

STATE, COUNTY AND REGIONAL-LEVEL ESTIMATES OF WIC ELIGIBLES AND PROGRAM REACH, CALIFORNIA 2011



Center for Family Health
Women, Infants and Children Program

March 2016

Acknowledgements

The *State, County and Regional-level Estimates of WIC Eligibles and Program Reach, California 2011* Report was prepared by the California Department of Public Health, Maternal, Child and Adolescent Health Program for the California Special Supplemental Nutrition Program for Women, Infants and Children (WIC). Methods formulated by the Urban Institute on behalf of the U.S. Department of Agriculture, Food and Nutrition Service (FNS) were adapted, and the following data sources specific to the State of California were used: 2011 population estimates from the California Department of Finance, demographic data from the 2010-2012 American Community Survey (ACS) and infant feeding data among WIC participants from the California WIC Management Information System (WIC MIS).

Contents included in this report may be reproduced with the following citation: *State, County and Regional-level Estimates of WIC Eligibles and Program Reach, California 2011*. Sacramento: California Department of Public Health, Center for Family Health; 2015.

Editors

Carina Saraiva, MPH, Jennifer Troyan, MPH, Melanie S. Dove, ScD, MPH, Chuncui Fan, PhD, MS, and Michael P. Curtis, PhD; California Department of Public Health, Center for Family Health, Maternal, Child and Adolescent Health Program.

Patricia Gradziel, PhD, RD and Jeffrey Johnson; California Department of Public Health, Center for Family Health, California Special Supplemental Nutrition Program for Women, Infants and Children (WIC).

The authors gratefully acknowledge the guidance provided by the WIC Caseload Management Workgroup:

Tracie Barrow MS, RD, CLC, co-lead of work group, Health Program Manager, Sonoma County
Shirlee Runnings, WIC Director, The Resource Connection of Amador and Calaveras Counties, Inc.
Maureen Clark MS, RD, WIC Director, Community Resource Project Inc.
Gloria Pecina MBA, RD, WIC Director, United Health Centers of San Joaquin Valley, Inc.
Gayle Hoxter MPH RD, Chief of Nutrition Services, Riverside County
Wade Ipson RD, Clinic Coordinator, Delta Health Care and Management Service Corp.
Jennifer Jeffries, Deputy Director of Client Services, Public Health Foundation
Sarah Monje, WIC Director, Native American Health Center, Inc.
Debra Leigh MPA, Associate Director, Planned Parenthood of Orange and San Bernardino
Sarah Brett RD, WIC Director, Butte County
Ilse Arrambide, RD IBCLC, Nutrition Service Director, Madera County
Jennifer Chiprich MPH PhD, Los Angeles Biomedical Institute at Harbor- UCLA Medical Center

Contents

Executive Summary	i
Introduction	1
Identifying Underserved Areas in California	2
Methods Overview	3
Geographic Unit of Analysis	4
WIC Program Participation.....	4
Estimating WIC Eligibility and Program Reach among Infants	5
Results: WIC Eligibility and Program Reach among Infants	6
Estimating WIC Eligibility and Program Reach among Pregnant Women	10
Results: WIC Eligibility and Program Reach among Pregnant Women	11
Estimating WIC Eligibility and Program Reach among Postpartum Women	15
Results: WIC Eligibility and Program Reach among Postpartum Women.....	16
Estimating WIC Eligibility and Program Reach among Children	20
Results: WIC Eligibility and Program Reach among Children	21
Characteristics of WIC Eligible Children in California	25
Estimates of Total WIC Eligibility and Program Reach in California	27
Summary	33
References	34

Appendices

Appendix A: Comparison of Methods to Estimate WIC Eligibility and Coverage	A1
Appendix B: Estimating Eligible Infants and Children Using ACS Data.....	B1
Appendix C: Estimating Eligible Pregnant and Postpartum Women.....	C1
Appendix D: Overview of Methods and Calculations for Eligibility Estimates and Data Tables.....	D1
Appendix E: Supplemental Data Tables.....	E1
Appendix F: Local WIC Agencies Providing Services to Participants Residing in a Given County	F1

Figures and Tables

Figure 1. WIC Coverage Rates for All Participants by State, CY 2011	
Table 1. WIC National-level Eligibles and Coverage Rates by Participant Group in an Average Month, 2011	
Figure 2. Public Use Microdata Areas (PUMAs), IPUMS ACS 2010-2012	
Table 2. Steps and Sources for 2011 Estimates of WIC Eligibility of Infants	
Table 3. Number of WIC Eligible Infants, Participants and Eligible Non-Participants, and Program Coverage, 2011	
Figure 3. Infant Coverage Rate by Number of Eligible Non-Participants (ENPs) by County and Region, 2011	
Figure 4. WIC Program Coverage of Infant Population in an Average Month by County or Region, 2011	
Table 4 . Steps and Sources for 2011 Estimates of WIC Eligibility of Pregnant Women	
Table 5. Number of WIC Eligible Pregnant Women, Participants and Eligible Non-Participants by County and Region, 2011	
Figure 5. Prenatal Coverage Rate by Number of Non-Participants (ENPs) by County and Region, 2011	
Figure 6. WIC Program Coverage of Pregnant Women in an Average Month by County or Region, 2011	
Table 6 . Steps and Sources for 2011 Estimates of WIC Eligibility of Postpartum Women	
Table 7. Number of WIC Eligible Postpartum Women, Participants and Eligible Non-Participants by County and Region, 2011	
Figure 7. Postpartum Coverage Rate by Number of Non-Participants (ENPs) by County and Region, 2011	
Figure 8. WIC Program Coverage of Postpartum Women in an Average Month by County or Region, 2011	
Table 8. Steps and Sources for 2011 Estimates of WIC Eligibility of Children	
Table 9. Number of WIC Eligible Children, Participants and Eligible Non-Participants, and Program Coverage, 2011	
Figure 9. Child Coverage Rate by Number of Eligible Non-Participants (ENPs) by County and Region, 2011	
Figure 10. WIC Program Coverage of Children in an Average Month by County or Region, 2011	
Table 10. Characteristics of WIC eligible children 0-4 years in California, IPUMS ACS 2010-2012	
Table 11. WIC Eligibility and Program Coverage in an Average Month by Participant Group, California 2011	
Table 12a. Total WIC Eligibles in an Average Month by Participant Group and County or Region, 2011	
Table 12b. Total WIC Participants in an Average Month by Participant Group and Coverage Rate by County or Region, 2011	
Table 12c. WIC Program Coverage by Participant Group and County or Region, 2011	
Figure 11. Total WIC Coverage Rate by Number of Eligible Non-Participants (ENPs) by County and Region, 2011	
Figure 12. Total WIC Program Coverage Rate in an Average Month by County or Region, 2011	

Executive Summary

The federally-funded Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) strives to improve the health of low-income families who are at nutritional risk by providing nutritious food, education on healthy eating, breastfeeding promotion and support, and referrals to health care and other services. Pregnant and postpartum women, infants, and children under age five who have a nutritional risk are eligible for WIC if they live in households with incomes at or below 185 percent of the Federal Poverty Level (FPL), or if they receive Supplemental Nutrition Assistance Program (SNAP) benefits (CalFresh), Medicaid (Medi-Cal) or Temporary Assistance for Needy Families (TANF).

This report provides county and regional-level estimates of women, infants and children eligible for WIC services in California and the count and percent of WIC-eligibles that received benefits from the program in an average month during calendar year 2011. Estimates of WIC eligibility and program reach are provided for 34 counties and 6 regions (grouped counties) within California to identify underserved communities to target outreach efforts to those in greatest need for WIC services.

Methods

The estimation procedures used in this report adapt USDA methodologies to produce county and regional-level estimates of women, infants and children eligible for WIC in California for calendar year 2011. These estimates generally follow USDA methods¹⁻³ with modifications to incorporate population characteristics and data sources specific to the State of California.

To produce statewide, county and regional-level eligibility estimations requires locally representative data and numerous assumptions that take into account fluctuations in income and enrollment in other safety net programs throughout the year, as well as WIC program certification periods and mothers' breastfeeding practices. For this report, 2011 county-level population counts of infants and children less than 5 years of age derived from the California Department of Finance (DOF) and 2010-2012 American Community Survey data were used to estimate the proportion of children less than 5 years of age living in households that were income ($\leq 185\%$ FPL) or adjunctively eligible (through enrollment in Medi-Cal or CalFresh) for WIC services at any point during the calendar year. These estimates are refined through a series of adjustment factors specific to each subpopulation to produce final estimates of WIC eligibility among infants and children.

The percentage of the eligible population that actively participates in WIC is the program's "coverage rate." For this report, WIC participants are defined as women, infants or children on WIC who receive a food package (or are fully breastfeeding infants) in a given time period. To measure WIC program coverage, average monthly participant data were obtained from the WIC Management Information System (WIC MIS) by population group (prenatal women, postpartum women, infants and children) and county of residence. Coverage rates for all participants by county or region were assessed to identify geographic areas of the state that were underserved in 2011.

Results

In 2011, an estimated 1.85 million women, infants and children were eligible for WIC benefits in California in an average month. Children ages 1 through 4 made up 62 percent of the eligible population, while infants represented nearly 18 percent and pregnant and postpartum women represented 9 and 11 percent, respectively (Table 1). Since eligibility rates reflect population and income differences, as well as differences in adjunctive eligibility (due to participation in Medi-Cal, and CalFresh), estimates of the percent of the total population eligible for WIC varied across geographic areas of the State.

During 2011, 1.47 million women, infants and children participated in the WIC program in an average month, producing a total coverage rate (participants divided by eligibles) of 79 percent. WIC program reach varied across the subgroups. The WIC coverage rate for children (73 percent) was much lower than the rates for other subgroups. Infants and postpartum women had the highest coverage rates of 91 percent (Table 1).

Table 1. WIC Eligibility and Coverage Rates by Participant Group in an Average Month, California 2011

Participant Group	Number Eligible	Percent of All Eligibles	Number of Participants	Coverage Rate
Infants	328,982	17.8	298,335	90.7
Pregnant Women	166,529	9.0	138,872	83.4
Postpartum Women	210,403	11.4	191,905	91.2
Children	1,147,348	61.9	837,126	73.0
All Participant Groups	1,853,262	100	1,466,238	79.1

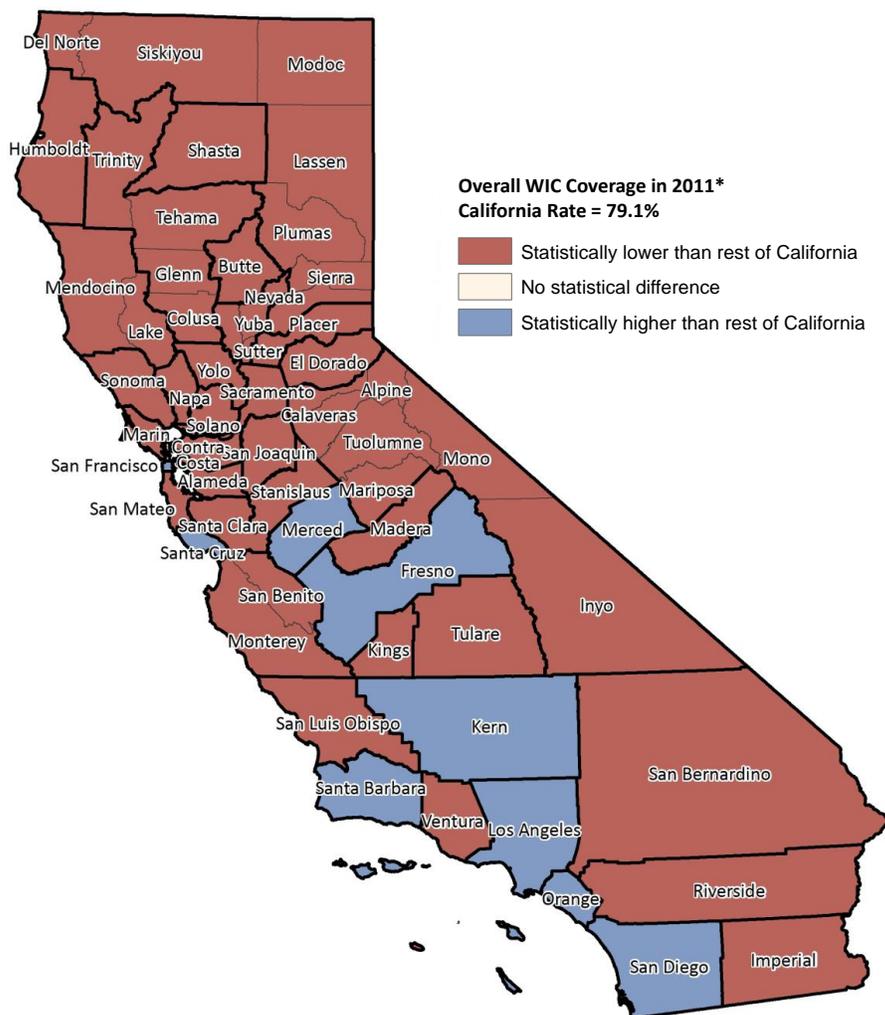
Total WIC Program coverage rates varied substantially across geographic areas of California. The highest total coverage rate in 2011 was 91 percent in Los Angeles County and the lowest was 47 percent in Placer County. Other areas throughout California with lower total WIC Program reach are select counties within the Bay Area and North/Mountain region, and Sacramento, Stanislaus and San Luis Obispo (Table 2 and Figure 1). Most areas with lower total coverage than the rest of the state consistently had lower coverage across all population subgroups (Table 2).

Table 2: WIC Program Coverage by Participant Group and County or Region, 2011

County	WIC Coverage of Infants	WIC Coverage of Pregnant Women	WIC Coverage of Postpartum Women	WIC Coverage of Children	Total WIC Coverage Rate
California	90.7	83.4	91.2	73.0	79.1
County					
Alameda	✗ 87.3	✗ 77.7	✗ 88.4	✗ 66.2	✗ 73.5
Butte	✗ 79.7	✗ 74.3	✗ 80.8	✗ 55.9	✗ 64.4
Contra Costa	✗ 88.9	◇ 84.7	◇ 91.2	✗ 56.4	✗ 68.2
El Dorado	✓ 93.6	◇ 86.5	✓ 94.3	✗ 61.6	✗ 72.5
Fresno	✓ 91.3	✓ 87.0	✗ 90.0	✓ 74.3	✓ 80.2
Humboldt	✗ 78.3	✗ 77.8	✗ 73.7	✗ 54.6	✗ 63.2
Imperial	✗ 86.1	✗ 71.5	✗ 86.8	✗ 70.9	✗ 75.7
Kern	✓ 95.4	✓ 93.8	✓ 94.0	✓ 75.3	✓ 82.4
Kings	✗ 83.6	✗ 74.2	✗ 88.7	✗ 65.2	✗ 71.9
Los Angeles	✓ 98.1	✓ 94.6	✓ 98.5	✓ 87.1	✓ 91.1
Madera	✗ 83.4	✗ 72.6	✗ 86.9	✗ 68.3	✗ 73.6
Marin	✗ 68.8	✗ 70.6	✗ 70.6	✗ 47.4	✗ 55.6
Merced	✓ 97.8	✓ 94.9	✓ 93.8	◇ 73.4	✓ 81.7
Napa	✗ 79.6	✗ 76.0	✗ 81.7	✗ 63.7	✗ 69.5
Orange	✓ 93.5	✓ 88.1	✓ 94.3	✓ 81.8	✓ 85.9
Placer	✗ 62.3	✗ 56.3	✗ 58.8	✗ 39.0	✗ 46.6
Riverside	✗ 87.7	✗ 75.0	✓ 92.1	✗ 65.3	✗ 72.9
Sacramento	✗ 84.9	✗ 76.3	✗ 80.4	✗ 59.4	✗ 67.8
San Bernardino	✗ 89.0	✗ 71.1	◇ 91.5	✗ 64.1	✗ 72.0
San Diego	✓ 91.3	✓ 85.9	✗ 89.0	✓ 80.0	✓ 83.8
San Francisco	✗ 87.2	✗ 78.5	✗ 88.0	✓ 82.2	✓ 83.7
San Joaquin	✗ 87.1	✗ 75.5	✗ 87.3	✗ 62.9	✗ 70.9
San Luis Obispo	✗ 67.4	✗ 58.3	✗ 66.1	✗ 46.9	✗ 53.8
San Mateo	✗ 79.9	✗ 65.9	✗ 81.7	✗ 55.0	✗ 63.4
Santa Barbara	✓ 94.2	✓ 85.8	✓ 98.4	✓ 81.2	✓ 86.1
Santa Clara	✗ 83.2	✗ 73.8	✗ 81.1	✗ 58.7	✗ 66.8
Santa Cruz	✗ 88.4	◇ 84.2	✗ 89.5	✓ 77.2	✓ 81.5
Shasta	✗ 76.8	✗ 78.2	✗ 71.4	✗ 57.1	✗ 64.2
Solano	✗ 76.5	✗ 68.0	✗ 79.0	✗ 50.3	✗ 59.5
Sonoma	✗ 77.5	✗ 71.0	✗ 79.0	✗ 56.5	✗ 63.9
Stanislaus	✗ 81.7	✗ 66.7	✗ 85.3	✗ 57.1	✗ 65.3
Tulare	✗ 84.6	✗ 71.8	✗ 90.2	✗ 65.5	✗ 72.0
Ventura	✗ 85.3	✗ 68.4	✗ 87.7	✗ 63.2	✗ 70.3
Yolo	✗ 87.6	◇ 80.7	◇ 90.1	✗ 65.9	✗ 73.8
Region					
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	◇ 91.6	◇ 84.7	◇ 92.9	✗ 60.6	✗ 71.2
Colusa, Glenn, Tehama and Trinity	◇ 92.2	◇ 85.5	◇ 90.3	✗ 68.5	✗ 76.1
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	✗ 81.8	✓ 88.2	✗ 74.4	✗ 55.5	✗ 64.7
Lake and Mendocino	✗ 81.4	✗ 78.6	✗ 81.3	✗ 60.6	✗ 68.2
Monterey and San Benito	✗ 86.4	✗ 81.6	◇ 90.7	✗ 69.6	✗ 76.2
Sutter and Yuba	✗ 84.9	✗ 78.4	✗ 83.1	✗ 63.1	✗ 70.4

Note: WIC program coverage rate is equal to number of participants divided by number of eligibles. Symbols indicate whether the WIC participation in a given county or region was higher (✓), lower (✗) or not statistically different (◇) than the rest of California (P<0.05, chi-square test).

Figure 1. WIC Program Coverage Rates for All Participants by County or Region of Residence, 2011



*Colors indicate whether the WIC program coverage rate in a given county or region was statistically different than the rest of California ($p < 0.05$, chi-square test).

Discussion

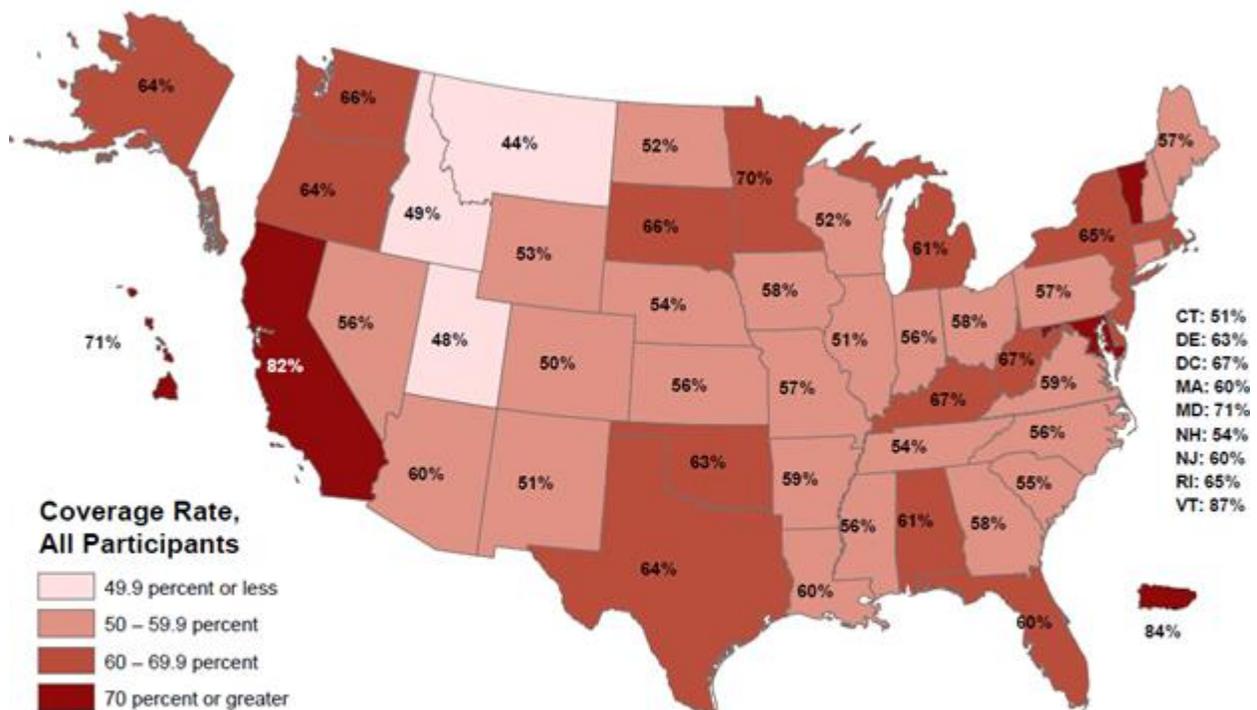
Although California's WIC Program provided services to approximately 1.47 million or 79 percent of all women, infants and children eligible for services, an estimated 390,000 eligibles did not participate in WIC during an average month in 2011. Program eligibility and reach varied across population subgroups and geographic regions of the State. WIC program coverage was lowest amongst children and pregnant women. Outreach efforts should focus on geographic areas where program coverage was lower than the state rate for a given population, as well as areas with a high number of eligibles that are not participating in the WIC Program, with an emphasis on early entry for pregnant women and retention of children ages 1 through 4.

Introduction

The federally-funded Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) strives to improve the health of low-income families who are at nutritional risk by providing nutritious food, education on healthy eating, breastfeeding promotion and support, and referrals to health care and other services. Pregnant and postpartum women, infants, and children under age five are eligible for WIC if they live in households with incomes at or below 185 percent of the Federal Poverty Level (FPL), or if they receive Food Stamps (CalFresh), Medicaid (Medi-Cal) or Temporary Assistance for Needy Families (TANF).

Since WIC is a Federal grant program for which Congress authorizes a specific amount of funds each year, the United States Department of Agriculture (USDA), Food and Nutrition Services (FNS) requires estimates of the total number of individuals eligible for the program to anticipate funding needs. Each year, the USDA produces national and statewide estimates of women, infants and children eligible for WIC services and program coverage rates – the percent of WIC-eligibles who receive benefits from the program.¹⁻³ Nationally there were 14.3 million WIC-eligibles and 9.0 million WIC participants in an average month in 2011, producing a total coverage rate of 63 percent. California has among the highest WIC program coverage rates in the nation with nearly 82 percent of all eligible women, infants and children participating (Figure 1).

Figure 1. Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Coverage Rates for All Participants by State, CY 2011



U.S. Dept. of Agriculture, Food and Nutrition Service, Office of Policy Support. *National and State-Level Estimates of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligibles and Program Reach, 2011*. by Paul Johnson, Linda Giannarelli, Erika Huber, and David Betson. Project Officer: Grant Lovellette. Alexandria, VA: March 2014.

At the national-level, coverage rates vary greatly across the participant subgroups; they were highest for infants (83 percent) and postpartum women (76 percent) and lowest for children (54 percent) (Table 1). Although estimates by participant group are important for program planning purposes, state-level estimates are only reported for all WIC eligible population subgroups combined. An overall statewide estimate of eligibility and program reach has limited relevance for local program planning, particularly in a state as large and diverse as California.

Table 1. WIC National-level Eligibles and Coverage Rates by Participant Group in an Average Month, 2011

Participant Group	Number Eligible	Percent of All Eligibles	Number of Participants	Coverage Rate
Infants	2,516,309	17.6%	2,097,958	83.4%
Pregnant Women	1,294,668	9.1%	899,686	69.5%
Postpartum Women	1,578,471	11.1%	1,199,599	76.0%
Children	8,888,005	62.3%	4,759,632	53.6%
All Participant Groups	14,277,453	100%	8,956,875	62.7%

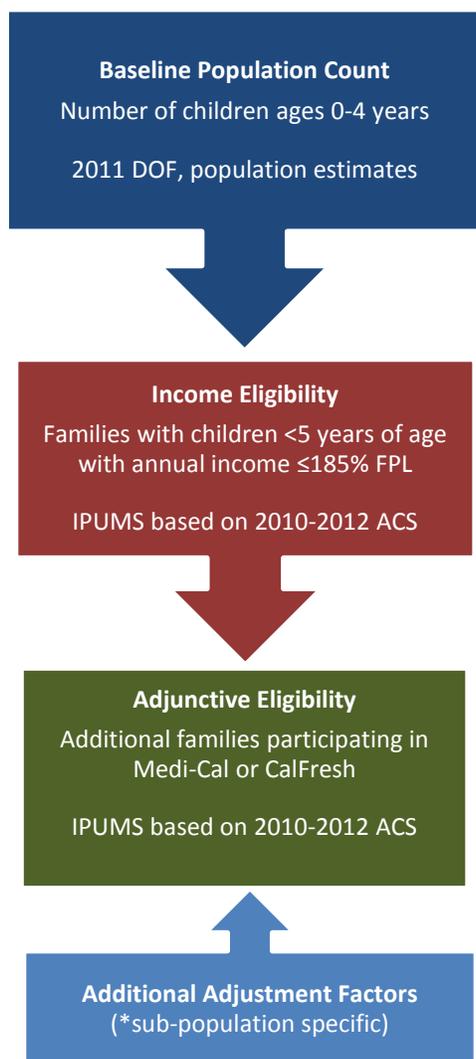
Identifying Underserved Areas in California

Each year, State WIC Programs are required to submit a comprehensive State Plan that describes how the Program plans to expand operations in the most underserved areas (also known as an Affirmative Action Plan).⁴ This report provides WIC eligibility and participation rate data in an average month during 2011 for 34 counties and 6 regions (grouped counties) within California to fulfill the following aims of the WIC Affirmative Action Plan:

1. Estimate the number of women, infants and children eligible for WIC services in California by county/region
2. Measure program participation in relation to the estimated number of eligible within each county/region (coverage rate)
3. Identify geographic areas of the state that are currently underserved (areas with lower coverage rates than the rest of California or a high number of eligible non-participants)
4. Describe underserved communities by sub-populations of WIC clients to target outreach efforts to those in greatest need for WIC services
5. Identify local WIC agencies providing services to WIC participants within each county

Methods Overview

This report adapts USDA methodologies to produce county and regional-level estimates of women, infants and children eligible for WIC in California for an average month in calendar year 2011. These estimates generally follow USDA methodology¹⁻³ with modifications to incorporate population characteristics and data sources specific to the State of California. A summary of how this methodology compares to methods used by the USDA and other states is presented in appendix A. Given these modifications, State estimates of WIC eligibles in this report will vary from what was reported for California by the USDA for 2011.



California's methodology begins with 2011 population counts of infants and children that were derived from the California Department of Finance (DOF), county-specific population estimates of children ages 0-4 years.⁵ Because the DOF projection models take into account recent trends in fertility, mortality, and migration, the estimates represent net migration patterns as well as infant or child deaths for a given county.⁶

The proportion of children living in families with an annual income at or below 185 percent of the Federal Poverty Level (FPL), and therefore income eligible for WIC services in a given county or region, was estimated using the Integrated Public Use Microdata Series (IPUMS), based on the 2010-2012 American Community Survey (ACS).

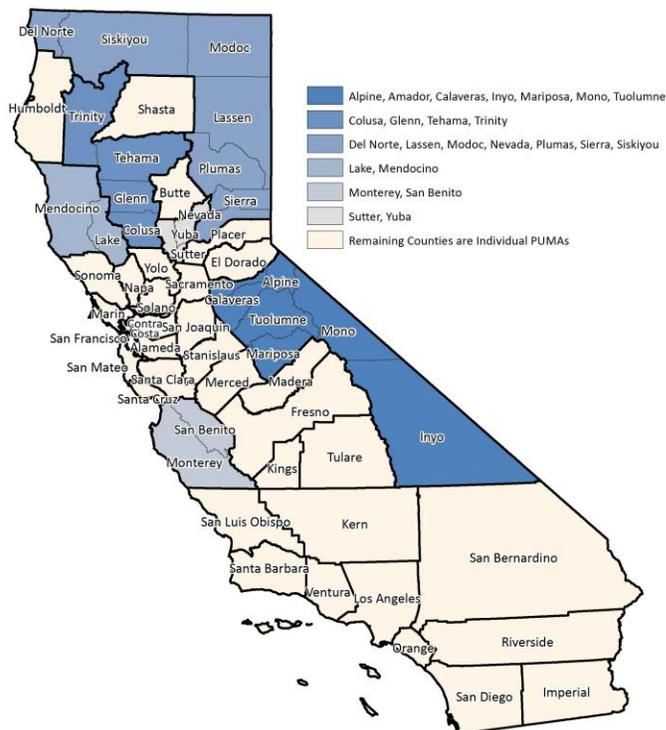
These estimates of income eligible children were then increased to reflect additional families that are adjunctively eligible for WIC services. Children in families that participate in Medi-Cal or CalFresh at any point during the calendar year are granted adjunctive eligibility regardless of their family income. Appendix B provides further details on using ACS data to determine WIC eligibility among children.

To derive final estimates of WIC eligibles, preliminary figures are further refined through a series of adjustment factors specific to each subpopulation to account for income fluctuations and program participation throughout the year, the length of WIC certification periods, and the likelihood that nutritional risk criteria set by the WIC program are met.

Geographic Unit of Analysis

The smallest geographic unit in the IPUMS is the Public Use Microdata Area (PUMA), which is a geographic unit containing at least 100,000 people.⁹ PUMAs do not exactly match up with counties in California (Figure 2). For example, there are 58 counties in California and 233 PUMAs. Most counties in California are composed of more than one PUMA. For example, Los Angeles has 67 PUMAs. However, there were 24 smaller counties that were aggregated to form 6 PUMA regions comprised of more than one county. For these counties, the WIC eligibility rate for the PUMA region was applied to all counties within a given PUMA region.

