# SUBSIDY-ELIGIBLE MAPS
# NOW AVAILABLE

***Also known as GIS Maps***

**The Subsidy-Eligible Geographic Information System (GIS) Maps are now updated for 2016!**

**What's New**


- ✓ Updated previous data model with June 2016 enrollment data.
- ✓ Updated certified enroller and storefront locations with July 2016 data.
- ✓ Increased three subsidy-eligible ranges to five ranges for a better estimated count of the subsidy-eligible.
- ✓ Added satellite imagery to contextualize areas.
- ✓ Clickable index map

**Background Information**

Covered California first announced the Subsidy-Eligible Maps project during the 2015 Regional In-Person Meetings where we engaged with Certified Enrollers and community leaders statewide to share new and existing tools and resources in preparation for the third Open Enrollment Period.

These maps identified targeted areas of remaining uninsured or privately insured consumers, representing Covered California subsidy-eligible target populations. In addition, the maps identified locations of Covered California Agents and Community Partner Storefronts, Navigator Grant Program Entities, Certified Application Entities, Certified Insurance Agents, and Community Outreach Network Partners.

**Why use the GIS Subsidy-Eligible Maps?**

- ✓ Understand where the remaining uninsured subsidy-eligible consumers are located in your region.
- ✓ Help you plan and strategize your outreach, education, and enrollment efforts.
- ✓ Support the communities that need your in-person assistance the most.
- ✓ Collaborate with other partners to make a big difference by enrolling uninsured consumers in your community.

**When and How Do I Get the Maps?**

They're available for you to download today! Follow the download instructions below:

1. Click on the following link here
2. Right-click on the Sales Area subsidy-eligible map you want to download and select "Save link as…"

3. Browse and select the file folder where you want to save the map and click “Save”

**Who to Contact if You Have Questions?**

Email OutreachandSales@Covered.ca.gov or contact your local Outreach and Sales Field Representative in your region.

## Covered California Subsidy Eligible Maps

The Covered California subsidy-eligible maps are separated into distinct PDF books between the eight Covered California sales areas. The eight sales areas were created based on the 19 rating regions.

These maps highlight subsidy-eligible populations at a Census Tract level. The subsidy-eligible population estimates rely on the California Simulation of Insurance Markets (CalSIM) for insurance estimates, the U.S. Census American Communities Survey (ACS) for the subsidy-eligible data, and enrollment data from Covered California. The analysis of the combined data from these sources creates a more targeted and precise layer for outreach to the subsidy-eligible population. A more detailed explanation of the subsidy-eligible map layer is provided in the following pages.

These maps also provide the locations of Agents and Community Partner Storefronts, Navigator Entities, Certified Application Entities, Certified Insurance Agents.

The first page of the PDF book hyperlinks to the corresponding map.

For any questions please contact OutreachandSales@covered.ca.gov.

# Covering Communities:
# A Model to Estimate Where Subsidy Eligible Californians Live

A core strategy for Covered California's mission to reduce the number of uninsured is strategic outreach to populations that are subsidy-eligible where they live. Without a comprehensive "list" of who the remaining uninsured are, Covered California relies on modeling of health insurance coverage, demographics, and geographic location from the most comprehensive public surveys that address the topic.

**Modeling the Subsidy-Eligible Statewide:**

For its statewide and some regional estimates, Covered California relies on the California Simulation of Insurance Markets (CalSIM), which is a micro-simulation model from UCLA and UC Berkeley.[1] This model leverages the rich health insurance coverage data from the California Health Interview Survey to develop a nuanced picture of subsidy eligibility that incorporates critical factors like offers of insurance from employers. The model has compared favorably with other estimates of California's subsidy eligible population and achieved a good track record of predicting take-up during the opening years of the Exchange.

**The Covering Communities Model: local estimates to guide enrollment activities**

The sample size of the California Health Interview Survey (on which CalSIM is based) does not permit estimates of subsidy-eligibility at a local level, such as the zipcode or even city. The only publicly-available survey with sufficient sample size to provide that level of geographic precision in its estimates is the U.S. Census American Communities Survey (ACS). While key health insurance questions were added to the survey in the last 10 years, the ACS does not include many of the eligibility characteristics needed to model the population – most notably immigration information to determine lawful presence, an eligibility requirement under the federal law.

