Preparing for 2020 Census Outreach

California Communities at Risk for Undercount

Edward Orozco Flores, Associate Professor of Sociology, University of California Merced

eflores52@ucmerced.edu

The United States 2020 decennial census will have profound implications for resource allocation—from congressional seats and electoral college votes to billions of dollars in federal funding. While Census enumeration may advance efforts for equitable resource allocation, the reverse may also be possible. In 1990, California's undercount rate (2.7%) was fourth-highest in the nation, and estimates suggest it was the only state to have lost a congressional seat due to undercount.[1]

California has been ahead of the nation in experiencing demographic changes. Many of these demographic changes—such as the growth of immigrant populations, and non-traditional households—will pose challenges for 2020 Census enumeration.[2] In fact, the California Hard-to-Count index suggests that much of the State's population lives in tracts at high risk of undercount.[3]

California, much like the rest of the nation, has an interest in ensuring that every resident is counted. California state elected officials have appropriated $90.3 million to the Complete Count Committee (the state census office), to enhance outreach efforts for the 2020 Census. Efforts to overcome challenges posed by demographic changes, however, will be best driven by an informed understanding of the State's regional and local diversity.

This brief will draw upon five-year US Census Bureau American Community Survey (ACS) Public Use Microdata Sample (PUMS) 2012-16.[4] This brief examines the prevalence of two hard-to-count populations in California: immigrants and complex households.[5] As this brief will suggest, not all California communities bear the same risk for undercount. *Some communities, such as those found in the San Joaquin Valley region, are characterized by a larger incidence of immigrants and complex households, and bear a higher risk of undercount for the 2020 Census.*

Enumeration Challenges in the US and California

Census experts have recently suggested that the current political climate has created pronounced challenges for an accurate census enumeration. In 2018, the president's administration proposed adding a citizenship question to the 2020 Census, to which immigration advocates responded negatively, calling the effort an attempt to chill immigrant participation. The citizenship question, however, may bear little consequence. Starting in 2017, census field interviewers had already noted immigrants' highly critical reaction to the census—displaying behaviors never before seen, such as referencing current events, changing answers, and refusing to answer.[6]

[1] See US Census Bureau (1990) and California Legislative Analyst's Office (1999).
[2] See California Legislative Analyst's Office (1999) and Flores and Myers (2011).
[3] See California Complete Count—Census 2020 (2019).
[4] See IPUMS USA (2019).
[5] This brief defines complex households as having "subfamilies," according to the IPUMS USA (2019) definition.
[6] See Meyers and Goerman (2018).

Table 1.1 California State Profile of Hard-To-Count (HTC) Groups

		California	Non-CA US
Hard-to-Count (HTC) Groups	% Immigrant	28.1%	12.2%
	% Non-Citizen	48.9%	49.5%
	New mothers	0.6%	0.7%
	Children Age 0-4	6.5%	6.2%
Household Composition	Avg Household Size	2.8	2.5
	Subfamilies per HH	9.3%	6.3%
As % of Subfamily Members	Unmarried mothers	12.6%	15.7%
	Children Age 0-4	16.1%	17.0%
Householders of Households with Subfamilies	Age	46	46
	Sex	67.0%	75.0%
	Immigrant	46.4%	18.5%
Immigrant Householders of Households with Subfamilies	Avg. Years in US	25	21
	Language:		
	Spanish	65.9%	54.6%
	Filipino	6.7%	2.5%
	English	6.2%	15.3%
Total Population		38,654,206	279,903,956

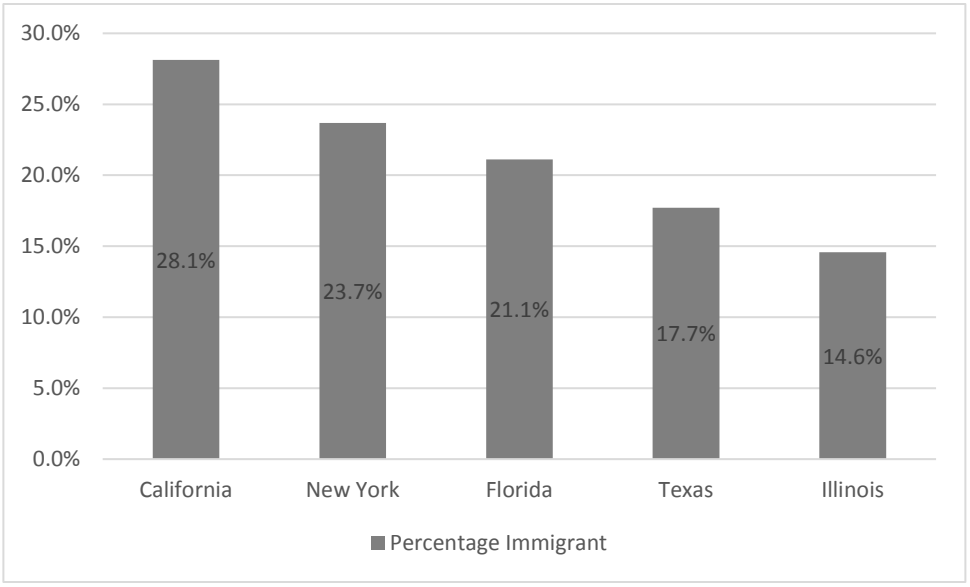
Source: American Community Survey (ACS) Public Use Microdata Series 2012-2016

