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# CONNECTING THE DOTS SNAPSHOT

FULL-TERM, NORMAL-WEIGHT BIRTHS

Children's  
Data Network

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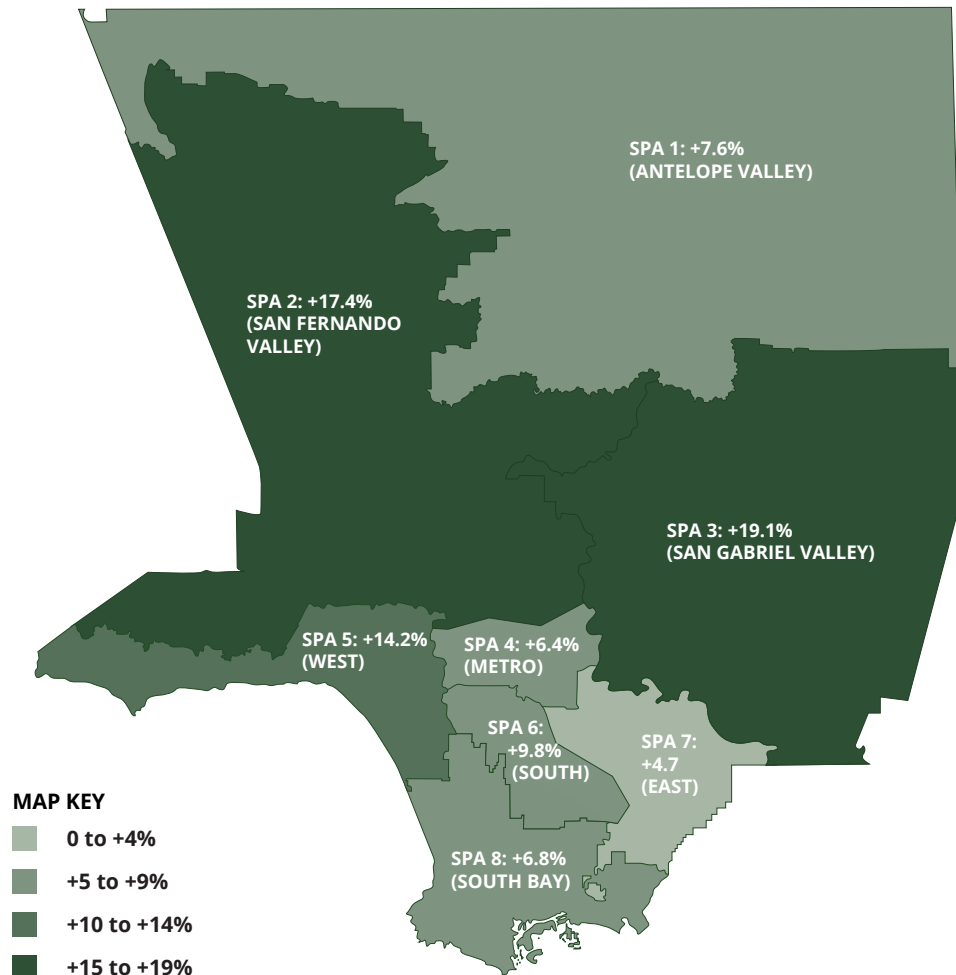
## FULL-TERM AND NORMAL-WEIGHT BIRTHS BY REGION IN LOS ANGELES COUNTY: RECENT PROGRESS AND WHY IT MATTERS

- Good news: The percentage of infants born full-term and at a normal weight improved from 2007 to 2012 (latest birth record data available), countywide and in all regions of the county.
- In 2012, just over half – 53.6% – of L.A. County births were full-term and normal weight, up from 47.7% in 2007.
- These improvements affected all demographic subgroups, with figures increasing for all racial/ethnic groups, countywide. At the local level, increases were seen for most groups in most regions.
- While full-term, normal-weight births were less common among mothers age 40+ compared to younger moms, women over 40 experienced the largest gains in full-term, normal-weight births of any demographic group in L.A. County during this period, from 39.9% to 48.8%. Improvements also were seen for births to teen mothers, from 51.3% to 56.6%.
- These findings indicate that public health efforts to decrease preterm births and improve birth weights appear to be working. As new birth record data become available, they likely will show continued progress given that many new programs and policies have been implemented since 2012. It is critical to maintain these gains and continue prioritizing efforts to promote healthy births in L.A. County, especially now, at a time of change and uncertainty for the nation's health care system and safety net programs.

