### Spring 2010 No Time for Complacency Method for Calculating Rates and Estimating Taxpayer and Societal Costs

## <u>Rates</u>

### California

The 1991–2008 teen birth rates for California were calculated using teen birth numbers and female teen population estimates from the following sources:

- 1991–2008 birth numbers—California Department of Public Health, Birth Statistical Data Tables: Number of Live Births by Age of Mother, California, 1960–2005 (By Place of Residence) http://www.cdph.ca.gov/data/statistics/Documents/VSC-2008-0201.pdf
- 1991–1999 population estimates—California Department of Finance (2009, May), Race/Ethnic Population With Age and Sex Detail, 1990–1990 http://www.dof.ca.gov/research/demographic/data/race-ethnic/1990-99/
- 2000–2008 population estimates—California Department of Finance (2007, July), Race/Ethnic Population With Age and Sex Detail, 2000–2050 <a href="http://www.dof.ca.gov/research/demographic/data/race-ethnic/2000-50/">http://www.dof.ca.gov/research/demographic/data/race-ethnic/2000-50/</a>

The 2006–2008 teen birth rates by race and ethnicity for California were calculated using teen birth numbers by race and ethnicity and female teen population estimates by race and ethnicity from the following sources:

- 2006–2008 birth numbers by race and ethnicity—California Department of Public Health, Birth Statistical Data Tables: Number of Live Births by Age and Race/Ethnic Group of Mother, California, 2004–2008 (By Place of Residence) http://www.cdph.ca.gov/data/statistics/Documents/VSC-2008-0204.pdf
- 2006–2008 population estimates by race and ethnicity—California Department of Finance (2007, July), Race/Ethnic Population With Age and Sex Detail, 2000–2050 <u>http://www.dof.ca.gov/research/demographic/data/race-ethnic/2000-50/</u>

In calculating rates, we replicated the California department of Public Health's (CDPH) approach. Nevertheless, as we used the most recent population estimates, the rates we report for 1991–2004 might differ slightly from the rates reported by CDPH for these years.

# **California counties**

The 1991–2008 teen birth rates for California counties were calculated using teen birth numbers and female teen population estimates from the following sources:

 1991–1998 birth numbers—California Department of Public Health, Vital Statistics of California 2001: Number and Percent of Live Births to Teen Mothers, California Counties, 1991–2001 (By Place of Residence) <u>http://www.cdph.ca.gov/pubsforms/Pubs/OHIRvsofca2001.pdf</u>

- 1999–2008 birth numbers—California Department of Public Health, Birth Statistical Data Tables: Number and Percent of Live Births to Teen Mothers, California Counties, 1999–2008 (By Place of Residence) http://www.cdph.ca.gov/data/statistics/Documents/VSC-2008-0221.pdf
- 1991–1999 population estimates—California Department of Finance (2009, May), Race/Ethnic Population With Age and Sex Detail, 1990–1990 (http://www.dof.ca.gov/research/demographic/data/race-ethnic/1990-99/)
- 2000–2008 population estimates—California Department of Finance (2007, July), Race/Ethnic Population With Age and Sex Detail, 2000–2050 (http://www.dof.ca.gov/research/demographic/data/race-ethnic/2000-50/)

In calculating rates we replicated the California department of Public Health's (CDPH) approach. Nevertheless, as we used the most recent population estimates, the rates we report for 1991–2004 might differ slightly from the rates reported by CDPH for these years.

# **United States**

The 1991–2008 teen birth rates for the United States were obtained from the following sources:

- 1991–2006—National Vital Statistics Reports (2009, January), 57(7), Births: Final Data for 2006 <u>http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57\_07.pdf</u>
- 2007— National Vital Statistics Reports (2009, March), 57(12), Births: Preliminary Data for 2007 <u>http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57\_12.pdf</u>
- 2008—National Vital Statistics Reports (2010, April), 58(16), Births: Preliminary Data for 2008
  <u>http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58\_16.pdf</u>

### Texas

Teen birth rates for Texas were calculated using the number of live births to mothers aged 15–19 years and teen female population estimates obtained from Texas Department of State Health Services. The latest available teen birth numbers for Texas are for 2006. To estimate Texas's 2007 and 2008 teen birth rate, the trend in the United States teen birth rate from 2006 to 2007 and 2008 was applied to the 2006 Texas rate.

# <u>Costs</u>

# California

In 1997, Maynard estimated the average annual cost to taxpayers in the United States for each birth to a school-age (age 17 years or younger) teen mother. Maynard employed conservative assumptions, and used the most directly attributable costs, including tax revenue costs based on mother's and father's income and consumption, public assistance direct costs such as welfare and medical assistance as well as the associated administrative costs of these programs, costs for increased foster placement and

incarceration of children, and tax revenue costs based on children's incomes and consumption when they reach young adulthood. In addition to taxpayer costs, Maynard estimated total costs to society, which included in addition to taxpayer costs, estimated changes in earnings of the teen mothers, fathers, and children when they reached young adulthood, and privately paid medical costs.

In 2008, Hoffman and Maynard<sup>1</sup> updated the 1997 taxpayer and societal costs. Unlike in 1997, however, costs for teens aged 18–19 years were estimated separately and in addition to costs for teens aged 17 years and younger. Some costs, such as public assistance, were averaged over the first 15 years of parenthood, while others, such as adult children's income-related costs, were averaged over longer periods of time. Appropriately, and unlike other less rigorous cost analyses, Maynard estimated net costs, adjusted for estimated costs in these same categories had the teen mother delayed her birth until age 20 or 21.

The average annual cost to taxpayers per teen birth was \$4,010 for age 17 years and younger and -\$98 for age 18–19 years, in year 2004 dollars. Adjusting for annual inflation, these costs are equivalent to \$4,572 for age 17 years and younger and -\$112 for age 18–19 years, in year 2008 dollars. To calculate the total taxpayer cost for the state each year, we multiplied the number of teen births with the average annual cost over the first 15 years of parenthood, based on Hoffman and Maynard's approach. We calculated the cost separately for teens aged 15–17 years and teens aged 18–19 years, and then summer the two costs to obtain a total taxpayer cost.

The average annual cost to society per teen birth was \$12,112 for age 17 years and younger and \$1,527 for age 18–19 years, in year 2004 dollars. Adjusting for annual inflation, these costs are equivalent to \$13,809 for age 17 years and younger and \$1,741 for age 18–19 years, in year 2008 dollars. To calculate the total societal cost for the state we first multiplied the statewide number of teen births with the average annual cost over the first 15 years of parenthood. We calculated the cost separately for teens aged 15–17 years and teens aged 18–19 years, and then we summer the two costs to obtain a total societal cost.

### **California counties**

To obtain the taxpayer and societal costs for counties, we multiplied the number of teen births in each county with the average annual cost over the first 15 years of parenthood. We calculated the cost separately for teens aged 15–17 years and teens aged 18–19 years, and then we summer the two costs to obtain a total taxpayer and a total societal cost for each county.

# **United States**

To obtain the taxpayer and societal costs for the United States, we multiplied the number of teen births with the average annual cost over the first 15 years of parenthood. We calculated the cost separately for teens aged 15–17 years and teens aged 18–19 years, and then we summer the two costs to obtain a total taxpayer cost and a total societal cost.

<sup>1.</sup> Hoffman, S. D., & Maynard, R. A. (2008). *Kids having kids* (2nd edition). Washington, DC: Urban Institute Press.