In addition, US Census Bureau (2016, 2017) research has also indicated that new mothers (defined as giving birth the past year), and children under 12, are populations with significant rates of undercount—and that the youngest of these groups are most undercounted. One report found that new mothers aged 15-19 were undercounted at a rate of 30.9%; furthermore, marital status (not married) was associated with undercount, and such factors were associated with undercount up to age 34.[7] Another report found that undercount was high among children under the age of five—but highest among children between ages 1 and 2 (5.5%)—and that this was likely due to their likelihood of living in complex households (housing units with multiple families or generations).[8]

The ACS data estimated that California had 12,807,398 households during the 2012-16 period.[9] These households resembled those in the rest of the US in a few ways. First, California's rate of new mothers (.6%) was only slightly lower than that in the rest of the US (.7%). Second, California's rate of children aged 0-4 (6.5%) was only slightly higher than in the rest of the US (6.2%).

[7] See US Census Bureau (2016).
[8] See US Census Bureau (2017).
[9] This does not include institutional group quarters (e.g. prisons, nursing homes, hospice care) or non-institutional group quarters (e.g. student housing, military quarters, group homes).

Figure 1.1 Immigrants as Percent of State Population, by Select States



Source: American Community Survey (ACS) Public Use Microdata Sample 2012-2016

In addition, California's balance between naturalized and non-citizen immigrants mirrored that of the rest of the US. Almost half of California's immigrant population were non-citizens (48.9%), virtually identical with that of the rest of the US (49.5%). Lastly, California's prevalence of unmarried mothers (12.6%) in subfamilies was slightly lower than that in the rest of the US (15.7%), as was its prevalence of children 0-4 (16.1% vs. 17.0%). In these respects, California's challenges for a successful census count might appear to be similar with those efforts in the rest of the US.

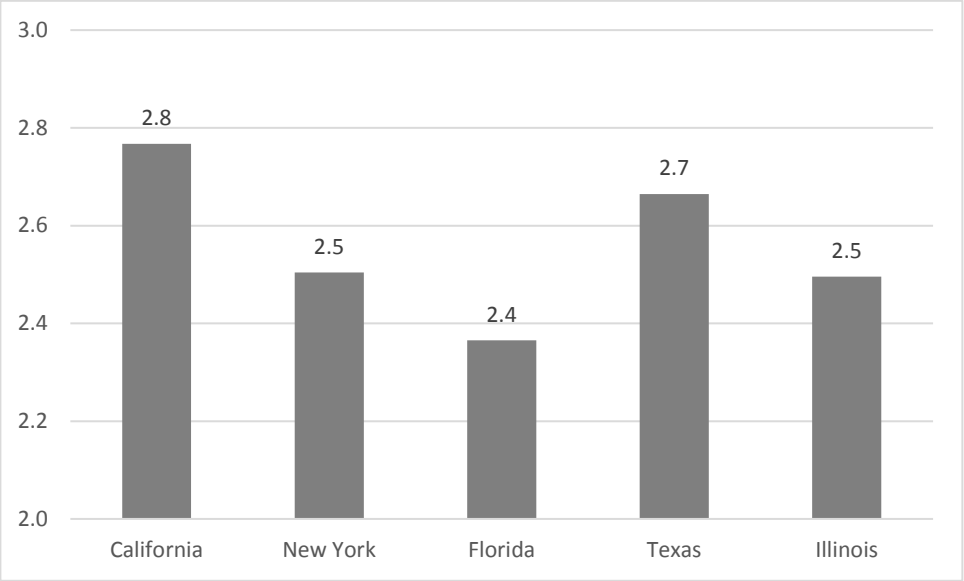
California's Distinct Enumeration Challenges

California's households, however, were strikingly different from those in the rest of the nation in two respects: *total number of immigrants* and *household composition*. As mentioned earlier, immigrants, and populations associated with complex households, are at higher risk of undercount.

