



CONNECTING THE DOTS SNAPSHOT

BIRTHS IN LOS ANGELES COUNTY

Children's
Data Network

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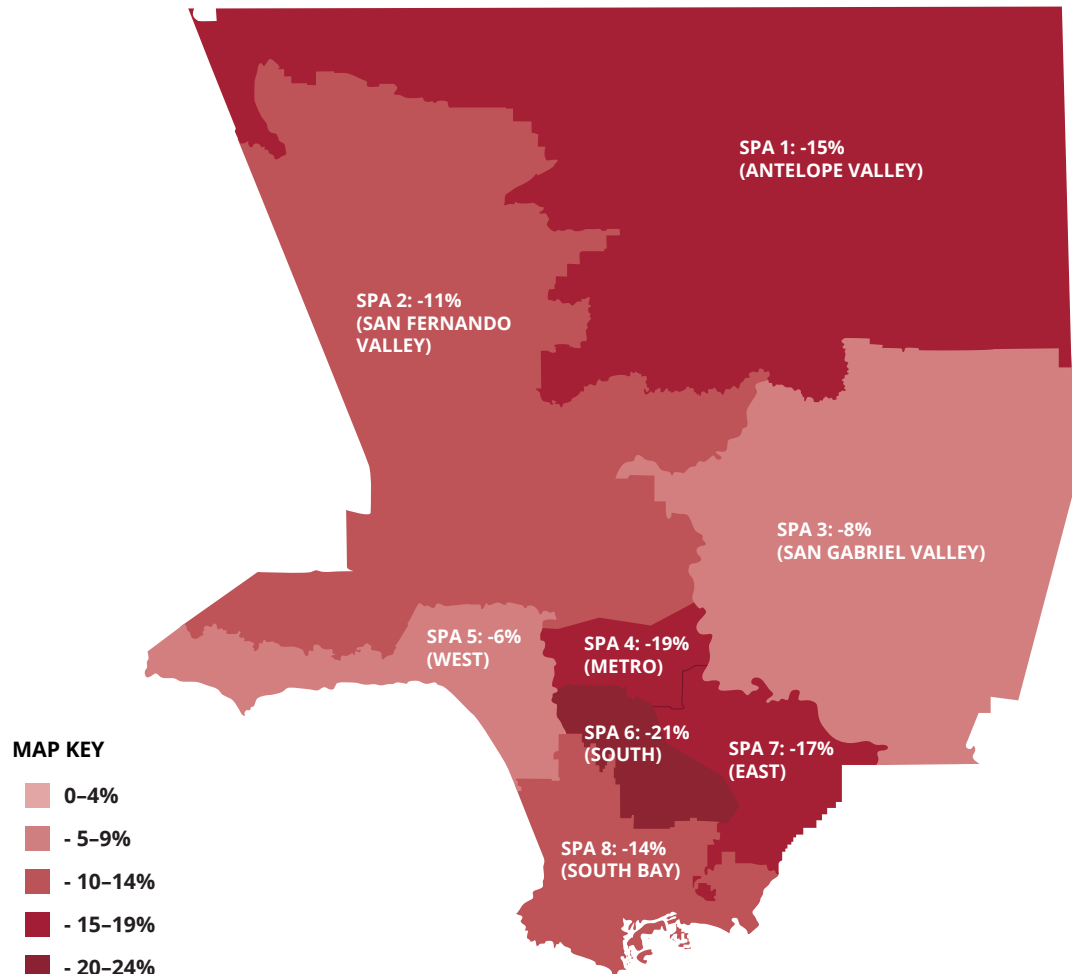
BIRTH TRENDS AND FAMILY DEMOGRAPHICS ACROSS LOS ANGELES COUNTY: HOW ARE THEY CHANGING AND WHY IT MATTERS

- Birth record data from 2002-2012 (the latest decade available) show a substantial drop in numbers and rates of births across L.A. County. The majority of births occurred in the San Gabriel and San Fernando Valleys, and in the South L.A. region.
- Births to white and Latina mothers decreased countywide by 33% and 19%, respectively, while births to Chinese women rose 146%—this increase was most dramatic in the San Gabriel Valley.
- Births to women with college degrees increased for the county as a whole, but not in the Metro, South, and East L.A. areas, or in the Antelope Valley.

Why do these trends matter? Understanding demographic trends is critical for planning services and systems to meet the changing needs of children and families. Historic service distribution patterns across the county may need to change to meet shifting demographic conditions. Communities with the largest concentrations of young children need the infrastructure and resources to support these families. Decades of research show investments in young children and families pay off. Assuring a healthy start for children should be one of the highest priorities for our county – our future literally depends on it.



PERCENTAGE CHANGE IN GENERAL FERTILITY RATES FROM 2002 TO 2012 BY SERVICE PLANNING AREA IN LOS ANGELES COUNTY



DATA DEFINITION: Percentage change in General Fertility Rate—number of births per 1,000 women ages 15–49—from 2002 to 2012, by Service Planning Area (SPA) in Los Angeles County.

