

DATA BYTES

Vulnerable Births in the Denver Metro Region

As part of our mission to transform data into actionable information that improves the social sector's ability to serve low-income communities, Shift Research Lab develops and maintains web-based technology tools that provide free data and analysis on social issues. We continuously update these tools with the most current information available from our data partners. To highlight new data that is added, we are releasing Shift Data Bytes—an ongoing series of data snapshots.

Every year, Shift acquires vital statistics data sets from the Colorado Department of Public Health & Environment. We recently published an updated vital statistics data set on Colorado births to Community Facts and the Early Care and Education Map, which are two of Shift's open data tools. In this edition of Data Bytes, we provide insight into what this new data tells us about vulnerable births in neighborhoods across Colorado.

WHAT YOU NEED TO KNOW: HOW DOES SHIFT DEFINE A "VULNERABLE BIRTH?"

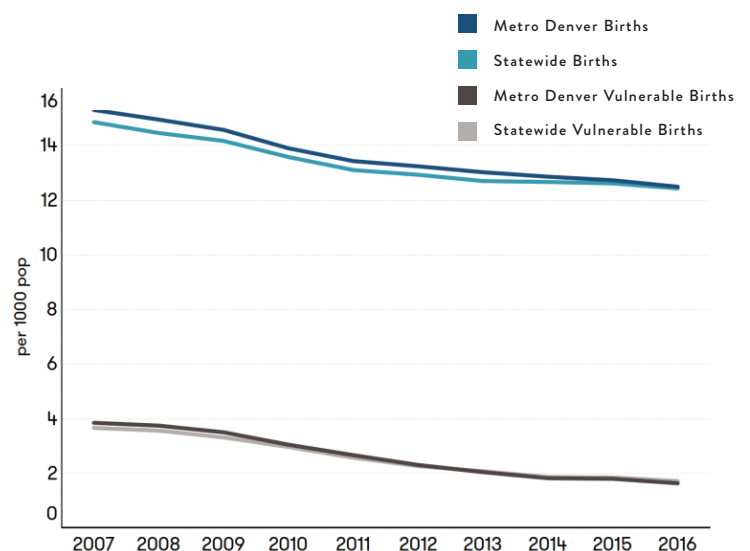
Some young children are impacted by one or more risk factors that make them more vulnerable to experiencing adverse health and education outcomes later in life. Two uniquely identifiable risk factors that Shift uses to define a "vulnerable birth" include being born to a teenage mother or being born to a mother over the age of 20 with less than a high school education. Children in Colorado born with either of these two risk factors are tracked to the right.

Calculating a birth rate standardizes the total number of births in a region so it's possible to compare areas with different populations. In this graph, the birth rate is defined as the number of births per 1,000 women. From 2007 to 2016, the total birth rate and vulnerable birth rate in Colorado declined. During this 10-year period, the total number of vulnerable births fell from 17,470 to 9,228. Although the total birth rate per 1000 women declined, the total number of births in Colorado increased. The number of total births hit a low of 65,052 in 2011 and increased to 66,613 in 2016.

