<br>100,000 residents |
|--------------------------|------------------------------------|
| Riverside/San Bernardino | 1,552                              |
| San Jose                 | 976                                |
| San Diego                | 972                                |
| California               | 865                                |
| San Francisco            | 828                                |
| Orange County            | 616                                |
| Sacramento               | 397                                |
| Los Angeles              | 379                                |
|                          |                                    |

Note: Figures represent kilowatts completed in 2013, not cumulative solar capacity. Sources: California Solar Statistics (www.californiasolarstatistics.ca.gov); California Department of

Finance, Table E-2, July 2013 (www.dof.ca.gov/research/demographic/reports/view.php)

### **Grid-Connected Solar Installations**

To be eligible for rebates in California, photovoltaic (PV) energy systems installed on residential, commercial, nonprofit or governmental buildings must be connected to the utility company electrical grid. As the customer's PV system produces electricity, the kilowatts are first used for any electric needs in the home or business. If more electricity is generated than the customer needs, the extra kilowatts are fed into the utility grid and customers receive the full retail value of the extra electricity their system generates.

Source: California Energy Commission & California Public Utilities Commission (www.gosolarcalifornia.ca.gov)

## Sewage Spills and Ocean Water Closures Decrease

### **Description of Indicator**

This indicator measures coastal water quality by tracking ocean and bay water closures and the posting of warning signs due to a sewage spill or other contamination. Closures and postings are shown in Beach Mile Days, which is calculated by multiplying the number of days of closure or posting by the number of miles of beach closed or posted. This measurement takes into account both the length of time and amount of beach that is unavailable for recreational use due to a closure or posting.

### Why is it Important?

Ocean and bay water closures and postings discourage tourists and local residents from visiting Orange County's beaches. This results in less consumer traffic in the beach communities and diminishes our overall sense of quality of life. Furthermore, pollutants that enter the ocean or bays through urban runoff and sewage spills have the potential to compromise public health and endanger marine life. Residents can take steps to reduce stormwater pollution by properly handling litter, pet waste, motor oil, pesticides, fertilizers and toxic household chemicals.

### How is Orange County Doing?

There were fewer closures in 2012:

- There were six Beach Mile Days of closures in 2012, compared to 13 in 2011 and 68 in 2010.
- Pipeline blockages were responsible for the majority of the closures since 1999 (61%).
- There were 165 Beach Mile Days of postings in 2012, below the previous 10-year average of 185.

Sewage spills reported by sanitation districts, cities, and private property owners decreased for the 10th consecutive year:

- There were 173 sewage spills reported in 2012, well below the previous 10-year average of 303 spills.
- Only 5% of spills in 2012 resulted in an ocean water closure, compared to the previous 10-year average of 7%.

### Closures

By state law, recreational ocean or bay waters must be closed when they have been directly contaminated by sewage or when the streams, creeks and rivers that discharge into them have been contaminated by sewage.

### Postings

The Orange County Health Care Agency is required to post warning signs when water quality exceeds state bacteriological standards. This poor water quality is largely attributed to urban runoff (runoff containing pollutants such as fertilizers, road oils, litter and large amounts of bacteria from a variety of sources).

### Sewage Spills

Sewage spills occur when wastewater in underground pipes overflows through a manhole, cleanout, or broken pipe. Although intense rain can overwhelm the sewer system and lead to spills, only a small fraction of all sewage spills reach the ocean and cause beach closures.

### **Pipeline Blockages and Breaks**

Roots and grease build-up are the most common causes of pipeline blockages.

### Infrastructure Capacity

Intense rain can overwhelm certain portions of a sewer system and lead to sewage spills. An aging sewer system in need of maintenance is also at increased risk of blockages and breaks.

### **Rain Advisory Days**

Because rain can carry urban runoff into the ocean, bays and harbors, residents are warned via a Rain Advisory to avoid contact with recreational waters during or following a rain event of 0.2 inches or more.

### Beach Mile Days of Ocean Water Postings and Closures Orange County, 2003-2012



Note: Due to the reduction of the monitoring period, posting data reflects monitoring from April 1 through October 31 and is not comparable to calendar year data presented prior to the 2011 Community Indicators Report.