SOURCE: Vital Records, 2002–2012. Analysis by the Children’s Data Network at the USC Suzanne Dworak-Peck School of Social Work. Population estimates for denominators retrieved from the California Department of Finance (<http://www.dof.ca.gov/Forecasting/Demographics/Estimates/>) and U.S. Census Bureau, American Community Survey (<https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>). Zip code estimates calculated by the Geospatial Sciences Institute at the Dana and David Dornsife College of Letters, Arts and Sciences, University of Southern California.

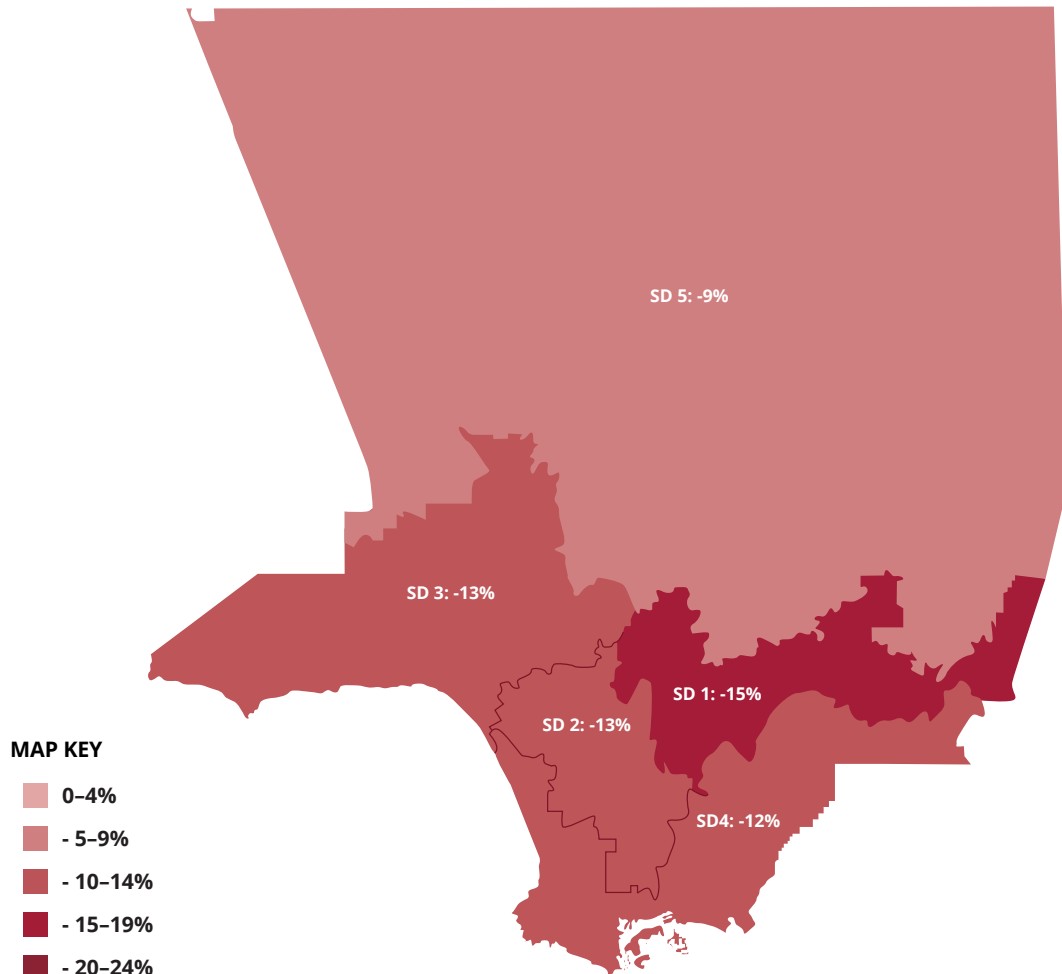
FOOTNOTES: Changes in fertility rates between 2002 and 2012 were statistically significant for L.A. County and all SPAs except 1 and 5. Population denominators for women ages 15–49 in each geographic area are synthetic zip code estimates based on city estimates from the California Department of Finance and U.S. Census Bureau.



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PERCENTAGE CHANGE IN GENERAL FERTILITY RATES FROM 2002 TO 2012 BY SUPERVISORIAL DISTRICT IN LOS ANGELES COUNTY



DATA DEFINITION: Percentage change in General Fertility Rate—number of births per 1,000 women ages 15-49—from 2002 to 2012, by Supervisorial District (SD) in Los Angeles County.

SOURCE: Vital Records, 2002-2012. Analysis by the Children's Data Network at the USC Suzanne Dworak-Peck School of Social Work. Population estimates for denominators retrieved from the California Department of Finance (<http://www.dof.ca.gov/Forecasting/Demographics/Estimates/>) and U.S. Census Bureau, American Community Survey (<https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>). Zip code estimates calculated by the Geospatial Sciences Institute at the Dana and David Dornsife College of Letters, Arts and Sciences, University of Southern California.