The ACS 2012-16 data suggest that the proportion of immigrants in California's population (28.1%) was more than double the rest of the US (12.2%) (see Table 1.1). This incidence was the highest in the nation—and far higher than that of the most populous states (see Figure 1.1). While New York and Florida had immigrant populations that were 23.7% and 21.1% of the State's population, Texas and Illinois had far lower proportions of immigrants, at 17.7% at 14.6%.

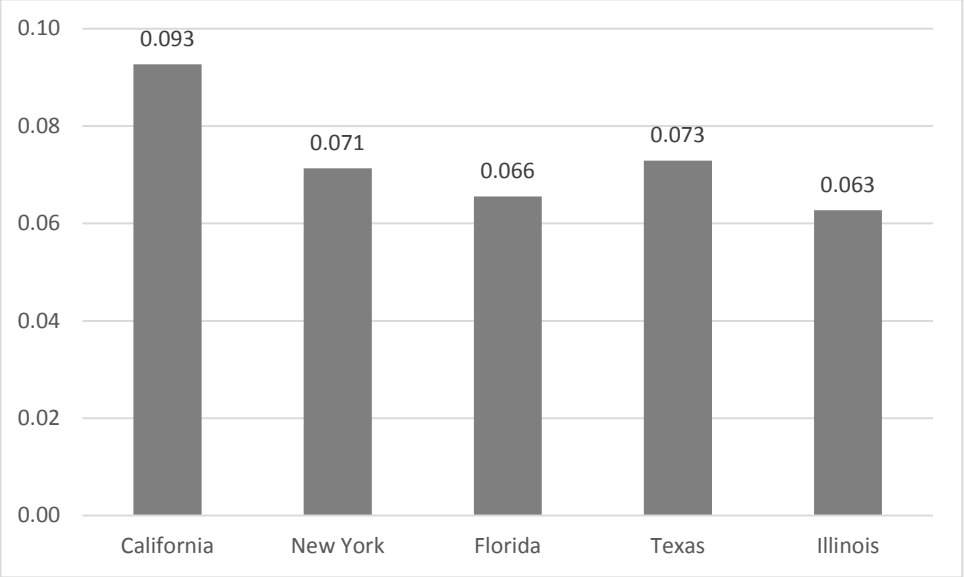
The ACS 2012-16 data also suggest that California households were far larger than many of those in the rest of the nation. California households had a mean average of 2.8 members, much higher than the US average of 2.5 (see Table 1.1). This rate was third-highest in the nation and higher than the most populous states. Texas' average household size was 2.7 members per household, while Illinois, New York and Florida had much smaller average household sizes (see Figure 1.2). The average household in Illinois only has 2.5 members per household, while in New York and Florida the average household sizes were 2.5 and 2.4.

Figure 1.2 Average Household Size, by Selected States



Source: American Community Survey (ACS) Public Use Microdata Sample 2012-2016

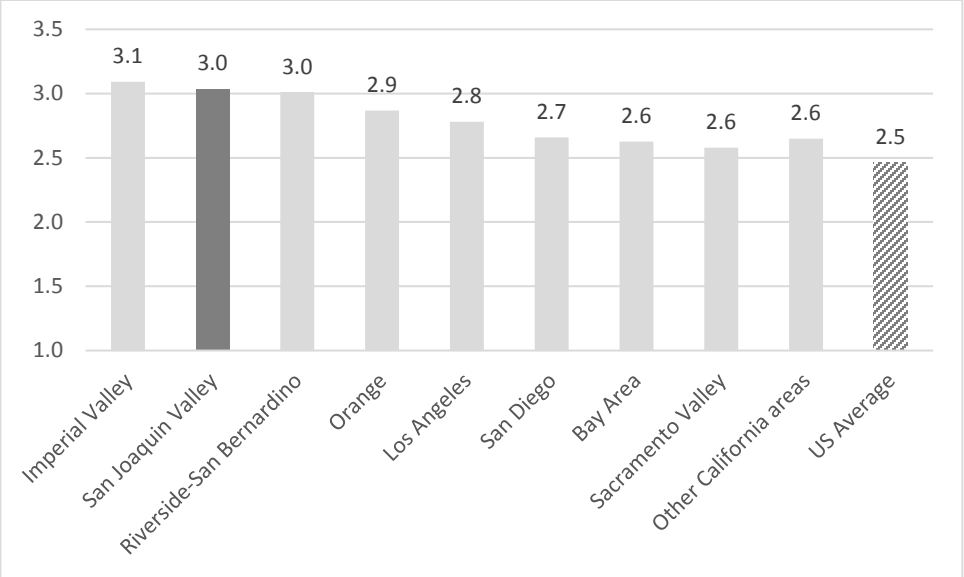
Figure 1.3 Subfamilies per Household, by Selected States