Figure 2. Public Use Microdata Areas (PUMA), IPUMS ACS 2010-2012



WIC Program Participation

In California, 84 WIC agencies provided services locally to over 1.4 million women, infants and children each month in 2011. For this report, WIC participants are defined as women, infants and children on WIC who receive a food package (or are fully breastfeeding infants) in a given time period. Monthly WIC participant counts were obtained from the WIC Management Information System (WIC MIS) at the State and county level by population group (prenatal women, postpartum women, infants, and children). County was assigned based on recorded family address; those missing address information were assigned to the county in which they were receiving WIC services (i.e. address of WIC clinic). An average monthly caseload estimate was produced for each county or region and the State by summing the 12 monthly participant counts from January 2011 through December 2011 and dividing by 12 months. Appendix E provides county-level average monthly caseload overall and by population group for calendar years 2011 through 2014. A listing of local WIC agencies authorized to provide services to participants residing in a given county is provided in Appendix F.

Estimating WIC Eligibility and Program Reach among Infants

This section provides an overview of methods used to estimate the number of infants that are eligible for WIC services and the proportion that receive WIC services in an average month during the 2011 calendar year. The steps and data sources used to estimate WIC eligibility among infants are summarized in Table 2. Further details on using ACS data to determine WIC eligibility among infants are provided in Appendix B.

Table 2. Steps and Sources for 2011 Estimates of WIC Eligibility of Infants

Step	Description	Source
Demographic Eligibility	Identify infants <1 year of age	California Department of Finance (DOF), 2011 Population Estimates
Income Eligibility	Count as eligible infants if prior year's annual family income is ≤ 185 percent of the federal poverty level.	IPUMS based on 2010-2012 American Community Survey (ACS), Public Use Microdata Sample (PUMS)
Adjunctive Eligibility	Add in as eligible those infants whose household reports enrollment in Medi-Cal or CalFresh at any point during the prior calendar year.	IPUMS based on 2010-2012 American Community Survey (ACS), Public Use Microdata Sample (PUMS)
Annual-to-monthly adjustment^a	Multiply the infant estimates by a factor of 1.16 to account for the impact of monthly fluctuations in income and program participation, and for the impact of 12 month certification periods.	USDA 2014 Report. ³
Adjust for nutritional risk	Multiply the infant estimates by a factor of 0.97 to account for some otherwise-eligible infants that might not be found to be at nutritional risk.	USDA Reports ¹⁻³

^a For more information on computing the annual-to-monthly adjustment factor see Appendix E in Volume II, USDA Report (2014): U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis. National and State-Level Estimates of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligibles and Program Reach, 2011, by Paul Johnson, Linda Giannarelli, Erika Huber, and David Betson. Project Officer: Grant Lovellette. Alexandria, VA: March 2014 <http://www.fns.usda.gov/sites/default/files/WICEligibles2011Volume2.pdf>

Results: WIC Eligibility and Program Reach among Infants

An estimated 328,982 (range 326,168 to 331,796) infants were eligible for WIC benefits in California in an average month in 2011 (Table 3). During 2011, 298,335 infants participated in the WIC program in an average month, producing a coverage rate (participants divided by eligibles) of 91 percent (Table 3). WIC program reach among infants varied across California from a high of 98 percent of eligible infants in Los Angeles and Merced to a low of 62 percent in Placer County. Other counties with a low program reach (less than 70 percent) among the infant population were San Luis Obispo (67 percent) and Marin (69 percent) (Figures 3 and 4).

For program planning purposes it may be important to consider not just areas with low coverage rates, but also areas with a high number of WIC eligibles that did not participate in WIC. Statewide, an estimated 30,647 WIC-eligible infants did not participate in WIC in an average month during 2011. Figure 3 shows a scatterplot of the number of WIC eligible infant non-participants (ENPs) by the percent of WIC eligibles infants that participated (i.e. coverage rate). Areas with lower infant coverage rates than the rest of the state and high numbers of infant ENPs include Riverside (2,657 ENPs), San Bernardino (2,579 ENPs), Sacramento (2,004 ENPs), Santa Clara (1,625 ENPs) and others. Although San Diego and Los Angeles counties had infant coverage rates that were higher than the rest of the state, they also had a high number of infant ENPs, with 2,147 and 1,778 infant ENPs, respectively.

Table 3. Number of WIC Eligible Infants, Participants and Eligible Non-Participants, and Program Coverage, 2011

County	Eligible Infants		Participants	Eligible Non-participants	Program Coverage	
	Estimate	Range (Low-High)			Rate	(Range)
California	328,982	(326,168 - 331,796)	298,335	30,647	90.7	(89.9 - 91.5)
County						
Alameda	9,348	(8,871 - 9,826)	8,164	1,184	✗	87.3 (83.1 - 92.0)
Butte	1,813	(1,626 - 2,000)	1,445	368	✗	79.7 (72.3 - 88.9)
Contra Costa	5,617	(5,226 - 6,009)	4,994	623	✗	88.9 (83.1 - 95.6)
El Dorado	687	(524 - 850)	643	44	✓	93.6 (75.6 - 100.0)
Fresno	13,736	(13,319 - 14,153)	12,544	1,192	✓	91.3 (88.6 - 94.2)
Humboldt	1,158	(1,026 - 1,290)	907	251	✗	78.3 (70.3 - 88.4)
Imperial	2,248	(2,023 - 2,474)	1,936	312	✗	86.1 (78.3 - 95.7)
Kern	11,514	(11,099 - 11,929)	10,982	532	✓	95.4 (92.1 - 98.9)
Kings	2,096	(1,936 - 2,255)	1,752	344	✗	83.6 (77.7 - 90.5)
Los Angeles	93,420	(92,165 - 94,676)	91,642	1,778	✓	98.1 (96.8 - 99.4)
Madera	2,287	(2,111 - 2,463)	1,908	379	✗	83.4 (77.5 - 90.4)
Marin	935	(774 - 1,096)	643	292	✗	68.8 (58.7 - 83.1)
Merced	3,526	(3,236 - 3,816)	3,448	78	✓	97.8 (90.4 - 100.0)
Napa	972	(835 - 1,109)	774	198	✗	79.6 (69.8 - 92.7)
Orange	21,053	(20,403 - 21,703)	19,676	1,377	✓	93.5 (90.7 - 96.4)
Placer	1,569	(1,337 - 1,801)	977	592	✗	62.3 (54.2 - 73.1)
Riverside	21,682	(20,924 - 22,439)	19,025	2,657	✗	87.7 (84.8 - 90.9)
Sacramento	13,282	(12,718 - 13,845)	11,278	2,004	✗	84.9 (81.5 - 88.7)
San Bernardino	23,370	(22,593 - 24,147)	20,791	2,579	✗	89.0 (86.1 - 92.0)
San Diego	24,630	(23,847 - 25,413)	22,483	2,147	✓	91.3 (88.5 - 94.3)
San Francisco	3,419	(3,093 - 3,745)	2,982	437	✗	87.2 (79.6 - 96.4)
San Joaquin	8,115	(7,675 - 8,555)	7,070	1,045	✗	87.1 (82.6 - 92.1)
San Luis Obispo	1,609	(1,415 - 1,804)	1,085	524	✗	67.4 (60.1 - 76.7)
San Mateo	3,662	(3,372 - 3,952)	2,926	736	✗	79.9 (74.0 - 86.8)
Santa Barbara	3,816	(3,522 - 4,111)	3,593	223	✓	94.2 (87.4 - 100.0)
Santa Clara	9,661	(9,092 - 10,231)	8,036	1,625	✗	83.2 (78.5 - 88.4)
Santa Cruz	2,030	(1,839 - 2,220)	1,794	236	✗	88.4 (80.8 - 97.6)
Shasta	1,678	(1,491 - 1,866)	1,288	390	✗	76.8 (69.0 - 86.4)
Solano	3,219	(2,962 - 3,477)	2,461	758	✗	76.5 (70.8 - 83.1)
Sonoma	3,171	(2,845 - 3,497)	2,459	712	✗	77.5 (70.3 - 86.4)
Stanislaus	5,773	(5,445 - 6,101)	4,718	1,055	✗	81.7 (77.3 - 86.6)
Tulare	7,303	(6,976 - 7,631)	6,175	1,128	✗	84.6 (80.9 - 88.5)
Ventura	6,410	(6,035 - 6,785)	5,466	944	✗	85.3 (80.6 - 90.6)
Yolo	1,342	(1,156 - 1,529)	1,176	166	✗	87.6 (76.9 - 100.0)
Region						
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	919	(724 - 1,114)	842	77	♦	91.6 (75.6 - 100.0)
Colusa, Glenn, Tehama and Trinity	1,347	(1,241 - 1,452)	1,242	105	♦	92.2 (85.5 - 100.0)
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	1,437	(1,249 - 1,624)	1,175	262	✗	81.8 (72.4 - 94.1)
Lake and Mendocino	1,470	(1,352 - 1,588)	1,197	273	✗	81.4 (75.4 - 88.5)
Monterey and San Benito	5,703	(5,378 - 6,027)	4,925	778	✗	86.4 (81.7 - 91.6)
Sutter and Yuba	2,009	(1,821 - 2,197)	1,705	304	✗	84.9 (77.6 - 93.6)

Note: WIC program coverage rate is equal to number of participants divided by number of eligibles.

Symbols indicate whether the WIC participation in a given county or region was higher (✓), lower (✗) or not statistically different (*) than the rest of California (P<0.05, chi-square test).

Figure 3. Infant Coverage Rate by Number of Eligible Non-Participants (ENPs) by County and Region, 2011

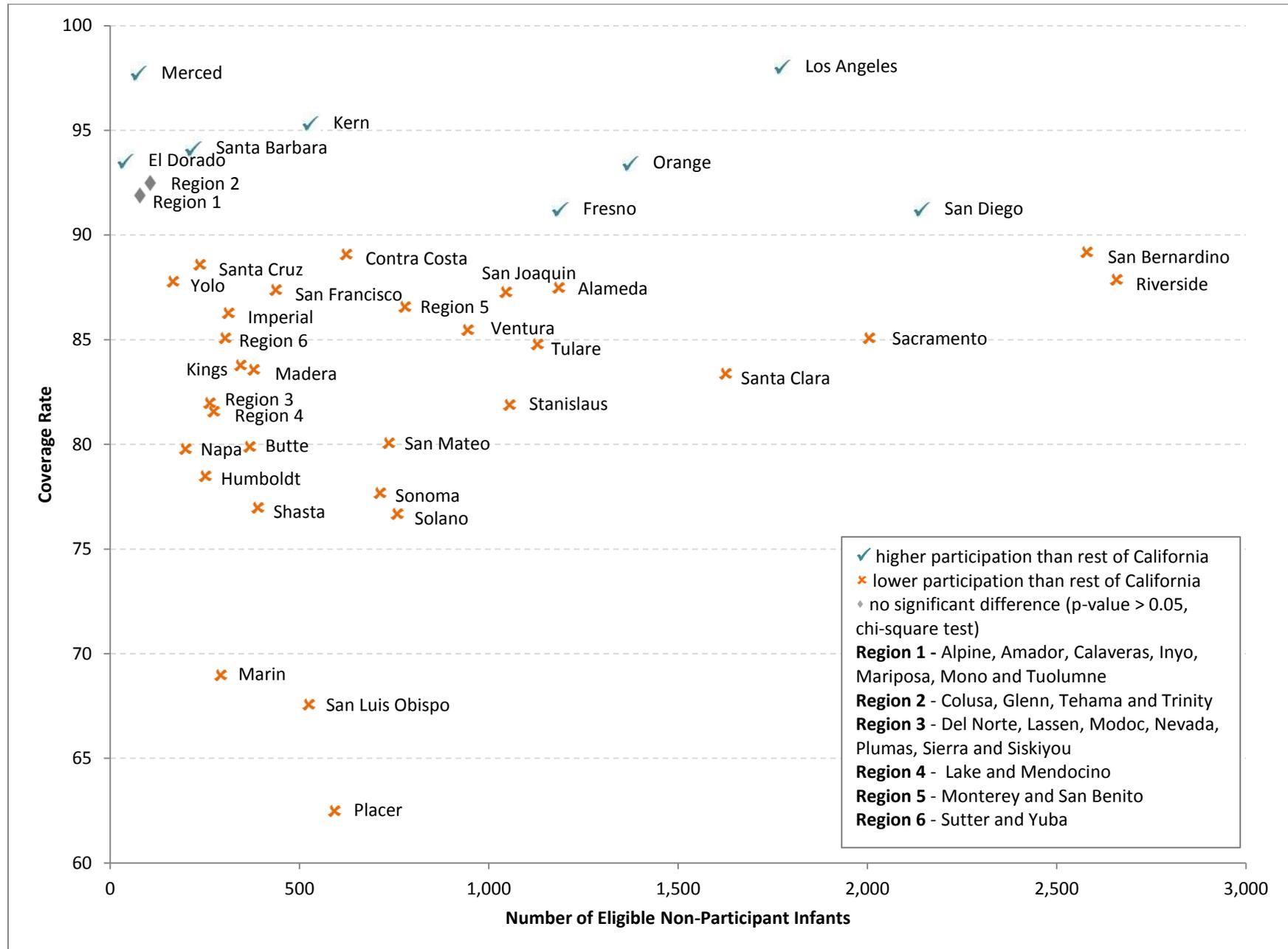
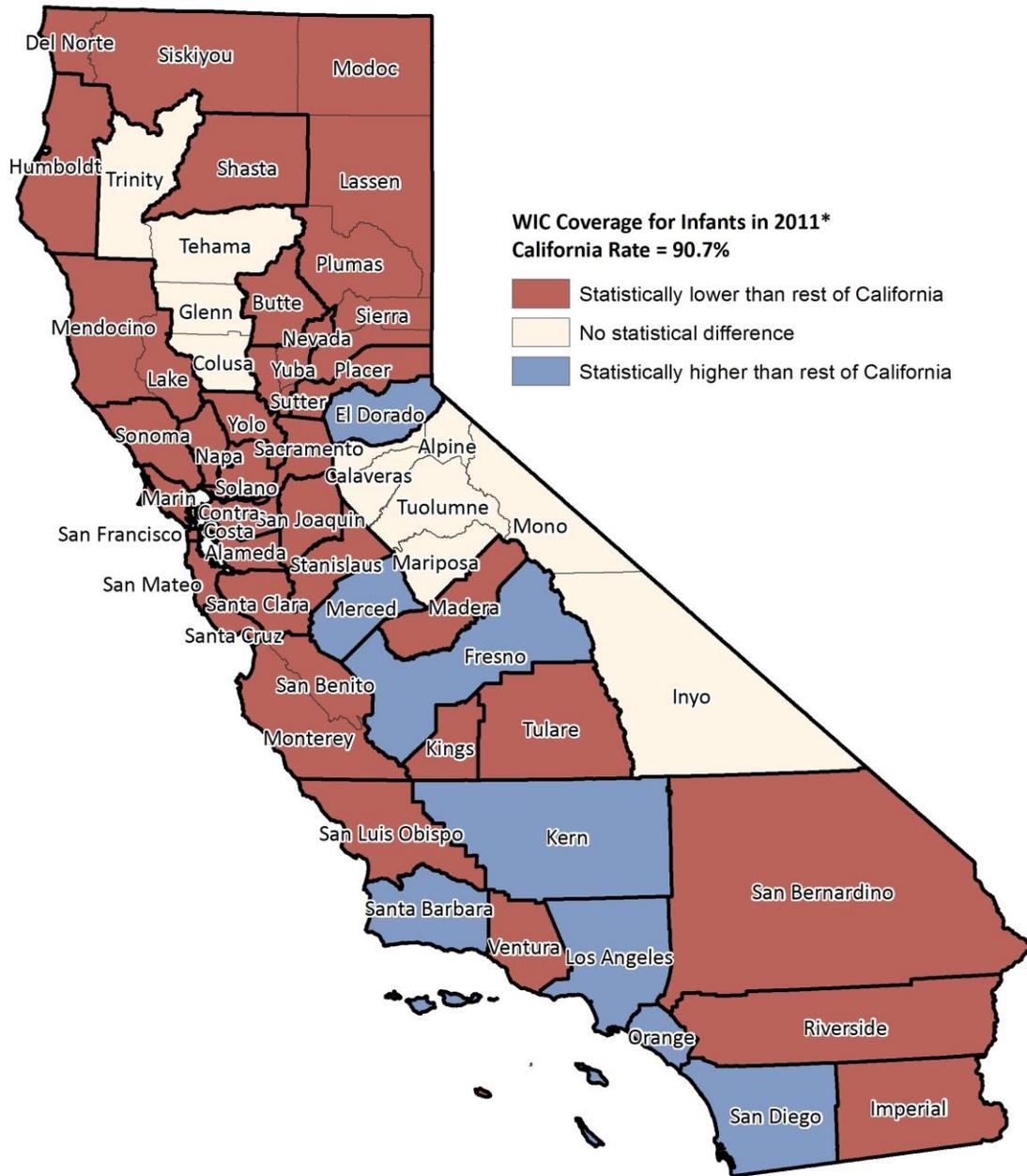


Figure 4: WIC Program Coverage of Infant Population in an Average Month by County or Region, 2011



*Colors indicate whether the WIC program coverage rate in a given county or region was statistically different than the rest of California ($p < 0.05$, chi-square test).

Estimating WIC Eligibility and Program Reach among Pregnant Women

Estimates of the number of WIC-eligible pregnant women are based upon adjusted counts of WIC-eligible infants. The adjustments made to the infant estimates to arrive at the final estimates of pregnant women are summarized in Table 4.

Table 4. Steps and Sources for 2011 Estimates of WIC Eligibility of Pregnant Women

Step	Description	Source
Starting point	Use the final estimate of eligible infants as starting point.	Infants as estimated using methods outlined in table 2.
Adjust for multiple births and infant and fetal deaths	The number of pregnant women is not exactly equal to the number of infants born in a given year. Multiply by a factor of 0.98 to account for the impact of multiple births and infant and fetal deaths.	California Department of Public Health, Vital Statistics Data, 2009-2011
Adjust for length of pregnancy and lower eligibility during pregnancy compared to after birth.	Multiply the estimate of pregnant women by a factor of 0.533(0.75 X 0.71) to account for 9 months of pregnancy (factor of 0.75) and to account for lower likelihood of financial eligibility during pregnancy versus after birth (factor of 0.71).	USDA Reports ¹⁻³
Adjust for nutritional risk	Multiply the estimates by a factor of 0.97 to reflect that not all eligible pregnant women will meet nutritional risk criterion.	USDA Reports ¹⁻³

Results: WIC Eligibility and Program Reach among Pregnant Women

An estimated 166,529 (range 165,105 to 167,953) pregnant women were eligible for WIC in California in an average month in 2011 (Tables 5). During 2011, 138,872 pregnant women participated in WIC producing a WIC program coverage rate of 83 percent. Similar to geographic patterns of WIC program coverage among the infant population, WIC program reach among pregnant women ranged from a high of 95 percent of eligible women in Los Angeles and Merced to a low of 56 percent in Placer County. Other counties with a lower program reach among the prenatal population were San Luis Obispo, San Mateo, Stanislaus, Solano, and Ventura (Figures 5 and 6).

In 2011, an estimated 27,657 pregnant women were eligible for WIC but did not participate in an average month. Figure 5 shows a scatterplot of the number of pregnant ENPs by the percent of WIC eligible pregnant women that participated (i.e. coverage rate). Among areas with prenatal coverage rates that were lower than the rest of California, San Bernardino (3,424 ENPs), Riverside (2,746 ENPs), Sacramento (1,596 ENPs), and Santa Clara (1,281 ENPs) counties had the highest number of pregnant ENPs. Although Los Angeles and San Diego counties had coverage rates for pregnant women that were higher than the rest of the state, they still had high numbers of pregnant women that did not participate in WIC in an average month at 2,538 and 1,756 ENPs, respectively.

Table 5. Number of WIC Eligible Pregnant Women, Participants and Eligible Non-Participants, and Program Coverage, 2011

County	Eligible Pregnant Women		Participants	Eligible Non-participants	Program Coverage	
	Number	Range (Low-High)			Rate	(Range)
California	166,529	(165,105 - 167,953)	138,872	27,657	83.4	(82.7 - 84.1)
County						
Alameda	4,732	(4,490 - 4,974)	3,675	1,057	✘	77.7 (73.9 - 81.8)
Butte	918	(823 - 1,013)	682	236	✘	74.3 (67.3 - 82.9)
Contra Costa	2,843	(2,645 - 3,041)	2,409	434	♦	84.7 (79.2 - 91.1)
El Dorado	348	(265 - 430)	301	47	♦	86.5 (70.0 - 100.0)
Fresno	6,953	(6,742 - 7,164)	6,052	901	✓	87.0 (84.5 - 89.8)
Humboldt	586	(519 - 653)	456	130	✘	77.8 (69.8 - 87.9)
Imperial	1,138	(1,024 - 1,252)	814	324	✘	71.5 (65.0 - 79.5)
Kern	5,828	(5,618 - 6,038)	5,464	364	✓	93.8 (90.5 - 97.3)
Kings	1,061	(980 - 1,142)	787	274	✘	74.2 (68.9 - 80.3)
Los Angeles	47,289	(46,654 - 47,924)	44,751	2,538	✓	94.6 (93.4 - 95.9)
Madera	1,158	(1,069 - 1,247)	841	317	✘	72.6 (67.4 - 78.7)
Marin	473	(392 - 555)	334	139	✘	70.6 (60.2 - 85.2)
Merced	1,785	(1,638 - 1,932)	1,694	91	✓	94.9 (87.7 - 100.0)
Napa	492	(423 - 561)	374	118	✘	76.0 (66.7 - 88.4)
Orange	10,657	(10,328 - 10,986)	9,385	1,272	✓	88.1 (85.4 - 90.9)
Placer	794	(677 - 912)	447	347	✘	56.3 (49.0 - 66.0)
Riverside	10,975	(10,592 - 11,359)	8,229	2,746	✘	75.0 (72.4 - 77.7)
Sacramento	6,723	(6,438 - 7,008)	5,127	1,596	✘	76.3 (73.2 - 79.6)
San Bernardino	11,830	(11,437 - 12,223)	8,406	3,424	✘	71.1 (68.8 - 73.5)
San Diego	12,468	(12,071 - 12,864)	10,712	1,756	✓	85.9 (83.3 - 88.7)
San Francisco	1,731	(1,565 - 1,896)	1,358	373	✘	78.5 (71.6 - 86.8)
San Joaquin	4,108	(3,885 - 4,330)	3,100	1,008	✘	75.5 (71.6 - 79.8)
San Luis Obispo	815	(716 - 913)	475	340	✘	58.3 (52.0 - 66.3)
San Mateo	1,854	(1,707 - 2,000)	1,221	633	✘	65.9 (61.1 - 71.5)
Santa Barbara	1,932	(1,783 - 2,081)	1,657	275	✓	85.8 (79.6 - 92.9)
Santa Clara	4,890	(4,602 - 5,179)	3,609	1,281	✘	73.8 (69.7 - 78.4)
Santa Cruz	1,027	(931 - 1,124)	865	162	♦	84.2 (77.0 - 92.9)
Shasta	850	(755 - 945)	665	185	✘	78.2 (70.4 - 88.1)
Solano	1,630	(1,499 - 1,760)	1,109	521	✘	68.0 (63.0 - 74.0)
Sonoma	1,605	(1,440 - 1,770)	1,139	466	✘	71.0 (64.4 - 79.1)
Stanislaus	2,922	(2,756 - 3,088)	1,948	974	✘	66.7 (63.1 - 70.7)
Tulare	3,697	(3,531 - 3,863)	2,655	1,042	✘	71.8 (68.7 - 75.2)
Ventura	3,244	(3,055 - 3,434)	2,218	1,026	✘	68.4 (64.6 - 72.6)
Yolo	680	(585 - 774)	549	131	♦	80.7 (70.9 - 93.8)
Region						
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	465	(366 - 564)	394	71	♦	84.7 (69.9 - 100.0)
Colusa, Glenn, Tehama and Trinity	682	(628 - 735)	583	99	♦	85.5 (79.3 - 92.8)
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	727	(632 - 822)	641	86	✓	88.2 (78.0 - 100.0)
Lake and Mendocino	744	(684 - 804)	585	159	✘	78.6 (72.8 - 85.5)
Monterey and San Benito	2,887	(2,722 - 3,051)	2,357	530	✘	81.6 (77.3 - 86.6)
Sutter and Yuba	1,017	(922 - 1,112)	797	220	✘	78.4 (71.7 - 86.4)

Note: WIC program coverage rate is equal to number of participants divided by number of eligibles.

Symbols indicate whether the WIC participation in a given county or region was higher (✓), lower (✘) or not statistically different (♦) than the rest of California (P<0.05, chi-square test).

Figure 5. Prenatal Coverage Rate by Number of Eligible Non-Participants (ENPs) by County and Region, 2011

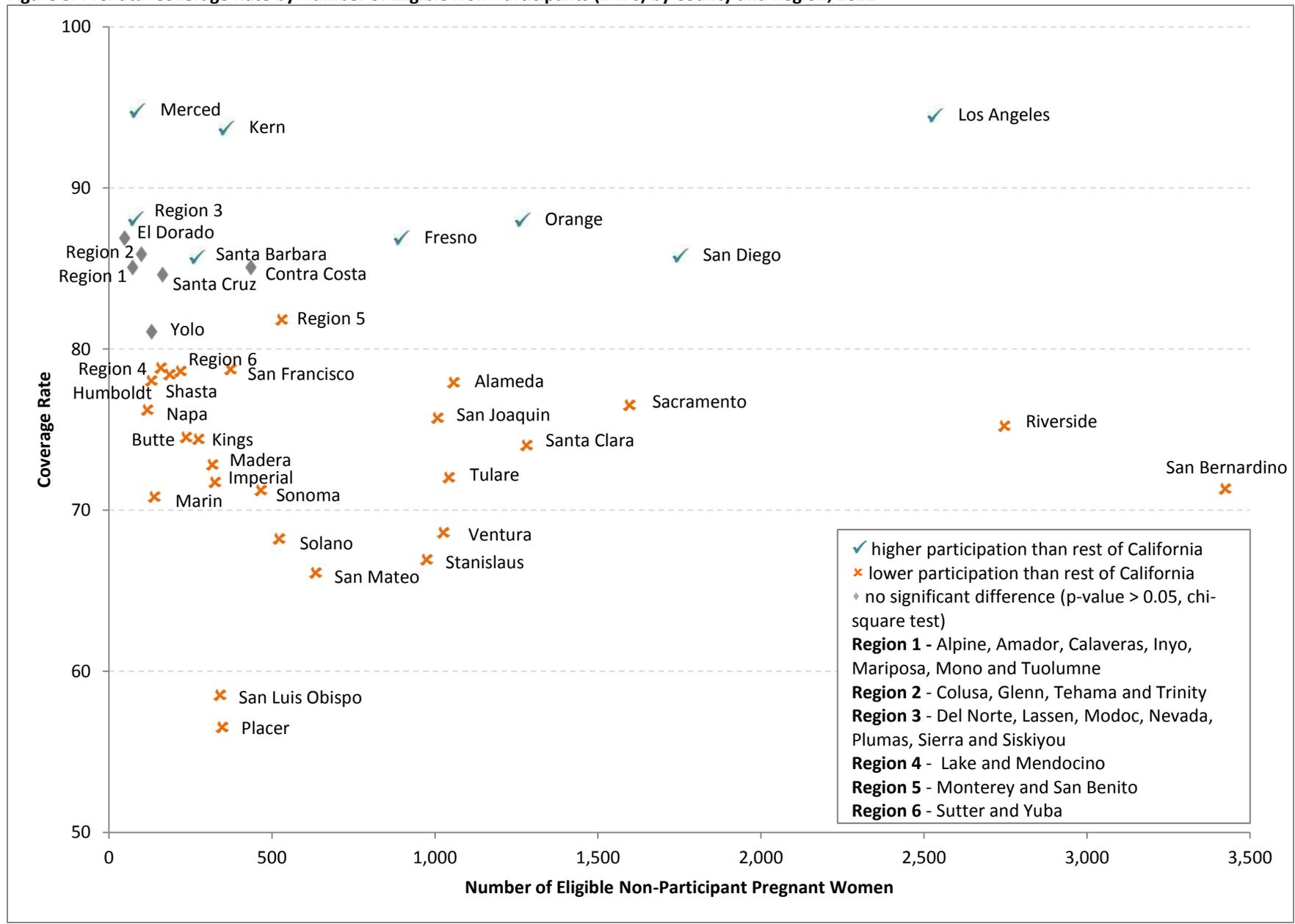
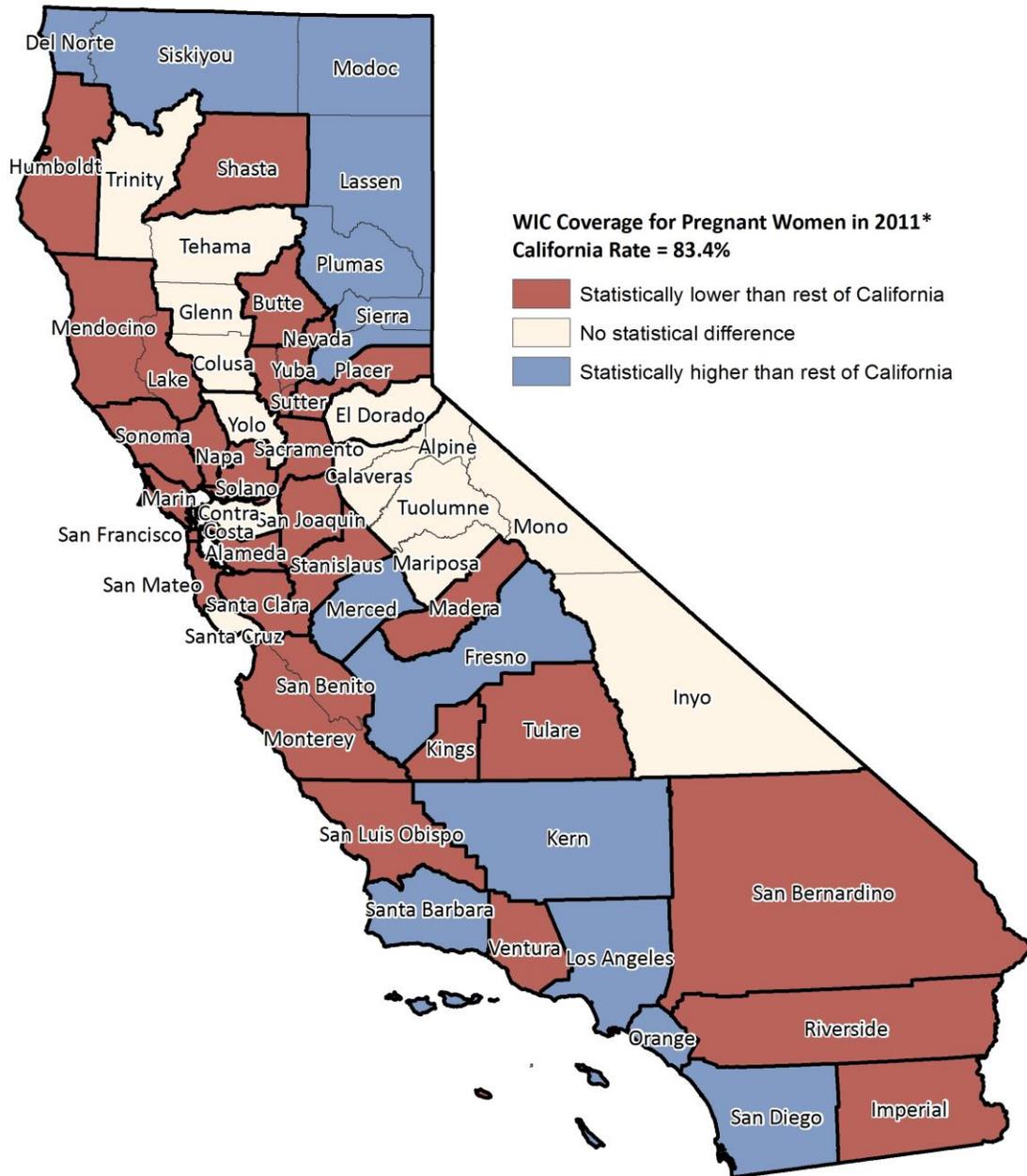


Figure 6: WIC Program Coverage of Pregnant Women in an Average Month by County or Region, 2011



*Colors indicate whether the WIC program coverage rate in a given county or region was statistically different than the rest of California ($p < 0.05$, chi-square test).

