County of Riverside

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FOURTH DISTRICT

**Little Hoover Commission**
**Hearing on Salton Sea Environmental Mitigation and Restoration**
**April 28, 2015**
**Written Testimony from Riverside County Supervisor and Salton Sea Authority Chairman John J. Benoit**

Thank you to the Little Hoover Commission for inviting me to testify at your hearing on the Salton Sea. I look forward to providing my perspective as the Riverside County supervisor for the Fourth District, an area that includes the Salton Sea.

I am also the chairman of the Salton Sea Authority, a joint powers authority formed by the local entities surrounding the Salton Sea: the counties of Imperial and Riverside, the Coachella Valley Water District, the Imperial Irrigation District and the Torres-Martinez Desert Cahuilla Indians. The Salton Sea Authority is an active, well-established body that meets monthly and is comprised of people who live here locally and know what the impacts are going to be. For more than two decades, the Salton Sea Authority has supported efforts to restore the Salton Sea.

I appreciate that the Little Hoover Commission is undertaking this study. The Salton Sea's deterioration is a great ecological and economic concern that affects the state and local residents.

**Demographic information about Riverside County**

Riverside County covers 7,296 square miles, stretching from the Greater Los Angeles area to the Arizona border. Riverside County is bordered by Los Angeles, Imperial, Orange, San Diego, and San Bernardino counties. Riverside County is home to 12 federally recognized Indian reservations and a portion of Joshua Tree National Park. The northern portion of the Salton Sea lies within Riverside County.

Riverside County has experienced dramatic population growth in recent years. Between 1990 and 2012, the population grew by more than 93 percent, making Riverside County one of the fastest-growing counties in California.

Recently, Riverside County became the tenth most populous county in the United States. According to recently released U.S. Census Bureau estimates, there are 2,329,271 residents of Riverside County.

Riverside County is 46 percent Hispanic or Latino, 39 percent white, 6 percent black, 6 percent Asian, and 1 percent American Indian. The median household income is $56,529.

The Riverside County Economic Development Agency's demographics division has compiled a profile of the county's demographic, social, economic and housing characteristics, collected from the U.S. Census Bureau's 2009-2013 5-Year American Community Survey. This information is presented in the appendix.

**Effects of Sea's Deterioration**

Damage from the sea's deterioration will have steep long-term social and economic costs. The price could be $29 billion to $70 billion over the next 30 years, according to a study published in September 2014 by the Pacific Institute. The study was conducted by senior research associate Michael J. Cohen and called "Hazard's Toll: The Costs of Inaction at the Salton Sea."

The institute further quantified the impacts on public health, property values, agricultural productivity, ecological values and recreational values by 2045 if current trends at the Salton Sea continue. Additionally, the Greater Palm Springs Convention and Visitors Bureau has commissioned a study looking at the effects of a deteriorating sea on tourism.

*Public Health*

The Pacific Institute cited studies that link blowing dust to a broad range of public health impacts, including childhood and adult asthma, cardiac disease, lung cancer and increased mortality rates. In two scenarios, the author estimated public health costs as high as $21 billion to $37 billion through 2047.

*Property Values*

The Pacific Institute used studies on the economic impacts of environmental hazards in other areas to offer methods for estimating potential impacts to property values at the Salton Sea. Blowing dust and the stigma associated with a deteriorating lake pose a risk to property values within several miles of the lake, suggesting that property devaluation in the immediate area of the Salton Sea is likely to be at least $400 million through 2047. In addition, the author cited dust and noxious odors as factors for depressed property values and revenues in the Coachella Valley. The total impact on property values could be as much as $7 billion.

*Agricultural Productivity*

In 2013, Riverside County's agriculture industry was valued at $1.33 billion. In a larger context, it is estimated to have a financial impact of $3.87 billion, supporting nearly 26,000 jobs. In the Coachella Valley alone, the agricultural crops were valued at $616 million.