**Methodology: Leveraging best available Census data to extend CalSIM's estimates**

To extend the CalSIM model to local geographies, the Covering Communities model leverages two versions of Census data from the American Communities Survey.[2] In two successive stages, the model identifies the subsidy-eligible population using best available estimates for a given geography, then identifies the most likely geographic distribution of that population using best available data at a smaller geographic unit in order to produce more granular geographic estimates of the total subsidy eligible universe. Finally, the model can subtract actual enrollments at any geography (using Covered California's administrative data) to estimate the "remaining eligible."

[1] http://healthpolicy.ucla.edu/programs/health-economics/projects/CalSIM/Pages/default.aspx

[2] The data are from the U.S. Census Bureau, American Communities Survey, 2008-2012 American Communities Survey 5-year Public-Use Microdata Sample (PUMS) data, and the 2009-2013 American Communities Survey 5-year estimates at the Census Tract Level (tables B27015 and C27016).

# Subsidy-Eligible Maps

CalSIM provides the most nuanced modeling of subsidy-eligibility – including specifying the source of coverage without the Affordable Care Act – but does not contain geographic specificity: it acts as the control for totals subsidy-eligible universe at the regional level.

Using the ACS 5-year PUMS data – which provides individual level responses needed to evaluate the complex set of income, age, demographic, and insurance conditions that determine subsidy eligibility, the model derives estimates of the subsidy eligible population, specifically, at the PUMA level (a Census geography that corresponds to roughly an area of 100,000 people). This analysis includes estimating a household percent of Federal Poverty Level (FPL), Medicaid eligibility for children under California's Medi-Cal eligibility rules (which are different from many other states), and imputing the undocumented population in the survey to remove them from the universe of the subsidy eligible.[3] Once PUMA-level estimates have been created, the model uses the ACS 5-year summary estimates at the Census Tract level of the uninsured between 138% and 400% of the poverty level, and estimates of privately insured under age 65, respectively, to spread the PUMA estimates to Census tracts.[4]

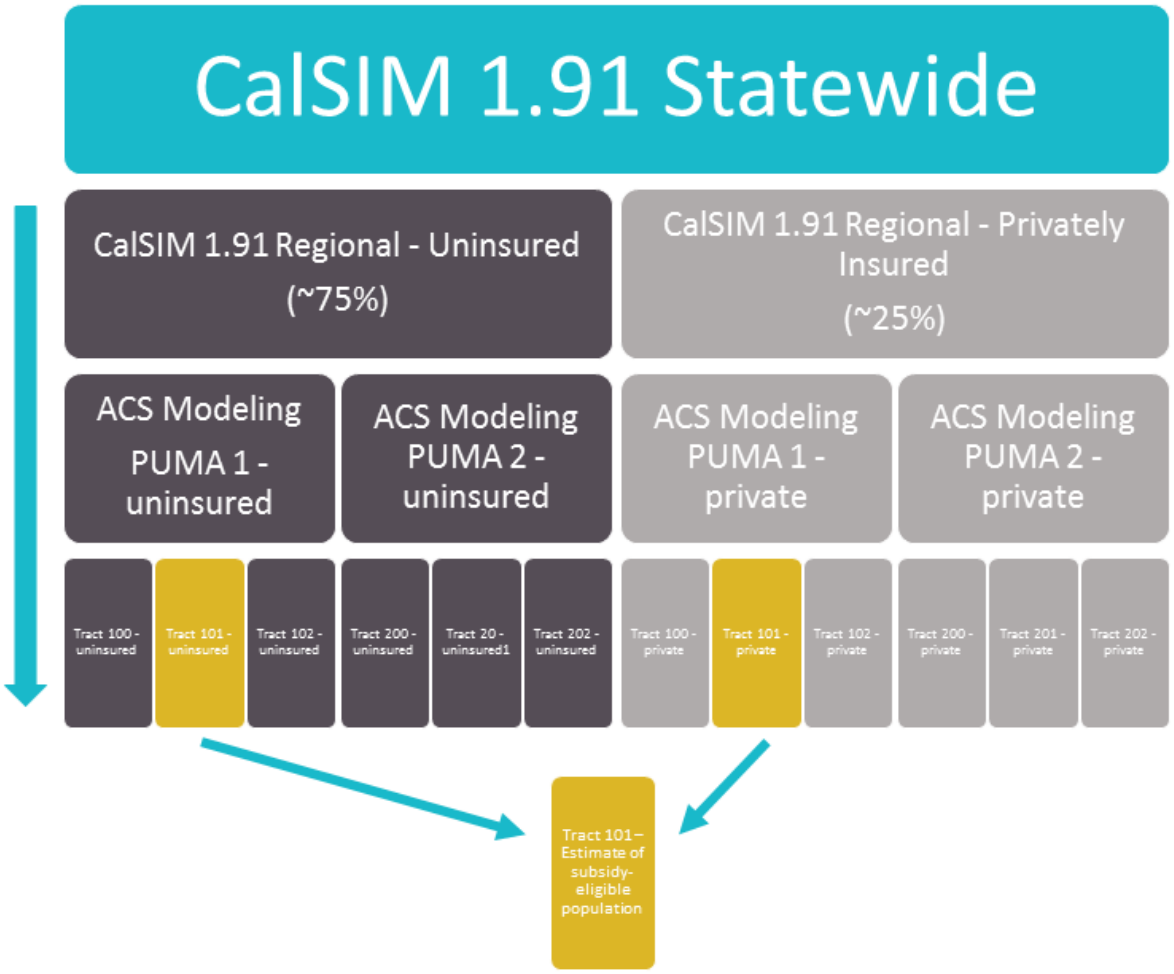
Finally, the model can subtract current Covered California enrollees from estimates at the PUMA or Tract level using geo-coded enrollment data to produce "remaining subsidy eligible" estimates at a local level.[5]