Source: American Community Survey (ACS) Public Use Microdata Sample 2012-2016

In addition, California ranked second in the nation in subfamilies per household (Hawaii ranked first). California had .093 subfamilies per household (see Table 1.1). This meant that there were nine subfamilies for every one hundred households in California—a rate about 1.5 times higher than the rest of the nation (.063). In fact, this rate was much higher than that of the most populous states (see Figure 1.3). Texas had a far lower rate of .073 subfamilies per household, while the rate was even lower in New York (.071), Florida (.066) and Illinois (.063).

Figure 2.1 Household members per unit, by region



Source: American Community Survey (ACS) Public Use Microdata Sample 2012-2016

Regional and Local Challenges in California's Census Enumeration

The risk of census undercount is not spread across California evenly—rural and suburban regions typify some of the State's most distinct vulnerabilities in achieving an accurate census enumeration. An analysis of the 1990 undercount found that Los Angeles County and several San Joaquin Valley counties were characterized by particularly high rates of undercount—even higher than the California state average.[10]

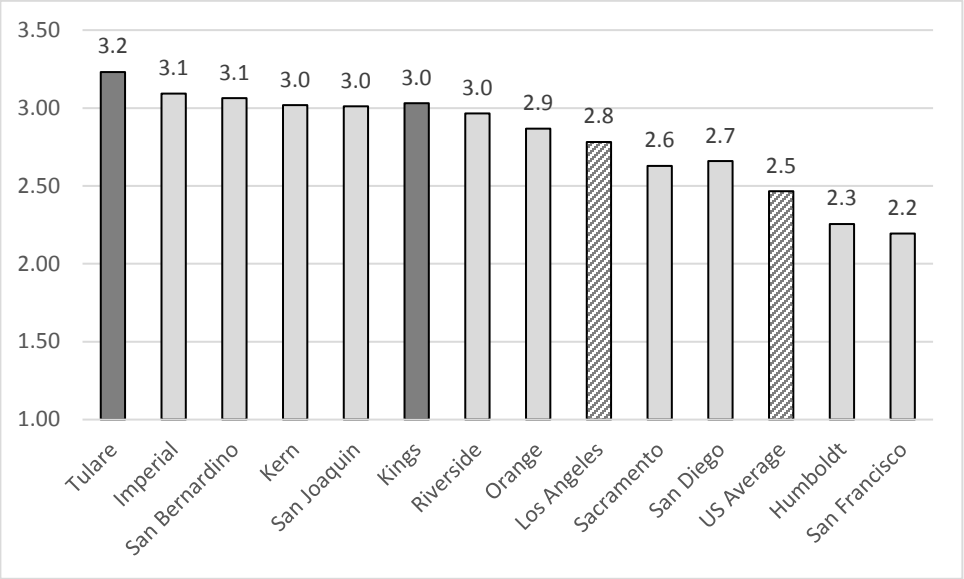
The following section will examine California's risk for overcount across the State's major regions and counties. *Imperial Valley* only refers to Imperial County. The *San Joaquin Valley* will include the seven counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings and Kern. The *Sacramento Valley* will consist of the seven counties of Shasta, Butte, Sacramento, El Dorado, Solano, Yolo, Placer. And the *Bay Area* will consist of the eight counties of Alameda, Contra Costa, Marin, Napa, San Mateo, Santa Clara, Sonoma, and San Francisco. [11]

Household Size

California's rural and suburban regions were characterized by household sizes larger than the national and state average. Imperial averaged 3.1 persons per household—the highest figure for all major regions (see Figure 2.1). The San Joaquin Valley and Riverside-San Bernardino regions averaged almost as many (3.0). Urban regions, however, had smaller household sizes. This included Orange (2.9), Los Angeles (2.8), San Diego (2.7), the Bay Area (2.6), and the Sacramento Valley (2.6). Nonetheless, these regions still had larger household sizes than the US average (2.5).

[10] In 1990, Tulare County held the highest rate of undercount (3.7%) among California counties with a population over 300,000. See California Legislative Analyst's Office (1999) analysis of US Census Bureau (1990) estimates.
[11] Solano is typically included in the Bay Area region and the Sacramento region. To avoid double-counting, Solano will only be categorized as part of the Sacramento Valley.