Why is it important for infants to be born “full-term” (delivered in the 39th or 40th week) *and* at a “normal weight” (about 5.5-8.8 pounds)? When babies reach full-term, their bodies have a chance to fully develop, including their respiratory, brain, and liver functioning. Preterm birth and low birthweight are leading causes of infant death in the U.S. In addition, infants born too early or too small are at increased risk of serious long-term health problems that can be very challenging for children and families and for society-at-large, resulting in billions of dollars spent each year on health care, special education, and other services.



**PERCENTAGE CHANGE IN BIRTHS AT FULL-TERM AND NORMAL WEIGHT FROM 2007 TO 2012 BY SERVICE PLANNING AREA (SPA) IN LOS ANGELES COUNTY**



**DATA DEFINITION:** Percentage change in births at full-term and normal weight from 2007 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.

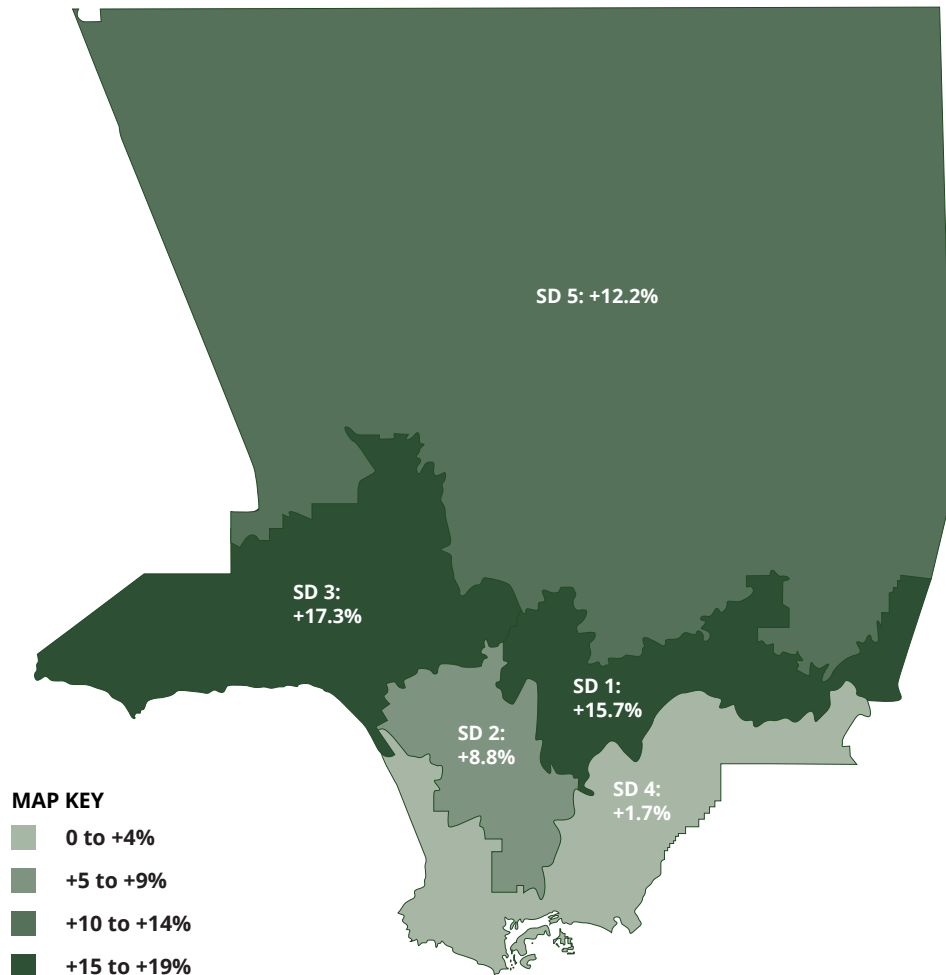
**FOOTNOTES:** Changes in the percentage of births at full-term and normal weight between 2007 and 2012 were statistically significant for L.A. County and all SPAs.



**CHILDREN'S DATA NETWORK**

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## PERCENTAGE CHANGE IN BIRTHS AT FULL-TERM AND NORMAL WEIGHT FROM 2007 TO 2012 BY SUPERVISORIAL DISTRICT (SD) IN LOS ANGELES COUNTY



**DATA DEFINITION:** Percentage change in births at full-term and normal weight from 2007 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.