In addition, agricultural companies pay indirect business taxes (including excise taxes, property taxes, fees, licenses and sales taxes) estimated at $22.4 million annually.

Although the Pacific Institute did not have sufficient information to estimate the potential costs to agriculture, I know there will be some degradation to Riverside County's valuable agriculture industry. One only need to look at Owens Lake to see how emissions devastated that valley.

*Ecological Values*

The Salton Sea's shoreline and near-shoreline offers habitat for hundreds of thousands of birds. Previous studies, which have indicated the value of wetland habitats in California at $60,000 per acre, were used by the Pacific Institute to estimate that the Salton Sea provides $2.6 billion annually in shoreline habitat. The institute estimates these annual values translate into present values ranging from $10 billion to $26 billion through 2047.

*Recreational revenues and tourism*

A restored Salton Sea can be a great asset to our tourism and eco-tourism industry, but continued degradation could threaten these revenues. Currently, activities at the sea include fishing, hunting, boating, bird watching, camping, photography and filming.

Already, recent declines in visits to the Salton Sea State Recreation Area have caused a loss of $6 million per year in direct spending. The Pacific Institute report suggests this is a loss of $110 million to $150 million in present value through 2047.

Tourism represents one quarter of total employment in the Coachella Valley region. In 2013, an estimated 12.1 million people visited the area, generating an estimated $5.8 billion in total business sales and supporting 46,863 jobs.

The Greater Palm Springs Convention & Visitors Bureau (CVB) is a joint powers authority that markets the Coachella Valley as a destination for visitors, meetings and conventions. The CVB commissioned Tourism Economics, a firm that produces economic analyses, to evaluate the potential impacts of a declining Salton Sea on the Coachella Valley's tourism industry.

The study reviewed various natural and man-made disasters in order to quantify the range of impacts over a five-year scenario in which the degradation of the Salton Sea continues without effective remediation. The study concluded that a declining Salton Sea could cost the region between $1.3 billion and $6.5 billion in lost tourism spending over five years. The resulting total economic loss could range from $1.7 billion to $8.6 billion. The study also forecast a cumulative $712 million loss in state and local tax revenue by 2019.

The CVB is scheduled to release the full Tourism Economics report April 30, 2015.

**Significance to the State of California**

The effects of the sea's deterioration extend beyond the Coachella Valley. The health and financial impacts are far from regional, and the implications for birds and habitats are significant. Furthermore, as highlighted by the California State Legislative Analyst (LAO) in 2008, the State of California has a contractual and legal obligation under the Quantification Settlement Agreement (QSA) to restore the sea, and voters have voiced their support for the sea in the past three water bond votes.

The sea's growing exposed lakebed is expected to lead to significant air-quality problems, extending across much of Southern California. This air-quality deterioration in turn poses a major threat to human health and to the regional economy in one of California's most economically stressed regions. In some wind conditions, airborne pollutants from the sea may travel hundreds of miles, affecting not just the Imperial and Coachella valleys but millions of people and the economy of Southern California. In September 2012, strong winds spread the rotten egg smell of hydrogen sulfide gas to as far away as Ventura County, and such large-scale odor events are expected to increase.

The air quality also will have lasting impacts on the region's thriving agriculture and tourism industries and, in addition, to local and state tax revenues, as noted above.

The reduced inflows will accelerate salinity levels at the sea and thus potentially decimate many species of waterfowl and the fish population. Without water and fish to eat, birds will not have a stop on the Pacific Flyway route, the major north-south path for migratory birds. The state also has public-trust obligations to protect wildlife at America's largest migratory waterfowl habitat outside the Everglades.

In addition to its legal obligations under the QSA, the state has numerous other reasons to cooperate in producing a workable revitalization effort backed by a financially feasible action plan.

**Salton Sea Solutions**

As a member of the Salton Sea Authority joint powers authority, Riverside County has been very supportive of taking action to restore the Salton Sea. The Board of Supervisors has adopted state and federal legislative platforms to advocate on behalf of the Salton Sea.