Figure 2.2 Household members per unit, by county



Source: American Community Survey (ACS) Public Use Microdata Sample 2012-2016

In terms of specific counties, Tulare County (located in the San Joaquin Valley), ranked the highest in the State in household size. Tulare averaged household had 3.2 members (see Figure 2.2). Other rural or suburban counties ranked high as well: Imperial County (3.1), San Bernardino (3.1), Kern (3.0), San Joaquin (3.0), Kings (3.0) and Riverside (3.0). These counties had household sizes far higher than the US average of 2.5.

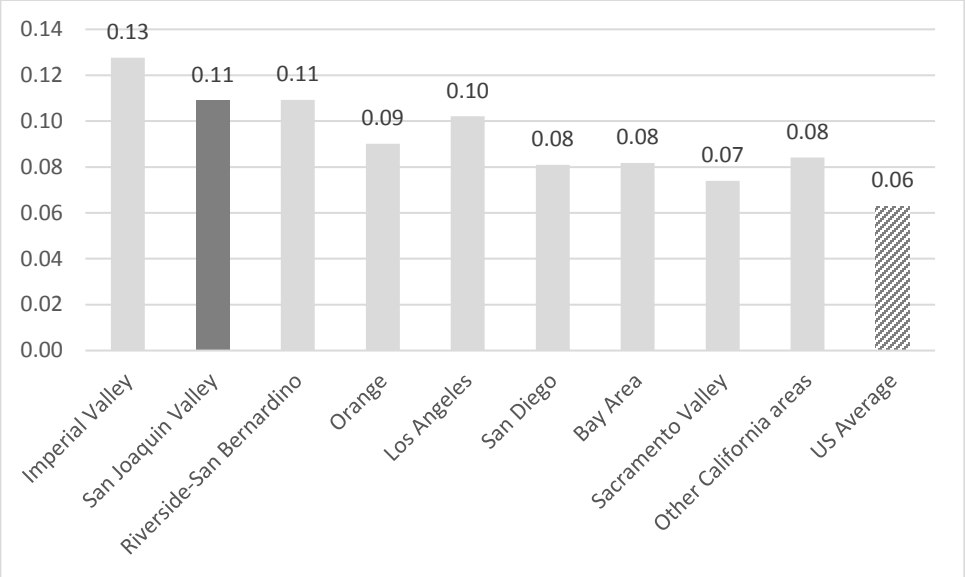
California's urban counties were characterized by smaller household sizes. Again, however, these figures were much higher than the US average of 2.5. Only San Francisco (2.2) had an average household size below that of the rest of the US.

Subfamilies in California

California's rural and suburban regions and counties also lead the State in the number of subfamilies per household. Imperial had a rate of .13 subfamilies per household—or thirteen per hundred. This was more than double the US average of .06 (see Figure 3.1). The San Joaquin Valley and Riverside-San Bernardino had a rate of .11.

California's urban regions had lower rates of subfamilies. Los Angeles had .10 subfamilies per household, while the respective figures for Orange (.09), the Bay Area (.08), and San Diego (.08) were even lower. Nonetheless, these figures were, again, all above the national average of .06 subfamilies per household.

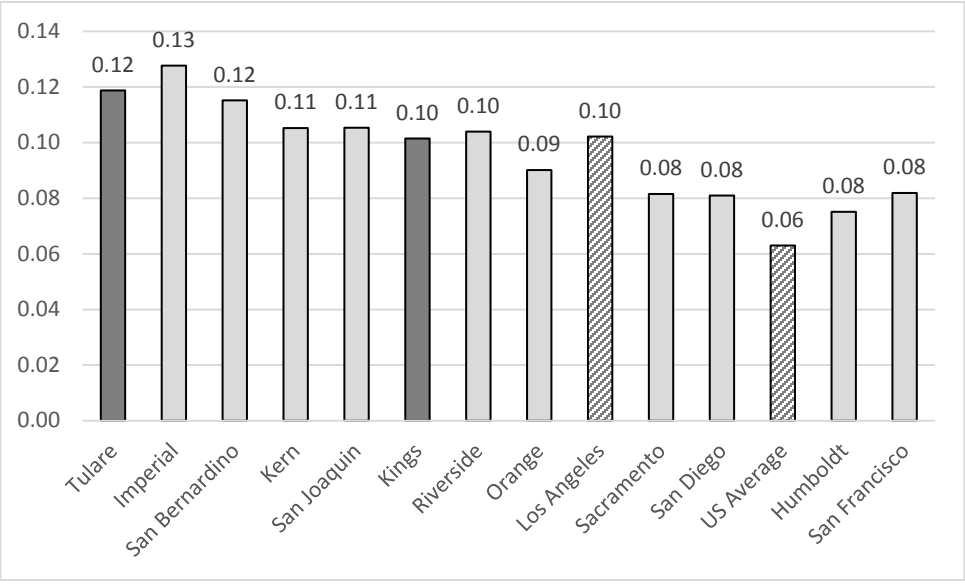
Figure 3.1 Subfamilies per households, by region