FOOTNOTES: Changes in fertility rates between 2002 and 2012 were statistically significant for L.A. County and all Supervisorial Districts. Population denominators for women ages 15-49 in each geographic area are synthetic zip code estimates based on city estimates from the California Department of Finance and U.S. Census Bureau.



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INTRODUCTION

How have birth trends varied over time in different regions of L.A. County? What do we know about the changing demographics of infants and their families? This snapshot addresses these and other questions drawing on the most recent decade of data available from birth records.*

Understanding demographic trends is critical. In order to invest appropriately in systems to support children and families throughout L.A. County, we need to understand the differences between demographic characteristics of our population in different parts of the county, including Service Planning Areas (SPAs) and Supervisorial Districts (SDs), and how they have changed over time. Studying demographic shifts is essential for understanding changing service needs, re-examining historical assumptions, tracking the results of changes in service delivery patterns, and guiding resource allocation. For example, examining where babies are born – and the characteristics of families having them – can help service providers, funders, and policymakers understand trends and see how previous policy and programmatic solutions have affected the population as a whole.

Examining the demographic trends of families with young children is especially important. Decades of research demonstrate that health and well-being in the early stages of life have profound impacts into adulthood.¹ By supporting young children and their families, we are investing in a healthy, thriving future population.¹ Recent demographic and economic analyses indicate that assuring a healthy start for our children is even more important to L.A. County's future prosperity than ever before.^{2,3} Overall, data point to a shrinking child population in L.A. County, a retiring baby boom generation, and projected workforce shortages in years to come, making our children and their families an increasingly vital resource.^{2,3} Because our county encompasses so many regions with different demographic and economic profiles, this snapshot focuses on key distinctions between communities in different parts of the county, providing a closer look at local conditions that may suggest new approaches to effectively supporting these families and their children.

*This snapshot focuses on the latest decade of birth record data available for 2002-2012. This perspective illustrates long-term demographic shifts and a trajectory of change that provides useful context for understanding today's environment. As subsequent years of data become available, these figures will be updated.

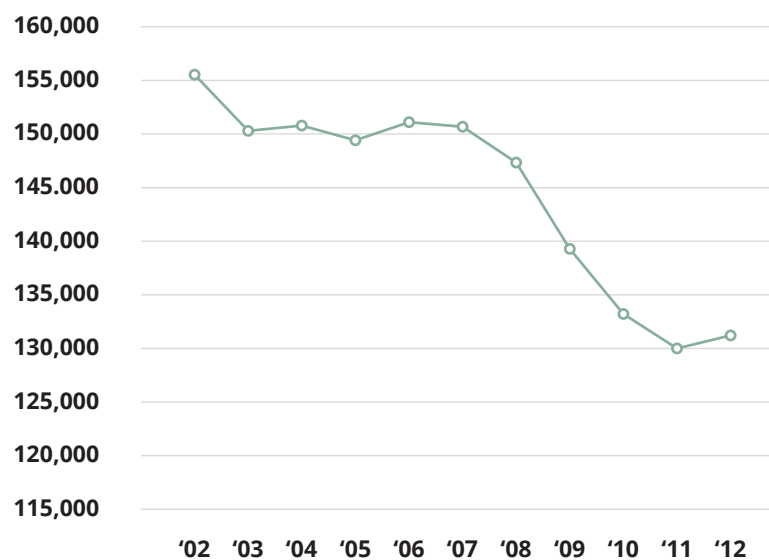




BIRTH TRENDS BY REGION

Births declined between 2002 and 2012, overall, and in nearly every region of L.A. County (only Antelope Valley showed a small increase of 6%). The total number of births in L.A. County decreased by 15% between 2002 to 2012, with an especially sharp drop between 2007 and 2011.