The Salton Sea Authority supports bringing the state and local policymakers to the table to fashion a comprehensive, reasonable and sustainable Salton Sea restoration plan as a vehicle for ensuring the state meets its obligation to fund and implement such a plan.

In December 2013, the Salton Sea Authority board of directors adopted a unifying Guiding Principles and Platform for Legislative Action to provide a united voice among all its members. Working as a team, the authority member agencies gained passage of AB 71 in 2013, which empowered the authority to work with the state and speak and act on behalf of local constituents in the restoration effort.

AB 71 authorized funding from the Salton Sea Restoration Fund for the Salton Sea Authority to lead a restoration funding and feasibility study, in coordination with the California Natural Resources Agency, to determine financial resources available to implement a restoration plan.

This coalition also secured a modest appropriation from the legislature allowing important early work to be accomplished, the first step toward a comprehensive, financially feasible restoration plan. The authority has worked closely with the Imperial Irrigation District (IID), Imperial and Riverside counties and other local stakeholders to implement these early restoration projects. These early restoration projects can serve as the initial building blocks of a comprehensive restoration plan, preserving the environment at the sea while a comprehensive plan is developed. These early projects also have provided further confirmation that a comprehensive restoration plan is feasible, and at a reasonable cost.

Recently, IID and Imperial County, as well as other parties, have reached a settlement of lawsuits related to the 2003 QSA that have previously caused acrimony and discord among authority member agencies. The residents of the Imperial and Coachella valleys now speak with one voice in urging the state to fulfill its obligation.

At the federal level, the authority is achieving noteworthy progress. In March 2014, the Salton Sea Authority signed a memorandum of understanding with assistant secretary of the U.S. Department of the Interior, Anne Castle, along with representatives from the Bureau of Reclamation, Bureau of Land Management, U.S. Fish and Wildlife Service, U.S. Geological Survey and the Bureau of Indian Affairs. Among other provisions in the MOU is agreement to pursue land transfers where feasible. One of the challenges in designing restoration projects – whether it is wetlands benefiting wildlife or renewable energy development that can deliver power to the grid – involves navigating the checkerboard of property ownership around the sea. Almost 40 percent of the land around and under the sea is federally owned, so the ability to move some of the checkerboard to create contiguous pieces of land could remove some of the chaos and delay for future environmental restoration and economic development at the sea.

In short, the leadership of the Salton Sea Authority in its revitalization efforts is starting to bear fruit at the federal and local levels and on the ground at the sea, though its efforts have been hampered by a lack of sufficient funding from the state and federal partners.

Going forward, the Salton Sea Authority has a vision to address the issues facing the Salton Sea.

The Salton Sea offers one of the largest and most diverse resources for renewable energy. Intense and reliable sunshine offers enormous solar energy production potential in a receding lakebed. Lithium brine has been recently discovered beneath the Salton Sea, with a yield estimated to be capable of meeting the entire world demand, a $23 billion industry. The nation's most commercially viable geothermal power generation lies under and adjacent to the southern edge of the sea, a $1.4 billion annual yield at build-out.

The nation's first waste-to-energy demonstration project is under exploration for feasibility to create biofuels, anything from kerosene to jet fuel, from bio-solids, green waste, food waste and algae grown at the sea.

Zinc, manganese and cesium, all metals in demand in the modern world, are also found in high concentration and volume at the sea.

If properly planned and developed in partnership with private enterprise, these publicly owned resources could be the sea's salvation. Ultimately, these revenue streams are to be contracted under terms of public-private partnerships delivering royalties and revenue sharing toward Salton Sea restoration projects.

I hope that, with cooperative state, federal and local government relations, coupled with a feasibility study on renewable energy, we can enable a partnership to seize opportunities to transform the economically and environmentally distressed Salton Sea region into a new economic powerhouse.

