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DSSD 2010 CENSUS COVERAGE MEASUREMENT MEMORANDUM SERIES #2010-G-04

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Subject: 2010 Census Coverage Measurement Estimation Report:
                                 Components of Census Coverage for the Household Population in
                                 the United States

This report is one of twelve documents providing estimation results from the 2010 Census Coverage Measurement program. This report provides estimates of components of census coverage for the household population in the United States.

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Attachments

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Census Coverage Measurement Estimation Report

Components of Census Coverage for the Household Population in the United States

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Executive Summary

The Census Coverage Measurement produced the components of census coverage that include erroneous enumerations and omissions. This document provides the components of census coverage for persons in housing units.

The Census Coverage Measurement estimated that the household population was 300.67 million people.

The Census Coverage Measurement also produced four components of census coverage: correct enumerations, erroneous enumerations, whole-person imputations, and omissions. The correct enumeration estimate was 284.67 million people. The erroneous enumeration estimate was 10.04 million people, with 8.52 million coming from duplication and 1.52 million coming from other reasons. The tally of whole-person census imputations was 5.99 million. The Census Coverage Measurement estimated that 16.00 million people were omitted from the census. Omissions are people who *should have been* enumerated in the United States, but were not. Many of these people may have been accounted for by the 5.99 million whole-person census imputations.

1.   Introduction

The 2010 Census Coverage Measurement (CCM) program evaluated coverage of the 2010 Census to aid in improving future censuses. The CCM measured the net coverage and components of census coverage of housing units and persons, excluding group quarters and persons residing in group quarters. The CCM sample design was a probability sample of 170,000 housing units. Remote areas of Alaska were out of scope for the CCM.

This report provides the 2010 components of census coverage that include estimates of correct enumerations, erroneous enumerations, and omissions for the national household population. Coverage component estimates for persons are provided for major demographic groups, census operational areas, states, large counties, and large places. As this is the first effort to provide detailed component estimates, this report does not provide any data from earlier censuses.

Additional reports that provide measures of census coverage include

- estimates of net coverage for the household population (Davis and Mulligan 2012),
- estimates of net coverage for housing units (Olson and Viehdorfer 2012), and
- estimates of components of census coverage for housing units (Keller and Fox 2012b).

2.   Methods

The general estimation approach for components of census coverage for persons fell into four categories:

- estimates of correct enumerations
- estimates of erroneous enumerations
- tabulations of whole-person census imputations
- estimates of omissions

2.1   Estimates of Correct Enumerations

In the CCM, we evaluated a sample of data-defined[1] enumerations in the census to determine if they were correct enumerations. For a person to be a correct enumeration for our component estimation, the first requirement was that the census person record should have been enumerated in a housing unit in the census. If a person was determined to have been included in the census two or more times, the CCM had procedures to determine which enumeration was correct based on the Person Interview and Person Followup information. The other enumerations were classified as erroneous enumerations.

Another requirement was geographic correctness. An enumeration was considered to be correct if the record was enumerated in the appropriate geographic area. Since we produced national, state, county, and place estimates, the definition of the correct geographic area changed depending on the area being evaluated.

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[1] A data-defined enumeration in the census had two reported characteristics, one of which can be name.

For national-level estimates, the geographic requirement for the enumeration to be considered correct was that the record corresponded to a person that should have been included anywhere in the United States in the coverage universe (that is, in a housing unit outside of Remote Alaska areas). This criterion applied to the estimates of the total population and other domains, like demographic characteristics and census operational areas. For state, county, and place estimates, the definition narrowed to require that the person should have been enumerated in that particular area.

This definition of correct enumeration for components of census coverage was different from the definition of correct enumeration used for estimating net coverage. The definition for net error was stricter, as it applied additional criteria to minimize the bias in our dual system estimates (DSEs). For net estimation, the record must have (1) had sufficient identification information, that is, a valid name and two other characteristics, and (2) been enumerated in the specific geographic area referred to as the block cluster search area[2]. For component estimation, we used a different definition that was more suitable for national, state, county, and place estimates.

In addition to generating estimates of levels of correct enumerations, the CCM produced percentages as well. For correct enumeration percentages, the denominator was the census count.

2.2   Estimates of Erroneous Enumerations

For component estimation, we also estimated the number of erroneous enumerations. When examining the reasons that a case was erroneous, we report the results for three categories:

- persons that should not have been enumerated at all ("Other Reasons")
- erroneous enumerations due to duplication
- enumerations included in the wrong location

There were several types of erroneous enumerations combined into the first category of "Other Reasons." Some of these included persons who should have been enumerated in a group quarters, who were born after Census Day or who died before Census Day, and fictitious enumerations.