Source: American Community Survey (ACS) Public Use Microdata Sample 2012-2016

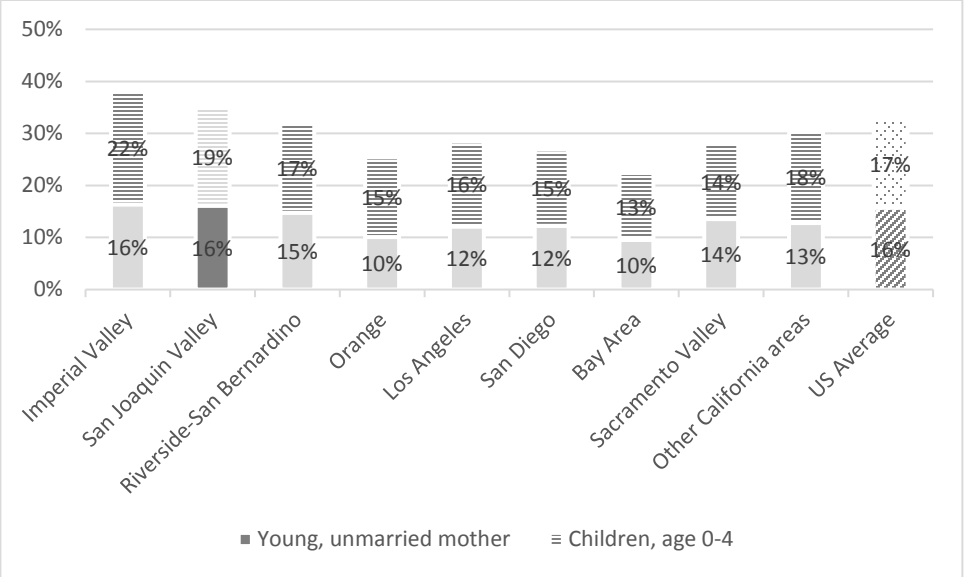
In terms of counties, rural and suburban counties had among the highest incidence of subfamilies in the State. In the counties under study, Imperial (.13) and Tulare (.12) had the highest incidence of subfamilies in households. Other counties, including San Bernardino (.11), Kern (.11) and San Joaquin (.11), had an average of ten subfamilies per hundred households. Kings and Riverside matched the rate of subfamilies in Los Angeles (.10). Other urban counties had lower incidences of subfamilies, including Orange (.09), San Diego (.08) and San Francisco (.08). Again, all were still above the national average.

Figure 3.2 Subfamilies per households, by county



Source: American Community Survey (ACS) Public Use Microdata Sample 2012-2016

Figure 4.1 Young, unmarried mothers and children 0-4 (as % of subfamily members), by region



Source: American Community Survey (ACS) Public Use Microdata Sample 2012-2016

Young, unmarried mothers and children 0-4

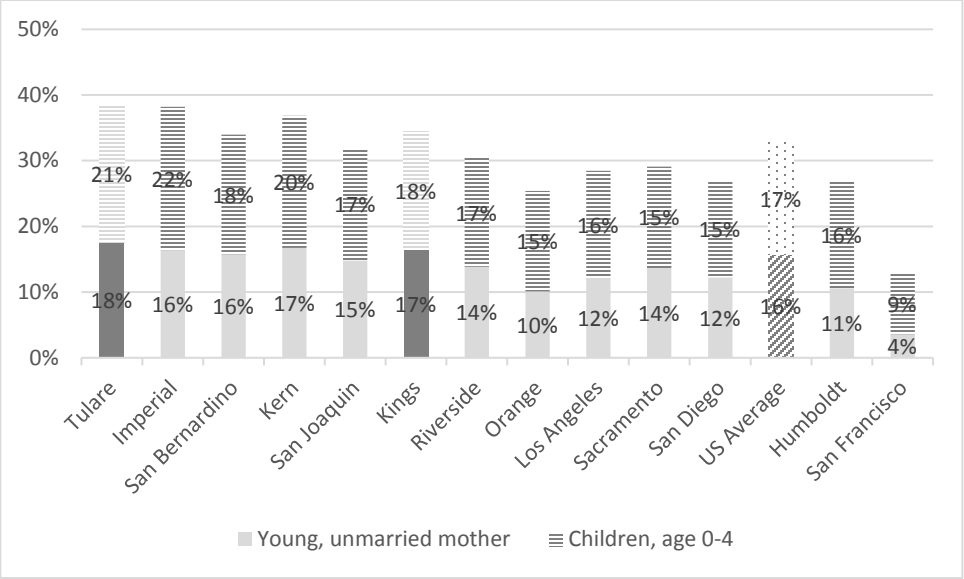
California subfamilies, like those in the rest of the nation, were often characterized by the presence of young, unmarried mothers (aged 15-34) and children aged 0-4 (see Table 1.1). Nationally, 15.7% of subfamily members were young, unmarried mothers, and 17.0% were children aged 0-4 (see Table 1.1). California subfamilies had only a slightly lower proportion of young, unmarried mothers (12.6%) and children (16.1%) than the rest of the US (see Table 1.1).