Estimating WIC Eligibility and Program Reach among Postpartum Women

Similar to the prenatal population estimates, the number of WIC-eligible postpartum women is based upon adjusted counts of WIC-eligible infants. However, breastfeeding behavior is an important additional factor in estimating WIC eligible postpartum women. Appendix C describes in detail the methodology for estimating WIC eligibility among postpartum women, including how breastfeeding rates and additional adjustment factors are used in the estimation. A summary of the adjustments made to the infant estimates to arrive at the final estimates of postpartum women is provided in Table 6 below.

Table 6. Steps and Sources for 2011 Estimates of WIC Eligibility of Postpartum Women

Step	Description	Source
Starting point	Use the final estimate of eligible infants as starting point.	Infants as estimated using methods outlined in table 2.
Adjust for multiple births and infant and fetal deaths	The number of postpartum women is not exactly equal to the number of infants born in a given year. Multiply by a factor of 0.98 to account for the impact of multiple births and infant and fetal deaths.	California Department of Public Health, Vital Statistics Data, 2009-2011
Adjust for breastfeeding initiation, duration and cessation, certification periods, and change in eligibility throughout the year.	<p>Estimate rates of in-hospital breastfeeding and any breastfeeding at 6 months postpartum among WIC participating mothers in 2011 (65% and 32%, respectively).</p> <p>Adjust these estimates to approximate breastfeeding for WIC-eligible mothers (using a factor of 1.056 and 1.15 for breastfeeding initiation and 6 month duration, respectively).</p> <p>Multiply these estimates by a factor to account for the interaction between women's certification periods, breastfeeding cessation, and that some women may not be eligible throughout the year.</p> <p>Estimate the total number of eligible postpartum women as sum of eligible breastfeeding and non-breastfeeding in the first half of the year, and eligible breastfeeding women for second half of the year (for further details see Appendix C).</p>	<p>WIC MIS, 2011</p> <p>USDA Reports¹⁻³</p>
Adjust for nutritional risk	Assume all postpartum women are at nutritional risk (factor of 1.0)	USDA Reports ¹⁻³

Results: WIC Eligibility and Program Reach among Postpartum Women

An estimated 210,403 (range 208,603 to 212,202) postpartum women were eligible for WIC in California in an average month in 2011. During 2011, 191,905 postpartum women participated in the WIC program in an average month, producing a WIC program coverage rate of 91 percent (Table 7). WIC program reach among postpartum women ranged from a high of 98 percent of eligible women in Los Angeles and Santa Barbara to a low of 59 percent in Placer County. Program reach among the postpartum population was also much lower (below 70 percent) than the rest of the state for San Luis Obispo at 66 percent (Figures 7 and 8).

Although most eligible postpartum women (91 percent) participated in WIC, an estimated 18,498 eligible postpartum women did not participate in an average month in 2011. Figure 7 shows a scatterplot of the number of postpartum ENPs by the percent of WIC eligible postpartum women that participated (i.e. coverage rate). Among areas with postpartum coverage rates that were lower than the rest of the State, San Diego (1,900 ENPs) had the most postpartum ENPs, followed by Sacramento (1,658 ENPs) and Santa Clara (1,209 ENPs). Although San Bernardino and Riverside counties had postpartum coverage rates that were no different or higher than the rest of the State, they both had a significant number of postpartum ENPs, at 1,156 and 1,086 postpartum ENPs, respectively.

Table 7. Number of WIC Eligible Postpartum Women, Participants and Eligible Non-Participants, and Program Coverage, 2011

County	Eligible Postpartum Women Number	Range (Low-High)	Participants	Eligible Non- participants	Program Coverage Rate	Program Coverage (Range)
California	210,403	(208,603 - 212,202)	191,905	18,498	91.2	(90.4 - 92.0)
County						
Alameda	6,378	(6,052 - 6,703)	5,640	738	✘	88.4 (84.1 - 93.2)
Butte	1,169	(1,048 - 1,290)	945	224	✘	80.8 (73.3 - 90.2)
Contra Costa	3,806	(3,541 - 4,071)	3,471	335	♦	91.2 (85.3 - 98.0)
El Dorado	475	(363 - 588)	448	27	✓	94.3 (76.2 - 100.0)
Fresno	7,986	(7,744 - 8,229)	7,186	800	✘	90.0 (87.3 - 92.8)
Humboldt	817	(724 - 910)	602	215	✘	73.7 (66.2 - 83.1)
Imperial	1,278	(1,150 - 1,406)	1,109	169	✘	86.8 (78.9 - 96.4)
Kern	6,705	(6,463 - 6,947)	6,304	401	✓	94.0 (90.7 - 97.5)
Kings	1,249	(1,154 - 1,344)	1,108	141	✘	88.7 (82.4 - 96.0)
Los Angeles	59,266	(58,470 - 60,062)	58,362	904	✓	98.5 (97.2 - 99.8)
Madera	1,511	(1,395 - 1,627)	1,313	198	✘	86.9 (80.7 - 94.1)
Marin	756	(626 - 886)	534	222	✘	70.6 (60.3 - 85.3)
Merced	2,141	(1,965 - 2,317)	2,009	132	✓	93.8 (86.7 - 100.0)
Napa	689	(592 - 786)	563	126	✘	81.7 (71.6 - 95.1)
Orange	13,780	(13,355 - 14,206)	12,999	781	✓	94.3 (91.5 - 97.3)
Placer	1,075	(917 - 1,234)	632	443	✘	58.8 (51.2 - 68.9)
Riverside	13,663	(13,186 - 14,141)	12,577	1,086	✓	92.1 (88.9 - 95.4)
Sacramento	8,457	(8,098 - 8,816)	6,799	1,658	✘	80.4 (77.1 - 84.0)
San Bernardino	13,654	(13,200 - 14,108)	12,498	1,156	♦	91.5 (88.6 - 94.7)
San Diego	17,207	(16,661 - 17,754)	15,307	1,900	✘	89.0 (86.2 - 91.9)
San Francisco	2,639	(2,387 - 2,890)	2,322	317	✘	88.0 (80.3 - 97.3)
San Joaquin	5,072	(4,797 - 5,347)	4,428	644	✘	87.3 (82.8 - 92.3)
San Luis Obispo	1,143	(1,005 - 1,281)	756	387	✘	66.1 (59.0 - 75.2)
San Mateo	2,472	(2,277 - 2,668)	2,020	452	✘	81.7 (75.7 - 88.7)
Santa Barbara	2,659	(2,454 - 2,864)	2,617	42	✓	98.4 (91.4 - 100.0)
Santa Clara	6,410	(6,032 - 6,788)	5,201	1,209	✘	81.1 (76.6 - 86.2)
Santa Cruz	1,478	(1,339 - 1,617)	1,323	155	✘	89.5 (81.8 - 98.8)
Shasta	1,103	(980 - 1,227)	788	315	✘	71.4 (64.2 - 80.4)
Solano	2,038	(1,875 - 2,201)	1,611	427	✘	79.0 (73.2 - 85.9)
Sonoma	2,278	(2,044 - 2,512)	1,800	478	✘	79.0 (71.7 - 88.1)
Stanislaus	3,522	(3,321 - 3,722)	3,006	516	✘	85.3 (80.8 - 90.5)
Tulare	4,294	(4,102 - 4,487)	3,873	421	✘	90.2 (86.3 - 94.4)
Ventura	4,066	(3,828 - 4,304)	3,567	499	✘	87.7 (82.9 - 93.2)
Yolo	897	(772 - 1,022)	808	89	♦	90.1 (79.1 - 100.0)
Region						
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	603	(475 - 732)	560	43	♦	92.9 (76.5 - 100.0)
Colusa, Glenn, Tehama and Trinity	862	(794 - 929)	778	84	♦	90.3 (83.7 - 98.0)
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	963	(838 - 1,089)	716	247	✘	74.4 (65.7 - 85.4)
Lake and Mendocino	995	(915 - 1,075)	809	186	✘	81.3 (75.3 - 88.4)
Monterey and San Benito	3,810	(3,593 - 4,027)	3,457	353	♦	90.7 (85.8 - 96.2)
Sutter and Yuba	1,269	(1,150 - 1,388)	1,055	214	✘	83.1 (76.0 - 91.7)

Note: WIC program coverage rate is equal to number of participants divided by number of eligibles.

Symbols indicate whether the WIC participation in a given county or region was higher (✓), lower (✘) or not statistically different (♦) than the rest of California (P<0.05, chi-square test).

Figure 7. Postpartum Coverage Rate by Number of Eligible Non-Participants (ENPs) by County and Region, 2011

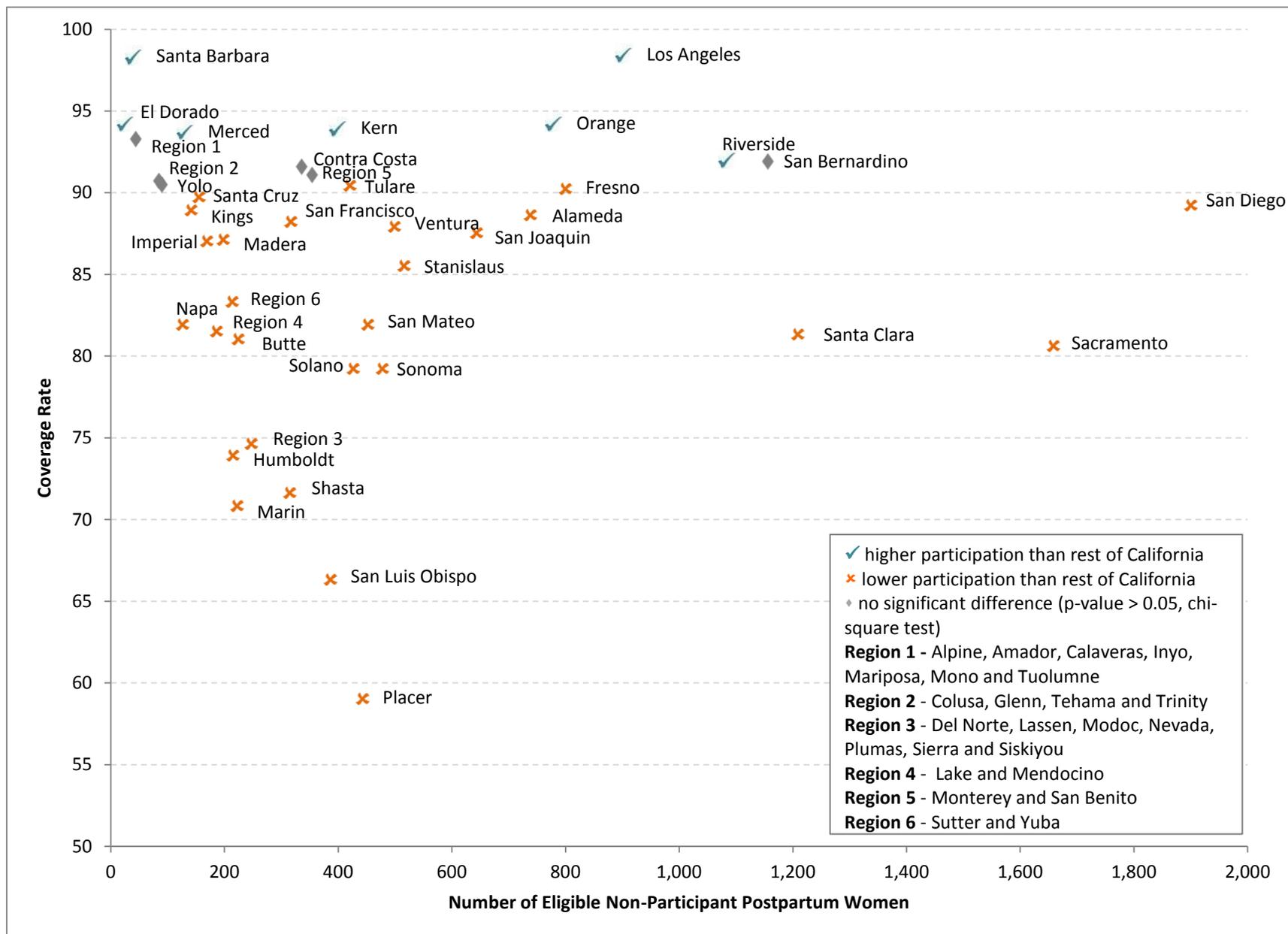
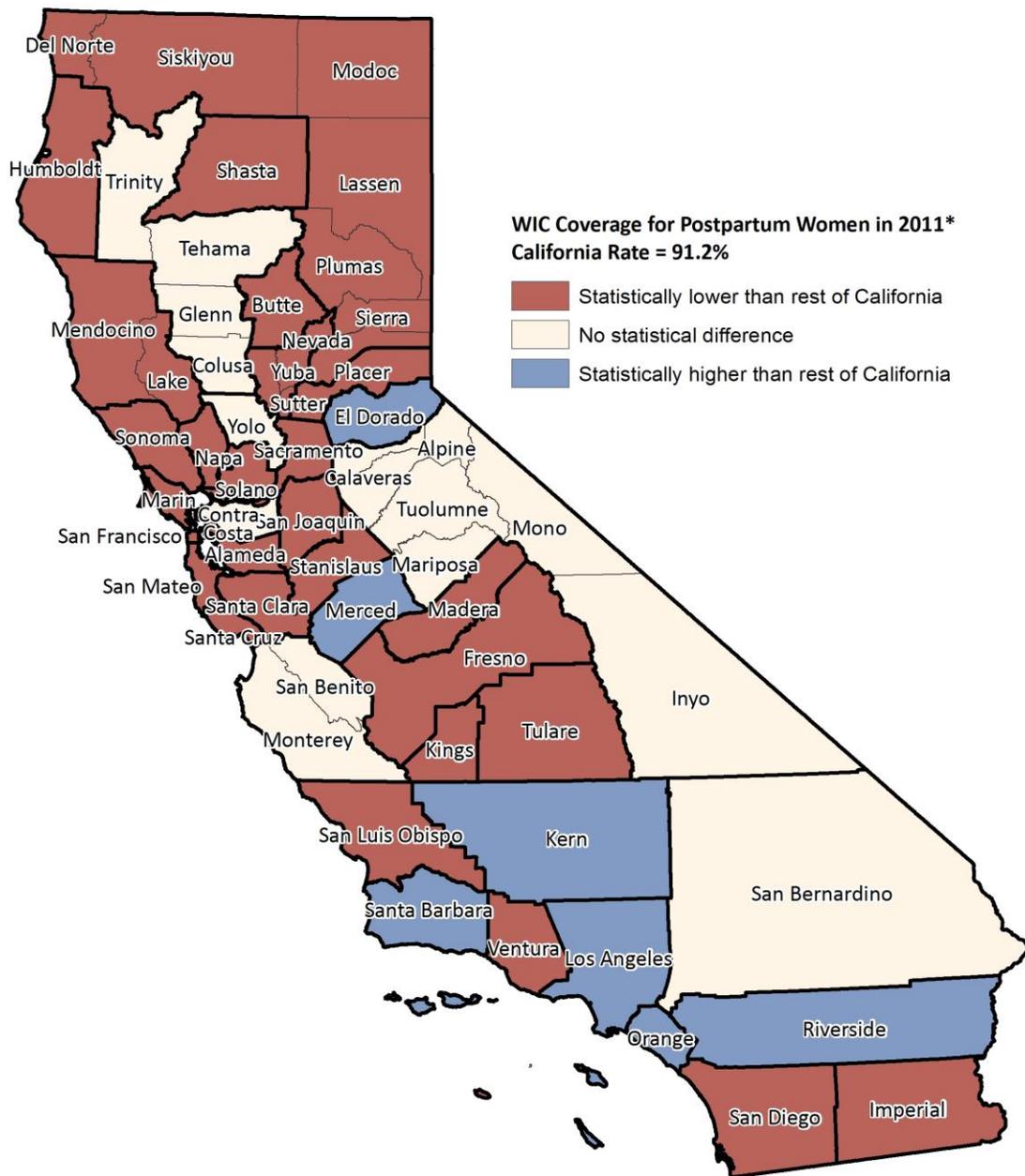


Figure 8: WIC Program Coverage of Postpartum Women in an Average Month by County or Region, 2011



*Colors indicate whether the WIC program coverage rate in a given county or region was statistically different than the rest of California ($p < 0.05$, chi-square test).

Estimating WIC Eligibility and Program Reach among Children

This section provides an overview of methods used to estimate the number of children that are eligible for WIC services in an average month and the proportion that receive WIC services during the 2011 calendar year. The steps and data sources used to estimate WIC eligibility among children are summarized in Table 8. Further details on using ACS data to determine WIC eligibility among children can be found in Appendix B.

Table 8. Steps and Sources for 2011 Estimates of WIC Eligibility of Children

Step	Description	Source
Demographic Eligibility	Identify children ages 1 to 4 years	California Department of Finance (DOF), 2011 Population Estimates
Income Eligibility	Count as eligible children if prior year's annual family income is \leq 185 percent of the federal poverty level.	IPUMS based on 2010-2012 American Community Survey (ACS), Public Use Microdata Sample (PUMS)
Adjunctive Eligibility	Add in as eligible those children whose household reports enrollment in Medi-Cal or CalFresh at any point during the prior calendar year.	IPUMS based on 2010-2012 American Community Survey (ACS), Public Use Microdata Sample (PUMS)
Annual-to-monthly adjustment^{a-b}	For children the impact of monthly fluctuations in income, program participation, and the 6 month certification period are offsetting; no adjustment required.	USDA 2014 Report. ^{3,a-b}
Adjust for nutritional risk	Multiply the child estimates by a factor of 0.99 to account for some otherwise-eligible children that might not be found to be at nutritional risk.	USDA Reports ¹⁻³

^a For more information on computing the annual-to-monthly adjustment factor see Appendix E in Volume II, USDA Report (2014): U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis. National and State-Level Estimates of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligibles and Program Reach, 2011, by Paul Johnson, Linda Giannarelli, Erika Huber, and David Betson. Project Officer: Grant Lovellette. Alexandria, VA: March 2014 <http://www.fns.usda.gov/sites/default/files/WICEligibles2011Volume2.pdf>

^b Although a recent Federal WIC policy change extends certification periods to one year for all children in the WIC Program, the policy was not implemented until March 2012 and therefore not accounted for in the 2011 estimates presented in this report

Results: WIC Eligibility and Program Reach among Children

In 2011, 1,147,348 (range 1.14 to 1.16 million) children aged 1 through 4 were eligible for WIC benefits in California in an average month. During an average month in 2011, 837,126 children ages 1 through 4 years participated in the WIC program, for a coverage rate of 73 percent (Table 9). WIC program reach among children varied from a high of 87 percent in Los Angeles County to a low of 39 percent in Placer County. Most counties and regions had coverage rates among children that were much lower than the statewide rate of 73 percent; however, a few counties including Fresno, Kern, Los Angeles, Orange, San Diego, San Francisco, Santa Barbara and Santa Cruz had coverage rates that were statistically higher than the rest of California (Figures 9 and 10).

Children are eligible to receive WIC services up to the age of 5 years, and therefore make up the largest share of the WIC eligible population. However, WIC program coverage was lowest amongst this group, with an estimated 310,222 eligible children not receiving services in an average month in 2011. Figure 9 shows a scatterplot of the number of WIC ENP children by the percent of WIC eligible children that participated (i.e. coverage rate). Los Angeles had the largest burden of children who were ENPs (41,200 ENPs), but the highest coverage rate for this population subgroup. Among areas with child coverage rates that were lower than the rest of California, San Bernardino (29,607 ENPs), Riverside (27,547 ENPs), Sacramento (18,983 ENPs) and Santa Clara (14,555 ENPs) had the most children who were eligible but did not receive WIC services.

Table 9. Number of WIC Eligible Children, Participants and Eligible Non-Participants, and Program Coverage, 2011

County	Eligible Children		Participants	Eligible Non-participants	Program Coverage	
	Number	Range (Low-High)			Rate	(Range)
California	1,147,348	(1,137,534 - 1,157,161)	837,126	310,222	73.0	(72.3 - 73.6)
County						
Alameda	33,607	(31,891 - 35,324)	22,235	11,372	✗	66.2 (62.9 - 69.7)
Butte	6,563	(5,885 - 7,242)	3,667	2,896	✗	55.9 (50.6 - 62.3)
Contra Costa	21,234	(19,755 - 22,713)	11,982	9,252	✗	56.4 (52.8 - 60.7)
El Dorado	2,727	(2,082 - 3,372)	1,679	1,048	✗	61.6 (49.8 - 80.6)
Fresno	46,654	(45,237 - 48,070)	34,651	12,003	✓	74.3 (72.1 - 76.6)
Humboldt	4,077	(3,613 - 4,542)	2,227	1,850	✗	54.6 (49.0 - 61.6)
Imperial	6,935	(6,239 - 7,630)	4,920	2,015	✗	70.9 (64.5 - 78.9)
Kern	41,042	(39,562 - 42,521)	30,886	10,156	✓	75.3 (72.6 - 78.1)
Kings	7,213	(6,663 - 7,762)	4,704	2,509	✗	65.2 (60.6 - 70.6)
Los Angeles	319,075	(314,788 - 323,362)	277,875	41,200	✓	87.1 (85.9 - 88.3)
Madera	7,851	(7,247 - 8,454)	5,364	2,487	✗	68.3 (63.4 - 74.0)
Marin	3,799	(3,145 - 4,454)	1,802	1,997	✗	47.4 (40.5 - 57.3)
Merced	12,725	(11,679 - 13,771)	9,334	3,391	♦	73.4 (67.8 - 79.9)
Napa	3,657	(3,142 - 4,172)	2,328	1,329	✗	63.7 (55.8 - 74.1)
Orange	74,111	(71,823 - 76,400)	60,642	13,469	✓	81.8 (79.4 - 84.4)
Placer	5,989	(5,104 - 6,875)	2,336	3,653	✗	39.0 (34.0 - 45.8)
Riverside	79,365	(76,593 - 82,137)	51,818	27,547	✗	65.3 (63.1 - 67.7)
Sacramento	46,748	(44,765 - 48,732)	27,765	18,983	✗	59.4 (57.0 - 62.0)
San Bernardino	82,542	(79,798 - 85,286)	52,935	29,607	✗	64.1 (62.1 - 66.3)
San Diego	79,126	(76,611 - 81,641)	63,316	15,810	✓	80.0 (77.6 - 82.6)
San Francisco	9,724	(8,796 - 10,653)	7,994	1,730	✓	82.2 (75.0 - 90.9)
San Joaquin	29,078	(27,502 - 30,654)	18,279	10,799	✗	62.9 (59.6 - 66.5)
San Luis Obispo	5,744	(5,049 - 6,438)	2,692	3,052	✗	46.9 (41.8 - 53.3)
San Mateo	13,160	(12,118 - 14,202)	7,242	5,918	✗	55.0 (51.0 - 59.8)
Santa Barbara	12,795	(11,808 - 13,782)	10,384	2,411	✓	81.2 (75.3 - 87.9)
Santa Clara	35,256	(33,177 - 37,334)	20,701	14,555	✗	58.7 (55.4 - 62.4)
Santa Cruz	6,704	(6,073 - 7,334)	5,178	1,526	✓	77.2 (70.6 - 85.3)
Shasta	5,814	(5,164 - 6,464)	3,319	2,495	✗	57.1 (51.3 - 64.3)
Solano	11,701	(10,764 - 12,638)	5,887	5,814	✗	50.3 (46.6 - 54.7)
Sonoma	11,858	(10,640 - 13,076)	6,696	5,162	✗	56.5 (51.2 - 62.9)
Stanislaus	20,704	(19,526 - 21,881)	11,830	8,874	✗	57.1 (54.1 - 60.6)
Tulare	25,786	(24,630 - 26,942)	16,889	8,897	✗	65.5 (62.7 - 68.6)
Ventura	22,475	(21,160 - 23,790)	14,195	8,280	✗	63.2 (59.7 - 67.1)
Yolo	4,850	(4,177 - 5,524)	3,198	1,652	✗	65.9 (57.9 - 76.6)
Region						
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	3,601	(2,836 - 4,366)	2,184	1,417	✗	60.6 (50.0 - 77.0)
Colusa, Glenn, Tehama and Trinity	5,275	(4,861 - 5,688)	3,611	1,664	✗	68.5 (63.5 - 74.3)
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	5,565	(4,839 - 6,292)	3,089	2,476	✗	55.5 (49.1 - 63.8)
Lake and Mendocino	5,289	(4,864 - 5,714)	3,203	2,086	✗	60.6 (56.1 - 65.9)
Monterey and San Benito	19,429	(18,323 - 20,535)	13,518	5,911	✗	69.6 (65.8 - 73.8)
Sutter and Yuba	7,200	(6,526 - 7,875)	4,540	2,660	✗	63.1 (57.7 - 69.6)

Note: WIC program coverage rate is equal to number of participants divided by number of eligibles. Symbols indicate whether the WIC participation in a given county or region was higher (✓), lower (✗) or not statistically different (♦) than the rest of California (P<0.05, chi-square test).

Figure 9. Child Coverage Rate by Number of Eligible Non-Participants (ENPs) by County and Region, 2011

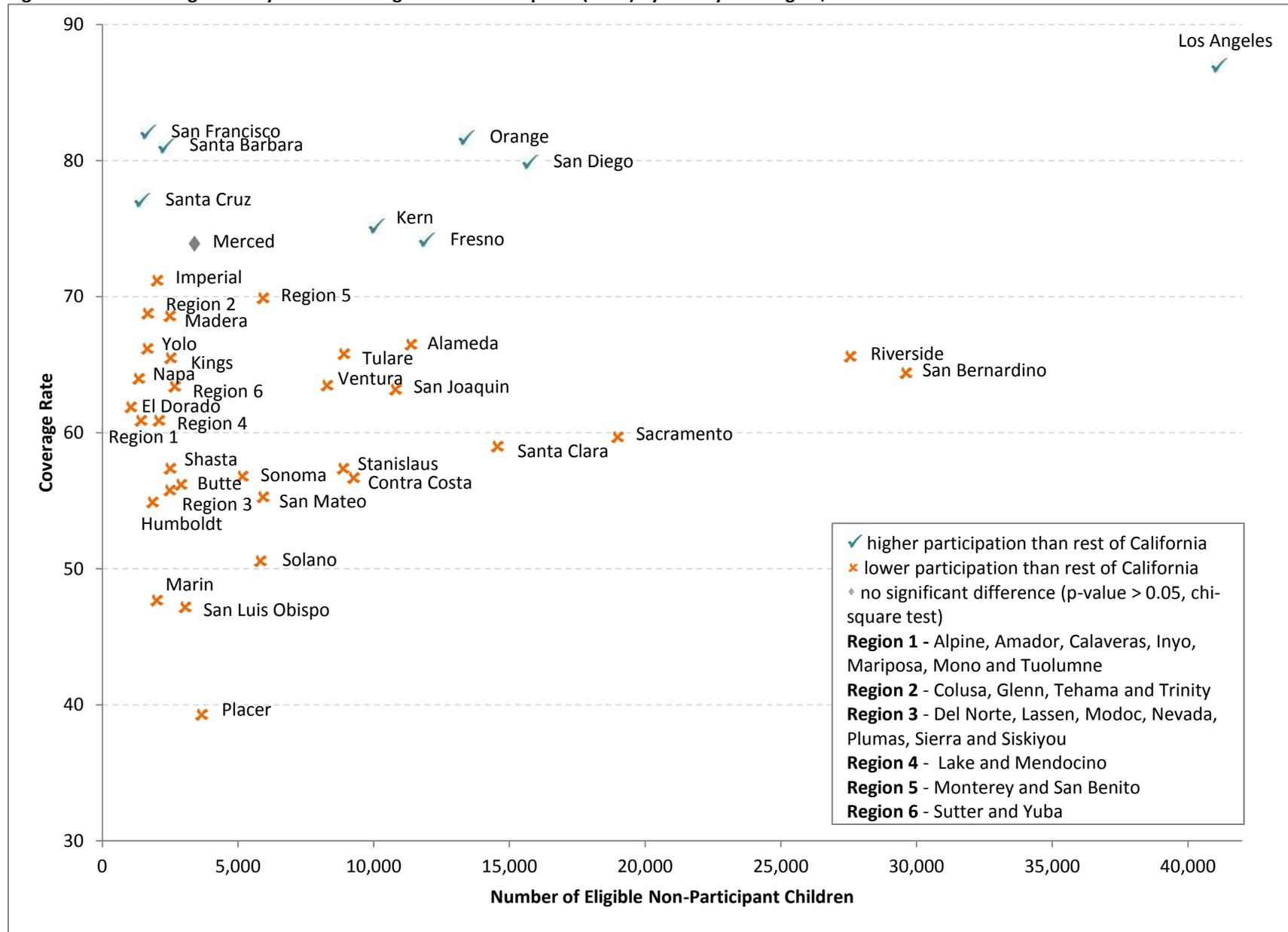
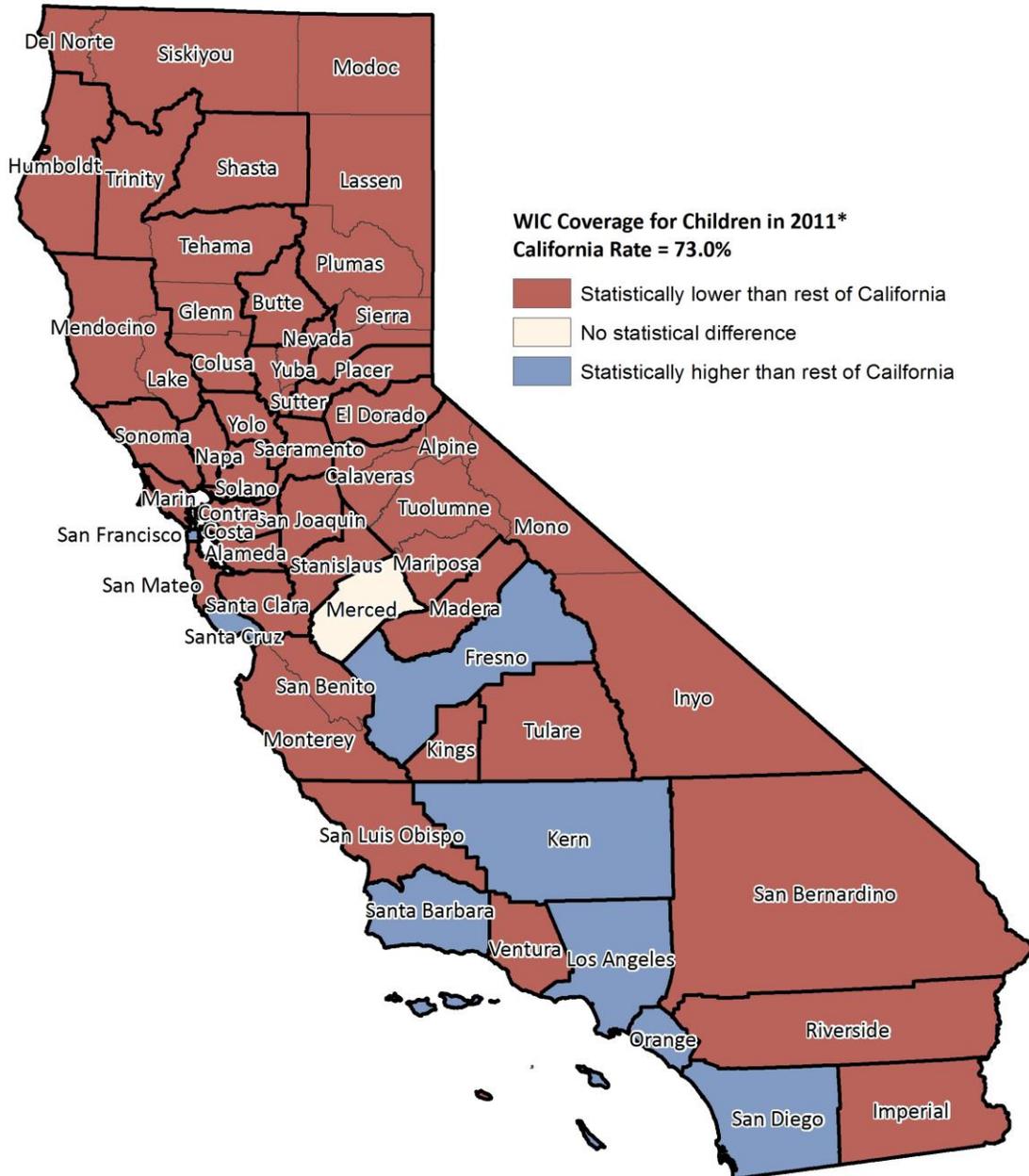


Figure 10: WIC Program Coverage of Children in an Average Month by County or Region, 2011



*Colors indicate whether the WIC program coverage rate in a given county or region was statistically different than the rest of California ($p < 0.05$, chi-square test).