FIGURE 1. NUMBER OF BIRTHS IN LOS ANGELES COUNTY

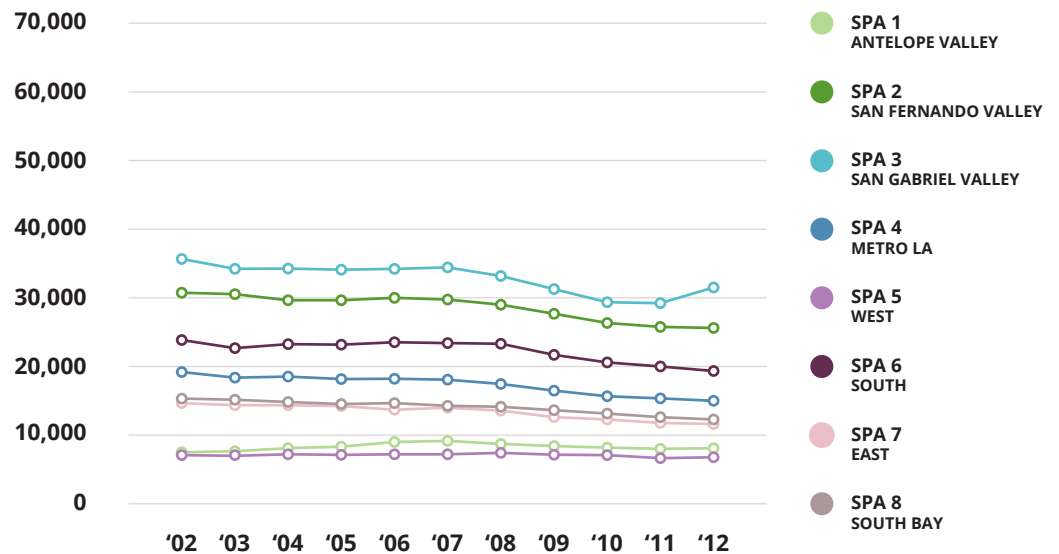


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BIRTH TRENDS AND FAMILY DEMOGRAPHICS ACROSS LOS ANGELES
COUNTY: HOW THEY ARE CHANGING AND WHY IT MATTERS

Examination of birth trends show differences between regions, as defined in two ways: Service Planning Areas (SPAs) and Supervisorial Districts (SDs).*

FIGURE 2. NUMBER OF BIRTHS BY SERVICE PLANNING AREA (SPA)



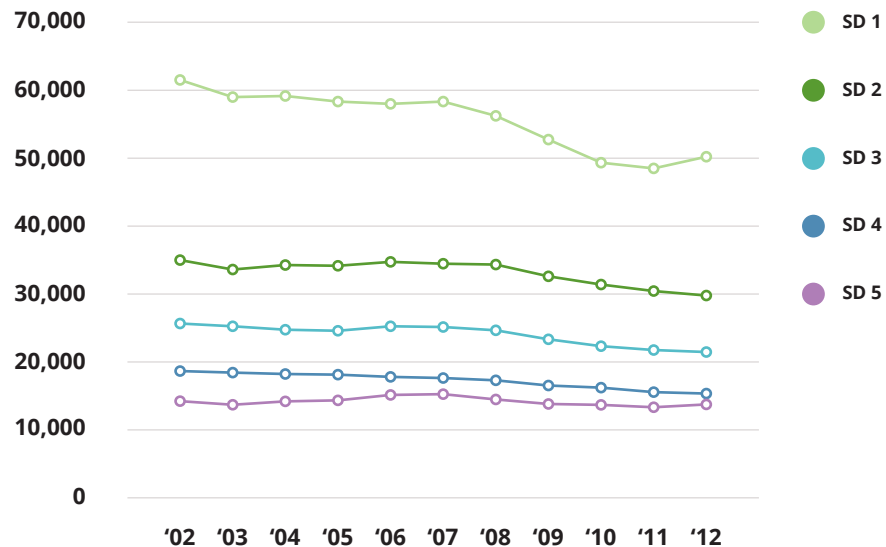
*The five Supervisorial Districts in L.A. County are defined by electoral district boundaries. Each district's elected Supervisor is a member of the Board of Supervisors, the governing body for the County. The eight SPAs were created for planning and information sharing purposes, in line with how communities think about their regions. The SPA boundaries were developed through a collaborative process, including focus groups and consultation with community organizations.



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FIGURE 3. NUMBER OF BIRTHS BY SUPERVISORIAL DISTRICT (SD)



The distribution of births throughout the county has remained fairly consistent, with most births occurring in the San Gabriel and San Fernando Valleys, and in the South L.A. region. For example, of the 131,119 total births in L.A. County in 2012, the majority (59%) occurred in SPAs 2 (San Fernando Valley), 3 (San Gabriel Valley), and 6 (South L.A. area), a pattern consistent with previous years. Among Supervisorial Districts in 2012, more than 75% of births occurred in SD 1 (downtown L.A. to Pomona and Eagle Rock to South Gate), SD 2 (southern L.A. areas down to Carson), and SD 3 (overlaps with SPA 2 in the San Fernando Valley and extends down to Venice and West Hollywood), also similar to prior years.

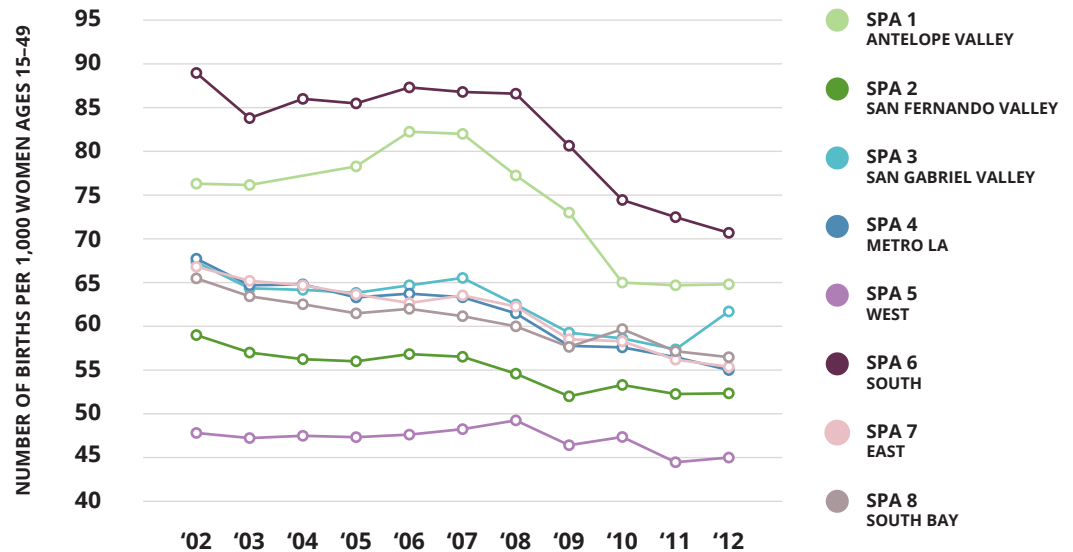
Not surprisingly, fertility rates among women of childbearing age (15-49) declined as well. In a trend consistent with other studies,^{3,4} L.A. County's general fertility rate dropped significantly during 2002-2012, from 66.9 to 57.9 births per 1,000 women ages 15-49. As shown in the map above, rates declined in all SPAs and SDs, with the greatest drops in Metro and South L.A.: SPA 4 (-19%) and SPA 6 (-21%). Data by Supervisorial District also showed the greatest decline in SD 1 (-15%), which covers Metro L.A. down to South Gate and part of the San Gabriel Valley.