### Reported Sewage Spills Orange County, 2003-2012



Source: County of Orange Health Care Agency, Public Health Services, Environmental Health (www.ocbeachinfo.com)

## Most Days Have Moderate Air Quality

### **Description of Indicator**

This indicator measures Orange County's air quality compared to neighboring and peer regions using the Air Quality Index (AQI).

### Why is it Important?

Poor air quality can aggravate the symptoms of heart and lung ailments, including asthma. It can also cause irritation and illness among the healthy population. Long-term exposure increases the risks of lung cancer, cardiovascular disease, and many other health conditions. Poor air quality can also put children's lung development at risk.

### How is Orange County Doing?

In 2012, air quality was better than the 10-year average:

- 136 days or 37% were in the "good" range, but most (222, or 61%) were in the "moderate" range.
- Eight days (2%) were considered "unhealthy for sensitive groups" and there were no days in the "unhealthy," "very unhealthy" or "hazardous" ranges in 2012.
- Orange County falls in the middle compared to neighbors and peers, with San Jose metro area experiencing the best air quality and Riverside/San Bernardino metro area experiencing the worst.
- Over the past 10 years, the median AQI value has gradually improved, from 60 in 2003 to 55 in 2012. Both values fall at the low end of the "moderate" range.

### Air Quality Index

Regional Comparison, 2012



Source: U.S. Environmental Protection Agency, Air Data (www.epa.gov/airdata)

### Air Quality Index

The Air Quality Index is calculated for ground-level ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide. The number 100 corresponds to the national air quality standard for the pollutant.

| AQI<br>Values | Health Categories              |
|---------------|--------------------------------|
| 0 - 50        | Good                           |
| 51 - 100      | Moderate                       |
| 101 - 150     | Unhealthy for Sensitive Groups |
| 151 - 200     | Unhealthy                      |
| 201 - 300     | Very Unhealthy                 |
| 301 - 500     | Hazardous                      |

Source: U.S. Environmental Protection Agency (http://airnow.gov/)

### Air Quality Index

### Orange County, 2003-2012



Note: Data have been updated since previously presented. There was one Very Unhealthy day in 2007 which is not indicated on the chart.

Source: U.S. Environmental Protection Agency, Air Data (www.epa.gov/airdata)

## Water Use Increases for Second Consecutive Year

### **Description of Indicator**

This indicator measures Orange County's annual urban (residential and commercial) water usage. Known and estimated costs of water by source as well as projected water use and supply through 2030 are also included.

### Why is it Important?

Effective water management is essential to ensure that the county has an ample water supply now and in the future. As population and business growth drive water demand, reliance on imported water will continue. The county's long-term sustainability will also rely on increased conservation and investment in additional water supplies such as groundwater basin replenishment, groundwater recovery, and ocean water desalination.

### How is Orange County Doing?

Urban water usage rose again in 2012/13:

- Between 2011/12 and 2012/13, per capita usage rose 4%.
- Although usage fluctuates from year-to-year, long-term trends show per capita usage rates falling by approximately 1% annually, and overall acre-feet usage declining by 0.5% annually – even while population grew roughly 0.5% each year.
- However, long-term projections anticipate increases in overall water use, although less than previously projected due in part to SB 7.
- SB 7 passed by the state legislature requires an approximate 20% reduction in per capita usage between roughly the year 2010 and the year 2020. Orange County is on track to meet this required reduction through increased conservation and recycling.
- Local groundwater and conservation are the least costly sources of water, while desalination and recycled water are among the most costly.
- Over the past five years, imported water costs increased approximately 11% each year.