Characteristics of WIC Eligible Children in California

Since children account for the largest proportion of WIC eligibles, it is important to examine the characteristics of WIC eligible infants and children from the IPUMS ACS 2010-2012 to provide a profile of California children eligible for WIC in 2011 (Table 10). WIC-eligible children are predominately Hispanic (about 69 percent) and speak Spanish in the home (about 58 percent). Less than half (46 percent) live in two-parent families, and large households are relatively common with nearly one third (31 percent) living in households with six or more persons. Most WIC eligible children (79 percent) meet WIC income eligibility guidelines with family income at or below 185 percent of the Federal Poverty Level (FPL), and few (17 percent) receive no form of government assistance (i.e. CalFresh or Medi-Cal). Over half (55 percent) of income-eligible children live in poverty, and nearly one in four live in extreme poverty, which is defined as household income below 50 percent of FPL.

These data also provide some insight into the characteristics of children who become eligible only through adjunctive eligibility. Children adjunctively eligible for WIC live in families with higher socioeconomic status compared with children that are income eligible. Among children adjunctively eligible for WIC, half (about 51 percent) have family incomes that are greater than 250 percent of FPL. Although annual income among adjunctively eligible children seems relatively high, they may have experienced drops in income during the year causing them to enroll in Medi-Cal or CalFresh.

Most children that are income-eligible for WIC receive additional benefits such as Medi-Cal or CalFresh; 41 percent receive both Medi-Cal and CalFresh, another third (34 percent) receive Medi-Cal only, and a few (4 percent) receive CalFresh benefits only. By definition, all children adjunctively eligible for WIC receive additional benefits with approximately 67.1 percent enrolled in Medi-Cal only, 8.2 percent on CalFresh only, and 24.7 percent enrolled in both Medi-Cal and CalFresh. Some of the WIC-eligible children at higher annual income levels may be adjunctively eligible because Medi-Cal and CalFresh do not necessarily count all family income in determining program eligibility.

Trends in WIC Eligibility among Children in California

Single-year IPUMS ACS data from 2008 through 2012 were used to explore trends in WIC eligibility among California children. Consistent with the economic downturn, the proportion of children meeting WIC eligibility requirements increased from approximately 53 percent in 2008 to nearly 58 percent in 2012. From 2008 to 2012, participation in government assistance programs (CalFresh and Medi-Cal) increased; yet, fewer children were only adjunctively eligible as more households fell below 185 percent of the FPL meeting income eligibility criteria (data not shown). Despite the increase in the proportion of children eligible for WIC during this time period, the number of children eligible for WIC services has actually decreased as a result of the decline in annual births beginning in 2008.

Table 10. Characteristics of WIC eligible children 0-4 years in California, IPUMS ACS 2010-2012

Characteristic	Percent Income Eligible ¹	Percent Adjunctively Eligible ²	Percent Total WIC Eligible ³
Total	45.9	11.8	57.7
Race/Ethnicity			
Hispanic	71.1	61.8	69.2
White, non-Hispanic	13.5	18.5	14.5
Black, non-Hispanic	6.4	5.4	6.2
Asian/Pacific Islander, non-Hispanic	5.6	9.0	6.3
American Indian/Alaskan Native, non-Hispanic	0.3	0.5	0.4
Other, non-Hispanic	0.2	0.2	0.2
Multi-race, non-Hispanic	3.0	4.6	3.3
Family Income as a Percent of Federal Poverty Level (FPL)			
missing	0.0	5.9	1.2
≤ 50% FPL	24.3	0.0	19.3
51-100% FPL	30.3	0.0	24.1
101-130% FPL	17.9	0.0	14.2
131-185% FPL	27.6	0.0	21.9
186-200% FPL	0.0	13.1	2.7
201-250% FPL	0.0	30.2	6.2
> 250% FPL	0.0	50.8	10.4
Household Language			
English	30.8	37.6	32.2
Spanish	60.6	49.9	58.4
other language	8.6	11.8	9.3
Marital Status			
missing	5.5	13.5	7.1
Mother and father married	45.2	49.2	46.1
Single mother	36.8	24.2	34.2
Single father	12.5	13.1	12.7
Family Size			
1	0.0	5.9	1.2
2	8.3	4.4	7.5
3	17.0	16.2	16.8
4	23.7	20.5	23.0
5	21.0	18.5	20.5
≥6	30.1	34.5	31.0
Benefit Receipt			
No benefit	21.2	0.0	16.9
CalFresh and Medi-Cal	41.4	24.7	38.0
CalFresh only	3.9	8.2	4.8
Medi-Cal only	33.5	67.1	40.4

Data Source: IPUMS based on 2010-2012 American Community Survey (ACS), Public Use Microdata Sample (PUMS)

¹Income eligible infants and children had family income ≤185% FPL; includes only persons in which poverty status could be determined.

²Infants and children adjunctively eligible are those whose family income was not ≤185% FPL (or missing) but who reported receipt of CalFresh or Medi-Cal.

³Includes all income eligible and adjunctively eligible children (regardless of income).

Estimates of Total WIC Eligibility and Program Reach in California

In 2011, 1.85 million (range 1.84 to 1.87 million) women, infants and children were eligible for WIC benefits in California in an average month (Tables 11 and 12a). Children ages 1 to 4 made up 62 percent of the eligible population, while infants represented nearly 18 percent and pregnant and postpartum women represented 9 and 11 percent, respectively (Table 11). Since eligibility rates reflect population and household income differences, as well as differences in adjunctive eligibility (due to participation in Medi-Cal, and CalFresh), estimates of the percent of the total population eligible for WIC varied across geographic areas of the State. The estimated distribution of WIC eligibility by county (Table 12a) shows that Los Angeles County had the largest share of WIC eligibles, with an estimated 28 percent of the total WIC-eligible population in California. Other counties with large shares of total eligibles are Riverside, San Bernardino and San Diego, with approximately 7 percent of the total WIC-eligible population each.

During 2011, nearly 1.47 million women, infants and children participated in the WIC program in an average month, producing a total coverage rate (participants divided by eligibles) of 79 percent (Table 12b). WIC program reach varied across the subgroups. The WIC coverage rate for children (73 percent) was much lower than the rates for other subgroups. Infants and postpartum women had the highest coverage rates of 91 percent (Table 11). These results were similar to national patterns of WIC eligibility and program utilization among participant groups.

Table 11. WIC Eligibility and Program Coverage in an Average Month by Participant Group, California 2011

Participant Group	Number Eligible	Percent of All Eligibles	Number of Participants	Coverage Rate
Infants	328,982	17.8	298,335	90.7
Pregnant Women	166,529	9.0	138,872	83.4
Postpartum Women	210,403	11.4	191,905	91.2
Children	1,147,348	61.9	837,126	73.0
Total	1,853,262	100	1,466,238	79.1

Total WIC Program coverage rates varied substantially across geographic areas of California. The highest total coverage rate in 2011 was 91 percent in Los Angeles County and the lowest was 47 percent in Placer County. Other areas throughout California with lower total WIC Program reach are select counties within the Bay Area and North/Mountain region, and Sacramento, Stanislaus and San Luis Obispo counties (Table 12b and Figures 11 and 12).

California has among the highest WIC program coverage rates in the nation, yet an estimated 387,024 eligibles did not participate in WIC during an average month in 2011. Figure 11 shows a scatterplot of the total number of WIC ENPs by the percent of WIC eligibles that participated (i.e. coverage rate). Areas with lower coverage rates than the rest of the state and high numbers of ENPs include San Bernardino (36,767 ENPs), Riverside (34,036 ENPs), Sacramento (24,240 ENPs) and Santa Clara (18,670 ENPs). Although Los Angeles County had the highest overall coverage rate, it had the most ENPs at 46,421. Most areas with low total coverage had low coverage across all population subgroups (Table 12c).

Table 12a: Total WIC Eligibles in an Average Month by Participant Group and County or Region of Residence, 2011

County	Eligible Infants	Eligible Children	Eligible Pregnant Women	Eligible Postpartum Women	Total WIC Eligibles		Percent Share
					Number	Range (Low-High)	
California	328,982	1,147,348	166,529	210,403	1,853,262	(1,837,410 - 1,869,112)	100.0
County							
Alameda	9,348	33,607	4,732	6,378	54,065	(51,304 - 56,827)	2.9
Butte	1,813	6,563	918	1,169	10,463	(9,382 - 11,545)	0.6
Contra Costa	5,617	21,234	2,843	3,806	33,500	(31,167 - 35,834)	1.8
El Dorado	687	2,727	348	475	4,237	(3,234 - 5,240)	0.2
Fresno	13,736	46,654	6,953	7,986	75,329	(73,042 - 77,616)	4.1
Humboldt	1,158	4,077	586	817	6,638	(5,882 - 7,395)	0.4
Imperial	2,248	6,935	1,138	1,278	11,599	(10,436 - 12,762)	0.6
Kern	11,514	41,042	5,828	6,705	65,089	(62,742 - 67,435)	3.5
Kings	2,096	7,213	1,061	1,249	11,619	(10,733 - 12,503)	0.6
Los Angeles	93,420	319,075	47,289	59,266	519,050	(512,077 - 526,024)	28.0
Madera	2,287	7,851	1,158	1,511	12,807	(11,822 - 13,791)	0.7
Marin	935	3,799	473	756	5,963	(4,937 - 6,991)	0.3
Merced	3,526	12,725	1,785	2,141	20,177	(18,518 - 21,836)	1.1
Napa	972	3,657	492	689	5,810	(4,992 - 6,628)	0.3
Orange	21,053	74,111	10,657	13,780	119,601	(115,909 - 123,295)	6.5
Placer	1,569	5,989	794	1,075	9,427	(8,035 - 10,822)	0.5
Riverside	21,682	79,365	10,975	13,663	125,685	(121,295 - 130,076)	6.8
Sacramento	13,282	46,748	6,723	8,457	75,210	(72,019 - 78,401)	4.1
San Bernardino	23,370	82,542	11,830	13,654	131,396	(127,028 - 135,764)	7.1
San Diego	24,630	79,126	12,468	17,207	133,431	(129,190 - 137,672)	7.2
San Francisco	3,419	9,724	1,731	2,639	17,513	(15,841 - 19,184)	0.9
San Joaquin	8,115	29,078	4,108	5,072	46,373	(43,859 - 48,886)	2.5
San Luis Obispo	1,609	5,744	815	1,143	9,311	(8,185 - 10,436)	0.5
San Mateo	3,662	13,160	1,854	2,472	21,148	(19,474 - 22,822)	1.1
Santa Barbara	3,816	12,795	1,932	2,659	21,202	(19,567 - 22,838)	1.1
Santa Clara	9,661	35,256	4,890	6,410	56,217	(52,903 - 59,532)	3.0
Santa Cruz	2,030	6,704	1,027	1,478	11,239	(10,182 - 12,295)	0.6
Shasta	1,678	5,814	850	1,103	9,445	(8,390 - 10,502)	0.5
Solano	3,219	11,701	1,630	2,038	18,588	(17,100 - 20,076)	1.0
Sonoma	3,171	11,858	1,605	2,278	18,912	(16,969 - 20,855)	1.0
Stanislaus	5,773	20,704	2,922	3,522	32,921	(31,048 - 34,792)	1.8
Tulare	7,303	25,786	3,697	4,294	41,080	(39,239 - 42,923)	2.2
Ventura	6,410	22,475	3,244	4,066	36,195	(34,078 - 38,313)	2.0
Yolo	1,342	4,850	680	897	7,769	(6,690 - 8,849)	0.4
Region							
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	919	3,601	465	603	5,588	(4,401 - 6,776)	0.3
Colusa, Glenn, Tehama and Trinity	1,347	5,275	682	862	8,166	(7,524 - 8,804)	0.4
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	1,437	5,565	727	963	8,692	(7,558 - 9,827)	0.5
Lake and Mendocino	1,470	5,289	744	995	8,498	(7,815 - 9,181)	0.5
Monterey and San Benito	5,703	19,429	2,887	3,810	31,829	(30,016 - 33,640)	1.7
Sutter and Yuba	2,009	7,200	1,017	1,269	11,495	(10,419 - 12,572)	0.6

Table 12b: Total WIC Participants in Average Month by Participant Group and Total Coverage Rate by County/Region, 2011

County	Infant Participants	Children Participants	Pregnant Women Participants	Postpartum Women Participants	Total WIC Participants	Eligible Non-Participants	Total Coverage Rate	(Range)
California	298,335	837,126	138,872	191,905	1,466,238	387,024	79.1	(78.4 - 79.8)
County								
Alameda	8,164	22,235	3,675	5,640	39,715	14,350	✘	73.5 (69.9 - 77.4)
Butte	1,445	3,667	682	945	6,739	3,724	✘	64.4 (58.4 - 71.8)
Contra Costa	4,994	11,982	2,409	3,471	22,856	10,644	✘	68.2 (63.8 - 73.3)
El Dorado	643	1,679	301	448	3,071	1,166	✘	72.5 (58.6 - 95.0)
Fresno	12,544	34,651	6,052	7,186	60,432	14,897	✓	80.2 (77.9 - 82.7)
Humboldt	907	2,227	456	602	4,192	2,446	✘	63.2 (56.7 - 71.3)
Imperial	1,936	4,920	814	1,109	8,778	2,821	✘	75.7 (68.8 - 84.1)
Kern	10,982	30,886	5,464	6,304	53,636	11,453	✓	82.4 (79.5 - 85.5)
Kings	1,752	4,704	787	1,108	8,351	3,268	✘	71.9 (66.8 - 77.8)
Los Angeles	91,642	277,875	44,751	58,362	472,629	46,421	✓	91.1 (89.8 - 92.3)
Madera	1,908	5,364	841	1,313	9,427	3,380	✘	73.6 (68.4 - 79.7)
Marin	643	1,802	334	534	3,313	2,650	✘	55.6 (47.4 - 67.1)
Merced	3,448	9,334	1,694	2,009	16,484	3,693	✓	81.7 (75.5 - 89.0)
Napa	774	2,328	374	563	4,038	1,772	✘	69.5 (60.9 - 80.9)
Orange	19,676	60,642	9,385	12,999	102,701	16,900	✓	85.9 (83.3 - 88.6)
Placer	977	2,336	447	632	4,391	5,036	✘	46.6 (40.6 - 54.6)
Riverside	19,025	51,818	8,229	12,577	91,649	34,036	✘	72.9 (70.5 - 75.6)
Sacramento	11,278	27,765	5,127	6,799	50,970	24,240	✘	67.8 (65.0 - 70.8)
San Bernardino	20,791	52,935	8,406	12,498	94,629	36,767	✘	72.0 (69.7 - 74.5)
San Diego	22,483	63,316	10,712	15,307	111,816	21,615	✓	83.8 (81.2 - 86.6)
San Francisco	2,982	7,994	1,358	2,322	14,656	2,857	✓	83.7 (76.4 - 92.5)
San Joaquin	7,070	18,279	3,100	4,428	32,877	13,496	✘	70.9 (67.3 - 75.0)
San Luis Obispo	1,085	2,692	475	756	5,008	4,303	✘	53.8 (48.0 - 61.2)
San Mateo	2,926	7,242	1,221	2,020	13,408	7,740	✘	63.4 (58.8 - 68.9)
Santa Barbara	3,593	10,384	1,657	2,617	18,251	2,951	✓	86.1 (79.9 - 93.3)
Santa Clara	8,036	20,701	3,609	5,201	37,547	18,670	✘	66.8 (63.1 - 71.0)
Santa Cruz	1,794	5,178	865	1,323	9,160	2,079	✓	81.5 (74.5 - 90.0)
Shasta	1,288	3,319	665	788	6,060	3,385	✘	64.2 (57.7 - 72.2)
Solano	2,461	5,887	1,109	1,611	11,068	7,520	✘	59.5 (55.1 - 64.7)
Sonoma	2,459	6,696	1,139	1,800	12,094	6,818	✘	63.9 (58.0 - 71.3)
Stanislaus	4,718	11,830	1,948	3,006	21,503	11,418	✘	65.3 (61.8 - 69.3)
Tulare	6,175	16,889	2,655	3,873	29,591	11,489	✘	72.0 (68.9 - 75.4)
Ventura	5,466	14,195	2,218	3,567	25,446	10,749	✘	70.3 (66.4 - 74.7)
Yolo	1,176	3,198	549	808	5,730	2,039	✘	73.8 (64.8 - 85.7)
Region								
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	842	2,184	394	560	3,980	1,608	✘	71.2 (58.7 - 90.4)
Colusa, Glenn, Tehama and Trinity	1,242	3,611	583	778	6,213	1,953	✘	76.1 (70.6 - 82.6)
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	1,175	3,089	641	716	5,622	3,070	✘	64.7 (57.2 - 74.4)
Lake and Mendocino	1,197	3,203	585	809	5,794	2,704	✘	68.2 (63.1 - 74.1)
Monterey and San Benito	4,925	13,518	2,357	3,457	24,258	7,571	✘	76.2 (72.1 - 80.8)
Sutter and Yuba	1,705	4,540	797	1,055	8,096	3,399	✘	70.4 (64.4 - 77.7)

Note: WIC program coverage rate is equal to number of participants divided by number of eligibles.

Symbols indicate whether the WIC participation in a given county or region was higher (✓), lower (✘) or not statistically different (*) than the rest of California (P<0.05, chi-square test).

Table 12c: WIC Program Coverage by Participant Group and County or Region, 2011

County	WIC Coverage of Infants	WIC Coverage of Pregnant Women	WIC Coverage of Postpartum Women	WIC Coverage of Children	Total WIC Coverage Rate
California	90.7	83.4	91.2	73.0	79.1
County					
Alameda	✗ 87.3	✗ 77.7	✗ 88.4	✗ 66.2	✗ 73.5
Butte	✗ 79.7	✗ 74.3	✗ 80.8	✗ 55.9	✗ 64.4
Contra Costa	✗ 88.9	◇ 84.7	◇ 91.2	✗ 56.4	✗ 68.2
El Dorado	✓ 93.6	◇ 86.5	✓ 94.3	✗ 61.6	✗ 72.5
Fresno	✓ 91.3	✓ 87.0	✗ 90.0	✓ 74.3	✓ 80.2
Humboldt	✗ 78.3	✗ 77.8	✗ 73.7	✗ 54.6	✗ 63.2
Imperial	✗ 86.1	✗ 71.5	✗ 86.8	✗ 70.9	✗ 75.7
Kern	✓ 95.4	✓ 93.8	✓ 94.0	✓ 75.3	✓ 82.4
Kings	✗ 83.6	✗ 74.2	✗ 88.7	✗ 65.2	✗ 71.9
Los Angeles	✓ 98.1	✓ 94.6	✓ 98.5	✓ 87.1	✓ 91.1
Madera	✗ 83.4	✗ 72.6	✗ 86.9	✗ 68.3	✗ 73.6
Marin	✗ 68.8	✗ 70.6	✗ 70.6	✗ 47.4	✗ 55.6
Merced	✓ 97.8	✓ 94.9	✓ 93.8	◇ 73.4	✓ 81.7
Napa	✗ 79.6	✗ 76.0	✗ 81.7	✗ 63.7	✗ 69.5
Orange	✓ 93.5	✓ 88.1	✓ 94.3	✓ 81.8	✓ 85.9
Placer	✗ 62.3	✗ 56.3	✗ 58.8	✗ 39.0	✗ 46.6
Riverside	✗ 87.7	✗ 75.0	✓ 92.1	✗ 65.3	✗ 72.9
Sacramento	✗ 84.9	✗ 76.3	✗ 80.4	✗ 59.4	✗ 67.8
San Bernardino	✗ 89.0	✗ 71.1	◇ 91.5	✗ 64.1	✗ 72.0
San Diego	✓ 91.3	✓ 85.9	✗ 89.0	✓ 80.0	✓ 83.8
San Francisco	✗ 87.2	✗ 78.5	✗ 88.0	✓ 82.2	✓ 83.7
San Joaquin	✗ 87.1	✗ 75.5	✗ 87.3	✗ 62.9	✗ 70.9
San Luis Obispo	✗ 67.4	✗ 58.3	✗ 66.1	✗ 46.9	✗ 53.8
San Mateo	✗ 79.9	✗ 65.9	✗ 81.7	✗ 55.0	✗ 63.4
Santa Barbara	✓ 94.2	✓ 85.8	✓ 98.4	✓ 81.2	✓ 86.1
Santa Clara	✗ 83.2	✗ 73.8	✗ 81.1	✗ 58.7	✗ 66.8
Santa Cruz	✗ 88.4	◇ 84.2	✗ 89.5	✓ 77.2	✓ 81.5
Shasta	✗ 76.8	✗ 78.2	✗ 71.4	✗ 57.1	✗ 64.2
Solano	✗ 76.5	✗ 68.0	✗ 79.0	✗ 50.3	✗ 59.5
Sonoma	✗ 77.5	✗ 71.0	✗ 79.0	✗ 56.5	✗ 63.9
Stanislaus	✗ 81.7	✗ 66.7	✗ 85.3	✗ 57.1	✗ 65.3
Tulare	✗ 84.6	✗ 71.8	✗ 90.2	✗ 65.5	✗ 72.0
Ventura	✗ 85.3	✗ 68.4	✗ 87.7	✗ 63.2	✗ 70.3
Yolo	✗ 87.6	◇ 80.7	◇ 90.1	✗ 65.9	✗ 73.8
Region					
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	◇ 91.6	◇ 84.7	◇ 92.9	✗ 60.6	✗ 71.2
Colusa, Glenn, Tehama and Trinity	◇ 92.2	◇ 85.5	◇ 90.3	✗ 68.5	✗ 76.1
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	✗ 81.8	✓ 88.2	✗ 74.4	✗ 55.5	✗ 64.7
Lake and Mendocino	✗ 81.4	✗ 78.6	✗ 81.3	✗ 60.6	✗ 68.2
Monterey and San Benito	✗ 86.4	✗ 81.6	◇ 90.7	✗ 69.6	✗ 76.2
Sutter and Yuba	✗ 84.9	✗ 78.4	✗ 83.1	✗ 63.1	✗ 70.4

Note: WIC program coverage rate is equal to number of participants divided by number of eligibles. Symbols indicate whether the WIC participation in a given county or region was higher (✓), lower (✗) or not statistically different (◇) than the rest of California (P<0.05, chi-square test).

Figure 11. Total WIC Coverage Rate by Number of Eligible Non-Participants (ENPs) by County and Region, 2011

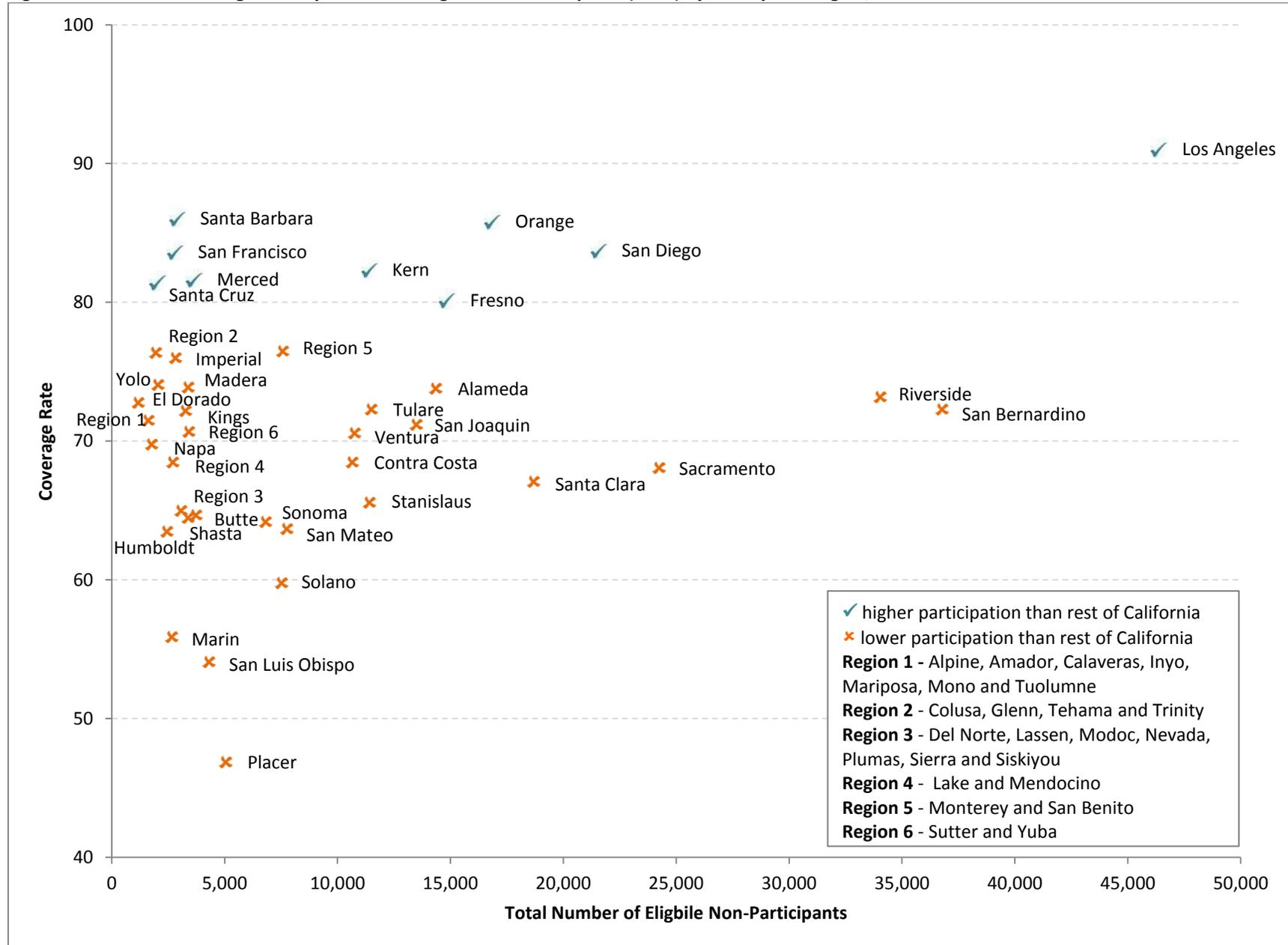
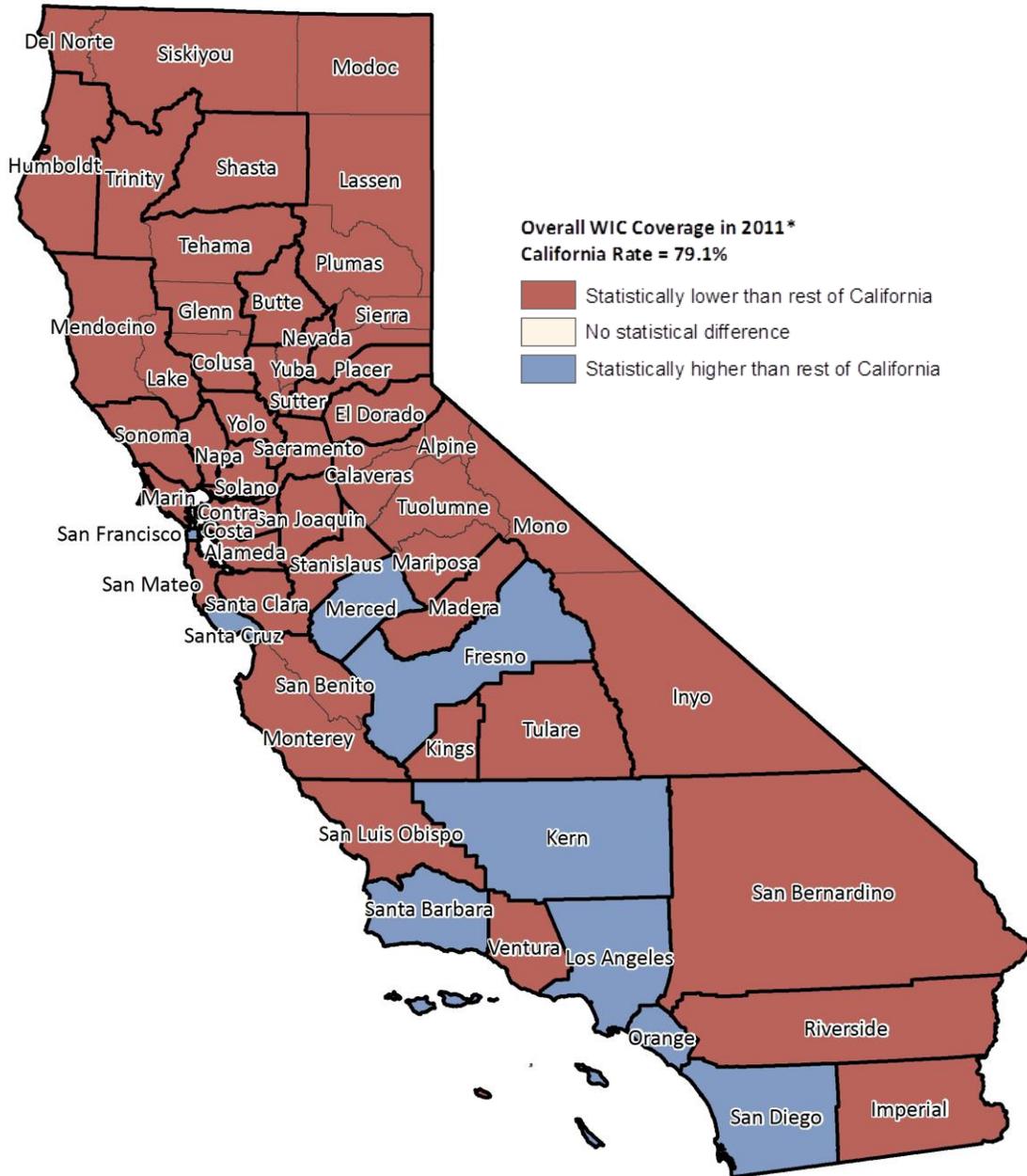


Figure 12: Total WIC Program Coverage Rate in an Average Month by County or Region, 2011



*Colors indicate whether the WIC program coverage rate in a given county or region was statistically different than the rest of California (p<0.05, chi-square test).