The graphs below show declines over time by SPA and SD, but they also highlight variations in birth rates by region. From 2002 to 2012, SPA 1 (Antelope Valley) and



SPA 6 (South L.A. area) consistently had the highest fertility rates, at 64.9 and 70.7 births, respectively, per 1,000 women ages 15-49 in 2012. SPA 5 (West L.A. area) had the lowest fertility rate, at 45 per 1,000 in 2012.

FIGURE 4. GENERAL FERTILITY RATE BY SERVICE PLANNING AREA (SPA)



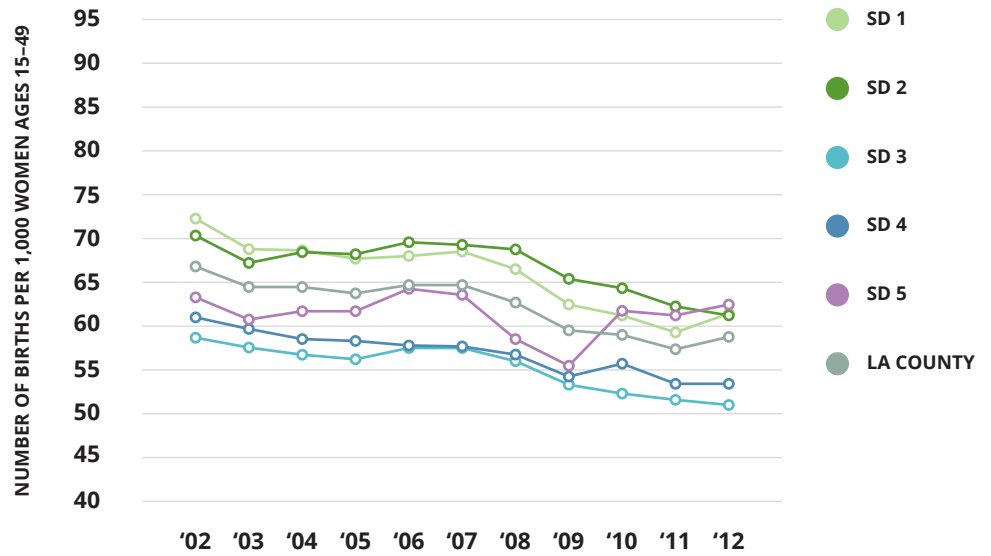
Supervisory District 2 encompasses many of the same communities included in SPA 6 (South L.A. area) and likewise had the highest fertility rate throughout most of the decade, at 61.1 births per 1,000 women in 2012. Supervisory District 1 (Metro L.A. to San Gabriel Valley) also had among the highest rates throughout this period. Consistent with SPA data showing the lowest fertility rates in the western part of the county, the rate in SD 3, which covers West and Northwest L.A. areas, remained below those of other districts, at 51 per 1,000 in 2012. (See downloadable Excel file online for all rates by year and geography.)



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FIGURE 5. GENERAL FERTILITY RATE BY SUPERVISORIAL DISTRICT (SD)



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DEMOGRAPHICS AND SOCIOECONOMICS OF INFANTS AND THEIR FAMILIES

The shifting characteristics of infants born in L.A. County and its sub-county areas suggests that the needs of these areas are shifting, as well. As such, these trends have important implications for service providers and policymakers.

The racial/ethnic landscape among mothers giving birth shifted significantly between 2002 and 2012. From 2002 to 2012, the racial/ethnic makeup of births in the county changed, and in some areas, these changes were substantial. For example, the number of infants born to white and Latina mothers in L.A. County decreased by 33% and 19%, respectively, whereas the number of infants born to Chinese mothers increased by 146%, as shown in the next table. Nowhere was the increase more evident than in the San Gabriel Valley, the region included in SPA 3 and part of SD 1, where births to Chinese mothers increased dramatically—by 691% in SPA 3 and by 361% in SD 1. (See all SPA and SD data in the downloadable Excel file online.)