California rural and suburban regions were characterized by the highest representation of young, unmarried mothers and children within subfamilies. In Imperial, 38% of subfamily members were young, unmarried mothers and children—the highest rate in the State (see Figure 4.1). In the San Joaquin Valley, this figure was 35%, and in Riverside-San Bernardino, 32%. The figures were lower for urban regions, such as Los Angeles (28%), San Diego (27%), Orange (25%) and the Bay Area (23%) (see Figure 4.1).

California, however, had a greater proportion of subfamilies with young unmarried mothers and children than the rest of the nation. While these graphs suggest that the rate of mothers and children *within* subfamilies is lower (see Figure 4.1), it must be remembered that the *overall* incidence of subfamilies is *higher* than in the rest of the nation (see Table 1.1).

In terms of counties, the rural and suburban counties with the largest household sizes and largest number of subfamilies also led the State with the highest proportion of young, unmarried mothers and children in subfamilies. Tulare, Imperial and Kern's proportion of young, unmarried mothers and children in subfamilies were between 37-39%, while Kings and San Bernardino were only slightly above the national average of 33% (see Figure 4.2). All other counties in this analysis were below the national average—with most urban counties faring the lowest. Only 13% of San Francisco's subfamily members consisted of young, unmarried mothers with children.

Figure 4.2 Young, unmarried mothers and children 0-4 (as % of subfamily members), by county



Source: American Community Survey (ACS) Public Use Microdata Sample 2012-2016

Immigrant Householders of California's Complex Households

This section returns to the issue of California's large immigrant population. As this brief previously mentioned, California's demographic characteristics are associated with undercount: large households, high incidences of subfamilies, and the significant presence of young, unmarried women and children in subfamilies. This brief will now examine how California regions and counties contrast in their association with these characteristics. *Findings suggest that California's rural and suburban regions are at greater risk of undercount*.

In 2012-16, California communities were characterized not just by large households and a high rate of subfamilies, but by immigrants who were the "householders" of *complex* households.[12] (This paper categorizes complex households as those with subfamilies). California householders of complex households are much like their US peers in two respects: their average age is forty-six, and they are usually women (67% in California, 75% in the rest of the US) (see Table 1.1).

California householders of complex households, however, diverged from rest of the nation in their nativity; almost half (46%) were immigrants, whereas the respective figure for the US was only 18%. Furthermore, the average California immigrant who was the householder of a complex household had been in this country for a longer period of time. US immigrant householders of complex households had been in this country for (a median average of) twenty-one years, whereas California immigrant householders of complex households had been in this country twenty-five years. Lastly, while 54.6% of US immigrant householders of complex households spoke Spanish as a primary language, almost two-thirds (65.6%) of their California counterparts did so. (For both, Filipino/Tagalog was the second most likely language for immigrant householders of complex households, though at far lower rates of 2.5% and 6.7%).

[12] The US Census Bureau defines the householder simply as the reference person who participates in the survey.

Table 2.1 Profiles of Householders of Complex Households, by Region

	All Complex Householders		Immigrant Complex Householders				
Region	Age	Immigrants	Years in US	Language	%	Language	%
Imperial	49	63%	26	Spanish	95.9	Filipino	0.5
San Joaquin Valley	45	40%	24	Spanish	75.1	Panjabi	5.1
Riverside-San Bernardino	48	41%	28	Spanish	78.4	Filipino	4.3
Orange	46	56%	24	Spanish	65.2	Vietnamese	12.2
Los Angeles	47	57%	27	Spanish	72.5	Filipino	5.2
Bay Area	45	47%	23	Spanish	41.9	Filipino	11.6
San Diego	46	42%	25	Spanish	61.6	Filipino	12.6
Sacramento Valley	46	28%	24	Spanish	39.1	Filipino	13.5
Other California areas	47	37%	23	Spanish	81.0	Filipino	3.5