**FOOTNOTES:** Changes in the percentage of births at full-term and normal weight between 2007 and 2012 were statistically significant for L.A. County and all SDs except for SD 4.



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## INTRODUCTION

Babies born too soon or at a low weight are at increased risk of death and serious long-term health and developmental problems.<sup>1,2</sup> Disorders related to low birthweight and preterm births are a leading cause of infant death in the U.S.<sup>3</sup> In addition to the difficult and potentially tragic consequences for families with infants born too early or too small, these birth outcomes also are costly to society, resulting in billions of dollars spent annually on health care, special education, and other services.<sup>2,4</sup>

Increasing attention is focused not only on preventing premature births and low birthweight, but also on promoting full-term births (delivered in the 39th or 40th week) and normal birthweight (about 5.5-8.8 pounds).<sup>1,5,6</sup> Since important growth happens in the final weeks of pregnancy—including brain, lung, and liver development—experts strongly recommend waiting until at least 39 weeks to give birth unless it is medically necessary to do so earlier.<sup>1,6</sup>

Babies born early often are too small, though not always. For example, some premature infants may fall into the normal weight range even though their bodies are not fully developed. And some infants are born at a low weight even though they are full-term. Low (or high) birthweight, separate from gestational age, is linked to many health problems.<sup>2,7</sup>

This snapshot looks at births that are both full-term and normal weight, as one important way to gauge healthy births. The data presented here highlight regional and demographic group differences across L.A. County, drawing on the most recent data available from birth records: 2007-2012. This perspective illustrates a trajectory of change that provides a useful backdrop for understanding today's environment. As new birth record data become available, these figures will be updated.

### KEY TERMS

**Preterm birth:**

Before 37 completed weeks of pregnancy

**Full-term birth:**

39 weeks–40 weeks, 6 days

**Low birthweight:**

Below 2,500 grams or 5.5 pounds

**Normal birthweight:**

2,500–3,900 grams or about 5.5–8.8 pounds

**High birthweight:**

4,000+ grams or 8.8+ pounds



## OVERALL FINDINGS

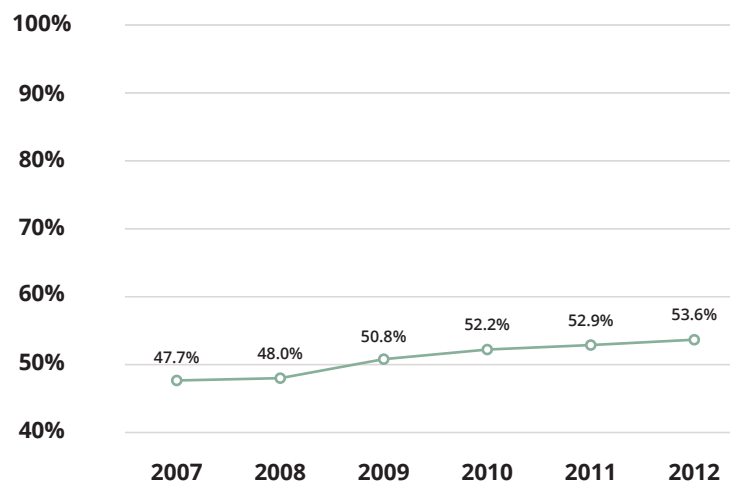
*Just over half (53.6%) of L.A. County infants were born full-term and at a normal-weight in 2012, up from 47.7% in 2007. All regions of the county improved.*

As context for these findings, recent decades of data show that L.A. County's rates of [preterm birth](#) and [low birthweight](#) have been slightly higher than California as a whole but lower than national levels. Preterm births have declined at the county, state, and national levels since 2007, though the CDC reports a small uptick between 2014 and 2015 in U.S. rates.<sup>1,8</sup> The latest March of Dimes [Premature Birth Report Card](#) shows that preterm birth rates are 9.6% for the U.S. and 8.5% for both California and L.A. County (state and national data are for 2015 and county data are for 2014).

Similarly, rates of [low birthweight](#) generally were on the rise at the county, state, and national levels from the 1990s until the mid 2000s, but largely leveled off with some slight declines since then. Low birthweight rates from the [March of Dimes](#) were 8.0% for the U.S., 6.7% for California, and 6.9% for L.A. County in 2014.

This snapshot describes the percentage of L.A. County births that were both full-term and normal-weight from 2007-2012 (latest available from birth records), by region and demographic group. Countywide, this percentage increased from 47.7% to 53.6% over the five-year period, shown below.