BIRTHS BY RACE / ETHNICITY OF MOTHER IN L.A. COUNTY

RACIAL / ETHNIC GROUP	NUMBER OF BIRTHS IN 2012	PERCENTAGE CHANGE FROM 2002 TO 2012
African American / Black	9,679	-7%
Chinese	8,119	+146%
Filipina	3,571	-3%
Indian	1,560	+33%
Japanese	878	-3%
Korean	2,325	+13%
Latina	74,844	-19%
Vietnamese	1,197	-32%
White	23,985	-33%
Other Asian (including Native Hawaiian / Pacific Islander)	2,293	-2%
Other (including American Indian / Alaska Native)	346	-35%

Fewer teens gave birth, by number and proportion. Children born to teens are at higher risk of premature birth, low birth weight, and other adverse health, behavioral, and social outcomes.⁵ Teen mothers and fathers, too, may face additional challenges as young parents, such as financial hardship and difficulty finishing their education.⁵

In a trend echoed by other local, state, and national research,^{4,6} the number of infants born to teen moms in L.A. County decreased substantially by 44% over the decade between 2002 and 2012. In 2012, births to teen moms made up only 4.1% of all births in L.A. County, down from previous years. All sub-county regions showed declines, as well, with the greatest



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reductions in the San Fernando Valley and West L.A. areas (SD 3 and SPAs 2 and 5), and in the South Bay (SD 4 and SPA 8).

Although women over 40 may be in a better financial position to have children relative to younger mothers, births to women over age 40 involve increased health risks for both mom and baby.⁴ Data show the opposite pattern for this group, with births to mothers age 40 and older rising 13% countywide during this decade. This pattern was evident in most parts of L.A. County, except areas east and south of L.A., which showed a different trend. Data from SPAs 6 (South) and 7 (East) showed decreases of 33% and 17%, respectively, in infants born to moms age 40 and over, while SD 1 (downtown L.A. to Pomona) also showed a decrease of 6%.

The vast majority – 92% – of births listed fathers on birth records in 2002 and 2012.

Fathers and other parental figures can have a profound, positive influence on children's development, from the prenatal stage throughout children's lives.⁷ Establishment of paternity at birth highlights the relationship between father and child, and the father's intention to remain engaged in his child's life. It may also serve as a proxy measure for family stability and financial resources, with the absence of an identified second parent potentially indicating increased family vulnerability. The lack of an identified second parent may signal, too, an increased likelihood there will be unrelated parental partners in the child's life.

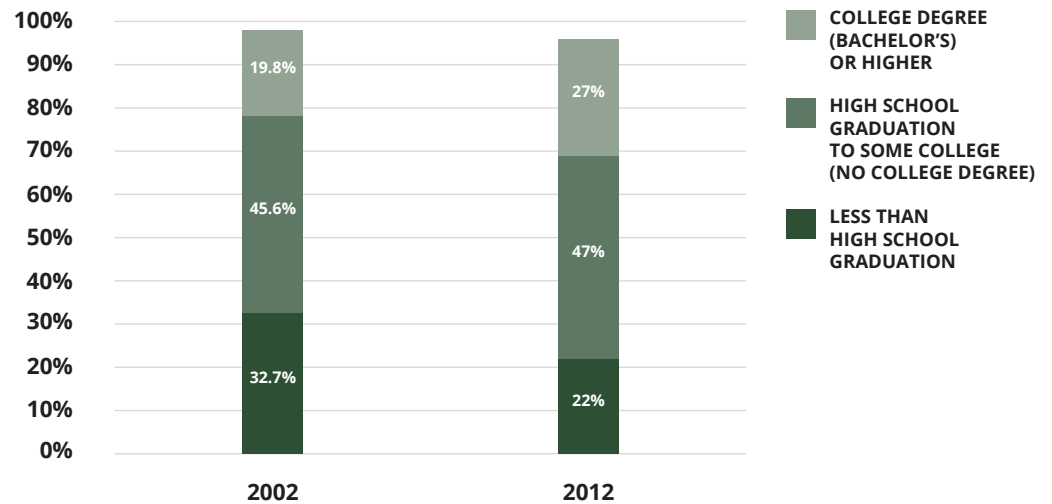
In both 2002 and 2012, fathers were listed on births records for the great majority, 92%, of infants born in L.A. County. All regions of the county showed similarly steady figures, hovering around 90% during the decade. Recognizing that births dropped countywide in this timeframe, the number of infants with fathers identified on birth records also declined overall and in every region except for Antelope Valley (SPA 1), which showed a small increase of 2%.

Maternal education levels increased for the county as a whole, but not for all regions.

Maternal education is a major factor that influences child health and well-being. For example, research indicates that as parental levels of education increase, children's health, behavior, and academic achievement also improve.⁸ As shown in the figure below, L.A. County birth records reveal shifts in maternal education levels, with increasing numbers of infants whose mothers had completed college and decreasing numbers of infants whose mothers had not completed high school. This trend has been reflected in other county data analyses, too, such as analysis of education levels for participants in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).