### Water Sources Projection



Orange County, 2010-2030





Sources: Municipal Water District of Orange County; California Department of Finance (Tables E-4 and E-1)

### The Impact of the Drought on Orange County

Southern California is a semi-desert region, where the average rainfall is 13 inches a year. In 2013, there were 3.6 inches of rainfall in Southern California - the driest year on record. As a result, water levels within the groundwater basin are quickly falling, but still remain within the normal historic operating range. If 2014 continues to be dry and the State Water Project maintains the zero-allocation for regions, groundwater pumping may need to be reduced in order to protect the basin. The basin will be replenished with more imported water when it is available to help counter the impact of reduced local rainfall runoff to the groundwater basin. The groundwater basin and programs like the Groundwater Replenishment System, which recycles water that would have otherwise been discharged into the Pacific Ocean, make Orange County significantly less vulnerable to drought compared to other California communities. Year-round conservation along with investment in the Bay Delta Conservation Plan and local water supply reliability projects - including ocean water desalination, groundwater desalination, water recycling and expanded water use efficiency are all part of ensuring long term water reliability.

Sources: Municipal Water District of Orange County; Orange County Water District

Note: 2010 figures reflect actual use in 2009/10. Projections have been revised since previously reported.

Source: Municipal Water District of Orange County

## Commute Times Hold Steady; Rail Use Increases

### **Description of Indicator**

This indicator tracks commute times and hours of vehicle delay due to congestion on Orange County freeways. It also measures ridership on Orange County's bus and commuter rail systems.

### Why is it Important?

The efficient movement of people and goods within Orange County is important to quality of life and a prosperous business climate. Long commutes impact personal lives and worker productivity due to the time lost in transit. In addition, an effective public transit system is essential for the mobility of individuals who cannot afford, are unable, or choose not to drive a car. Driving less and increasing use of alternative transit can improve air quality and limit dependence on fossil fuels.

### How is Orange County Doing?

For the past several years, commute times have remained steady:

- Between 2008 and 2012, the average commute time to work for Orange County residents was approximately 26 minutes (26.3 minutes in 2012).
- Orange County's average commute time falls between the average commutes for California (27.2 minutes) and the U.S. (25.5 minutes).

Delay due to congestion exacts a considerable cost:

- In 2011, there were 10.2 million annual vehicle hours of delay on Orange County freeways, a 17.3% decrease from the previous year.
- Orange County had the third greatest number of hours of delay among California regions compared, behind the Los Angeles and Bay Area regions.
- According to Caltrans' preliminary calculations, vehicle delay in Orange County in 2011 resulted in an additional 171,409 tons of CO<sub>2</sub> released into the air compared to what would have been emitted at free-flow speeds. Further, the cost of the extra fuel used as a result of vehicle delay totaled \$64.9 million.<sup>1</sup>
- In terms of productivity, lost time due to vehicle delays equates to wage and salary losses of \$176.6 million or \$483,843 per day in Orange County in 2011.

Rail ridership rose while bus ridership declined:

- Total ridership on Orange County's three commuter rail lines increased for the third consecutive year, growing 6.4% to a total of 4,443,982 riders in 2012/13. This increase is on top of an 8% increase the previous year.
- Ridership on both the Orange County and Inland Empire/ Orange County Lines increased (6% and 11%, respectively), while the 91 Line experienced a decrease in ridership of 1.4%.<sup>2</sup>
- In 2012, annual bus boardings increased slightly (2.4%) while per capita ridership dipped (from 18 to 17 boardings per capita).



Note: As defined by Caltrans, the following regional boundaries include: Sacramento (Butte, Colusa, El Dorado, Glenn, Nevada, Placer, Sacramento, Sierra, Sutter, Yolo, and Yuba counties); San Francisco/San Jose (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties); Los Angeles (Los Angeles and Ventura counties); and San Diego (Imperial and San Diego counties).

Source: Preliminary Data from the California Department of Transportation Mobility Performance Report, 2011

### Commuter Rail Ridership

Annual Vehicle Hours of Delay

Orange County, Inland Empire/Orange County and 91 Lines, 2004-2013



### **Bus Ridership**

### Orange County Transportation Authority (OCTA), 2003-2012



Note: The per capita calculation uses the OCTA service area population. Source: National Transit Database (www.ntdprogram.gov)

<sup>&</sup>lt;sup>1</sup>Based on 2010 methodology that is currently under review.

<sup>&</sup>lt;sup>2</sup> The Orange County Line runs between Oceanside and downtown Los Angeles; the 91 Line parallels State Route 91; and the Inland Empire/Orange County Line runs between San Bernardino and San Juan Capistrano.

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