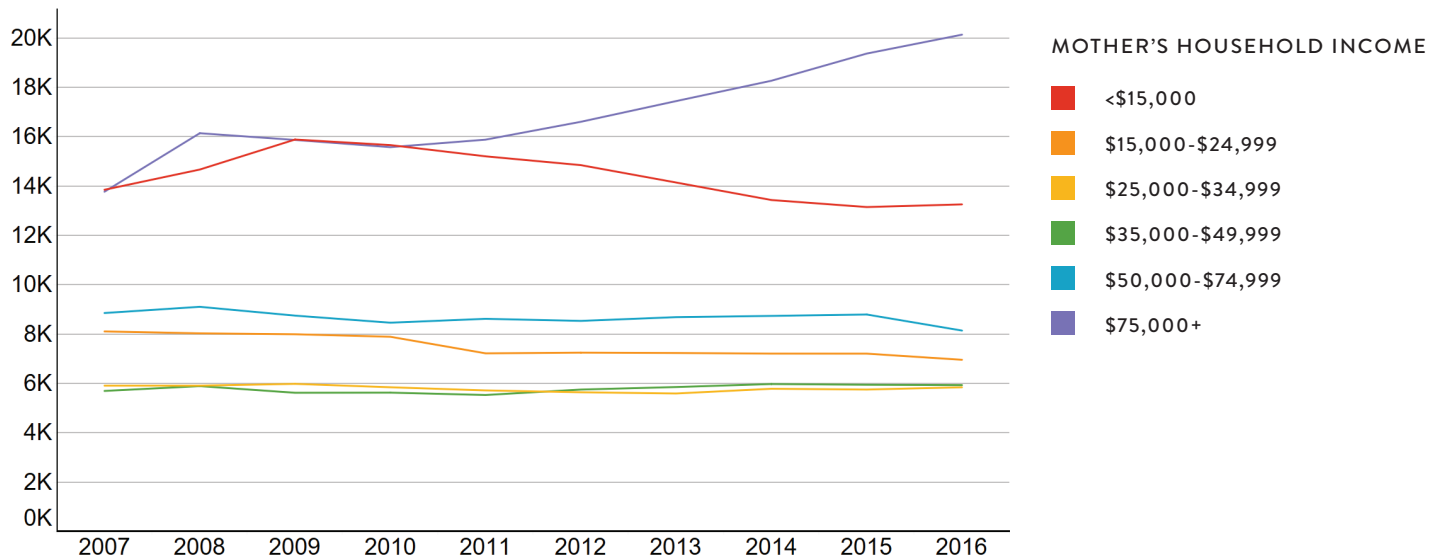
KEY FINDINGS

- The birth rate in Colorado has been steadily declining from 2007-2016.
- Vulnerable births have been trending downward for the past 10 years.
- From 2007-2016, the total number of births only changed for the top and bottom income tiers.

BIRTH & VULNERABLE BIRTH RATES FOR COLORADO & METRO DENVER (2007-2016)



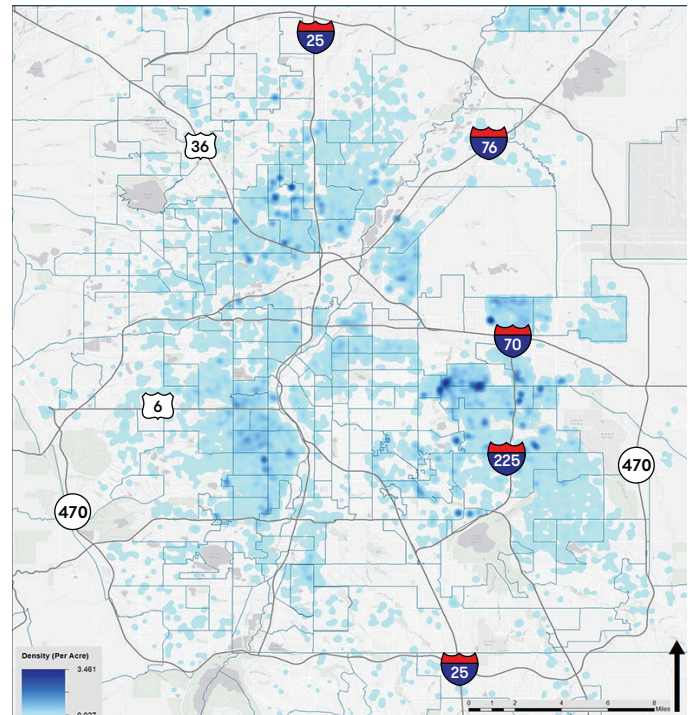
NUMBER OF COLORADO BIRTHS BY MOTHER'S HOUSEHOLD INCOME - (2007-2016)



The graph above shows the number of births in Colorado from 2007 through 2016 based on the mother's household income. Notably, the highest income bracket is the only one in which births increased over the 10-year period. Although the lowest income bracket had the same amount of births as the highest income bracket from 2009 through 2010, the number of births have declined since then. In fact, as of 2016, mothers whose household incomes were \$75,000 or more a year experienced 6,879 more births than mothers whose household incomes were less than \$15,000. It's also worth noting that the middle income tiers trend sideways, exhibiting no major fluctuations over time.

The map to the right shows the density of vulnerable births in the Denver metro region from 2012 through 2016. Within the City and County of Denver, vulnerable births are predominantly clustered in the western neighborhoods. However, there is also a dense cluster on the east side of the city in Montbello. Vulnerable births outside of Denver are clustered in three primary areas: West Aurora, north of Denver and along the east side of I-225.

VULNERABLE BIRTHS (2012-2016)



HUNGRY FOR MORE DATA BYTES?

Have more questions about vulnerable births specifically, or Shift's work more generally? Contact Jennifer Newcomer, Shift's Principal of Research, at jnewcomer@garycommunity.org.

For a more in-depth look at this new data, explore Community Facts and Early Care and Education Map.

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