**FIGURE 6. PERCENTAGE OF BIRTHS BY MATERNAL EDUCATION LEVEL
IN L.A. COUNTY, 2002–2012**



All geographic areas showed a similar pattern of fewer infants whose moms had not completed high school in the decade between 2002 and 2012. Trends were more mixed for the number of infants whose mothers had college degrees. There was a decline in college educated mothers in the Metro, South, and East L.A. areas (SD 1 and SPAs 4, 6, and 7), and in Antelope Valley (SPA 1), whereas West L.A. areas showed a substantial increase. For example, the number of infants born to college educated mothers decreased by 74% in SPA 6 (South), but increased by 152% in SPA 5 (West) over this decade. (See all SPA and SD data in the downloadable Excel file online.)

The percentage of births covered by public insurance remained steady – just over 50%.

The number of births funded by public health insurance is one way to gauge the economic circumstances of families with new babies. This data set covers changes in the period between 2002 and 2012, as noted, which was prior to full implementation of the federal Affordable Care Act. As new birth record data become available, these data will be updated and analyzed alongside policy and program changes that took place after 2012.

Just over half of all L.A. County births were funded by public insurance in both 2002 and 2012. In line with the significant countywide drop in births during this period, the number of births funded by both public and private insurance also declined. But trends at the sub-county level varied. All regions showed declines in the number of publicly-funded births except for the South L.A. area (SD 2 and SPA 6) and Antelope Valley (SPA 1), which showed increases. SPA 6 (South) also had the highest proportion of publicly-funded births



of all regions in 2012: 78%, up from 51% in 2002. SPA 5 (West), on the other hand, had the lowest proportion in 2012: 32%, compared to 51% in 2002.

New 2016 WIC data by SPA signal shifts in languages spoken among low-income families with young children. Data from the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provide additional insight into the circumstances of L.A. County's low-income population. WIC is a major public health program and a critical part of the safety net for families in need. It provides healthful food, nutrition education, breastfeeding support, and referrals to needed services for low-income (below 185% of federal poverty level) pregnant and postpartum women, and children up to age 5. In L.A. County alone, WIC served more than 330,000 children and 85,000 women in 2016, reaching a substantial portion of the county's low-income families.⁹ In fact, WIC serves approximately 60% of all children under age 5 in L.A. County.^{9, 10}

The following table shows the total number of women and children served by WIC in each SPA in 2016. (Data are not available by Supervisorial District. See the downloadable Excel file online for additional WIC data by SPA for 2006-2016.) While WIC is reaching thousands of struggling families throughout the county, the South L.A. area (SPA 6) was home to the greatest number (84,841) and percentage (20%) of individuals served in 2016, similar to previous years. In addition, the San Fernando Valley (SPA 2), San Gabriel Valley (SPA 3), East L.A. area (SPA 7), and South Bay (SPA 8) each had more than 60,000 WIC participants in 2016 and prior years.

POPULATION SERVED BY WIC, 2016

REGION	PREGNANT AND POSTPARTUM WOMEN	CHILDREN AGES 0-5	TOTAL SERVED
SPA 1: Antelope Valley	4,239	16,556	20,795
SPA 2: San Fernando Valley	14,737	49,834	64,571
SPA 3: San Gabriel Valley	13,125	51,496	64,621
SPA 4: Metro L.A.	9,619	35,874	45,493
SPA 5: West	1,231	4,545	5,776
SPA 6: South	16,794	68,047	84,841
SPA 7: East	13,684	55,120	68,804
SPA 8: South Bay	12,427	50,252	62,679
L.A. County	85,856	331,724	417,580

SOURCE: PHFE WIC Data Mining Project, L.A. County WIC Data, 2016. See the downloadable Excel file online for additional 2006–2016 data run by Service Planning Area for this report.



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WIC data also shed light on changing demographics across the county, including languages spoken in low-income households. For many years, nearly all WIC participants have indicated their preferred language is either English or Spanish; however, the percentage preferring Spanish has been on the decline over the past decade, as depicted below.