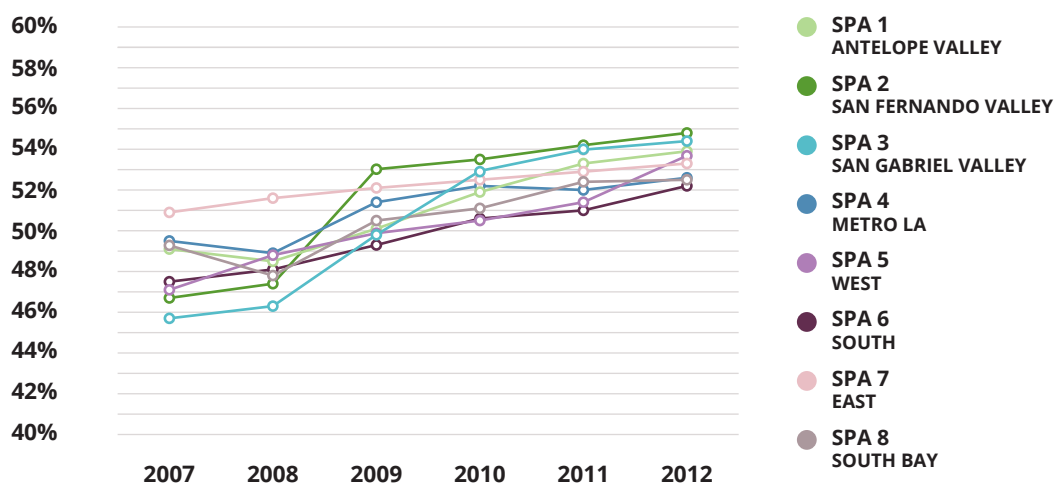
**FIGURE 1. PERCENTAGE OF BIRTHS AT FULL-TERM AND NORMAL-WEIGHT IN LOS ANGELES COUNTY**



Examination of trends show differences among regions in L.A. County, as defined in two ways: *Service Planning Areas (SPAs)* and *Supervisorial Districts (SDs)*.\*

As shown in the opening map, all SPAs and SDs experienced percentage gains in births that were full-term and normal weight from 2007 to 2012. Figures 2 and 3 show these changes over time, and they also highlight variations by region. The largest increases occurred in the San Gabriel and San Fernando Valleys, with percentage gains over 19% in SPA 3 and over 17% in SPA 2 and SD 3. The smallest gains were seen in the South and East regions of the county—in SD 4 and SPA 7 (1.7% and 4.7%, respectively), which include many of the same communities, such as Downey, Whittier, Lakewood, Cerritos, and La Mirada. However, SD 4 and SPA 7 also started at higher levels than other regions at the beginning of this period, as shown in the next figures. The percentage changes in births at full-term and normal weight were significant for all regions except SD 4.

**FIGURE 2. PERCENTAGE OF BIRTHS AT FULL-TERM AND NORMAL-WEIGHT BY SERVICE PLANNING AREA (SPA)**

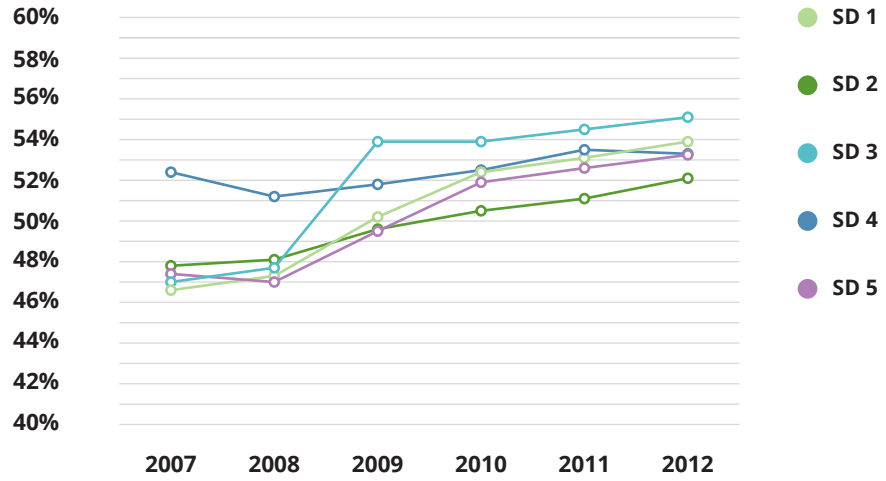


**NOTE:** See downloadable Excel file at <http://www.datanetwork.org/cdn-apps/fullterm> for additional data by SPA.

\*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.