Our vision of a stabilized Salton Sea involves some costly infrastructure projects. Primarily, the surface area will need to be physically reconfigured to enable water inflow to exceed evaporation. A berm and wide channels to convey fresh water into a smaller sea, along with a siphon to remove salty water from the sea, will also be needed.

Altogether, this series of public works could include in-sea embankment, water quality treatment works and habitat improvement projects.

The cost has always been the biggest hurdle to solving the problem. Neither the state, nor the federal government, has provided a feasible solution for the sea despite spending approximately $50 million on studies during the last 15 years.

As a reminder, the state and the federal government insisted and indeed were successful in leading the process to transfer water from IID to San Diego as well as to the Coachella Valley. This water transfer set 2017 as the year water deliveries would be permanently reduced to the sea. In the subsequent Programmatic Environmental Impact Report, there was an acknowledgment of habitat, air quality and environmental impacts to the sea.

The state accepted responsibility for these impacts, and three years later used $25 million from Proposition 84 money, money that was dedicated to the restoration of the sea, for a two-year study, which produced a "no action" alternative with a cost exceeding $1 billion. The other alternatives were in the tens of billions of dollars.

We are out of time. We need to start constructing a project that will save a portion of the sea for recreation, a portion for specific habitats and a portion to manage a significant draw down of water.

The good news is we are on our way to identifying an engineering solution that will accomplish these tasks. In the Netherlands, the Dutch have been building barriers to hold back and to separate bodies of water for centuries. Relatively recently they have been using what are called Geo Tubes instead of earthen dams or concrete. Geo Tubes are giant tubes made of a unique geosynthetic and filled with sand. These tubes are significantly cheaper than conventional dams.

So a project that has traditionally been unfeasible due to cost, now becomes very feasible.

The Salton Sea Authority is moving forward at a rapid pace to validate the use of Geo Tubes. As a member of the Riverside County Board of Supervisors, I am directing staff to move quickly in forming an enhanced infrastructure finance district. The purpose of the district is to prepare for the issuance of bonds to pay for the construction. We believe we can finance a significant amount of the Geo Tube construction at the local level and we expect the state to fulfill its obligation by taking responsibility to mitigate the portion of the sea that will become exposed as the transfers continue.

**Conclusion**

Local stakeholders at the Salton Sea Authority are determined to work cooperatively with state and federal counterparts to reverse the decline of the Salton Sea. Local stakeholders have been working diligently in good faith and we respectfully but firmly ask that the state live up to the obligation it undertook in the 2003 QSA agreement.

Time for restoration is running out. The end of deliveries of mitigation water in 2017, which were designed to offset the effects of the QSA water transfers during a 15-year transition and restoration planning period, will significantly reduce inflow to the sea, making restoration planning difficult and greatly increasing the cost of any solutions.

With enormous opportunities to finance restoration, it is not too late for the State of California to realize the great promise of an environmentally and economically transformed Salton Sea instead of the mounting costs and liabilities from a looming environmental crisis.

# Appendix

**Riverside County Economic Development Agency**
P.O. Box 1180 * Riverside, CA 92502 * (951) 955-8916

## COUNTY OF RIVERSIDE
## Demographic Estimates 2009-2013

| Sex and Age | Number | Percent |
|---|---|---|
| **Total Population** | **2,228,528** | |
| Male | 1,109,691 | 50% |
| Female | 1,118,837 | 50% |
| | | |
| Under 5 years | 161,165 | 7% |
| 5 to 9 years | 167,271 | 8% |
| 10 to 14 years | 177,696 | 8% |
| 15 to 19 years | 183,421 | 8% |
| 20 to 24 years | 162,952 | 7% |
| 25 to 34 years | 291,550 | 13% |
| 35 to 44 years | 294,008 | 13% |
| 45 to 54 years | 295,061 | 13% |
| 55 to 59 years | 120,101 | 5% |
| 60 to 64 years | 103,773 | 5% |
| 65 to 74 years | 149,288 | 7% |
| 75 to 84 years | 89,351 | 4% |
| 85 years and over | 32,891 | 2% |