Source: American Community Survey (ACS) Public Use Microdata Sample (PUMS) 2012-2016

Table 2.2 Profiles of Householders of Complex Households, by County

	All Complex Householders		Immigrant Complex Householders				
County	Age	Immigrants	Years in US	Language	%	Language	%
Tulare	48	47%	26	Spanish	89.5	Filipino	1.9
Imperial	49	63%	26	Spanish	95.9	Filipino	0.5
San Bernardino	48	42%	28	Spanish	79.4	Filipino	4.3
Kern	44	38%	24	Spanish	81.9	Panjabi	4.9
San Joaquin	46	41%	23	Spanish	57.4	Filipino	13.1
Kings	46	41%	26	Spanish	82.6	Filipino	4.4
Riverside	48	40%	28	Spanish	77.5	Filipino	4.4
Orange	46	56%	24	Spanish	65.2	Vietnamese	12.2
Los Angeles	47	57%	27	Spanish	72.5	Filipino	5.2
Sacramento	44	32%	23	Spanish	34.1	Filipino	8.6
San Diego	46	42%	25	Spanish	61.6	Filipino	12.6
US Average	46	18%	21	Spanish	54.6	Filipino	2.5
Humboldt	42	7%	30	Spanish	57.4	Hmong	8.5
San Francisco	42	45%	24	Chinese	20.8	Cantonese	20.8

Source: American Community Survey (ACS) Public Use Microdata Series (PUMS) 2012-2016

California's regions and counties differed in the characteristics of their householders of complex households (see Table 2.1). For example, Imperial County had the highest rate of immigrants as householders of Complex Households (63%), while the Los Angeles (57%) and Orange (56%) regions had the second and third highest rates. In the Sacramento Valley, by contrast, immigrants comprised only 28% of householders of complex households. Differences also emerge between counties within the same region (see Table 2.2); while 47% of Tulare County's complex households were immigrants, the respective figure for Kern County was much lower (38%).

California's regions and counties also differed by characteristics of immigrant householders of Complex Households. While more immigrant householders spoke Spanish as a primary language (the most extreme case being in Tulare at 89.5%), the second most popular primary language varied by region and county (see Tables 2.1 and 2.2). Kern County's second most popular language among immigrant householders was Panjabi (4.9%). San Joaquin County's second-most popular language was Filipino/Tagalog (13.1%).

Extending the analysis of county-level differences among immigrant householders of complex households revealed further differences. In Orange County, Vietnamese was the second most popular primary language (12.2%) for immigrant householders of complex households. In Humboldt County, the second-most popular primary language was Hmong (8.5%), while in San Francisco it was Cantonese (20.8%).

Summary

California communities are at high risk of undercount. California has experienced many demographic changes—such as a growth in the immigrant population and a shift away from traditional households—that are associated with challenges in conducting accurate census enumeration. However, while census experts have pointed toward the current political climate as cause for concern, a closer look at the dynamics of census undercount suggests that California's enumeration challenges are much broader and stretch back further than any recent developments.

California is at high risk for undercount due to its large immigrant population, as well the prevalence of complex households. California's immigrant population rate is the highest in the nation and more than double that of the rest of the US. In addition, California households have the second-highest prevalence of subfamilies in the nation—a rate 1.5 times higher than the rest of the US. These trends had already characterized California in 1990, and were attributable to the State's historic undercount in the 1990 Census—when the undercount rate was fourth-highest in the nation and cost the State a congressional seat.

California's rural and suburban communities will be at highest risk for undercount during the 2020 Census. The California trends examined early in this brief—large household size, high rates of immigrants, and a high prevalence of subfamilies in households—are much more pronounced in rural and suburban communities. Imperial, the San Joaquin Valley, and Riverside-San Bernardino were characterized by larger households, more subfamilies, and more young, unmarried women and children within those subfamilies. In terms of counties, Imperial, Tulare and San Bernardino exhibited the greatest association with factors linked to challenges in census enumeration. This,

too, reflects long-standing demographic features of the State. In, 1990 Los Angeles County and the San Joaquin Valley had experienced the highest rates of undercount.

California's 2020 Census outreach efforts are underway and include an historic investment in the State census office. To be most effective, however, such efforts will have to develop strategies specific to the State's diverse regional and local communities, such as developing messaging and outreach together with community leaders. (One example of this might be targeting the householders of complex households, many of whom are immigrant, women, and have been in the US for an average of two to three decades). If such outreach can communicate that *everyone* must be counted—emphasizing the enumeration of young, unmarried mothers and children in subfamilies—then efforts to improve Census population counts may succeed and the State may experience a more equitable allocation of resources for the following decade.

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