**FIGURE 3. PERCENTAGE OF BIRTHS AT FULL-TERM AND NORMAL-WEIGHT BY SUPERVISORIAL DISTRICT (SD)**



**NOTE:** See downloadable Excel file at <http://www.datanetwork.org/cdn-apps/fullterm> for additional data by SD.



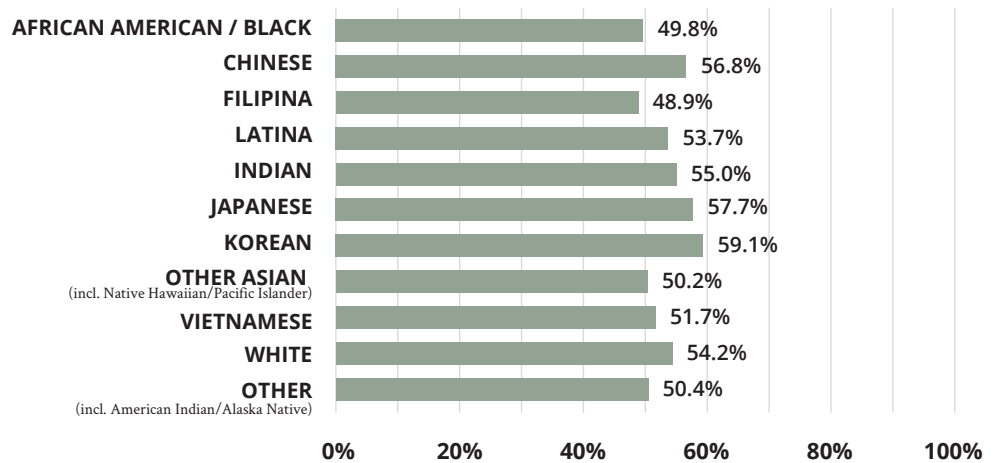
## KEY FINDINGS BY DEMOGRAPHIC GROUP

### *Births at Full-Term and Normal Weight Are More Common Among Certain Demographic Groups.*

#### RACE / ETHNICITY

The percentage of full-term, normal-weight births increased for all racial/ethnic groups between 2007-2012 in L.A. County. The greatest percentage gains occurred among Japanese (+18.4%) and Chinese (+16.9%) mothers. Despite these improvements, inequities persisted, with certain groups continuing to have lower percentages of full-term, normal-weight births, illustrated in Figure 4. Similar trends are echoed in other local and national studies showing that preterm births and low birthweight are more likely to occur among women of color, particularly African American and American Indian/Alaska Native mothers.<sup>9, 10</sup>

**FIGURE 4. PERCENTAGE OF BIRTHS AT FULL-TERM AND NORMAL-WEIGHT IN LOS ANGELES COUNTY, BY RACE / ETHNICITY OF MOTHERS, 2012**



**NOTE:** See downloadable Excel file at <http://www.datanetwork.org/cdn-apps/fullterm> for additional demographic group data and findings by SPA and SD.

At the local level, while small numbers in some cases make it difficult to determine trends, the percentage of infants born full-term and normal weight increased for most racial/ethnic groups in the majority of SPAs and SDs. Notably, figures for African American, Latina, Chinese, and Japanese mothers improved in every region with available data.



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## AGE OF MOTHER

Consistent with other research, mothers age 40+ were less likely than younger moms to have full-term, normal-weight births in L.A. County during 2007-2012, though women over 40 experienced the largest gains in this time period of any demographic group at the county level, from 39.9% to 48.8%.<sup>1,11</sup> Figures also improved for teen moms age 19 or younger, from 51.3% to 56.6%. Mothers ages 20-29 and 30-39 saw improvements, too (up to 55.1% and 52.7%, respectively, in 2012). Data by SPA and SD generally followed these countywide patterns.

## OTHER DEMOGRAPHIC GROUPS

There were no substantial differences between levels of maternal education, public/private insurance status, or paternity establishment in the percentage of births at full-term and normal weight. All of these demographic sub-groups improved at the county level from percentages in the high 40s in 2007 to the low 50s in 2012.

**NOTE:** See downloadable Excel file at <http://www.datanetwork.org/cdn-apps/fullterm> for all demographic group data by SPA and SD.