| Sex and Age | Number | Percent |
|---|---|---|
| Median age (years) | 33.9 | |
| | | |
| 18 years and over | 1,611,004 | 72% |
| 21 years and over | 1,501,940 | 67% |
| 50 years and over | 639,130 | 29% |
| 62 years and over | 332,011 | 15% |
| 65 years and over | 271,530 | 12% |
| | | |
| **18 years and over** | **1,611,004** | |
| Male | 794,695 | 49% |
| Female | 816,309 | 51% |
| | | |
| **65 years and over** | **271,530** | |
| Male | 122,658 | 45% |
| Female | 148,872 | 55% |

| Race | Number | Percent |
|---|---|---|
| **Total Population** | **2,228,528** | |
| One race | 2,134,162 | 96% |
| Two or more races | 94,366 | 4% |
| | | |
| One race | 2,134,162 | 96% |
| White | 1,475,081 | 66% |
| Black | 138,881 | 6% |
| Asian | 134,097 | 6% |
| American Indian and Alaska Native | 22,075 | 1% |
| Native Hawaiian and Other Pacific Islander | 7,086 | 0% |
| Other race | 356,942 | 16% |
| | | |
| Two or more races | 94,366 | 4% |
| White and Black | 15,059 | 1% |
| White and American Indian and Alaska Native | 13,558 | 1% |
| White and Asian | 19,431 | 1% |
| Black and American Indian and Alaska Native | 2,519 | 0% |

| Hispanic or Latino and Race | Number | Percent |
|---|---|---|
| **Total Population** | **2,228,528** | |
| | | |
| Hispanic or Latino (any race) | 1,025,543 | 46% |
| Mexican | 915,779 | 41% |
| Puerto Rican | 13,699 | 1% |
| Cuban | 5,808 | 0% |
| Other Hispanic or Latino | 90,257 | 4% |
| | | |
| Not Hispanic or Latino | 1,202,985 | 54% |
| White alone | 867,859 | 39% |
| Black alone | 131,246 | 6% |
| Asian alone | 130,179 | 6% |
| American Indian and Alaska Native alone | 10,085 | 1% |
| Native Hawaiian and Other Pacific Islander alone | 6,124 | 0% |
| Some other race alone | 5,238 | 0% |
| Two or more races | 52,254 | 2% |

Source: U.S. Census Bureau, 2009-2013 5-Year American Community Survey

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# COUNTY OF RIVERSIDE
## Selected Social Characteristics 2009-2013

| Households by Type | Number | Percent |
|---|---|---|
| **Total households** | **683,144** | |
| Family households | 504,705 | 74% |
| With own children under 18 years | 250,728 | 37% |
| Married-couple family | 370,366 | 54% |
| With own children under 18 years | 177,703 | 26% |
| Male householder, no wife present | 42,262 | 6% |
| With own children under 18 years | 21,625 | 3% |
| Female householder, no husband | 92,077 | 14% |
| With own children under 18 years | 51,400 | 8% |
| Nonfamily household | 178,439 | 26% |
| Average household size | 3.21 | |

| Place of Birth and U.S. Citizenship Status | Number | Percent |
|---|---|---|
| **Total population** | **2,228,528** | |
| Native | 1,741,318 | 78% |
| Born in United States | 1,718,341 | 77% |
| Born in California | 1,296,244 | 58% |
| Born in some other state | 422,097 | 19% |
| Born in Puerto Rico, U.S. islands | 22,977 | 1% |
| Foreign born | 487,210 | 22% |
| **U.S. Citizenship Status** | | |
| Foreign born population | 487,210 | |
| Naturalized U.S. citizen | 214,372 | 44% |
| Not a U.S. citizen | 272,838 | 56% |