FIGURE 7. 2006 PERCENTAGE OF WIC PARTICIPANTS BY LANGUAGE PREFERENCE

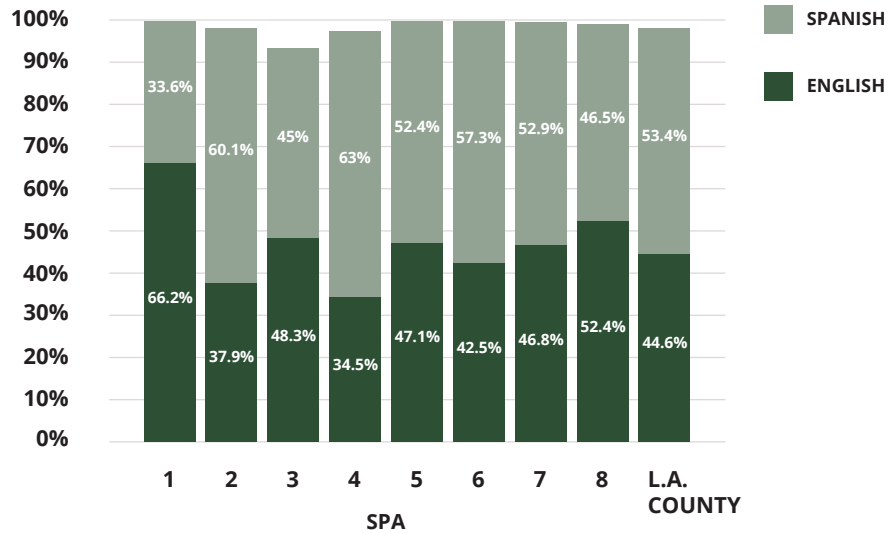
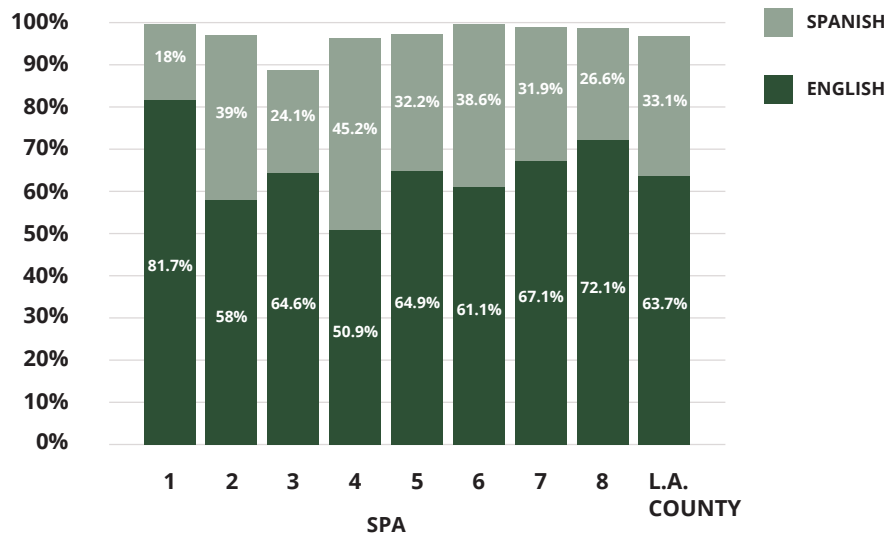


FIGURE 8. 2016 PERCENTAGE OF WIC PARTICIPANTS BY LANGUAGE PREFERENCE



SOURCE: PHFE WIC Data Mining Project, L.A. County WIC Data, 2006-2016. Analysis run by Service Planning Area for this report. See the downloadable Excel file online for additional data.





IMPLICATIONS

While the birth rate is down overall, there are still significant differences between the regions of L.A. County in terms of the numbers of newborns and the circumstances faced by their families.

These differences matter. They matter because services to support young children and their families are not distributed based on need – and it is likely that historic distribution patterns have not changed to meet shifting demographic conditions.

They matter because many of the communities that are home to our largest concentrations of young children do not have the infrastructure or resources needed to support these young families. It is essential to prepare our communities to give families the best start possible. As First 5 LA states, “...just as children do better in strong families, families do better in strong communities. In order for young children to succeed, we need communities and neighborhoods to be safe, healthy places where families can thrive. This happens when communities are able to support and connect their residents to each other through sound policies, abundant resources, and quality services.”

They matter because the programs that are recognized as being particularly effective in supporting families and preparing children for healthy, productive lives are not always readily available or accessible in communities where families need them most. These include home visiting and high quality early care and education programs.^{11, 12, 13}



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COUNTY: HOW THEY ARE CHANGING AND WHY IT MATTERS

They matter because many of the county's service systems are still oriented to routine processing of service requests or managing cases. They are not as helpful as they need to be in helping families negotiate institutional silos or connecting them to community-based services that can help prevent later problems or intervene early when warning signs appear. Service providers may not appreciate the extent to which children are becoming an even more important resource for L.A., and may not be prepared to address the special needs and circumstances of parents with young children.

They matter because the building blocks for lifelong health and wellness are set in the earliest years of childhood through relationships with parents and caregivers. Helping parents and supporting them to make the most of these early years should be one of the highest priorities for our county – our future literally depends on it.



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ABOUT THE PROJECT

This snapshot is part of the ongoing "Connecting the Dots" series by the Children's Data Network at the USC Suzanne Dworak-Peck School of Social Work. Connecting the Dots snapshots bring together data and stories to provide new insights about the health and well-being of children and families in L.A. County. The series also highlights the great work happening throughout the county.

This is the first of four snapshots to be released in 2017, drawing on data from birth records to examine regional differences within L.A. County. This snapshot provides an overview of infant and family demographic trends as a foundation for the next three snapshots, which will explore specific indicators of healthy birth outcomes, such as receipt of timely prenatal care.

To learn more about this project and the Children's Data Network, please visit <http://www.datanetwork.org/snapshots/>.



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