Summary

This report adapts USDA methodologies to produce county and regional-level estimates of women, infants and children eligible for WIC services in California for an average month during calendar year 2011. These results show that 1.85 million individuals were eligible for WIC during an average month of 2011 in California, including 328,982 infants, 166,529 pregnant women, 210,403 postpartum women, and 1.15 million children age 1 through 4.

During 2011, 1.47 million women, infants and children participated in the WIC program in an average month, producing a total coverage rate of 79 percent. Although California has among the highest WIC program coverage rates in the nation, an estimated 387,024 individuals were eligible for WIC but did not receive benefits in 2011, including 30,647 infants, 27,657 pregnant women, 18,498 postpartum women and 310,222 children. Children make up the largest share of the WIC eligible population; however, WIC program coverage was lowest amongst this subgroup. WIC program coverage was also lower among pregnant women, suggesting a need for statewide emphasis on early program entry for pregnant women and retention of children through age 4. Geographic areas with large shares of the WIC eligible population, such as Los Angeles, San Diego, San Bernardino, and Riverside, also had a higher burden of eligible non-participants regardless of their WIC program coverage rates. Therefore, outreach should focus on geographic areas with lower WIC coverage rates than the rest of the state, as well as those with a high burden of WIC eligibles that are not receiving benefits.

Further details on all methods used to produce these estimates are available in the six appendices to this report. Appendix A provides a summary of how the methodology presented in this report compares to methods used by the USDA and other states. Appendix B provides further details on using ACS data to determine WIC eligibility among infants and children. Appendix C describes the methodology for estimating WIC eligibility among pregnant and postpartum women. Appendix D provides an overview of methods and calculations for eligibility estimates for each population subgroup and detailed data tables. Appendix E provides supplemental data tables showing county-level population estimates of children ages 0-4, number of Medi-Cal certified eligible children in an average month, and WIC participation patterns that may be useful for local WIC program planning. Appendix F provides a listing of local WIC agencies providing services to participants residing in a given county.

Further details on the USDA method can be found in the *National and State-level Estimates of Special Supplemental Nutrition for Women, Infants, and Children (WIC) Eligibles and Program Reach, 2011* Report found at: <http://www.fns.usda.gov/sites/default/files/WICEligibles2011Volume1.pdf>

References

1. U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis. National and State-Level Estimates of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligibles and Program Reach, 2000–2009, by David Betson, Michael Martinez-Schiferl, Linda Giannarelli, and Sheila Zedlewski. Project Officer: Grant Lovellette, Alexandria, VA: December 2011.
Main Report: http://www.fns.usda.gov/sites/default/files/WICEligibles2000-2009Vol1_0.pdf
Appendices: <http://www.fns.usda.gov/sites/default/files/WICEligibles2000-2009Vol2.pdf>
2. U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis. National and State-Level Estimates of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligibles and Program Reach, 2010, by Michael Martinez-Schiferl, Sheila Zedlewski, and Linda Giannarelli. Project Officer: Grant Lovellette. Alexandria, VA: January 2013.
Main Report: <http://www.fns.usda.gov/sites/default/files/WICEligibles2010Vol1.pdf>
Appendices: <http://www.fns.usda.gov/sites/default/files/WICEligibles2010Vol2.pdf>
3. U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis. National and State-Level Estimates of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligibles and Program Reach, 2011, by Paul Johnson, Linda Giannarelli, Erika Huber, and David Betson. Project Officer: Grant Lovellette. Alexandria, VA: March 2014
Main Report: <http://www.fns.usda.gov/sites/default/files/WICEligibles2011Volume1.pdf>
Appendices: <http://www.fns.usda.gov/sites/default/files/WICEligibles2011Volume2.pdf>
4. WIC Program Regulations, Code of Federal Regulations, 7 C.F.R. Part 246§ 246.4(a).
<http://www.fns.usda.gov/wic/lawsandregulations/WICRegulations-7CFR246.pdf>
5. State of California, Department of Finance, *Report P-3: State and County Population Projections by Race/Ethnicity, Detailed Age, and Gender, 2010-2060*. Sacramento, California, January 2013
www.dof.ca.gov/research/demographic/reports/projections/P-3/
6. State of California, Department of Finance, *Methodology and Assumptions for the State and County Population Projections: July 1, 2010-2060*. January 2013
7. Steven Ruggles, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis: University of Minnesota, 2010.
8. U.S. Census Bureau, *A Compass for Understanding and Using American Community Survey Data: What PUMS Data Users Need to Know*. U.S. Government Printing Office, Washington DC, 2009.
<http://www.census.gov/acs/www/Downloads/handbooks/ACSPUMS.pdf>
9. Missouri Census Data Center's Geographic Correspondence Engines (Accessed March 5, 2014)
<http://mcdc2.missouri.edu/websas/geocorr2k.html> and <http://mcdc.missouri.edu/websas/geocorr12.html>

Appendix A: Comparison of Methods to Estimate WIC Eligibility and Coverage

Infants/Children	USDA Methods ¹⁻³	WA ⁴ & MT WIC State Plan ⁵	California Methods
Baseline Count	Current Population Survey (CPS) - U.S. American Community Survey (ACS) - States	Vital Statistics: Infants (most recent year); Children (prior 4 years)	California Department of Finance (DOF), Population Estimates of Children ages 0-4, 2011
Weight adjustment/ Migration adjustment	Inter-census population estimates CY 2011	Net migration adjustment using inter-census year population estimate for children 0-4, compared to vital statistics counts above	
Income Eligibility/ Poverty Rate Estimate	IPUMS based on ACS 2011 individuals (ages 0-4) in households with prior year family income ≤185% FPG	Census 2000 to compute county poverty rate <i>OR CPS County poverty rate, whichever is higher</i>	IPUMS based on 2010-2012 ACS PUMS- children (ages 0-4) living in households with prior year family income ≤185% FPG
Adjunctive Eligibility	ACS 2011 add in households that report food stamps or Medicaid in prior year; *Note: 2013 report made reference that adjunctive eligibility increased infant eligibility by 31% and child eligibility by 23%.	Increase estimate by a factor of 31% for infants and 14% for children (*MT used updated factor of 23%) <i>OR sum of medicaid participants plus non-medicaid on food stamps, whichever is higher</i>	IPUMS based on 2010-2012 ACS PUMS- add in households that report CalFresh, or Medi-Cal in prior year
Adjust for fluctuations in monthly income and certification periods	SIPPS panels 2004 & 2008; Factor: 1.16 for infants and 1.0 for children	WA used income factor of 1.04 for infants and 1.09 for children; separate adjustment of 0.95 for children to account for 12 month certification period; MT used combined factor of 1.18 for infants and 1.01 for children as referenced in previous USDA reports. ¹⁻²	SIPPS panels 2004 & 2008; Factor: 1.16 for infants and 1.0 for children
Adjust for nutritional risk	Factor: 0.97 for infants and 0.99 for children	None	Factor: 0.97 for infants and 0.99 for children

Pregnant Women	USDA Methods ¹⁻³	WA ⁴ & MT WIC State Plan ⁵	California Methods
Baseline Count	Start with estimates of fully eligible infants	Start with estimates of fully eligible infants	Start with estimates of fully eligible infants
Plural birth and/or infant death	Factor of 0.9961 to account for multiple births and infant deaths	Reduce count of infants by number of plural births	Factor of 0.98 to account for multiple births and infant and fetal deaths
Other Adjustment Factor applied to baseline count	Use multiplier of 0.533 to account for length of pregnancy (0.75) and lower likelihood of income eligibility of women during pregnancy (0.71).	Add number of women pregnant in current year that won't deliver until following year (assume 40/52 or 77% of WIC-eligible women who become pregnant in current year will deliver during following year)	Multiply the estimate by a factor of 0.533 to account for 9 months of pregnancy (0.75) and to account for lower likelihood of financial eligibility during pregnancy versus after birth (additional 0.71).
Adjust for nutritional risk	Factor: 0.97 for pregnant women	None	Factor: 0.97 for pregnant women
Postpartum Women	USDA Methods ¹⁻³	WA ⁴ & MT WIC State Plan ⁵	California Methods
Baseline Count	Start with estimates of fully eligible infants	Start with estimates of fully eligible infants	Start with estimates of fully eligible infants
Plural birth and/or infant death	Factor: 0.9961 to account for multiple births and infant deaths	Reduce count of infants by number of plural births	Factor of 0.98 to account for multiple births and infant and fetal deaths
Distribute into Breastfeeding/ Non-Breastfeeding	<p>1) Estimate eligible breastfeeding women using Infant Feeding Survey (IFS) in-hospital and 6-month breastfeeding rates</p> <p>2) Adjust to apply to WIC-eligible mothers using factor derived from NHANES (1.056 for in-hospital, and 1.15 for 6-month breastfeeding rates)</p> <p>3) Adjust using SIPP based factor for women's certification period, breastfeeding cessation, and that women may not be eligible throughout year</p> <p>4) Divide women between breastfeeding and non-breastfeeding in 1st half of year and to estimate eligible breastfeeding women in second half of year</p>	<p>WA multiplied weighted average (WIC Participant and eligible non-participant) 6-month breastfeeding rate from NIS with number of WIC-eligible mothers above.</p> <p>MT multiplied 6-month breastfeeding rate from PedNSS with number of WIC-eligible mothers above.</p>	<p>1) Use WIC MIS data to estimate rates of breastfeeding initiation and any breastfeeding at 6 months postpartum among WIC participants in 2011.</p> <p>2) Adjust to apply to WIC-eligible mothers using factor derived from NHANES (1.056 for in-hospital, and 1.15 for 6-month breastfeeding rates)</p> <p>3) Adjust using SIPP based factor for women's certification period, breastfeeding cessation, and that women may not be eligible throughout year</p> <p>4) Divide women between breastfeeding and non-breastfeeding in 1st half of year and to estimate eligible breastfeeding women in second half of year</p>
Adjust for nutritional risk	None: assume all postpartum women are at nutritional risk	None	None

1. U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis. National and State-Level Estimates of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligibles and Program Reach, 2000–2009, by David Betson, Michael Martinez-Schiferl, Linda Giannarelli, and Sheila Zedlewski. Project Officer: Grant Lovellette, Alexandria, VA: December 2011.
Main Report: http://www.fns.usda.gov/sites/default/files/WICEligibles2000-2009Vol1_0.pdf
Appendices: <http://www.fns.usda.gov/sites/default/files/WICEligibles2000-2009Vol2.pdf>
2. U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis. National and State-Level Estimates of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligibles and Program Reach, 2010, by Michael Martinez-Schiferl, Sheila Zedlewski, and Linda Giannarelli. Project Officer: Grant Lovellette. Alexandria, VA: January 2013.
Main Report: <http://www.fns.usda.gov/sites/default/files/WICEligibles2010Vol1.pdf>
Appendices: <http://www.fns.usda.gov/sites/default/files/WICEligibles2010Vol2.pdf>
3. U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis. National and State-Level Estimates of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligibles and Program Reach, 2011, by Paul Johnson, Linda Giannarelli, Erika Huber, and David Betson. Project Officer: Grant Lovellette. Alexandria, VA: March 2014
Main Report: <http://www.fns.usda.gov/sites/default/files/WICEligibles2011Volume1.pdf>
Appendices: <http://www.fns.usda.gov/sites/default/files/WICEligibles2011Volume2.pdf>
4. WIC Nutrition Program Caseload Management Project User’s Guide. Washington State Department of Health, 2008.
5. WIC State Plan 2013, Affirmative Action Plan. Montana Department of Public Health and Human Services. <http://wic.mt.gov/stateplan/documents/AffirmativeActionPlan.pdf>

Appendix B: Estimating Eligible Infants and Children Using ACS Data

American Community Survey (ACS) Overview

The American Community Survey (ACS) is a nationwide survey conducted by the U.S. Census Bureau. In 2005, the ACS became the new source for information previously collected through the decennial census long form. This information includes demographic, social, economic and housing data. Unlike the decennial census, ACS data are collected on a continuous basis. The ACS samples about 1 in every 40 households every year, or 250,000 households nationwide every month. This allows the Census Bureau to provide communities with reliable and timely data each year rather than every decade. Federal and State agencies often use ACS estimates to inform policymakers, distribute funds, and assess programs.

ACS Public Use Data Files

The Census Bureau produces a large number of pre-tabulated summary tables from the ACS. In addition, the Census Bureau produces the ACS Public Use Microdata Sample (PUMS) files containing de-identified records about individual people and housing units so that data users can analyze ACS data to create customized tables to meet their needs.

The USDA recommends that all members of a household related by blood, marriage, or adoption be considered as one family unit for the purposes of determining WIC eligibility. However, the only information the ACS PUMS provides on family relationships is each individual's relationship to the reference person (householder). To capture WIC eligibility among all families in a household, the USDA used the Minnesota Population Center's Integrated Public Use Microdata Series (IPUMS).¹ The IPUMS is created using ACS PUMS, and many of the variables in IPUMS and ACS PUMS are the same. However, IPUMS creates variables that describe additional family relationships that allow inclusion of children living in families unrelated to the householder in their poverty estimates, whereas ACS PUMS does not.

In order to allow for county-level estimates of WIC eligibility, three years (2010-2012) of IPUMS data were used to approximate the proportion of children less than 5 years of age that were income or adjunctively eligible for WIC services in California.

Determining WIC eligibility

IPUMS data were used to estimate the proportion of children less than 5 years of age that were living in families with a total household income less than or equal to 185 percent of the Federal Poverty Level (the threshold for WIC income eligibility) or adjunctively eligible for WIC through enrollment in Medi-Cal or Food Stamps (CalFresh).

Income Eligibility

Children were eligible for WIC if they had family incomes less than or equal to 185% of the Federal Poverty Level (FPL).² Children missing poverty status were not included in estimates of children income eligible for WIC.

ACS determines poverty status by comparing the total family income in the past 12 months to the poverty threshold appropriate for that family size and composition. If the total income of the family was less than or equal to the threshold multiplied by 1.85, every member of the family was considered less than or equal to 185% FPL. ACS defines family as at least 2 individuals (including the householder) living together that are related by birth, marriage, or adoption.³

Adjunctive Eligibility

Children were adjunctively eligible for WIC if they were enrolled in Medi-Cal or CalFresh, despite their income level.⁴ Children missing poverty status (i.e. foster children) were included in estimates of children adjunctively eligible for WIC.

Children were classified as being on CalFresh if one or more members of the household received CalFresh, a CalFresh benefit card or benefits from the Supplemental Nutrition Assistance Program (SNAP) during the past 12 months.³ Children were classified as being on Medi-Cal if their current insurance was Medi-Cal, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability.³ Therefore, this category is not specific to Medi-Cal. ACS applied an eligibility edit, which assigned this coverage category to the spouses and children of certain Medi-Cal beneficiaries.³

Children were also adjunctively eligible for WIC if they were a member of a family that was eligible to receive Temporary Assistance for Needy Families (TANF) benefits.⁴ ACS asks about public assistance income, which includes general assistance and TANF.³ Since these two sources can't be separated, we did not include this source of adjunctive eligibility.

Total Eligibility

The total number of WIC eligible children was calculated by adding the number of income eligible children to the number of adjunctively eligible children. The percent of WIC eligible children was obtained by dividing the number of WIC eligible children by the total number of children.

All estimates were weighted using the population (or person) weights. These estimates were calculated using SAS 9.3.

95% CI estimates for the percent of WIC eligible children

The following steps were used to calculate the 95% confidence intervals for each percent.⁵

1. The replicate population weights were used to calculate standard errors (SE) for the numerator and denominator of each percent. The standard errors were estimated using the sum of the squared differences between each replicate estimate X_r and the full sample estimate X , using the following formula:

$$SE(X) = \sqrt{\frac{4}{80} \sum_{r=1}^{80} (X_r - X)^2}$$

Where X = sample estimate using the full sample weight (i.e. numerator or denominator)

X_r = estimate using each replicate weight 1-80

2. The margin of error (MOE) for a 95% confidence interval was calculated for each numerator and denominator:

$$MOE(X) = 1.96 * SE(X)$$

3. The following formula was used to calculate the MOE of a proportion:

$$MOE_p = \frac{\pm \sqrt{MOE_{num}^2 - (p^2 * MOE_{den}^2)}}{X_{den}}$$

Where MOE_{num} = MOE of the numerator

MOE_{den} = MOE of the denominator

p = X_{num} / X_{den}

X_{num} = numerator of the proportion

X_{den} = denominator of the proportion

4. The 95% CI for the proportion = $p \pm MOE_p$

Differences between WIC eligibility guidelines and IPUMS data

There are several small differences between the WIC eligibility guidelines outlined in the California WIC Program Manual and what is available using IPUMS, outlined in Table 1.

Table 1. Eligibility guidelines used by WIC compared with data available in IPUMS 2010-2012

Topic	WIC eligibility guidelines	IPUMS data
Foster children	Included ⁴	Included in the number of children adjunctively eligible.
Definition of family in determining poverty status	A group of related and nonrelated individuals living together. Foster children are a family of 1. ⁴	At least 2 individuals living together that are related by birth, marriage, or adoption. Foster children are a family of 1.
CalFresh	Individual eligible for CalFresh. ⁴	Anyone in the household eligible for CalFresh. ³
Medi-Cal	More specific - Individual eligible for Medi-Cal or is a member of a family in which a pregnant woman or infant is certified as eligible for Medi-Cal. ⁴	Broader - Individual's current insurance was Medi-Cal, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability. ³
TANF	Eligible if a member of a family is eligible for TANF ⁴	Asks about general assistance and TANF together, can't be separated out. ³
Federal Poverty Level (Threshold) vs. Guidelines	Federal Poverty Guidelines ⁶ : -Updated each year by U.S. Department of Health and Human Services -Simplification of the Poverty Thresholds -used in determining financial eligibility for certain federal programs, including WIC ⁷	Federal Poverty Level (Threshold) : -Updated each year by the Census -used for statistical purposes, such as calculating the number of people in poverty ⁷ -Similar to the Poverty Guidelines ⁷
Age categories	2 age categories : - infants <1 year - children 1through 4 years	1 age category because of small sample sizes: - children <5 years

Geography

The most detailed unit of geography in the IPUMS is the Public Use Microdata Area (PUMA), which is a geographic unit containing at least 100,000 people.⁵ PUMA's do not exactly match up with counties in California. For example, there are 58 counties in California and 233 PUMAs. Most counties in California are composed of more than one PUMA. For example, Los Angeles has 67 PUMA's. However, there were 24 smaller counties that were aggregated to form 6 PUMA regions comprised of more than one county. For these counties, the WIC eligibility rate for the PUMA region was applied to all counties within a given PUMA region. The county to PUMA conversion was obtained using the Missouri Census Data Center's Geographic Correspondence Engines.⁸



Comparison to USDA Methods

Although the use of IPUMS data to estimate the proportion of the population that is income or adjunctively eligible for WIC services is consistent with USDA methodology for State estimates, there are several differences to be noted.⁹ First, USDA uses single-year estimates to coincide with the annual estimate of WIC eligibility and program reach for a given year, whereas the three-year aggregate dataset was used in order to derive stable county-level estimates for California in this report.

In order to maintain consistency with previous year's estimates, the USDA derived national estimates of WIC eligibility using the Current Population Survey Annual Social and Economic Survey (CPS ASES). The IPUMS ACS data were used by the USDA only to allocate the national total to individual states. The IPUMS ACS analyses resulted in State shares for each subgroup (i.e. infants <1 year, children 1-4 years, pregnant women, and all postpartum women) which were then applied to the CPS ASES national estimates. In this report, IPUMS ACS data were used to estimate both State and county estimates of WIC eligibility directly. For these reasons, State estimate in this report will vary slightly from what was reported for California by the USDA.⁹

Stability of Eligibility Estimates and Validating the Results

The eligibility estimates for infants and children are based upon a sample of the population responding to the American Community Survey between 2010 and 2012 and therefore subject to sampling error. Standard errors of estimates were produced for the 2010-2012 State, county and PUMA estimates. Appendix B shows how the standard errors, 95% CIs, and the coefficient of variation (CV), which is the ratio of the standard error to the eligibility percent estimate, were calculated. Since population estimates at an aggregated geographic level produce smaller margin of error, the stability of the estimates is considerably higher at the state level than at the county and regional levels. However, the CVs of all county and regions were less than 15 percent (ranging from 0.7 percent for Los Angeles County to 12.1 for El Dorado County), indicating stable estimates of WIC eligible infants and children for all counties and regions.

Although it is impossible to assess the true accuracy of the eligibility estimates, it is important that the estimates are reasonable. One comparison that can produce confidence in the eligibility estimates is to examine whether the average monthly WIC participation estimates ever exceed the eligibility estimates by State, County or PUMA. At the level of detail shown in this report, there are no cases where the participation estimates exceed the eligibility estimate figures.

Another comparison that can support eligibility estimates is to examine whether the average monthly Medi-Cal certified eligible counts for children less than 5 years of age ever exceed the eligibility estimates for infants and children. In comparing our eligibility estimates for infants and children to average monthly Medi-Cal certified eligible counts, the Medi-Cal figures fell within the range of estimates for WIC eligible infants and children (see Appendix F).

Income and Adjunctive Eligibility for WIC among Children (ages 0 to 4), Statewide and by County or Region of Residence, IPUMS (ACS) 2010-2012

County/Region	Income Eligible ($\leq 185\%$ FPL) ¹		Adjunctively Eligible ²		Income/Adjunctively Eligible ³		Coefficient of Variation (CV) ⁴
	Percent	(95% CI)	Percent	(95% CI)	Percent	(95% CI)	
California	45.9	(45.4 - 46.4)	11.8	(11.5 - 12.1)	57.7	(57.2 - 58.2)	0.4
Alameda	33.2	(30.9 - 35.4)	10.4	(9.1 - 11.6)	43.5	(41.3 - 45.7)	2.6
Butte	52.5	(45.4 - 59.5)	13.9	(9.3 - 18.6)	66.4	(59.5 - 73.3)	5.3
Contra Costa	31.1	(28.0 - 34.2)	9.7	(7.8 - 11.6)	40.7	(37.9 - 43.6)	3.6
El Dorado	32.4	(24.2 - 40.7)	5.2	(1.5 - 9.0)	37.7	(28.8 - 46.6)	12.1
Fresno	63.7	(61.2 - 66.1)	11.6	(9.7 - 13.6)	75.3	(73.0 - 77.6)	1.5
Humboldt	48.0	(38.9 - 57.1)	18.9	(11.6 - 26.3)	66.9	(59.3 - 74.5)	5.8
Imperial	57.4	(50.2 - 64.5)	7.0	(3.8 - 10.3)	64.4	(57.9 - 70.9)	5.1
Kern	61.4	(58.5 - 64.2)	10.1	(8.5 - 11.7)	71.5	(68.9 - 74.1)	1.8
Kings	65.3	(58.9 - 71.6)	7.4	(3.8 - 11.1)	72.7	(67.2 - 78.3)	3.9
Los Angeles	50.3	(49.5 - 51.1)	12.7	(12.1 - 13.3)	63.0	(62.2 - 63.9)	0.7
Madera	66.2	(58.9 - 73.5)	17.6	(10.3 - 24.9)	83.8	(77.4 - 90.3)	3.9
Marin	24.5	(18.9 - 30.2)	10.6	(5.8 - 15.3)	35.1	(29.1 - 41.1)	8.8
Merced	61.0	(54.4 - 67.6)	12.3	(8.7 - 15.9)	73.3	(67.3 - 79.3)	4.2
Napa	46.9	(38.2 - 55.6)	11.0	(6.2 - 15.8)	57.9	(49.7 - 66.0)	7.2
Orange	37.0	(35.2 - 38.8)	12.2	(11.1 - 13.3)	49.2	(47.7 - 50.7)	1.6
Placer	31.3	(25.8 - 36.8)	5.1	(2.4 - 7.9)	36.4	(31.0 - 41.8)	7.5
Riverside	48.5	(45.9 - 51.1)	14.0	(12.1 - 15.9)	62.5	(60.4 - 64.7)	1.8
Sacramento	49.4	(46.5 - 52.3)	9.4	(8.1 - 10.8)	58.8	(56.3 - 61.3)	2.2
San Bernardino	52.8	(50.3 - 55.3)	13.7	(11.9 - 15.4)	66.5	(64.3 - 68.7)	1.7
San Diego	40.1	(38.4 - 41.7)	9.2	(8.1 - 10.3)	49.3	(47.7 - 50.9)	1.6
San Francisco	24.1	(20.3 - 28.0)	10.2	(7.3 - 13.1)	34.3	(31.1 - 37.6)	4.9
San Joaquin	55.9	(51.9 - 59.9)	12.9	(10.3 - 15.5)	68.8	(65.1 - 72.5)	2.8
San Luis Obispo	38.0	(31.4 - 44.7)	16.4	(10.4 - 22.5)	54.5	(47.9 - 61.1)	6.2
San Mateo	25.6	(22.6 - 28.7)	10.2	(7.5 - 12.8)	35.8	(33.0 - 38.6)	4.0
Santa Barbara	47.5	(42.7 - 52.4)	11.8	(8.7 - 15.0)	59.4	(54.8 - 63.9)	3.9
Santa Clara	25.8	(24.0 - 27.6)	10.2	(8.7 - 11.7)	35.9	(33.8 - 38.1)	3.0
Santa Cruz	42.4	(36.1 - 48.6)	13.6	(8.6 - 18.6)	56.0	(50.7 - 61.3)	4.8
Shasta	55.4	(47.3 - 63.4)	15.9	(9.6 - 22.1)	71.2	(63.3 - 79.2)	5.7
Solano	41.1	(36.0 - 46.2)	14.6	(11.0 - 18.2)	55.7	(51.2 - 60.1)	4.1
Sonoma	41.8	(36.2 - 47.4)	11.6	(8.1 - 15.0)	53.4	(47.9 - 58.9)	5.2
Stanislaus	54.8	(51.2 - 58.4)	11.5	(9.0 - 14.0)	66.3	(62.5 - 70.1)	2.9
Tulare	69.1	(65.1 - 73.1)	11.0	(8.6 - 13.3)	80.1	(76.5 - 83.7)	2.3
Ventura	38.9	(35.5 - 42.4)	13.1	(10.8 - 15.4)	52.0	(49.0 - 55.1)	3.0
Yolo	39.6	(32.5 - 46.7)	9.9	(5.1 - 14.8)	49.5	(42.7 - 56.4)	7.1
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	40.1	(29.1 - 51.2)	13.3	(7.0 - 19.6)	53.4	(42.1 - 64.8)	10.8
Colusa, Glenn, Tehama and Trinity	57.6	(49.9 - 65.3)	17.4	(12.3 - 22.5)	75.0	(69.1 - 80.9)	4.0
Del Norte, Lassen, Modoc, Siskiyou, Nevada, Plumas and Sierra	48.1	(39.8 - 56.3)	11.6	(6.8 - 16.4)	59.7	(51.9 - 67.4)	6.7
Lake and Mendocino	64.0	(57.0 - 71.0)	10.9	(5.8 - 16.0)	74.9	(68.9 - 81.0)	4.1
Monterey and San Benito	52.2	(48.0 - 56.3)	14.7	(11.5 - 17.9)	66.9	(63.1 - 70.7)	2.9
Sutter and Yuba	57.8	(50.3 - 65.2)	11.7	(7.1 - 16.3)	69.5	(63.0 - 76.0)	4.8

¹Percent of children that are income eligible ($\leq 185\%$ FPL) for WIC services, excluding those with missing income information

²Additional percentage of children that are adjunctively eligible (enrolled in Medi-Cal or CalFresh) for WIC Services regardless of income

³Percent of children that are income eligible ($\leq 185\%$ FPL) or adjunctively eligible (enrolled in Medi-Cal or CalFresh Programs) for WIC Services

⁴The coefficient of variation (CV) is defined as the ratio of the standard error to the percent income/adjunctively eligible estimate.