| Educational Attainment | Number | Percent |
|---|---|---|
| **Population 25 years and over** | **1,376,023** | |
| Up to 12th grade, no diploma | 281,318 | 20% |
| High school graduate | 348,392 | 25% |
| Some college, no degree | 357,881 | 26% |
| Associate's degree | 106,276 | 8% |
| Bachelor's degree or higher | 282,156 | 21% |

| School Enrollment | Number | Percent |
|---|---|---|
| **Population 3 years and over enrolled in school** | **653,024** | |
| Nursery school, preschool | 29,006 | 4% |
| Kindergarten | 33,152 | 5% |
| Elementary school (grades 1 to 8) | 276,225 | 42% |
| High school (grades 9 to 12) | 156,316 | 24% |
| College or graduate school | 158,325 | 24% |

| Marital Status - Male | Number | Percent |
|---|---|---|
| **Males 15 years and over** | **851,720** | |
| Never married | 313,156 | 37% |
| Now married, except separated | 427,998 | 50% |
| Separated | 16,227 | 2% |
| Widowed | 18,832 | 2% |
| Divorced | 75,507 | 9% |

| Marital Status - Female | Number | Percent |
|---|---|---|
| **Females 15 years and over** | **870,676** | |
| Never married | 255,491 | 29% |
| Now married, except separated | 418,847 | 48% |
| Separated | 25,342 | 3% |
| Widowed | 69,848 | 8% |
| Divorced | 101,148 | 12% |

| Disability Status of the Civilian Noninstitutionalized Population | Number | Percent |
|---|---|---|
| **Total population** | **2,204,724** | |
| With a disability | 235,067 | 11% |
| **Population under 18 years** | **616,519** | |
| With a disability | 19,473 | 3% |
| **Population 18 to 64 years** | **1,319,816** | |
| With a disability | 118,412 | 9% |
| **Population 65 years and over** | **268,389** | |
| With a disability | 97,182 | 36% |

| Language Spoken at Home | Number | Percent |
|---|---|---|
| **Population 5 years and over** | **2,067,363** | |
| English only | 1,243,234 | 60% |
| Language other than English | 824,129 | 40% |
| Spanish | 683,857 | 33% |
| Asian & Pacific Islander languages | 83,377 | 4% |
| Other Indo-European languages | 43,091 | 2% |
| Other languages | 13,804 | 1% |
| Speak English less than "very well" | 324,583 | 16% |

Source: U.S. Census Bureau, 2009-2013 5-Year American Community Survey

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# COUNTY OF RIVERSIDE
## Selected Economic Characteristics 2009-2013

| Employment Status and Per Capita Income | Number | Percent |
|---|---|---|
| **Population 16 years and over** | **1,684,865** | |
| In labor force | 1,034,815 | 61% |
| Civilian labor force | 1,030,145 | 61% |
| Employed | 877,030 | 52% |
| Unemployed | 153,115 | 9% |
| Armed forces | 4,670 | 0% |
| Not in labor force | 650,050 | 39% |
| **Females 16 years and over** | **852,222** | |
| In labor force | 465,307 | 55% |
| Civilian labor force | 464,953 | 55% |
| Employed | 395,944 | 46% |
| **Per capita income (2013 dollars)** | **23,591** | |

| Household Income (2013 inflation-adjusted dollars) | Number | Percent |
|---|---|---|
| **Total Households** | **683,144** | |
| Less than $15,000 | 71,058 | 10% |
| $15,000 to $24,999 | 71,505 | 10% |
| $25,000 to $34,999 | 69,917 | 10% |
| $35,000 to $49,999 | 92,954 | 14% |
| $50,000 to $74,999 | 124,120 | 18% |
| $75,000 to $99,999 | 89,035 | 13% |
| $100,000 to $149,999 | 99,104 | 15% |
| $150,000 to $199,999 | 38,105 | 6% |
| $200,000 or more | 27,346 | 4% |
| Median household income (dollars) | 56,529 | |
| Mean household income (dollars) | 73,752 | |