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## IMPLICATIONS

This snapshot reveals promising news for L.A. County: The percentage of infants born full-term and normal weight improved across the board for all regions and sub-groups in the county during 2007-2012. As new data become available, they likely will show continued progress given the many program and policy developments since 2012, including implementation of the Affordable Care Act and other recently implemented or expanded local programs (e.g., First 5 LA's [Best Start Communities](#)). Increasing full-term births and normal birth weight have long been public health goals in L.A. County and the U.S. overall, and these findings indicate that efforts to address these critical issues seem to be working.<sup>12, 13</sup>

However, differences by region and demographic group remain, and there is considerable room to improve L.A. County's 53.6% of infants born full-term and at a normal weight. We must not only maintain the recent gains, but also continue striving toward new progress and increased equity among demographic groups. This is especially important at a time of change and uncertainty for the nation's health care system and safety net programs.

Many local and national organizations have been steadfastly working for years to promote full-term births. One such effort is the March of Dimes [Prematurity Campaign](#), in which L.A. County is participating. This campaign focuses on the following strategies to reduce preterm births (thereby addressing a major cause of low birthweight, as well):

- Reducing elective deliveries—whether induction or caesarean sections—before 39 weeks of pregnancy.
- Expanding access to high-quality prenatal care, including group prenatal care (*see the recent [Connecting the Dots](#) snapshot on [Prenatal Care](#)*).
- Encouraging women to space births apart by at least 18 months, and promoting comprehensive interconception health care (between pregnancies) that addresses family planning, contraception, mental health and substance use screening/referrals, and folic acid intake.
- Reducing smoking among pregnant women (*see the recent [Connecting the Dots](#) snapshot on [Perinatal Smoking](#)*).
- Increasing progesterone therapy for women with a history of preterm births, as this has been shown to reduce future prematurity.



- Increasing use of low-dose aspirin to prevent preeclampsia, a high blood pressure-related condition that can threaten the lives of mothers and infants.
- Promoting universal screening to identify women with a short cervix (a risk factor for preterm birth) and ensuring that they receive appropriate treatment.
- Reducing multiple births (twins, triplets, etc.) conceived with assisted reproductive technology, as these births are more likely to be premature.<sup>14</sup>

L.A. County organizations can continue pursuing these strategies while leveraging state and national momentum and resources. The March of Dimes and others also are engaged in broader efforts to reduce preterm births, including: expanding research on prevention and treatment options; improving clinical practice; promoting health equity in recognition of long-standing racial/ethnic and socioeconomic disparities; and increasing public awareness about the urgent need to reduce preterm births.

This snapshot is the fourth and final in the 2017 Connecting the Dots series focused on birth trends and indicators of healthy births. Taken together, findings from this series point to several recurring themes:

- *Preconception and interconception health are essential.* It is well established that healthy pregnancies begin before conception. Long-term, sustained advances in birth outcomes will require improving the health of all reproductive-age women – and men, too.
- *Women need access to affordable, culturally appropriate, high-quality health care and support services addressing non-medical issues when and where they need it.* This is particularly critical for populations at higher risk of adverse birth outcomes, e.g., low-income, women of color, teens, women age 40+, women with past pregnancy complications, women carrying more than one baby, and women with health, mental health, or substance use issues.
- *Infant health affects lifelong health.* Investments in young children are investments in our future population. Healthy children require healthy families and communities. To support young families, leaders need to understand who they are, where they live, and the needs they face. This series provided insight into those questions.



- *Historic service distribution patterns across the county may need to change to meet shifting needs and demographic conditions. Communities with the largest concentrations of young children need the infrastructure and resources to support these families.*
- *Reducing inequities in birth outcomes and improving healthy births overall in L.A. County will require continued cross-sector collaboration to strengthen, expand, and align service systems to fill gaps and help families navigate the complex network of services across the county.*



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## CORE PROJECT TEAM

- Jacquelyn McCroskey, Co-Director of the Children's Data Network and John Milner Professor of Child Welfare at the USC Suzanne Dworak-Peck School of Social Work
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- Emily Putnam-Hornstein, Director of the Children's Data Network and Associate Professor at the USC Suzanne Dworak-Peck School of Social Work

## 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.

As noted, this is the fourth and final snapshot in the 2017 series, drawing on data from birth records to examine regional differences in births and healthy birth indicators across L.A. County. The four snapshots covered [Birth Trends](#), [Timely Prenatal Care](#), [Perinatal Smoking](#), and [Full-Term & Normal-Weight Births](#).

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



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