References:

1. Steven Ruggles, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. Integrated Public Use Microdata Series: Version 5.0 [Machine-readable database]. Minneapolis: University of Minnesota, 2010.
2. California Department of Public Health, WIC Program Webpage
<http://www.cdph.ca.gov/programs/wicworks/Pages/AboutWICandHowtoApply.aspx>
3. American Community Survey and Puerto Rico Community Survey 2011 Subject Definitions
https://www.census.gov/acs/www/Downloads/data_documentation/SubjectDefinitions/2011_ACSS_subjectDefinitions.pdf (Accessed March 5, 2014).
4. WIC Program Manual: WIC-210-02
<http://www.cdph.ca.gov/programs/wicworks/Documents/WPM/WIC-WPM-210-03.pdf>
5. U.S. Census Bureau, A Compass for Understanding and Using American Community Survey Data: What PUMS Data Users Need to Know U.S. Government Printing Office, Washington DC, 2009.
<http://www.census.gov/acs/www/Downloads/handbooks/ACSPUMS.pdf>
6. WIC Income Guidelines Table: <http://www.cdph.ca.gov/programs/wicworks/Documents/WPM/WIC-APP-980-1060-WIC-IncomeGuidelines-WIC-4-16-2013.pdf>
7. Institute for Research on Policy <http://www.irp.wisc.edu/faqs/faq1.htm> (Accessed March 5, 2014)
8. Missouri Census Data Center's Geographic Correspondence Engine with Census 2010 Geography (MABLE/Geocorr2k) : <http://mcdc2.missouri.edu/websas/geocorr2k.html> (Accessed March 5, 2014)

Missouri Census Data Center's Geographic Correspondence Engine with Census 2010 Geography (MABLE/Geocorr12): <http://mcdc.missouri.edu/websas/geocorr12.html> (Accessed March 5, 2014)
9. U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis. National and State-Level Estimates of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligibles and Program Reach, 2011, by Paul Johnson, Linda Giannarelli, Erika Huber, and David Betson. Project Officer: Grant Lovellette. Alexandria, VA: March 2014
Main Report: <http://www.fns.usda.gov/sites/default/files/WICEligibles2011Volume1.pdf>
Appendices: <http://www.fns.usda.gov/sites/default/files/WICEligibles2011Volume2.pdf>

Appendix C: Estimating WIC Eligibility among Postpartum Women

This appendix was adapted from Appendix F of the National-and State-level Estimates of WIC Eligibles and Program Reach, 2011¹ and provides a detailed description of how WIC eligibility is determined for postpartum women, including how estimates of breastfeeding rates are employed in the estimation. Since WIC eligibility for postpartum women is determined not only on the basis of income or their participation in SNAP, TANF, or Medicaid, but also on whether or not they are breastfeeding, estimates of breastfeeding behavior are an important factor in this estimation.

Data Sources used by the USDA to Assess Breastfeeding Behavior

Detailed breastfeeding duration data at six months postpartum are not widely available, especially stratified by WIC eligibility status. The USDA makes multiple assumptions and utilizes three separate data sources: the Ross Labs Mothers Survey (RLMS, now named Infant Feeding Survey), the National Health and Nutritional Examination Survey (NHANES), and the SIPP, to derive breastfeeding rates for the WIC eligible population.¹⁻³ This method takes annual breastfeeding rates among WIC participants from RLMS and then adjusts these rates to account for higher rates among WIC eligible, non-participating women based on NHANES data. Since the USDA estimates of eligibility and program reach calculate the average monthly number of individuals eligible for WIC, in-hospital breastfeeding rates are used to determine eligibility for the first 6 months postpartum, and the 6-month breastfeeding rate is used to estimate women eligible for additional 6 months of services because they are still breastfeeding. SIPP data were used to simulate monthly postpartum WIC eligibility to develop additional adjustment factors to account for the interaction between women's certification periods, breastfeeding cessation, and the fact that women may not be income or adjunctively eligible throughout the year.¹⁻³

Data Sources used by Others States to Assess Breastfeeding Behavior

Researchers have recommended that the USDA use the National Immunization Survey (NIS) as a source of breastfeeding rates in lieu of the RLMS. Some states use NIS data for estimating WIC program reach, while other states use WIC client data as previously reported in the Pediatric Nutrition Surveillance System (PedNSS).^{4,5} Both of these options have limitations. First, the NIS is subject to recall bias as it asks mothers to report infant feeding information for children who are 19 to 35 months at the time of interview. Second, the age range of the children who are the focus of NIS means that it requires three years of NIS data to estimate the breastfeeding rates of infants born in the same calendar year. Finally, the NIS sample does not allow for annual stratification by WIC eligibility status at the state level, which is problematic given the variance in breastfeeding practices across states. The use of WIC client data alone can also be problematic. Although use of breastfeeding data directly from the WIC program (e.g. PedNSS or WIC MIS in California) would provide breastfeeding rates for mothers who are participating in WIC, this project requires estimates of breastfeeding rates among all mothers who are eligible for WIC, requiring further adjustments to account for the fact that WIC-eligible women are more likely to breastfeed than WIC participants.

Computing Total WIC-Eligible Postpartum Women

The estimation of the number of WIC-eligible postpartum women is closely related to the number of WIC-eligible infants. However, it is not a one-to-one relationship due to multiple births and infant and fetal deaths. An adjustment factor was derived by summing the total number of live births, multiple births, infant deaths and fetal deaths for the state in 2009-2011. The number of multiple births was subtracted from the 3-year total of live births. The number of infant and fetal deaths was then added to this figure to find the number of women who delivered during that period. Consequently, the total number of mothers of WIC-eligible infants was multiplied by a factor of 0.98.

Given that different benefit packages are provided to mothers and infants based upon infant feeding choice, the total universe of mothers of WIC-eligible infants is broken down into four groups: mothers who are breastfeeding at birth; mothers who are not breastfeeding at birth; mothers who are breastfeeding at six months; and mothers who are not breastfeeding at six months. Of these four groups, the first three are potentially eligible for WIC while the last group of mothers will not be eligible. The implicit assumption employed by the USDA methodology is that mothers apply for WIC eligibility at the birth of the child, and then reapply (if still breastfeeding) at six months postpartum.

Using WIC Program Data to Estimate Breastfeeding among WIC-eligible Postpartum Women

The WIC Management Information System (WIC MIS) collects data on monthly food package issuances for infants that can be used to determine infant feeding practices among WIC participants from birth through 12 months postpartum. To estimate the percentage of WIC mothers who initiated breastfeeding, the food package data for all infants less than one month old were assessed. Since some mothers of breastfed infants do not enroll their infant within the first month of life, and receive a pregnant breastfeeding package for themselves, we included these women into the overall estimate of any breastfeeding initiation. To estimate the percentage of WIC mothers breastfeeding at 6 months postpartum, WIC MIS data on food package issuance for infants 6 months of age was used. In 2011, these WIC MIS data showed that 65 percent of WIC mothers breastfed their infants within the first month, and 31.9 percent breastfed at 6 months. For county-level breastfeeding rates among WIC participants see Tables 1a and 1b.

Since estimates show that mothers who are eligible but not participating in WIC have higher rates of breastfeeding than WIC participants, the rates reported in WIC MIS for WIC participants will underestimate rates for all WIC-eligible women. The USDA methodology adjusts for this difference by using the 2001-2006 National Health and Nutrition Examination Survey (NHANES) data to compute ratios of breastfeeding rates for all WIC-eligible to WIC-participating mothers for breastfeeding initiation and at six months postpartum. The analysis of NHANES data showed that the breastfeeding initiation rate among WIC-eligible mothers was 5.6 percent higher than for WIC participants, while the breastfeeding rate at 6 months was 15 percent higher. These ratios are applied to the WIC MIS estimates of breastfeeding among WIC participants to approximate breastfeeding rates among all WIC-eligible mothers.

Additional Adjustment Factors

In the absence of further complications, the estimated rates of breastfeeding initiation among mothers of WIC-eligible infants could be used to estimate the numbers of breastfeeding and non-breastfeeding WIC-eligible mothers in the first six months, and the number of breastfeeding WIC-eligible mothers in the second six months. However, not all mothers of WIC-eligible infants will themselves be WIC-eligible. For example, consider the situation where at birth the infant is not income-eligible but gains WIC eligibility through enrollment in Medicaid. Unless the mother is also enrolled in Medicaid, she will not be WIC-eligible. While the mother may not be WIC-eligible at the birth of her child, the mother may gain WIC eligibility prior to being six months postpartum.

Given declining breastfeeding rates during the infant's first year, the in-hospital rate will overestimate the prevalence of breastfeeding for these mothers during months 2-6, resulting in misclassification of breastfeeding status among WIC eligibles. Even when the mother is WIC-eligible at the birth of the child, she may not be at the time of the six-month recertification. Finally, mothers who are certified as breastfeeding may have incentive to report that they have stopped breastfeeding prior to the end of a certification period, in order to obtain a food package that considers their infant fully fed by formula.

To account for the complications caused by changes in eligibility and declining breastfeeding rates during the year, data from the Survey of Income and Program Participation (SIPP) have been used to simulate adjustments to the in-hospital ($\alpha_{SIPP,0}$) and the six-month breastfeeding rates ($\alpha_{SIPP,6}$).^a Two simulations are performed with different breastfeeding assumptions, and the average monthly estimates of WIC-eligible mothers produced by the two simulations are compared to derive the adjustment factors. One adjustment factor is used to estimate average monthly eligibility for WIC-eligible mothers of infants under six months old ($\alpha_{SIPP,0}=0.620$) and the other is used to estimate eligibility for mothers with infants ages six months to under one year old ($\alpha_{SIPP,6}=0.832$).

^a For more information on SIPP-based adjustment factors for postpartum women see Appendix F in Volume II, USDA Report (2011): U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis. National and State-Level Estimates of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligibles and Program Reach, 2000–2009, by David Betson, Michael Martinez-Schiferl, Linda Giannarelli, and Sheila Zedlewski. Project Officer: Grant Lovellette, Alexandria, VA: December 2011. <http://www.fns.usda.gov/sites/default/files/WICEligibles2000-2009Vol2.pdf>

Computing Estimates of WIC-Eligible Postpartum Women in an Average Month, California

The estimation of the three groups of WIC-eligible mothers is computed as follows:

$$\text{Mothers of Eligible infants} = \text{Number of Eligible Infants} * 0.98 = 322,402$$

Breastfeeding Rates and Adjustment Factors:

$$\text{Breastfeeding Initiation} \quad \text{BF}_{\text{WIC},0} = 0.650 * 1.056 = \mathbf{0.686}, \alpha_{\text{SIPP},0} = \mathbf{0.620}$$

$$\text{Breastfeeding at 6 months} \quad \text{BF}_{\text{WIC},6} = 0.319 * 1.15 = \mathbf{0.367}, \alpha_{\text{SIPP},6} = \mathbf{0.832}$$

$$\begin{aligned} \text{Mothers breastfeeding at birth} &= 0.5 * (\text{N Eligible Mothers} * 0.686 * 0.620) \\ &= 322,402 * 0.212784 = \mathbf{68,602} \end{aligned}$$

$$\begin{aligned} \text{Mothers breastfeeding at six months} &= 0.5 * (\text{N Eligible Mothers} * 0.367 * 0.832) \\ &= 322,402 * 0.15261 = \mathbf{49,202} \end{aligned}$$

$$\begin{aligned} \text{Mothers not breastfeeding at birth} &= 0.5 * (\text{N Eligible Mothers}) * (1 - (0.686 * 0.620)) \\ &= 322,402 * 0.287216 = \mathbf{92,599} \end{aligned}$$

$$\begin{aligned} \text{Total Postpartum Women} &= \text{Mothers breastfeeding at birth (68,602)} \\ &\quad + \text{Mothers breastfeeding at six months (49,202)} \\ &\quad + \text{non-breastfeeding mothers (92,599)} \\ &\quad \hline &= \mathbf{210,403 \text{ Total Postpartum Women}} \end{aligned}$$

Table1a: Breastfeeding Rates among WIC Participants (WIC MIS) by County of Residence, 2011

County	Any Breastfeeding among Infants < 1 Month Old			Any Breastfeeding among Infants 6 Months Old		
	Total Infants	Breastfeeding	Percent	Total Infants	Breastfeeding	Percent
California	327,601	212,781	65.0	297,377	95,006	31.9
Alameda	8,141	6,288	77.2	8,298	3,404	41.0
Alpine	*	*	*	*	*	*
Amador	123	78	63.4	129	30	23.3
Butte	1,620	1,099	67.8	1,478	488	33.0
Calaveras	195	140	71.8	197	60	30.5
Colusa	272	178	65.4	241	61	25.3
Contra Costa	4,480	3,063	68.4	5,161	2,065	40.0
Del Norte	324	227	70.1	254	83	32.7
El Dorado	626	450	71.9	654	282	43.1
Fresno	14,028	6,973	49.7	12,216	2,381	19.5
Glenn	356	285	80.1	309	114	36.9
Humboldt	1,037	800	77.2	930	428	46.0
Imperial	2,397	1,817	75.8	1,981	331	16.7
Inyo	135	103	76.3	126	48	38.1
Kern	12,217	6,949	56.9	10,891	2,144	19.7
Kings	1,770	869	49.1	1,771	401	22.6
Lake	719	553	76.9	542	190	35.1
Lassen	196	138	70.4	174	48	27.6
Los Angeles	107,435	68,046	63.3	89,594	27,565	30.8
Madera	1,883	1,214	64.5	1,904	693	36.4
Marin	626	567	90.6	683	463	67.8
Mariposa	76	52	68.4	80	28	35.0
Mendocino	672	541	80.5	619	273	44.1
Merced	4,069	2,603	64.0	3,375	843	25.0
Modoc	49	26	53.1	63	14	22.2
Mono	70	51	72.9	75	34	45.3
Monterey	4,195	3,104	74.0	4,542	1,732	38.1
Napa	766	589	76.9	763	356	46.7
Nevada	382	331	86.7	303	168	55.4
Orange	21,638	14,627	67.6	19,474	6,836	35.1
Placer	1,177	916	77.8	1,013	422	41.7
Plumas	70	50	71.4	95	37	38.9
Riverside	18,785	11,451	61.0	19,165	5,734	29.9
Sacramento	13,448	9,357	69.6	11,310	3,538	31.3
San Benito	440	304	69.1	480	178	37.1
San Bernardino	20,627	10,101	49.0	20,638	4,155	20.1
San Diego	26,125	20,852	79.8	22,823	10,148	44.5
San Francisco	2,823	2,315	82.0	2,978	1,791	60.1
San Joaquin	7,729	5,092	65.9	7,179	2,065	28.8
San Luis Obispo	1,321	1,107	83.8	1,113	523	47.0
San Mateo	2,752	2,139	77.7	3,032	1,197	39.5
Santa Barbara	3,537	2,630	74.4	3,580	1,580	44.1
Santa Clara	9,093	6,791	74.7	8,051	2,976	37.0
Santa Cruz	1,839	1,489	81.0	1,835	933	50.8
Shasta	1,539	1,118	72.6	1,335	477	35.7
Sierra	17	15	88.2	10	*	*
Siskiyou	387	303	78.3	271	95	35.1
Solano	2,862	2,061	72.0	2,674	815	30.5
Sonoma	2,173	1,687	77.6	2,507	1,222	48.7
Stanislaus	4,756	2,610	54.9	4,752	1,218	25.6
Sutter	994	672	67.6	912	280	30.7
Tehama	625	404	64.6	614	184	30.0
Trinity	95	76	80.0	77	38	49.4
Tulare	5,980	2,606	43.6	6,212	1,296	20.9
Tuolumne	238	184	77.3	257	106	41.2
Ventura	5,376	3,094	57.6	5,575	1,717	30.8
Yolo	1,228	875	71.3	1,212	461	38.0
Yuba	1,066	720	67.5	835	248	29.7

*Cells suppressed when fewer than 10 participants.

Table 1b: Breastfeeding Rates among WIC Participants (WIC MIS) by PUMA of Residence, 2011

PUMA	Any Breastfeeding among Infants < 1 Month Old			Any Breastfeeding among Infants 6 Months Old		
	Total Infants	Breastfeeding	Percent	Total Infants	Breastfeeding	Percent
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	839	609	72.6	868	308	35.5
Colusa, Glenn, Tehama and Trinity	1348	943	70.0	1241	397	32.0
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	1425	1090	76.5	1170	450	38.5
Lake and Mendocino	1391	1094	78.6	1161	463	39.9
Monterey and San Benito	4635	3408	73.5	5022	1,910	38.0
Sutter and Yuba	2060	1392	67.6	1747	528	30.2

References

1. U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis. National and State-Level Estimates of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligibles and Program Reach, 2000–2009, by David Betson, Michael Martinez-Schiferl, Linda Giannarelli, and Sheila Zedlewski. Project Officer: Grant Lovellette, Alexandria, VA: December 2011.
Main Report: http://www.fns.usda.gov/sites/default/files/WICEligibles2000-2009Vol1_0.pdf
Appendices: <http://www.fns.usda.gov/sites/default/files/WICEligibles2000-2009Vol2.pdf>
2. U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis. National and State-Level Estimates of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligibles and Program Reach, 2010, by Michael Martinez-Schiferl, Sheila Zedlewski, and Linda Giannarelli. Project Officer: Grant Lovellette. Alexandria, VA: January 2013.
Main Report: <http://www.fns.usda.gov/sites/default/files/WICEligibles2010Vol1.pdf>
Appendices: <http://www.fns.usda.gov/sites/default/files/WICEligibles2010Vol2.pdf>
3. U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis. National and State-Level Estimates of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligibles and Program Reach, 2011, by Paul Johnson, Linda Giannarelli, Erika Huber, and David Betson. Project Officer: Grant Lovellette. Alexandria, VA: March 2014
Main Report: <http://www.fns.usda.gov/sites/default/files/WICEligibles2011Volume1.pdf>
Appendices: <http://www.fns.usda.gov/sites/default/files/WICEligibles2011Volume2.pdf>
4. WIC Nutrition Program Caseload Management Project User’s Guide. Washington State Department of Health, 2008.
5. Montana WIC State Plan 2014.
<http://www.dphhs.mt.gov/wic/stateplan2014/documents/StatePlan2014FullVersion.pdf>

Appendix D: Overview of Methods and Calculations for Eligibility Estimates

Table 1: Overview of Methods for Computing Estimates of WIC Eligible Infants, California 2011

Table 2: Overview of Methods for Computing Estimates of WIC Eligible Pregnant Women, California 2011

Table 3: Overview of Methods for Computing Estimates of WIC Eligible Postpartum Women, California 2011

Table 4: Overview of Methods for Computing Estimates of WIC Eligible Children, California 2011

Table 5. Priority Ranking System for WIC Participation

Table 6a: Estimates of Total WIC Eligible Infants in an Average Month by County or Region of Residence, 2011

Table 6b: WIC Eligible Infants, Number Served by Priority Type, and Program Coverage in an Average Month, 2011

Table 7a: Estimates of WIC Eligible Pregnant Women in an Average Month by County or Region of Residence, 2011

Table 7b: WIC Eligible Pregnant Women, Number Served by Priority Type, and Program Coverage in Average Month, 2011

Table 8a: Estimates of WIC Eligible Postpartum Women in an Average Month by County/Region of Residence, 2011

Table 8b: WIC Eligible Postpartum Women, Number Served by Priority Type, and Program Coverage in Average Month, 2011

Table 9a: Estimates of Total WIC Eligible Children in an Average Month by County or Region of Residence, 2011

Table 9b: WIC Eligible Children, Number Served by Priority Type, and Program Coverage in an Average Month, 2011

Table 1: Overview of Methods for Computing Estimates of WIC Eligible Infants, California 2011

Step	Description	Source	Computation of Estimate	Computation of Range	
				Lower	Upper
Demographic Eligibility	Identify infants < 1 year of age.	DOF population estimates, 2011	506,556*	506,556*	506,556*
Total Income or Adjunctive Eligibility	Count as eligible infants and children if prior year's annual family income is ≤ 185 percent of the federal poverty level. Add in as eligible those infants and children whose household reports enrollment in Medi-Cal or CalFresh at any point during the prior calendar year. <i>Percent income or adjunctively eligible is 57.7 (95% confidence interval CI = 57.2-58.2).</i>	2010-2012 ACS State and county/PUMA level	292,376	289,876	294,877
Annual-to-monthly adjustment	Multiply the estimates by a <i>factor of 1.16</i> to account for the impact of monthly fluctuations in income and program participation, and for the impact of 12 month certification periods.	USDA	339,156	336,256	342,057
Adjust for nutritional risk	Multiply estimates by a <i>factor of 0.97</i> to account for some otherwise-eligible infants that might not be found to be at nutritional risk.	USDA	328,982	(326,168 -	331,796)

*Figures shown in this table have been rounded; therefore, following computation steps using these figures will result in slightly different total estimates than what is reported.

Table 2: Overview of Methods for Computing Estimates of WIC Eligible Pregnant Women, California 2011

Step	Description	Source	Computation of Estimate	Computation of Range	
Starting Point	Use as a starting point the final average monthly eligibility estimate for infants.		328,982*	326,168*	331,796*
Adjust for multiple births and infant deaths	The number of pregnant women/mothers is not exactly equal to the number of infants born in a given year. Multiply by a factor to account for the impact of multiple births and infant and fetal deaths.	Vital Statistics, 2009-2011 (factor 0.98)	322,402	319,645	325,160
Adjust for length of pregnancy and lower eligibility during pregnancy compared to after birth.	Multiply the estimate of pregnant women by a factor of 0.533 (0.75 X 0.71) to account for 9 months of pregnancy (factor of 0.75) and to account for lower likelihood of financial eligibility during pregnancy versus after birth (factor of 0.71).	USDA	171,679	170,211	173,148
Adjust for nutritional risk	Multiply the estimates by a factor of 0.97 to reflect that not all eligible pregnant women will meet nutritional risk criterion.	USDA	166,529	(165,105-	167,953)

*Figures shown in this table have been rounded; therefore, following computation steps using these figures will result in slightly different total estimates than what is reported.

Table 3: Overview of Methods for Computing Estimates of WIC Eligible Postpartum Women, California 2011

Step	Description	Source	Computation of Estimate	Computation of Range	
Starting Point	Use as a starting point the final average monthly eligibility estimate for infants.		328,982*	326,168*	331,796*
Adjust for multiple births and infant deaths	The number of pregnant women/mothers is not exactly equal to the number of infants born in a given year. Multiply by a factor to account for the impact of multiple births and infant and fetal deaths.	Vital Statistics, 2009-2011 (factor 0.98)	322,402	319,645	325,160
Adjust for breastfeeding initiation, duration and cessation, certification periods, and change in eligibility throughout the year.	<p>1) Estimate rates of in-hospital breastfeeding and any breastfeeding at 6 months postpartum among WIC participating mothers in 2011 (65% and 32%, respectively).</p> <p>2) Adjust these estimates to approximate breastfeeding for WIC-eligible mothers (using factors of 1.056 and 1.15 for in-hospital and 6 months, respectively).</p> <p>3) Multiply these estimates by a factor to account for the interaction between women’s certification periods, breastfeeding cessation, and that some women may not be eligible throughout the year.</p> <p>4) Estimate the total number of eligible postpartum women as sum of eligible breastfeeding and non-breastfeeding in the first half of the year, and eligible breastfeeding women for second half of the year.</p>	<p>2011 WIC MIS</p> <p>USDA</p> <p>USDA</p>	210,403	208,603	212,202
Adjust for nutritional risk	No adjustment for nutritional risk.	Same	210,403	(208,603-	212,202)

*Figures shown in this table have been rounded; therefore, following computation steps using these figures will result in slightly different total estimates than what is reported.

Table 4: Overview of Methods for Computing Estimates of WIC Eligible Children, California 2011

Step	Description	Source	Computation of Estimate	Computation of Range	
				Lower	Upper
Demographic Eligibility	Identify children ages 1 to 4 years. Baseline Count	DOF population estimates, 2011	2,007,912*	2,007,912*	2,007,912*
Total Income or Adjunctive Eligibility	Count as eligible infants and children if prior year's annual family income is ≤ 185 percent of the federal poverty level. Add in as eligible those infants and children whose household reports enrollment in Medi-Cal or CalFresh at any point during the prior calendar year. <i>Percent income or adjunctively eligible is 57.7 (95% confidence interval CI = 57.2-58.2).</i>	2010-2012 ACS State and county/PUMA level	1,158,937	1,149,025	1,168,849
Annual-to-monthly adjustment	Multiply the estimates by a <i>factor of 1.00</i> to account for the impact of monthly fluctuations in income and program participation, and for the impact of 6 month certification periods.	USDA	1,158,937	1,149,025	1,168,849
Adjust for nutritional risk	Multiply estimates by a <i>factor of 0.99</i> to account for some otherwise-eligible children that might not be found to be at nutritional risk.	USDA	1,147,348	(1,137,534 -	1,157,161)

*Figures shown in this table have been rounded; therefore, following computation steps using these figures will result in slightly different total estimates than what is reported.

WIC Participant Data to Derive Coverage Rates

For this report, WIC participants are defined as women, infants and children on WIC who receive a food package (or are fully breastfeeding infants) in a given time period. WIC participant count data was obtained from the WIC MIS in order to derive state, county and regional-level WIC program coverage rates - the percent of WIC-eligibles who receive benefits from the program. Monthly WIC participant counts were obtained at the State and county level by population group (prenatal women postpartum women, infants and children) and priority type (Table 5). County of residence was assigned based on recorded family address; those missing address information were assigned to the county in which they were receiving WIC services (i.e. address of WIC clinic). An average monthly caseload estimate was produced for each county or region and the State by summing the 12 monthly participant counts from January 2011 through December 2011 and dividing by 12 months (see Appendix E).

Table 5. Priority Ranking System for WIC Participation

Priority	Description
I	Pregnant women, breastfeeding women, and infants at nutritional risk as demonstrated by hematological or anthropometric measurements or other documented nutritionally related medical conditions that demonstrate the need for supplemental foods.
II	Except those infants who qualify for Priority I, infants up to 6 months of age born to program participants who participated during pregnancy, and infants up to 6 months of age born of women who were not program participants during pregnancy but whose medical records document that they were at nutritional risk during pregnancy due to nutritional conditions detectable by biochemical or anthropometric measurements or other documented nutritionally related medical conditions that demonstrated the person's need for supplemental foods.
III	Children at nutritional risk as demonstrated by hematological or anthropometric measurements or other documented medical conditions that demonstrate the child's need for supplemental foods. High-risk non-breastfeeding women with anthropometric, biochemical, or clinical risk criteria.
IV	Pregnant women, breastfeeding women, and infants at nutritional risk because of an inadequate dietary pattern.
V	Children at nutritional risk because of an inadequate dietary pattern.
VI	Postpartum women at nutritional risk.

Notes: Priorities I through VI must be used in all States. Source: 7 CFR 246.7.

Table 6a: Estimates of Total WIC Eligible Infants in an Average Month by County or Region of Residence, 2011

County/Region	Baseline Count ¹	Percent ²	Total WIC Eligible Infants	
			Estimate	Range (Low – High)
California	506,556	64.9	328,982	(326,168 - 331,796)
County				
Alameda	19,097	49.0	9,348	(8,871 - 9,826)
Butte	2,427	74.7	1,813	(1,626 - 2,000)
Contra Costa	12,251	45.9	5,617	(5,226 - 6,009)
El Dorado	1,620	42.4	687	(524 - 850)
Fresno	16,217	84.7	13,736	(13,319 - 14,153)
Humboldt	1,538	75.3	1,158	(1,026 - 1,290)
Imperial	3,103	72.5	2,248	(2,023 - 2,474)
Kern	14,315	80.4	11,514	(11,099 - 11,929)
Kings	2,561	81.8	2,096	(1,936 - 2,255)
Los Angeles	131,779	70.9	93,420	(92,165 - 94,676)
Madera	2,425	94.3	2,287	(2,111 - 2,463)
Marin	2,369	39.5	935	(774 - 1,096)
Merced	4,275	82.5	3,526	(3,236 - 3,816)
Napa	1,493	65.1	972	(835 - 1,109)
Orange	38,023	55.4	21,053	(20,403 - 21,703)
Placer	3,828	41.0	1,569	(1,337 - 1,801)
Riverside	30,808	70.4	21,682	(20,924 - 22,439)
Sacramento	20,060	66.2	13,282	(12,718 - 13,845)
San Bernardino	31,234	74.8	23,370	(22,593 - 24,147)
San Diego	44,407	55.5	24,630	(23,847 - 25,413)
San Francisco	8,846	38.6	3,419	(3,093 - 3,745)
San Joaquin	10,482	77.4	8,115	(7,675 - 8,555)
San Luis Obispo	2,625	61.3	1,609	(1,415 - 1,804)
San Mateo	9,087	40.3	3,662	(3,372 - 3,952)
Santa Barbara	5,714	66.8	3,816	(3,522 - 4,111)
Santa Clara	23,889	40.4	9,661	(9,092 - 10,231)
Santa Cruz	3,221	63.0	2,030	(1,839 - 2,220)
Shasta	2,094	80.1	1,678	(1,491 - 1,866)
Solano	5,138	62.7	3,219	(2,962 - 3,477)
Sonoma	5,279	60.1	3,171	(2,845 - 3,497)
Stanislaus	7,737	74.6	5,773	(5,445 - 6,101)
Tulare	8,104	90.1	7,303	(6,976 - 7,631)
Ventura	10,944	58.6	6,410	(6,035 - 6,785)
Yolo	2,409	55.7	1,342	(1,156 - 1,529)
Region				
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	1,529	60.1	919	(724 - 1,114)
Colusa, Glenn, Tehama and Trinity	1,596	84.4	1,347	(1,241 - 1,452)
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	2,140	67.1	1,437	(1,249 - 1,624)
Lake and Mendocino	1,743	84.3	1,470	(1,352 - 1,588)
Monterey and San Benito	7,578	75.3	5,703	(5,378 - 6,027)
Sutter and Yuba	2,570	78.2	2,009	(1,821 - 2,197)

¹Number of infants less than 1 year of age, DOF population estimates, 2011.

²Percent of infants eligible for WIC services = percentage of children that are income or adjunctively eligible for WIC based on IPUMS(ACS) 2010-2012 data (see Appendix B) * income adjustment factor of 1.16 * nutritional risk adjustment factor of 0.97.