| Family Income (2013 inflation-adjusted dollars) | Number | Percent |
|---|---|---|
| **Families** | **504,705** | |
| Less than $15,000 | 38,836 | 8% |
| $15,000 to $24,999 | 42,235 | 8% |
| $25,000 to $34,999 | 49,088 | 10% |
| $35,000 to $49,999 | 68,547 | 14% |
| $50,000 to $74,999 | 94,871 | 19% |
| $75,000 to $99,999 | 72,631 | 14% |
| $100,000 to $149,999 | 82,687 | 16% |
| $150,000 to $199,999 | 32,811 | 7% |
| $200,000 or more | 22,999 | 5% |
| Median family income (dollars) | 63,378 | |
| Mean family income (dollars) | 80,100 | |

| People Whose Income Is Below the Poverty Level (in the past 12 months) | Number | Percent |
|---|---|---|
| **Population whom poverty status determined** | **2,193,762** | |
| People below poverty level | 355,511 | 16% |
| **Population under 18 years** | **607,198** | |
| Under 18 years, below poverty level | 136,688 | 23% |
| **Population of related children under 18 years** | **603,646** | |
| Related children under 18, below poverty lev. | 133,208 | 22% |
| **Population 18 years and over** | **1,586,564** | |
| 18 years and over, below poverty level | 218,823 | 14% |
| **Population 18 to 64 years** | **1,318,175** | |
| 18 to 64 years, below poverty level | 194,763 | 15% |
| **Population 65 years and over** | **268,389** | |
| 65 years and over, below poverty level | 24,060 | 9% |

| Industry (age 16 and over) | Number | Percent |
|---|---|---|
| **Civilian employed population** | **877,030** | |
| Educational svcs., health care, social assist. | 181,003 | 21% |
| Retail trade | 114,208 | 13% |
| Arts, entertainment, recreation, food svcs. | 96,865 | 11% |
| Professional, scientific, mgmt., admin. | 87,990 | 10% |
| Manufacturing | 81,173 | 9% |
| Construction | 72,017 | 8% |
| Finance, insurance, real estate | 47,236 | 5% |
| Transportation, warehousing, utilities | 47,094 | 5% |
| Other services, except public administration | 45,966 | 5% |
| Public administration | 45,696 | 5% |
| Wholesale trade | 29,676 | 3% |
| Information | 14,384 | 2% |
| Agriculture, forestry, fishing, hunting, mining | 13,722 | 2% |

| Occupation (age 16 and over) | Number | Percent |
|---|---|---|
| **Civilian employed population** | **877,030** | |
| Management, business, science & arts | 256,130 | 29% |
| Sales and office | 225,407 | 26% |
| Service | 185,076 | 21% |
| Production, transportation, & material moving | 111,815 | 13% |
| Natural resources, construction & maintenance | 98,602 | 11% |

| Commuting to work | Number | Percent |
|---|---|---|
| **Workers 16 years and over** | **857,119** | |
| Drove alone | 660,150 | 77% |
| Carpooled | 114,464 | 13% |
| Public transportation | 11,987 | 1% |
| Walked and Other means | 27,238 | 3% |
| Worked at home | 43,280 | 5% |
| Mean travel time to work (minutes) | 32.0 | |

Source: U.S. Census Bureau, 2009-2013 5-Year American Community Survey

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# COUNTY OF RIVERSIDE
## Selected Housing Characteristics 2009-2013

| Housing Occupancy and Units in Structure | Number | Percent |
|---|---|---|
| **Total housing units** | **805,142** | |
| Occupied housing units | 683,144 | 85% |
| Vacant housing units | 121,998 | 15% |
| Homeowner vacancy rate | 3.0 | |
| Rental vacancy rate | 7.3 | |
| **Units in Structure** | | |
| Single-family | 599,446 | 74% |
| Multi-family | 131,006 | 16% |
| Mobile home | 73,012 | 9% |
| Boat, RV, van, etc. | 1,678 | 0% |