[3] These estimates would not have been possible without the important contributions of State Health Access Data Assistance Center (SHADAC) at the University of Minnesota on calculating the "Health Insurance Unit" for household size and for modeling the undocumented population (as detailed by the Kaiser Family Foundation here: http://files.kff.org/attachment/technical-appendix-b-new-estimates-of-eligibility-for-aca-coverage-among-the-uninsured.

[4] The respondents to the American Communities Survey are believed respond that they have "private" for kinds of coverage beyond the individual market coverage modeled by CalSIM, which is why Census estimates of this coverage exceed estimates of the individual market size that are available in administrative data from state regulators. To ensure that the "private market" group of subsidy eligible consumers does not bias results, the model distinguishes between subsidy eligible consumers whose source of coverage without/prior to the ACA was being uninsured, and those who had a prior coverage source of private, individual market coverage at every stage.

[5] While the model of total subsidy eligible distinguishes between those who were previously uninsured and those who were previously insured with private coverage, because our enrollment data does not have a precise indicator of prior source of coverage, the "remaining eligible" estimates are necessarily a single aggregation of all subsidy eligible (from both groups).

*Diagram 1: Using Best Available Data and Models to Distribute Estimates of the Subsidy-eligible Popluation to Smaller Geographic Units*




**How Precise is the Model, and What Are Its Limitations?**

The modeling of subsidy eligibility – even at the statewide level – is inherently imprecise. The Covering Communities model extends statewide estimates using other inputs that are also subject to substantial margins of error. For example, the raw PUMA level estimates of the subsidy eligible uninsured have any estimates margin of error of at least 10%. Census Tract level estimates in the Census alone may have a coefficient of variation of greater than 1.0, meaning the standard deviation of the estimates is larger than the mean of the estimates.

Calculations of the remaining subsidy-eligible – even at the larger geography of the PUMA – reveals that survey data estimates are just estimates: in some PUMAs (and much more

frequently in Census Tracts) Covered California's administrative data indicates more subsidy eligible have been enrolled than are eligible (resulting in a negative "remaining" estimate).

While the specific Tract point estimates are almost certainly "wrong" individually, the *relative* position of the estimates within a PUMA are likely accurate. For this reason, the Covered California uses the model's estimates of the Tract data as directional only (for example, the Tract estimates are used in Covered California's heat maps to provide a quick visual directional sense of "hot spots"). The Tracts add the important advantage of enabling the model to produce estimates at geographies other than the PUMA (which are not well known or readily understood) – provided the geography is sufficiently large to have confidence in the estimates (e.g. Oakland or Long Beach, not Yreka).

An additional limitation of the model is that it relies on Census data from 2008 through 2013 to produce estimates for 2016. While unavoidable due to the lag for public surveys to derive reliable estimates at small geographies, this means the model estimates may not reflect the ways that factors connected to insurance coverage – like labor markets and availability of job-based coverage – have evolved differently in different regions since the survey data was collected.

Covered California continues to refine this model and pursue new data and methods to keep the estimates current in future years.