Table 6b: WIC Eligible Infants, Number Served by Priority Type, and Program Coverage in an Average Month, 2011

County/Region	Eligible Infants	Infants Served by WIC				Total Served ¹	Rate	Coverage (Range)
		Priority I	Priority II	Priority IV				
California	328,982	226,087	63,864	7803	298,335	90.7	(89.9 - 91.5)	
County								
Alameda	9,348	7,024	935	200	8,164	87.3	(83.1 - 92.0)	
Butte	1,813	1,126	293	22	1,445	79.7	(72.3 - 88.9)	
Contra Costa	5,617	3,895	991	82	4,994	88.9	(83.1 - 95.6)	
El Dorado	687	526	77	38	643	93.6	(75.6 - 100.0)	
Fresno	13,736	8,047	4,303	174	12,544	91.3	(88.6 - 94.2)	
Humboldt	1,158	784	91	31	907	78.3	(70.3 - 88.4)	
Imperial	2,248	1,631	243	59	1,936	86.1	(78.3 - 95.7)	
Kern	11,514	8,607	2,109	253	10,982	95.4	(92.1 - 98.9)	
Kings	2,096	1,188	514	43	1,752	83.6	(77.7 - 90.5)	
Los Angeles	93,420	67,938	21,782	1,846	91,642	98.1	(96.8 - 99.4)	
Madera	2,287	1,511	376	18	1,908	83.4	(77.5 - 90.4)	
Marin	935	585	48	10	643	68.8	(58.7 - 83.1)	
Merced	3,526	2,688	666	90	3,448	97.8	(90.4 - 100.0)	
Napa	972	648	109	17	774	79.6	(69.8 - 92.7)	
Orange	21,053	15,582	3,609	468	19,676	93.5	(90.7 - 96.4)	
Placer	1,569	809	116	52	977	62.3	(54.2 - 73.1)	
Riverside	21,682	14,099	3,975	896	19,025	87.7	(84.8 - 90.9)	
Sacramento	13,282	8,600	2,259	409	11,278	84.9	(81.5 - 88.7)	
San Bernardino	23,370	13,482	6,720	495	20,791	89.0	(86.1 - 92.0)	
San Diego	24,630	18,853	2,789	719	22,483	91.3	(88.5 - 94.3)	
San Francisco	3,419	2,655	277	47	2,982	87.2	(79.6 - 96.4)	
San Joaquin	8,115	5,326	1,619	118	7,070	87.1	(82.6 - 92.1)	
San Luis Obispo	1,609	914	131	40	1,085	67.4	(60.1 - 76.7)	
San Mateo	3,662	2,468	363	93	2,926	79.9	(74.0 - 86.8)	
Santa Barbara	3,816	2,988	558	43	3,593	94.2	(87.4 - 100.0)	
Santa Clara	9,661	6,416	1,350	265	8,036	83.2	(78.5 - 88.4)	
Santa Cruz	2,030	1,574	152	68	1,794	88.4	(80.8 - 97.6)	
Shasta	1,678	1,037	180	69	1,288	76.8	(69.0 - 86.4)	
Solano	3,219	1,722	559	175	2,461	76.5	(70.8 - 83.1)	
Sonoma	3,171	2,062	323	71	2,459	77.5	(70.3 - 86.4)	
Stanislaus	5,773	3,108	1,298	308	4,718	81.7	(77.3 - 86.6)	
Tulare	7,303	4,055	2,018	87	6,175	84.6	(80.9 - 88.5)	
Ventura	6,410	4,138	1,152	154	5,466	85.3	(80.6 - 90.6)	
Yolo	1,342	885	245	41	1,176	87.6	(76.9 - 100.0)	
Region								
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	919	686	123	28	842	91.6	(75.6 - 100.0)	
Colusa, Glenn, Tehama and Trinity	1,347	1,018	192	26	1,242	92.2	(85.5 - 100.0)	
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	1,437	964	167	39	1,175	81.8	(72.4 - 94.1)	
Lake and Mendocino	1,470	1,044	123	30	1,197	81.4	(75.4 - 88.5)	
Monterey and San Benito	5,703	4,158	606	152	4,925	86.4	(81.7 - 91.6)	
Sutter and Yuba	2,009	1,242	421	33	1,705	84.9	(77.6 - 93.6)	

¹The sum of participants by priority type may not be equal to the 'total served' column because a small number of participants had an unknown priority type and are not shown. These cases are largely due to participants moving from out-of-state for which priority type could not be determined.

Table 7a: Estimates of WIC Eligible Pregnant Women in an Average Month by County or Region of Residence, 2011

County	Mothers of Eligible Infants ¹	Eligible Pregnant Women ² Number	Range (Low-High)
California	322,402	166,529	(165,105 - 167,953)
County			
Alameda	9,161	4,732	(4,490 - 4,974)
Butte	1,777	918	(823 - 1,013)
Contra Costa	5,505	2,843	(2,645 - 3,041)
El Dorado	673	348	(265 - 430)
Fresno	13,461	6,953	(6,742 - 7,164)
Humboldt	1,135	586	(519 - 653)
Imperial	2,204	1,138	(1,024 - 1,252)
Kern	11,283	5,828	(5,618 - 6,038)
Kings	2,054	1,061	(980 - 1,142)
Los Angeles	91,552	47,289	(46,654 - 47,924)
Madera	2,241	1,158	(1,069 - 1,247)
Marin	917	473	(392 - 555)
Merced	3,456	1,785	(1,638 - 1,932)
Napa	952	492	(423 - 561)
Orange	20,632	10,657	(10,328 - 10,986)
Placer	1,537	794	(677 - 912)
Riverside	21,248	10,975	(10,592 - 11,359)
Sacramento	13,016	6,723	(6,438 - 7,008)
San Bernardino	22,903	11,830	(11,437 - 12,223)
San Diego	24,138	12,468	(12,071 - 12,864)
San Francisco	3,351	1,731	(1,565 - 1,896)
San Joaquin	7,953	4,108	(3,885 - 4,330)
San Luis Obispo	1,577	815	(716 - 913)
San Mateo	3,588	1,854	(1,707 - 2,000)
Santa Barbara	3,740	1,932	(1,783 - 2,081)
Santa Clara	9,468	4,890	(4,602 - 5,179)
Santa Cruz	1,989	1,027	(931 - 1,124)
Shasta	1,645	850	(755 - 945)
Solano	3,155	1,630	(1,499 - 1,760)
Sonoma	3,107	1,605	(1,440 - 1,770)
Stanislaus	5,657	2,922	(2,756 - 3,088)
Tulare	7,157	3,697	(3,531 - 3,863)
Ventura	6,281	3,244	(3,055 - 3,434)
Yolo	1,316	680	(585 - 774)
Region			
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	901	465	(366 - 564)
Colusa, Glenn, Tehama and Trinity	1,320	682	(628 - 735)
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	1,408	727	(632 - 822)
Lake and Mendocino	1,441	744	(684 - 804)
Monterey and San Benito	5,589	2,887	(2,722 - 3,051)
Sutter and Yuba	1,969	1,017	(922 - 1,112)

¹Number of mothers of eligible infants derived from count of eligible infants reduced by factor of 0.98 to account for multiple births, fetal and infant deaths.

²Multiply number of mothers by factor of 0.533 to account for length of pregnancy (0.75) and difference in eligibility during pregnancy and postpartum period (0.71), and by a factor of 0.97 to reflect that not all eligible pregnant women will meet nutritional risk criteria.

Table 7b: WIC Eligible Pregnant Women, Number Served by Priority Type, and Program Coverage in Average Month, 2011

County	Eligible Pregnant Women ¹	Pregnant Women Served by WIC			Coverage (Range)	
		Priority I	Priority IV	Total Served ¹	Rate	(Range)
California	166,529	125,928	12,881	138,872	83.4	(82.7 - 84.1)
County						
Alameda	4,732	3,398	278	3,675	77.7	(73.9 - 81.8)
Butte	918	658	24	682	74.3	(67.3 - 82.9)
Contra Costa	2,843	2,225	178	2,409	84.7	(79.2 - 91.1)
El Dorado	348	290	11	301	86.5	(70.0 - 100.0)
Fresno	6,953	5,755	295	6,052	87.0	(84.5 - 89.8)
Humboldt	586	408	48	456	77.8	(69.8 - 87.9)
Imperial	1,138	764	50	814	71.5	(65.0 - 79.5)
Kern	5,828	5,249	213	5,464	93.8	(90.5 - 97.3)
Kings	1,061	753	33	787	74.2	(68.9 - 80.3)
Los Angeles	47,289	40,300	4,440	44,751	94.6	(93.4 - 95.9)
Madera	1,158	807	34	841	72.6	(67.4 - 78.7)
Marin	473	314	20	334	70.6	(60.2 - 85.2)
Merced	1,785	1,619	74	1,694	94.9	(87.7 - 100.0)
Napa	492	353	21	374	76.0	(66.7 - 88.4)
Orange	10,657	8,524	860	9,385	88.1	(85.4 - 90.9)
Placer	794	411	36	447	56.3	(49.0 - 66.0)
Riverside	10,975	7,244	978	8,229	75.0	(72.4 - 77.7)
Sacramento	6,723	4,792	334	5,127	76.3	(73.2 - 79.6)
San Bernardino	11,830	7,872	530	8,406	71.1	(68.8 - 73.5)
San Diego	12,468	9,230	1,466	10,712	85.9	(83.3 - 88.7)
San Francisco	1,731	1,070	288	1,358	78.5	(71.6 - 86.8)
San Joaquin	4,108	2,929	171	3,100	75.5	(71.6 - 79.8)
San Luis Obispo	815	448	27	475	58.3	(52.0 - 66.3)
San Mateo	1,854	1,125	95	1,221	65.9	(61.1 - 71.5)
Santa Barbara	1,932	1,508	149	1,657	85.8	(79.6 - 92.9)
Santa Clara	4,890	3,161	447	3,609	73.8	(69.7 - 78.4)
Santa Cruz	1,027	704	161	865	84.2	(77.0 - 92.9)
Shasta	850	651	14	665	78.2	(70.4 - 88.1)
Solano	1,630	1,007	101	1,109	68.0	(63.0 - 74.0)
Sonoma	1,605	1,021	118	1,139	71.0	(64.4 - 79.1)
Stanislaus	2,922	1,772	175	1,948	66.7	(63.1 - 70.7)
Tulare	3,697	2,505	148	2,655	71.8	(68.7 - 75.2)
Ventura	3,244	2,056	161	2,218	68.4	(64.6 - 72.6)
Yolo	680	496	52	549	80.7	(70.9 - 93.8)
Region						
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	465	378	17	394	84.7	(69.9 - 100.0)
Colusa, Glenn, Tehama and Trinity	682	551	31	583	85.5	(79.3 - 92.8)
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	727	619	22	641	88.2	(78.0 - 100.0)
Lake and Mendocino	744	557	28	585	78.6	(72.8 - 85.5)
Monterey and San Benito	2,887	1,637	718	2,357	81.6	(77.3 - 86.6)
Sutter and Yuba	1,017	759	37	797	78.4	(71.7 - 86.4)

¹The sum of participants by priority type may not be equal to the 'total served' column because a small number of participants had an unknown priority type and are not shown. These cases are largely due to participants moving from out-of-state for which priority type could not be determined.

Table 8a: Estimates of WIC Eligible Postpartum Women in an Average Month by County/Region of Residence, 2011

County	Mothers of Eligible Infants ¹	Eligible Postpartum Women ² Number	Range (Low-High)
California	322,402	210,403	(208,603 - 212,202)
County			
Alameda	9,161	6,378	(6,052 - 6,703)
Butte	1,777	1,169	(1,048 - 1,290)
Contra Costa	5,505	3,806	(3,541 - 4,071)
El Dorado	673	475	(363 - 588)
Fresno	13,461	7,986	(7,744 - 8,229)
Humboldt	1,135	817	(724 - 910)
Imperial	2,204	1,278	(1,150 - 1,406)
Kern	11,283	6,705	(6,463 - 6,947)
Kings	2,054	1,249	(1,154 - 1,344)
Los Angeles	91,552	59,266	(58,470 - 60,062)
Madera	2,241	1,511	(1,395 - 1,627)
Marin	917	756	(626 - 886)
Merced	3,456	2,141	(1,965 - 2,317)
Napa	952	689	(592 - 786)
Orange	20,632	13,780	(13,355 - 14,206)
Placer	1,537	1,075	(917 - 1,234)
Riverside	21,248	13,663	(13,186 - 14,141)
Sacramento	13,016	8,457	(8,098 - 8,816)
San Bernardino	22,903	13,654	(13,200 - 14,108)
San Diego	24,138	17,207	(16,661 - 17,754)
San Francisco	3,351	2,639	(2,387 - 2,890)
San Joaquin	7,953	5,072	(4,797 - 5,347)
San Luis Obispo	1,577	1,143	(1,005 - 1,281)
San Mateo	3,588	2,472	(2,277 - 2,668)
Santa Barbara	3,740	2,659	(2,454 - 2,864)
Santa Clara	9,468	6,410	(6,032 - 6,788)
Santa Cruz	1,989	1,478	(1,339 - 1,617)
Shasta	1,645	1,103	(980 - 1,227)
Solano	3,155	2,038	(1,875 - 2,201)
Sonoma	3,107	2,278	(2,044 - 2,512)
Stanislaus	5,657	3,522	(3,321 - 3,722)
Tulare	7,157	4,294	(4,102 - 4,487)
Ventura	6,281	4,066	(3,828 - 4,304)
Yolo	1,316	897	(772 - 1,022)
Region			
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	901	603	(475 - 732)
Colusa, Glenn, Tehama and Trinity	1,320	862	(794 - 929)
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	1,408	963	(838 - 1,089)
Lake and Mendocino	1,441	995	(915 - 1,075)
Monterey and San Benito	5,589	3,810	(3,593 - 4,027)
Sutter and Yuba	1,969	1,269	(1,150 - 1,388)

¹Number of mothers of eligible infants derived from count of eligible infants reduced by factor of 0.98 to account for multiple births, fetal and infant deaths.

²Appendix C provides detailed methodology for estimating WIC eligibility among postpartum women.

Table 8b: WIC Eligible Postpartum Women, Number Served by Priority Type, and Program Coverage in Average Month, 2011

County	Eligible Postpartum Women	Postpartum Women Served by Priority Type				Total Served ¹	Coverage (Range)	
		Priority I	Priority III	Priority VI	Rate			
California	210,403	106,337	19,100	66,322	191,905	91.2	(90.4 - 92.0)	
County								
Alameda	6,378	3,808	554	1,277	5,640	88.4	(84.1 - 93.2)	
Butte	1,169	559	180	204	945	80.8	(73.3 - 90.2)	
Contra Costa	3,806	2,249	415	802	3,471	91.2	(85.3 - 98.0)	
El Dorado	475	300	55	93	448	94.3	(76.2 - 100.0)	
Fresno	7,986	2,666	1,237	3,276	7,186	90.0	(87.3 - 92.8)	
Humboldt	817	428	60	113	602	73.7	(66.2 - 83.1)	
Imperial	1,278	487	99	522	1,109	86.8	(78.9 - 96.4)	
Kern	6,705	2,553	726	3,021	6,304	94.0	(90.7 - 97.5)	
Kings	1,249	476	209	423	1,108	88.7	(82.4 - 96.0)	
Los Angeles	59,266	30,414	4,154	23,770	58,362	98.5	(97.2 - 99.8)	
Madera	1,511	793	218	301	1,313	86.9	(80.7 - 94.1)	
Marin	756	457	30	47	534	70.6	(60.3 - 85.3)	
Merced	2,141	984	288	736	2,009	93.8	(86.7 - 100.0)	
Napa	689	400	49	114	563	81.7	(71.6 - 95.1)	
Orange	13,780	7,675	812	4,508	12,999	94.3	(91.5 - 97.3)	
Placer	1,075	428	65	139	632	58.8	(51.2 - 68.9)	
Riverside	13,663	7,057	1,220	4,288	12,577	92.1	(88.9 - 95.4)	
Sacramento	8,457	3,798	924	2,074	6,799	80.4	(77.1 - 84.0)	
San Bernardino	13,654	5,233	1,932	5,311	12,498	91.5	(88.6 - 94.7)	
San Diego	17,207	10,488	1,016	3,773	15,307	89.0	(86.2 - 91.9)	
San Francisco	2,639	1,880	135	306	2,322	88.0	(80.3 - 97.3)	
San Joaquin	5,072	2,358	716	1,354	4,428	87.3	(82.8 - 92.3)	
San Luis Obispo	1,143	545	74	136	756	66.1	(59.0 - 75.2)	
San Mateo	2,472	1,360	222	438	2,020	81.7	(75.7 - 88.7)	
Santa Barbara	2,659	1,802	171	644	2,617	98.4	(91.4 - 100.0)	
Santa Clara	6,410	3,317	398	1,485	5,201	81.1	(76.6 - 86.2)	
Santa Cruz	1,478	991	100	232	1,323	89.5	(81.8 - 98.8)	
Shasta	1,103	473	166	148	788	71.4	(64.2 - 80.4)	
Solano	2,038	885	252	473	1,611	79.0	(73.2 - 85.9)	
Sonoma	2,278	1,340	128	331	1,800	79.0	(71.7 - 88.1)	
Stanislaus	3,522	1,447	483	1,076	3,006	85.3	(80.8 - 90.5)	
Tulare	4,294	1,596	776	1,497	3,873	90.2	(86.3 - 94.4)	
Ventura	4,066	1,926	304	1,334	3,567	87.7	(82.9 - 93.2)	
Yolo	897	508	117	181	808	90.1	(79.1 - 100.0)	
Region								
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	603	373	59	126	560	92.9	(76.5 - 100.0)	
Colusa, Glenn, Tehama and Trinity	862	445	165	167	778	90.3	(83.7 - 98.0)	
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	963	464	106	145	716	74.4	(65.7 - 85.4)	
Lake and Mendocino	995	542	121	145	809	81.3	(75.3 - 88.4)	
Monterey and San Benito	3,810	2,278	169	1,009	3,457	90.7	(85.8 - 96.2)	
Sutter and Yuba	1,269	549	200	305	1,055	83.1	(76.0 - 91.7)	

¹The sum of participants by priority type may not be equal to the 'total served' column because a small number of participants had an unknown priority type and are not shown. These cases are largely due to participants moving from out-of-state for which priority type could not be determined.

Table 9a: Estimates of Total WIC Eligible Children in an Average Month by County or Region of Residence, 2011

County/Region	Baseline Count ¹	Percent ²	Total WIC Eligible Children	
			Estimate	Range (Low – High)
California	2,007,912	57.1	1,147,348	(1,137,534 - 1,157,161)
County				
Alameda	78,029	43.1	33,607	(31,891 - 35,324)
Butte	9,984	65.7	6,563	(5,885 - 7,242)
Contra Costa	52,635	40.3	21,234	(19,755 - 22,713)
El Dorado	7,308	37.3	2,727	(2,082 - 3,372)
Fresno	62,605	74.5	46,654	(45,237 - 48,070)
Humboldt	6,154	66.3	4,077	(3,613 - 4,542)
Imperial	10,876	63.8	6,935	(6,239 - 7,630)
Kern	57,994	70.8	41,042	(39,562 - 42,521)
Kings	10,019	72.0	7,213	(6,663 - 7,762)
Los Angeles	511,554	62.4	319,075	(314,788 - 323,362)
Madera	9,460	83.0	7,851	(7,247 - 8,454)
Marin	10,935	34.7	3,799	(3,145 - 4,454)
Merced	17,535	72.6	12,725	(11,679 - 13,771)
Napa	6,383	57.3	3,657	(3,142 - 4,172)
Orange	152,130	48.7	74,111	(71,823 - 76,400)
Placer	16,609	36.1	5,989	(5,104 - 6,875)
Riverside	128,174	61.9	79,365	(76,593 - 82,137)
Sacramento	80,251	58.3	46,748	(44,765 - 48,732)
San Bernardino	125,382	65.8	82,542	(79,798 - 85,286)
San Diego	162,143	48.8	79,126	(76,611 - 81,641)
San Francisco	28,597	34.0	9,724	(8,796 - 10,653)
San Joaquin	42,690	68.1	29,078	(27,502 - 30,654)
San Luis Obispo	10,650	53.9	5,744	(5,049 - 6,438)
San Mateo	37,117	35.5	13,160	(12,118 - 14,202)
Santa Barbara	21,774	58.8	12,795	(11,808 - 13,782)
Santa Clara	99,080	35.6	35,256	(33,177 - 37,334)
Santa Cruz	12,093	55.4	6,704	(6,073 - 7,334)
Shasta	8,246	70.5	5,814	(5,164 - 6,464)
Solano	21,225	55.1	11,701	(10,764 - 12,638)
Sonoma	22,436	52.9	11,858	(10,640 - 13,076)
Stanislaus	31,538	65.6	20,704	(19,526 - 21,881)
Tulare	32,521	79.3	25,786	(24,630 - 26,942)
Ventura	43,617	51.5	22,475	(21,160 - 23,790)
Yolo	9,890	49.0	4,850	(4,177 - 5,524)
Region				
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	6,810	52.9	3,601	(2,836 - 4,366)
Colusa, Glenn, Tehama and Trinity	7,106	74.2	5,275	(4,861 - 5,688)
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	9,422	59.1	5,565	(4,839 - 6,292)
Lake and Mendocino	7,129	74.2	5,289	(4,864 - 5,714)
Monterey and San Benito	29,344	66.2	19,429	(18,323 - 20,535)
Sutter and Yuba	10,467	68.8	7,200	(6,526 - 7,875)

¹Number of children ages 1-4 years, DOF population estimates, 2011

²Percent of children eligible for WIC services = percent of children that are income or adjunctively eligible for WIC based on IPUMS (ACS) 2010-2012 data (see Appendix B) * income adjustment factor of 1.0 * nutritional risk adjustment factor of 0.99.

Table 9b: WIC Eligible Children, Number Served by Priority Type, and Program Coverage in Average Month, 2011

County	Eligible Children	Children Served by WIC			Coverage	
		Priority III	Priority V	Total Served ¹	Rate	(Range)
California	1,147,348	354,771	481,770	837,126	73.0	(72.3 - 73.6)
County						
Alameda	33,607	9,392	12,837	22,235	66.2	(62.9 - 69.7)
Butte	6,563	1,865	1,797	3,667	55.9	(50.6 - 62.3)
Contra Costa	21,234	5,671	6,291	11,982	56.4	(52.8 - 60.7)
El Dorado	2,727	765	912	1,679	61.6	(49.8 - 80.6)
Fresno	46,654	16,539	18,083	34,651	74.3	(72.1 - 76.6)
Humboldt	4,077	1,062	1,161	2,227	54.6	(49.0 - 61.6)
Imperial	6,935	1,984	2,933	4,920	70.9	(64.5 - 78.9)
Kern	41,042	13,398	17,474	30,886	75.3	(72.6 - 78.1)
Kings	7,213	2,129	2,568	4,704	65.2	(60.6 - 70.6)
Los Angeles	319,075	112,455	165,321	277,875	87.1	(85.9 - 88.3)
Madera	7,851	2,812	2,543	5,364	68.3	(63.4 - 74.0)
Marin	3,799	782	1,021	1,802	47.4	(40.5 - 57.3)
Merced	12,725	4,449	4,875	9,334	73.4	(67.8 - 79.9)
Napa	3,657	1,019	1,309	2,328	63.7	(55.8 - 74.1)
Orange	74,111	25,380	35,250	60,642	81.8	(79.4 - 84.4)
Placer	5,989	1,030	1,305	2,336	39.0	(34.0 - 45.8)
Riverside	79,365	22,014	29,757	51,818	65.3	(63.1 - 67.7)
Sacramento	46,748	11,471	16,277	27,765	59.4	(57.0 - 62.0)
San Bernardino	82,542	22,341	30,516	52,935	64.1	(62.1 - 66.3)
San Diego	79,126	25,330	37,875	63,316	80.0	(77.6 - 82.6)
San Francisco	9,724	3,462	4,530	7,994	82.2	(75.0 - 90.9)
San Joaquin	29,078	7,771	10,502	18,279	62.9	(59.6 - 66.5)
San Luis Obispo	5,744	1,268	1,424	2,692	46.9	(41.8 - 53.3)
San Mateo	13,160	2,707	4,534	7,242	55.0	(51.0 - 59.8)
Santa Barbara	12,795	4,701	5,676	10,384	81.2	(75.3 - 87.9)
Santa Clara	35,256	9,176	11,519	20,701	58.7	(55.4 - 62.4)
Santa Cruz	6,704	2,608	2,569	5,178	77.2	(70.6 - 85.3)
Shasta	5,814	1,345	1,970	3,319	57.1	(51.3 - 64.3)
Solano	11,701	2,473	3,405	5,887	50.3	(46.6 - 54.7)
Sonoma	11,858	2,794	3,900	6,696	56.5	(51.2 - 62.9)
Stanislaus	20,704	4,991	6,833	11,830	57.1	(54.1 - 60.6)
Tulare	25,786	7,748	9,122	16,889	65.5	(62.7 - 68.6)
Ventura	22,475	6,602	7,580	14,195	63.2	(59.7 - 67.1)
Yolo	4,850	1,412	1,783	3,198	65.9	(57.9 - 76.6)
Region						
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	3,601	934	1,249	2,184	60.6	(50.0 - 77.0)
Colusa, Glenn, Tehama and Trinity	5,275	1,740	1,864	3,611	68.5	(63.5 - 74.3)
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	5,565	1,355	1,728	3,089	55.5	(49.1 - 63.8)
Lake and Mendocino	5,289	1,649	1,552	3,203	60.6	(56.1 - 65.9)
Monterey and San Benito	19,429	6,197	7,309	13,518	69.6	(65.8 - 73.8)
Sutter and Yuba	7,200	1,935	2,598	4,540	63.1	(57.7 - 69.6)

¹The sum of participants by priority type may not be equal to the 'total served' column because a small number of participants had an unknown priority type and are not shown. These cases are largely due to participants moving from out-of-state for which priority type could not be determined.

Appendix E: Supplemental Data Tables

Table 1a: Department of Finance Population Estimates for Infants and Children by County, 2011

Table 1b: Department of Finance Population Estimates for Infants and Children by Region, 2011

Table 2a: Total WIC Participation Counts in an Average Month by County, for Calendar Year (CY) 2011 – 2014

Table 2b: WIC Participation Counts in an Average Month for Infants and Children by Region, for CY 2011 - 2014

Table 2c: WIC Participation Counts in an Average Month for Women by County, for CY 2011-2014

Table 2d: Total WIC Participation Counts in an Average Month by Region, for Calendar Year (CY) 2011 – 2014

Table 2e: WIC Participation Counts in an Average Month for Infants and Children by Region for CY 2011 - 2014

Table 2f: WIC Participation Counts in an Average Month for Women by Region, for CY 2011 – 2014

Table 3a: Number of Medi-Cal Certified Eligible Children ages 0-4 in an Average Month by County, 2011

Table 3b: Number of Medi-Cal Certified Eligible Children ages 0-4 in an Average Month by Region, 2011

Table 1a: Department of Finance Population Estimates for Infants and Children by County, 2011

County	Infants <1 Year of Age	Children Ages 1-4	Total Infants & Children Ages 0-4
California	506,556	2,007,912	2,514,468
Alameda	19,097	78,029	97,125
Alpine	4	50	54
Amador	263	1,147	1,410
Butte	2,427	9,984	12,410
Calaveras	332	1,575	1,907
Colusa	335	1,433	1,768
Contra Costa	12,251	52,635	64,886
Del Norte	334	1,350	1,683
El Dorado	1,620	7,308	8,928
Fresno	16,217	62,605	78,822
Glenn	421	1,724	2,144
Humboldt	1,538	6,154	7,691
Imperial	3,103	10,876	13,979
Inyo	192	858	1,050
Kern	14,315	57,994	72,309
Kings	2,561	10,019	12,580
Lake	737	2,871	3,607
Lassen	296	1,299	1,595
Los Angeles	131,779	511,554	643,333
Madera	2,425	9,460	11,884
Marin	2,369	10,935	13,304
Mariposa	147	605	752
Mendocino	1,006	4,259	5,265
Merced	4,275	17,535	21,810
Modoc	99	431	530
Mono	152	701	854
Monterey	6,822	26,082	32,904
Napa	1,493	6,383	7,876
Nevada	766	3,511	4,277
Orange	38,023	152,130	190,153
Placer	3,828	16,609	20,437
Plumas	168	734	902
Riverside	30,808	128,174	158,983
Sacramento	20,060	80,251	100,311
San Benito	756	3,262	4,018
San Bernardino	31,234	125,382	156,616
San Diego	44,407	162,143	206,550
San Francisco	8,846	28,597	37,443
San Joaquin	10,482	42,690	53,172
San Luis Obispo	2,625	10,650	13,275
San Mateo	9,087	37,117	46,204
Santa Barbara	5,714	21,774	27,489
Santa Clara	23,889	99,080	122,969
Santa Cruz	3,221	12,093	15,314
Shasta	2,094	8,246	10,340
Sierra	18	116	134
Siskiyou	459	1,983	2,442
Solano	5,138	21,225	26,363
Sonoma	5,279	22,436	27,715
Stanislaus	7,737	31,538	39,275
Sutter	1,328	5,628	6,956
Tehama	729	3,486	4,215
Trinity	111	464	575
Tulare	8,104	32,521	40,625
Tuolumne	440	1,872	2,312
Ventura	10,944	43,617	54,562
Yolo	2,409	9,890	12,298
Yuba	1,242	4,839	6,081

Table 1b: Department of Finance Population Estimates for Infants and Children by Region, 2011

County	Infants < 1 Year of Age	Children Ages 1-4	Total Infants & Children Ages 0-4
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	1,529	6,810	8,339
Colusa, Glenn, Tehama and Trinity	1,596	7,106	8,702
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	2,140	9,422	11,563
Lake and Mendocino	1,743	7,129	8,873
Monterey and San Benito	7,578	29,344	36,922
Sutter and Yuba	2,570	10,467	13,037

Table 2a: Total WIC Participation Counts in an Average Month by County, for Calendar Years (CY) 2011 – 2014

County	Total WIC Participants in Average Month			
	CY 2011	CY 2012	CY 2013	CY 2014
California	1,466,238	1,456,858	1,405,189	1,332,840
Alameda	39,715	39,246	38,255	36,538
Alpine	*	*	*	*
Amador	563	611	619	628
Butte	6,739	6,602	6,411	6,340
Calaveras	834	857	794	780
Colusa	1,235	1,218	1,220	1,129
Contra Costa	22,856	22,453	21,767	20,458
Del Norte	1,263	1,211	1,108	1,086
El Dorado	3,071	3,026	2,799	2,644
Fresno	60,432	63,684	63,063	61,427
Glenn	1,639	1,589	1,565	1,502
Humboldt	4,192	4,158	3,738	3,521
Imperial	8,778	8,703	8,398	8,331
Inyo	677	657	668	630
Kern	53,636	54,790	53,662	51,606
Kings	8,351	8,253	8,104	7,740
Lake	2,621	2,642	2,637	2,617
Lassen	796	763	733	700
Los Angeles	472,629	463,387	445,023	419,159
Madera	9,427	9,402	9,394	9,396
Marin	3,313	3,200	2,996	2,844
Mariposa	376	376	393	362
Mendocino	3,173	3,333	3,047	2,993
Merced	16,484	16,235	16,257	16,575
Modoc	267	231	224	216
Mono	329	336	323	317
Monterey	21,801	21,558	20,612	20,424
Napa	4,038	3,916	3,680	3,450
Nevada	1,535	1,550	1,524	1,344
Orange	102,701	99,769	93,930	87,184
Placer	4,391	4,262	3,995	3,590
Plumas	437	394	375	376
Riverside	91,649	94,602	93,003	88,613
Sacramento	50,970	51,068	51,164	48,477
San Benito	2,457	2,348	2,240	2,076
San Bernardino	94,629	97,588	95,886	89,496
San Diego	111,816	110,062	102,075	96,167
San Francisco	14,656	14,421	13,326	12,555
San Joaquin	32,877	32,817	31,883	31,191
San Luis Obispo	5,008	4,895	4,924	4,650
San Mateo	13,408	13,010	12,345	11,680
Santa Barbara	18,251	18,271	18,043	17,791
Santa Clara	37,547	36,588	34,848	32,126
Santa Cruz	9,160	9,104	8,542	8,120
Shasta	6,060	6,176	6,130	5,849
Sierra	71	67	61	58
Siskiyou	1,253	1,261	1,209	1,257
Solano	11,068	10,751	10,750	10,457
Sonoma	12,094	11,597	10,836	9,827
Stanislaus	21,503	21,532	21,131	19,823
Sutter	4,249	4,028	3,897	3,809
Tehama	2,993	2,965	2,815	2,755
Trinity	347	340	352	335
Tulare	29,591	29,202	28,490	27,694
Tuolumne	1,193	1,228	1,226	1,212
Ventura	25,446	24,864	23,281	22,025
Yolo	5,730	5,763	5,524	5,239
Yuba	3,848	3,802	3,794	3,646

*Cells suppressed when fewer than 10 participants.