| Housing Tenure and Occupants Per Room | Number | Percent |
|---|---|---|
| **Occupied housing units** | **683,144** | |
| Owner-occupied | 454,455 | 67% |
| Renter-occupied | 228,689 | 34% |
| Average household size (owner-occupied) | 3.17 | |
| Average household size (renter-occupied) | 3.30 | |
| **Occupants Per Room** | | |
| 1.00 or less | 632,826 | 93% |
| 1.01 to 1.50 | 37,289 | 6% |
| 1.51 or more | 13,029 | 2% |

| Year Structure Built | Number | Percent |
|---|---|---|
| **Total housing units** | **805,142** | |
| Built 2010 or later | 5,070 | 1% |
| Built 2000 to 2009 | 220,869 | 27% |
| Built 1990 to 1999 | 128,693 | 16% |
| Built 1980 to 1989 | 176,889 | 22% |
| Built 1970 to 1979 | 121,828 | 15% |
| Built 1960 to 1969 | 65,712 | 8% |
| Built 1950 to 1959 | 52,847 | 7% |
| Built 1940 to 1949 | 16,551 | 2% |
| Built 1939 or earlier | 16,683 | 2% |

| Value | Number | Percent |
|---|---|---|
| **Owner-occupied units** | **454,455** | |
| Less than $50,000 | 32,034 | 7% |
| $50,000 to $99,999 | 30,375 | 7% |
| $100,000 to $149,999 | 52,989 | 12% |
| $150,000 to $199,999 | 71,735 | 16% |
| $200,000 to $299,999 | 120,033 | 26% |
| $300,000 to $499,999 | 108,847 | 24% |
| $500,000 to $999,999 | 32,129 | 7% |
| $1,000,000 or more | 6,313 | 1% |
| Median (dollars) | 231,000 | |

| Mortgage Status and Selected Monthly Owner Costs | Number | Percent |
|---|---|---|
| **Owner-occupied units** | **454,455** | |
| **Housing units with a mortgage** | **338,973** | **75%** |
| Less than $300 | 452 | 0% |
| $300 to $499 | 2,819 | 1% |
| $500 to $699 | 6,158 | 2% |
| $700 to $999 | 23,960 | 7% |
| $1,000 to $1,499 | 67,893 | 20% |
| $1,500 to $1,999 | 74,293 | 22% |
| $2,000 or more | 163,398 | 48% |
| Median (dollars) | 1,957 | |
| **Housing unit without a mortgage** | **115,482** | **25%** |
| Less than $100 | 2,747 | 2% |
| $100 to $199 | 8,554 | 7% |
| $200 to $299 | 15,060 | 13% |
| $300 to $399 | 18,234 | 16% |
| $400 or more | 70,887 | 61% |
| Median (dollars) | 480 | |

| Gross Rent and Gross Rent as a Percentage of Household Income | Number | Percent |
|---|---|---|
| **Occupied units paying rent** | **219,768** | |
| Less than $200 | 1,150 | 1% |
| $200 to $299 | 3,905 | 2% |
| $300 to $499 | 8,245 | 4% |
| $500 to $749 | 22,453 | 10% |
| $750 to $999 | 44,332 | 20% |
| $1,000 to $1,499 | 76,631 | 35% |
| $1,500 or more | 63,052 | 29% |
| No rent paid | 8,921 | |
| Median (dollars) | 1,168 | |
| **Gross Rent as a Percentage of Household Income** | | |
| Less than 15.0 percent | 13,560 | 6% |
| 15.0 to 19.9 percent | 20,734 | 10% |
| 20.0 to 24.9 percent | 24,897 | 12% |
| 25.0 to 29.9 percent | 25,251 | 12% |
| 30.0 percent or more | 131,983 | 61% |
| Not computed | 12,264 | |

Source: U.S. Census Bureau, 2009-2013 5-Year American Community Survey