Table 2b: WIC Participation Counts in an Average Month for Infants and Children by County, for CY 2011 - 2014

County	Infant Participants in Average Month				Child Participants in Average Month			
	CY 2011	CY 2012	CY 2013	CY 2014	CY 2011	CY 2012	CY 2013	CY 2014
California	298,335	292,354	283,652	272,402	837,126	839,026	809,457	760,992
Alameda	8,164	8,025	7,793	7,557	22,235	22,012	21,649	20,391
Alpine	*	*	*	*	*	*	*	*
Amador	125	146	145	143	305	307	332	326
Butte	1,445	1,395	1,345	1,395	3,667	3,618	3,498	3,365
Calaveras	187	192	171	179	452	460	440	413
Colusa	240	223	232	225	754	743	731	660
Contra Costa	4,994	4,943	4,820	4,619	11,982	11,914	11,606	10,728
Del Norte	261	250	233	237	701	688	613	589
El Dorado	643	621	565	564	1,679	1,695	1,582	1,440
Fresno	12,544	12,729	12,512	12,267	34,651	37,336	37,310	36,045
Glenn	311	287	292	295	975	959	943	868
Humboldt	907	859	834	770	2,227	2,276	1,965	1,862
Imperial	1,936	1,880	1,858	1,911	4,920	4,949	4,718	4,573
Inyo	123	136	136	135	396	368	365	344
Kern	10,982	11,014	10,992	10,503	30,886	31,768	31,022	29,809
Kings	1,752	1,697	1,663	1,615	4,704	4,759	4,685	4,426
Lake	558	538	557	541	1,450	1,475	1,455	1,476
Lassen	172	162	149	173	434	431	406	340
Los Angeles	91,642	88,827	85,674	81,379	277,875	274,361	263,549	246,399
Madera	1,908	1,856	1,818	1,805	5,364	5,435	5,487	5,482
Marin	643	614	556	568	1,802	1,788	1,690	1,535
Mariposa	76	75	88	71	218	210	213	216
Mendocino	640	702	624	609	1,752	1,795	1,692	1,651
Merced	3,448	3,434	3,338	3,338	9,334	9,151	9,325	9,599
Modoc	57	41	43	42	156	144	136	125
Mono	74	71	70	75	172	181	170	162
Monterey	4,448	4,384	4,157	4,117	12,111	12,052	11,553	11,424
Napa	774	761	693	702	2,328	2,277	2,167	1,935
Nevada	312	325	350	306	820	815	750	680
Orange	19,676	19,136	18,024	17,001	60,642	59,311	55,999	51,721
Placer	977	960	888	821	2,336	2,261	2,156	1,902
Plumas	86	79	77	86	253	220	203	200
Riverside	19,025	19,161	18,981	18,830	51,818	54,237	53,148	49,649
Sacramento	11,278	11,107	11,025	10,653	27,765	28,100	28,323	26,545
San Benito	477	439	447	403	1,407	1,375	1,290	1,214
San Bernardino	20,791	20,716	20,472	19,326	52,935	55,644	54,751	50,475
San Diego	22,483	21,856	20,959	20,167	63,316	62,399	56,989	52,913
San Francisco	2,982	2,890	2,745	2,553	7,994	7,956	7,319	6,919
San Joaquin	7,070	6,888	6,709	6,572	18,279	18,526	18,064	17,589
San Luis Obispo	1,085	1,008	1,037	958	2,692	2,748	2,733	2,613
San Mateo	2,926	2,874	2,660	2,563	7,242	6,998	6,799	6,408
Santa Barbara	3,593	3,582	3,525	3,566	10,384	10,482	10,338	10,017
Santa Clara	8,036	7,726	7,453	6,882	20,701	20,264	19,352	17,764
Santa Cruz	1,794	1,768	1,658	1,587	5,178	5,192	4,899	4,616
Shasta	1,288	1,252	1,271	1,212	3,319	3,468	3,427	3,298
Sierra	12	13	12	10	42	39	37	38
Siskiyou	275	284	279	281	683	669	632	670
Solano	2,461	2,362	2,342	2,314	5,887	5,825	5,786	5,590
Sonoma	2,459	2,286	2,163	1,956	6,696	6,544	6,116	5,535
Stanislaus	4,718	4,748	4,651	4,472	11,830	11,912	11,770	10,802
Sutter	881	812	782	777	2,397	2,318	2,268	2,188
Tehama	616	640	600	612	1,700	1,640	1,579	1,483
Trinity	75	69	80	66	181	176	179	189
Tulare	6,175	6,094	5,916	5,650	16,889	16,623	16,372	16,086
Tuolumne	256	260	262	267	638	664	663	639
Ventura	5,466	5,193	4,962	4,787	14,195	14,030	12,996	12,165
Yolo	1,176	1,167	1,156	1,122	3,198	3,224	3,027	2,854
Yuba	824	780	784	766	2,143	2,170	2,145	2,046

*Cells suppressed when fewer than 10 participants.

Table2c: WIC Participation Counts in an Average Month for Women by County, for CY 2011-2014

County	Pregnant Women Participants in Average Month				Postpartum Women Participants in Average Month			
	CY 2011	CY 2012	CY 2013	CY 2014	CY 2011	CY 2012	CY 2013	CY 2014
California	138,872	136,670	129,950	124,539	191,905	188,808	182,130	174,907
Alameda	3,675	3,564	3,366	3,235	5,640	5,645	5,447	5,355
Alpine	*	*	*	*	*	*	*	*
Amador	59	59	53	58	75	99	90	101
Butte	682	674	703	653	945	915	864	927
Calaveras	74	75	68	70	120	130	116	119
Colusa	109	125	125	108	131	127	132	136
Contra Costa	2,409	2,153	2,026	1,907	3,471	3,444	3,315	3,203
Del Norte	155	130	126	120	147	143	136	140
El Dorado	301	282	250	234	448	427	402	407
Fresno	6,052	6,315	6,120	6,048	7,186	7,305	7,122	7,068
Glenn	153	154	150	148	199	189	181	191
Humboldt	456	462	391	363	602	561	548	525
Imperial	814	794	757	717	1,109	1,080	1,065	1,130
Inyo	71	65	70	59	87	88	96	93
Kern	5,464	5,558	5,099	5,074	6,304	6,450	6,550	6,219
Kings	787	742	715	685	1,108	1,055	1,042	1,015
Lake	256	259	256	243	357	370	369	356
Lassen	95	85	100	86	95	85	78	101
Los Angeles	44,751	43,407	40,903	38,619	58,362	56,792	54,898	52,762
Madera	841	926	962	956	1,313	1,185	1,127	1,152
Marin	334	309	291	283	534	489	459	458
Mariposa	35	40	35	32	47	51	58	43
Mendocino	329	329	298	293	452	506	433	441
Merced	1,694	1,603	1,598	1,552	2,009	2,047	1,997	2,087
Modoc	27	23	20	27	27	23	26	22
Mono	35	31	33	30	49	53	50	49
Monterey	2,129	2,032	1,950	1,911	3,113	3,090	2,952	2,972
Napa	374	335	320	304	563	543	500	508
Nevada	168	168	170	136	235	242	253	222
Orange	9,385	8,905	8,262	7,641	12,999	12,418	11,645	10,821
Placer	447	437	392	346	632	604	559	521
Plumas	40	37	37	33	59	58	57	58
Riverside	8,229	8,338	8,209	7,781	12,577	12,866	12,665	12,353
Sacramento	5,127	5,049	5,110	4,897	6,799	6,812	6,706	6,382
San Benito	228	230	194	185	345	305	309	273
San Bernardino	8,406	8,601	8,437	8,891	12,498	12,627	12,226	10,806
San Diego	10,712	10,573	9,750	9,286	15,307	15,234	14,377	13,800
San Francisco	1,358	1,342	1,183	1,142	2,322	2,233	2,080	1,941
San Joaquin	3,100	3,192	3,057	3,015	4,428	4,212	4,053	4,014
San Luis Obispo	475	449	464	416	756	691	690	663
San Mateo	1,221	1,111	1,051	947	2,020	2,028	1,834	1,763
Santa Barbara	1,657	1,618	1,639	1,619	2,617	2,589	2,541	2,589
Santa Clara	3,609	3,566	3,233	3,036	5,201	5,033	4,811	4,444
Santa Cruz	865	842	757	734	1,323	1,302	1,227	1,183
Shasta	665	665	625	583	788	792	808	756
Sierra	*	*	*	*	10	10	*	*
Siskiyou	152	153	140	138	143	155	158	169
Solano	1,109	1,046	1,063	1,042	1,611	1,519	1,559	1,511
Sonoma	1,139	1,066	965	891	1,800	1,701	1,591	1,445
Stanislaus	1,948	1,882	1,841	1,738	3,006	2,990	2,870	2,812
Sutter	403	375	360	343	567	523	487	501
Tehama	280	265	256	261	397	421	380	399
Trinity	40	41	41	32	50	54	53	48
Tulare	2,655	2,606	2,459	2,368	3,873	3,880	3,743	3,590
Tuolumne	120	118	118	106	179	186	182	199
Ventura	2,218	2,470	2,380	2,231	3,567	3,171	2,943	2,843
Yolo	549	577	553	508	808	795	789	755
Yuba	394	401	402	376	488	452	463	459

*Cells suppressed when fewer than 10 participants.

Table 2d: Total WIC Participation Counts in an Average Month by Region, for Calendar Year (CY) 2011 – 2014

County	Total WIC Participants in Average Month			
	CY 2011	CY 2012	CY 2013	CY 2014
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	3,980	4,073	4,027	3,934
Colusa, Glenn, Tehama and Trinity	6,213	6,111	5,953	5,721
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	5,622	5,477	5,233	5,037
Lake and Mendocino	5,794	5,975	5,684	5,610
Monterey and San Benito	24,258	23,906	22,851	22,500
Sutter and Yuba	8,096	7,830	7,691	7,455

Table 2e: WIC Participation Counts in an Average Month for Infants and Children by Region, for CY 2011 - 2014

County	Infant Participants in Average Month				Child Participants in Average Month			
	CY 2011	CY 2012	CY 2013	CY 2014	CY 2011	CY 2012	CY 2013	CY 2014
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	842	882	875	872	2,184	2,194	2,183	2,103
Colusa, Glenn, Tehama and Trinity	1,242	1,218	1,204	1,197	3,611	3,518	3,431	3,201
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	1,175	1,153	1,142	1,134	3,089	3,006	2,777	2,641
Lake and Mendocino	1,197	1,240	1,181	1,150	3,203	3,270	3,146	3,127
Monterey and San Benito	4,925	4,823	4,604	4,520	13,518	13,426	12,843	12,638
Sutter and Yuba	1,705	1,592	1,566	1,542	4,540	4,488	4,413	4,234

Table 2f: WIC Participation Counts in an Average Month for Women by Region, for CY 2011 - 2014

County	Pregnant Women Participants in Average Month				Postpartum Women Participants in Average Month			
	CY 2011	CY 2012	CY 2013	CY 2014	CY 2011	CY 2012	CY 2013	CY 2014
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	394	388	376	355	560	608	593	605
Colusa, Glenn, Tehama and Trinity	583	585	573	549	778	790	746	774
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	641	602	598	543	716	715	716	719
Lake and Mendocino	585	588	555	536	809	877	803	797
Monterey and San Benito	2,357	2,262	2,144	2,096	3,457	3,395	3,260	3,245
Sutter and Yuba	797	776	762	719	1,055	975	950	960

Table 3a: Number of Medi-Cal Certified Eligible Children ages 0-4 in an Average Month by County, 2011

County	Under Age 1	Age 1 Year	Age 2 Years	Age 3 Years	Age 4 Years	Total Ages 0-4 Years
California	301,216	245,617	240,735	245,802	241,657	1,275,027
Alameda	8,344	7,226	7,308	7,341	7,108	37,327
Butte	1,666	1,422	1,400	1,406	1,342	7,236
Contra Costa	5,394	4,407	4,314	4,316	4,408	22,839
El Dorado	771	597	539	551	586	3,044
Fresno	12,990	11,043	10,633	10,960	10,766	56,392
Humboldt	1,121	793	753	765	737	4,169
Imperial	2,220	1,687	1,722	1,703	1,625	8,957
Kern	10,804	8,782	8,591	8,720	8,538	45,435
Kings	1,610	1,271	1,377	1,362	1,244	6,864
Los Angeles	85,891	72,333	72,221	73,828	72,154	376,427
Madera	1,985	1,652	1,581	1,659	1,622	8,499
Marin	852	669	689	715	684	3,609
Merced	3,499	2,795	2,783	2,779	2,858	14,714
Napa	801	602	597	583	561	3,144
Orange	19,677	15,550	15,084	15,555	15,204	81,070
Placer	1,271	1,003	973	972	960	5,179
Riverside	19,950	15,160	14,623	15,271	15,287	80,291
Sacramento	11,902	9,955	9,846	10,045	9,937	51,685
San Bernardino	21,007	17,028	16,840	17,271	17,119	89,265
San Diego	19,245	15,334	14,290	14,452	14,323	77,644
San Francisco	3,326	2,557	2,522	2,523	2,466	13,394
San Joaquin	7,290	6,128	6,042	6,064	6,050	31,574
San Luis Obispo	1,438	1,139	1,013	1,080	1,104	5,774
San Mateo	3,262	2,580	2,368	2,386	2,370	12,966
Santa Barbara	4,077	3,274	3,117	3,099	3,049	16,616
Santa Clara	9,408	7,630	7,473	7,667	7,542	39,720
Santa Cruz	2,041	1,541	1,453	1,476	1,421	7,932
Shasta	1,477	1,180	1,079	1,186	1,148	6,070
Solano	2,557	2,110	2,163	2,213	2,087	11,130
Sonoma	2,894	2,306	2,057	2,093	2,051	11,401
Stanislaus	5,641	4,350	4,292	4,517	4,437	23,237
Tulare	7,027	6,040	5,929	6,009	5,973	30,978
Ventura	6,248	4,895	4,679	4,615	4,577	25,014
Yolo	1,190	927	921	993	967	4,998

Table 3b: Number of Medi-Cal Certified Eligible Children ages 0-4 in an Average Month by Region, 2011

County	Under Age 1	Age 1 Year	Age 2 Years	Age 3 Years	Age 4 Years	Total Ages 0-4 Years
Alpine, Amador, Calaveras, Inyo, Mariposa, Mono and Tuolumne	948	714	747	728	735	3,872
Colusa, Glenn, Tehama and Trinity	1,305	1,045	1,077	1,053	1,022	5,502
Del Norte, Lassen, Modoc, Nevada, Plumas, Sierra and Siskiyou	1,419	1,118	1,075	1,144	1,125	5,881
Lake and Mendocino	1,485	1,199	1,170	1,156	1,103	6,113
Monterey and San Benito	5,453	4,174	4,052	4,153	3,974	21,806
Sutter and Yuba	1,730	1,401	1,342	1,393	1,393	7,259

Source: Department of Health Care Services (DHCS) MIS/DSS Data Warehouse, certified eligible records July –December 2011.

Appendix F: WIC Agencies Servicing Participants Residing in a Given County

County of Residence	WIC Agency Name	Location
Alameda	Alameda County Health Care Services Agency	3600 TELEGRAPH AVE., OAKLAND, CA, 94609
Alameda	Axis Community Health	1991 SANTA RITA RD. STE H, PLEASANTON, CA, 94566
Alameda	City of Berkeley	830 UNIVERSITY AVE., BERKELEY, CA, 94710
Alameda	La Clinica de la Raza-Fruitvale Health Project, Inc.	2716 INTERNATIONAL BLVD., OAKLAND, CA, 94601
Alameda	Native American Health Center, Inc.	3124 INTERNATIONAL BLVD. RM 103, OAKLAND, CA, 94601
Alameda	Tiburcio Vasquez Health Center, Inc.	32970 ALVARADO NILES RD. STE 760, UNION CITY, CA, 94587
Alameda	West Oakland Health Council, Inc.	700 ADELIN ST., OAKLAND, CA, 94607
Alpine	El Dorado County Department of Community Services	937 SPRING ST., PLACERVILLE, CA, 95667
Amador	Resource Connection of Amador and Calaveras Counties, Inc.	430 SUTTER HILL RD., SUTTER CREEK, CA, 95685
Butte	Butte County Department of Public Health	2491 CARMICHAEL DR. STE 400, CHICO, CA, 95928
Calaveras	Resource Connection of Amador and Calaveras Counties, Inc.	430 SUTTER HILL RD., SUTTER CREEK, CA, 95685
Colusa	Ampla Health	1114 YUBA ST., MARYSVILLE, CA, 95901
Contra Costa	Axis Community Health	1991 SANTA RITA RD. STE H, PLEASANTON, CA, 94566
Contra Costa	Contra Costa County Health Services	2355 STANWELL CIR., CONCORD, CA, 94520
Del Norte	County of Humboldt, Department of Health and Human Services	317 2ND ST., EUREKA, CA, 95501
Del Norte	United Indian Health Services, Inc.	1600 WEEOT WAY WIC PROG, ARCATA, CA, 95521
El Dorado	El Dorado County Department of Community Services	937 SPRING ST., PLACERVILLE, CA, 95667
Fresno	Central Valley Indian Health, Inc.	2740 HERNDON AVE., CLOVIS, CA, 93611
Fresno	Clinica Sierra Vista, Inc.	1430 TRUXTON AVE. STE 120, BAKERSFIELD, CA, 93301
Fresno	Fresno EOC	1920 MARIPOSA MALL, STE 105, FRESNO, CA, 93721
Fresno	United Health Centers of the San Joaquin Valley, Inc.	650 ZEDIKER AVE. BLDG 2, PARLIER, CA, 93648
Glenn	Butte County Department of Public Health	2491 CARMICHAEL DR. STE 400, CHICO, CA, 95928
Glenn	Glenn County Health Services	345 YOLO ST., ORLAND, CA, 95963
Humboldt	County of Humboldt, Department of Health and Human Services	317 2ND ST., EUREKA, CA, 95501
Humboldt	United Indian Health Services, Inc.	1600 WEEOT WAY WIC PROG, ARCATA, CA, 95521
Imperial	Clinicas de Salud del Pueblo, Inc.	561 E ST., BRAWLEY, CA, 92227
Inyo	County of Inyo Department of Health and Human Services	568 LINE ST. W, BISHOP, CA, 93514
Inyo	Toiyabe Indian Health Project, Inc.	52 TU SU LN., BISHOP, CA, 93514

County of Residence	WIC Agency Name	Location
Kern	Clinica Sierra Vista, Inc.	1430 TRUXTON AVE. STE 120, BAKERSFIELD, CA, 93301
Kern	Community Action Partnership of Kern	500 CALIFORNIA AVE. E, BAKERSFIELD, CA, 93307
Kings	Central Valley Indian Health, Inc.	2740 HERNDON AVE., CLOVIS, CA, 93611
Kings	Kings County Health Department	330 CAMPUS DR., HANFORD, CA, 93230
Kings	United Health Centers of the San Joaquin Valley, Inc.	650 ZEDIKER AVE. BLDG 2, PARLIER, CA, 93648
Lake	E Center	831 BEVINS ST., LAKEPORT, CA, 95453
Lassen	Northeastern Rural Health Clinics, Inc.	1850 SPRING RIDGE DR., SUSANVILLE, CA, 96130
Los Angeles	Antelope Valley Hospital	209 AVENUE K AVE. E STE 220, LANCASTER, CA, 93534
Los Angeles	City of Long Beach	2525 GRAND AVE., LONG BEACH, CA, 90815
Los Angeles	Los Angeles Biomedical Institute at Harbor- UCLA Medical Center	2930 IMPERIAL HIGHWAY STE 601, INGLEWOOD, CA, 90303
Los Angeles	Northeast Valley Health Corporation	1172 MACLAY AVE., SAN FERNANDO, CA, 91340
Los Angeles	Pasadena Public Health Department	363 VILLA ST. ROOM 115, PASADENA, CA, 91101
Los Angeles	Public Health Foundation Enterprises, Inc.	12781 SHABARUM AVE., IRWINDALE, CA, 91706
Los Angeles	Watts Healthcare Corporation	10300 COMPTON AVE. S, LOS ANGELES, CA, 90002
Madera	Central Valley Indian Health, Inc.	2740 HERNDON AVE., CLOVIS, CA, 93611
Madera	Madera County Department of Public Health	14215 ROAD 28, MADERA, CA, 93638
Madera	United Health Centers of the San Joaquin Valley, Inc.	650 ZEDIKER AVE. BLDG 2, PARLIER, CA, 93648
Marin	Marin County Department of Health and Human Services	3250 KERNER BLVD., SAN RAFAEL, CA, 94901
Mariposa	Merced County Community Action Board	P.O. BOX 2085 RD., MERCED, CA, 95340
Mendocino	County of Mendocino	1120 DORA ST., UKIAH, CA, 95482
Merced	Merced County Community Action Board	P.O. BOX 2085 RD., MERCED, CA, 95340
Modoc	Northeastern Rural Health Clinics, Inc.	1850 SPRING RIDGE DR., SUSANVILLE, CA, 96130
Mono	Mono County Health Department	P.O. BOX 3329, MAMMOTH LAKES, CA, 93546
Mono	Toiyabe Indian Health Project, Inc.	52 TU SU LN., BISHOP, CA, 93514
Monterey	Community Bridges	18 LAKE AVE. W STE A, WATSONVILLE, CA, 95076
Monterey	Monterey County	632 ALISAL ST., SALINAS, CA, 93905
Napa	County of Napa	2344 OLD SONOMA ROAD RD. BLDG G, NAPA, CA, 945593721
Nevada	Nevada County Public Health Department	500 CROWN POINT CIR. STE 110, GRASS VALLEY, CA, 95945

County of Residence	WIC Agency Name	Location
Orange	Camino Health Center	30300 CAMINO CAPISTRANO, SAN JUAN CAPISTRANO, CA, 92675
Orange	County of Orange Health Care Agency	1725 17TH ST., SANTA ANA, CA, 92706
Orange	Planned Parenthood of Orange and San Bernardino Counties	700 TUSTIN ST. S, ORANGE, CA, 92886
Orange	Public Health Foundation Enterprises, Inc.	12781 SHABARUM AVE., IRWINDALE, CA, 91706
Placer	Placer County Department of Health and Human Services	11562 B AVE., AUBURN, CA, 95603
Plumas	Northeastern Rural Health Clinics, Inc.	1850 SPRING RIDGE DR., SUSANVILLE, CA, 96130
Plumas	Plumas Rural Services, Inc.	771 MAIN ST. E , QUINCY, CA, 95971
Riverside	County of Riverside Health Services Agency	P.O. BOX 7600, RIVERSIDE, CA, 92513
Riverside	Riverside-San Bernardino County Indian Health, Inc.	11555.5 POTRERO RD., BANNING, CA, 92220
Sacramento	Community Resource Project, Inc.	915 BROADWAY, SACRAMENTO, CA, 95818
Sacramento	Sacramento County Department of Health and Human Services	2251 FLORIN RD. STE 100, SACRAMENTO, CA, 95822
San Benito	San Benito Health Foundation	351 FELICE DR., HOLLISTER, CA, 95023
San Bernardino	Community Action Partnership of Kern	500 CALIFORNIA AVE. E, BAKERSFIELD, CA, 93307
San Bernardino	Inland Behavioral and Health Services, Inc.	665 D ST. N, SAN BERNARDINO, CA, 92401
San Bernardino	Public Health Foundation Enterprises, Inc.	12781 SHABARUM AVE., IRWINDALE, CA, 91706
San Bernardino	Riverside-San Bernardino County Indian Health, Inc.	11555.5 POTRERO RD., BANNING, CA, 92220
San Bernardino	San Bernardino County Department of Public Health	1505 D ST. S, SAN BERNARDINO, CA, 92415
San Diego	American Red Cross	3950 CALLE FORTUNADA, SAN DIEGO, CA, 92123
San Diego	North County Health Project, Inc.	150 VALPRED A RD. STE 202, SAN MARCOS, CA, 92069
San Diego	San Diego State University Foundation	9210 SKY PARK CT. STE 150, SAN DIEGO, CA, 92123
San Diego	San Ysidro Health Center	1655 BROADWAY ST. STE 18, CHULA VISTA, CA, 91911
San Diego	Scripps Mercy Hospital	4077 FIFTH AVE., SAN DIEGO, CA, 921032180
San Francisco	City and County of San Francisco Department of Public Health	30 VAN NESS AVE. STE 220, SAN FRANCISCO, CA, 94102
San Francisco	Native American Health Center	3124 INTERNATIONAL BLVD. RM 103, OAKLAND, CA, 94601
San Joaquin	Community Medical Centers, Inc.	425 CALIFORNIA ST. N STE 7, STOCKTON, CA, 95202
San Joaquin	Delta Health Care and Management Services Corporation	4662 PRECISSI LN. STE 500, STOCKTON, CA, 95207
San Joaquin	San Joaquin County Public Health Services	620 AURORA ST. STE B, STOCKTON, CA, 95202
San Luis Obispo	County of San Luis Obispo	2180 JOHNSON AVE., SAN LUIS OBISPO, CA, 93401
San Mateo	San Mateo County Health Services Agency	477 9TH AVE. STE 110, SAN MATEO, CA, 94402

County of Residence	WIC Agency Name	Location
Santa Barbara	Santa Barbara County Health Care Services	315 CAMINO DEL REMEDIO, SANTA BARBARA, CA, 93110
Santa Clara	Gardner Family Care Corporation	3030 ALUM ROCK AVE., SAN JOSE, CA, 95127
Santa Clara	Indian Health Center of Santa Clara Valley, Inc.	1685 WESTWOOD DR. #4, SAN JOSE, CA, 95125
Santa Clara	Santa Clara County Department of Public Health	725 SANTA CLARA ST. STE 200, SAN JOSE, CA, 95112
Santa Cruz	Community Bridges	18 LAKE AVE. W STE A, WATSONVILLE, CA, 95076
Shasta	Shasta County Department of Public Health	1220 SACRAMENTO ST., REDDING, CA, 96001
Sierra	Sierra County Human Services	202 FRONT ST., LOYALTON, CA, 96118
Siskiyou	Northeastern Rural Health Clinics, Inc.	1850 SPRING RIDGE DR., SUSANVILLE, CA, 96130
Siskiyou	Siskiyou County Public Health Department	808 MAIN ST. S, YREKA, CA, 96097
Solano	Solano County Health and Social Services Department	275 BECK AVE. MS 5-240, FAIRFIELD, CA, 94533
Sonoma	Alliance Medical Center, Inc.	1381 UNIVERSITY ST. STE 200, HEALDSBURG, CA, 95448
Sonoma	County of Sonoma Department of Health Services	1450 GUERNEVILLE RD., SANTA ROSA, CA, 95403
Sonoma	Sonoma County Indian Health Project, Inc.	144 STONY POINT RD., SANTA ROSA, CA, 95401
Stanislaus	Stanislaus County Health Services agency	251 HACKETT RD. E, MODESTO, CA, 95358
Sutter	Sutter County Human Services Department	1445 VETERANS MEMORIAL CIR., YUBA CITY, CA, 95993
Tehama	Tehama County Health Services Agency	P.O. BOX 400, RED BLUFF, CA, 96080
Trinity	Trinity County Health and Human Services	P.O. BOX 1470 , WEAVERVILLE, CA, 96093
Tulare	County of Tulare Health and Human Services Agency	1819 DINUBA BLVD., VISALIA, CA, 93291
Tulare	United Health Centers of the San Joaquin Valley, Inc.	650 ZEDIKER AVE. BLDG 2, PARLIER, CA, 93648
Tuolumne	Tuolumne County Health Department	20111 CEDAR RD. N, SONORA, CA, 95370
Ventura	Ventura County Health Care Agency	2240 GONZALEZ RD. E STE 290, OXNARD, CA, 93036
Yolo	Community Medical Centers, Inc.	425 CALIFORNIA ST. N STE 7, STOCKTON, CA, 95202
Yolo	Yolo County Department of Public Health	137 COTTONWOOD ST. STE 1200, WOODLAND, CA, 95695
Yuba	Ampla Health	1114 YUBA ST., MARYSVILLE, CA, 95901
Yuba	Butte County Department of Public Health	2491 CARMICHAEL DR. STE 400, CHICO, CA, 95928
Yuba	Nevada County Public Health Department	500 CROWN POINT CIR. STE 110, GRASS VALLEY, CA, 95945