The second group was erroneous enumerations due to duplication. A person enumerated two or more times in the census for whom at least one of those enumerations was in a housing unit fell into this category. For the situation where the person was enumerated correctly in a group quarters and enumerated erroneously in a housing unit, the person enumeration in the housing unit was an erroneous enumeration due to duplication.

The third category of erroneous enumerations, those included in the wrong location, by definition does not exist for national estimates such as total population or race groups. That is,

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[2] The block cluster search area is the block cluster and the one ring of surrounding census blocks. A block cluster is one or more contiguous blocks, and averages 30 housing units.

any person was a correct enumeration if the person should have been counted in a housing unit and was counted in a housing unit anywhere in the United States. For state, county, and place estimates, the CCM narrowed the geographic criterion of where the person should have been counted to determine whether the person was treated as erroneous or correct based on the appropriate geographic area of interest.

2.3   *Tabulations of Whole-Person Census Imputations*

We tallied the number of whole-person census imputations. All of the characteristics were imputed for these census person records.

The CCM program was not in a position to assess whether an individual whole-person census imputation was correct or erroneous because, in large part, there was no practical way to follow up on records for which all information was imputed. Therefore, this report provides the count of whole-person imputations. Table A provides the five types of imputation cases included in the count.

In addition to tallying the number of whole-person census imputations, the CCM produced percentages as well. For these percentages, the denominator was the census count.

Table A. Whole-Person Census Imputation Categories

Count Imputation
1.   Status Imputation - No information about the housing unit; housing unit imputed as occupied, vacant, or non-existent. Those imputed as non-existent were removed from the census files.
2.   Occupancy Imputation - Existence of housing unit confirmed, but no information as to occupancy status; imputed as occupied or vacant.
3.   Household Size Imputation - Occupied status confirmed, but no information as to household count; the household population count was imputed.
Population Count Already Known for the Housing Unit
4.   Whole Household - Population count known; all characteristics imputed for the entire household.
5.   Partial Household - Population count known; all characteristics imputed for some, but not all, persons in the household.

Note: Any housing unit imputed as occupied during count imputation also had its household population count imputed, which resulted in whole-person census imputations.

2.4   Estimates of Omissions

We estimated the total number of omissions in the census as well. A direct estimation method for the number of omissions is not available. In the past, different definitions and estimators of omissions were used. The CCM estimated the number of omissions by subtracting the estimate of correct enumerations from the DSE.

$$Omissions = DSE - Correct\ Enumerations$$

As whole-person census imputations are a separate category from correct enumerations and erroneous enumerations, our definition of omissions effectively treats these imputations as omissions. In effect, omissions are people who *should have been* enumerated in the United States, but were not. Many of these people may have been accounted for in the whole-person census imputations. We believe that most of the imputed people may have been verified as correct if we could have collected a valid name and sufficient characteristics.

In addition to levels, the CCM reports omissions as a percentage of the estimated population.

$$Omission\ Percentage = \left(\frac{Omissions}{DSE}\right) \times 100$$

2.5   Net Coverage Estimates

In addition to reporting component estimates, we also show results of net coverage estimation, specifically percent net undercount. The percent net undercount is the net undercount estimate (DSE - Census Count) divided by the DSE expressed as a percentage. A positive percent indicates a net undercount and a negative percent indicates a net overcount.

$$Percent\ Net\ Undercount = \left(\frac{DSE - Census}{DSE}\right) \times 100$$

2.6   Statistical Testing

Statements of comparison in this report are statistically significant at the 90% confidence level ($\alpha = 0.10$) using a two-sided test. "Statistically significant" means that the difference is not likely due to random chance alone. In the tables, percent net undercount estimates that are significantly different from zero are identified by an asterisk (*).

3. Limitations

In this section, we provide statements about the data that are worth noting when reading this document.

3.1. *Measures of Uncertainty Accounting for Sampling and Synthetic Error*

Because the CCM estimates are based on a sample survey, they are subject to sampling error. As a result, the sample estimates differ from what would have been obtained if all housing units had been included in the survey. The standard errors provided with the data reflect variation due to sampling. For the component estimation of correct and erroneous enumerations, we used a ratio-adjusted design-based estimator that was benchmarked to a larger aggregate estimate. The standard error measures the uncertainty of this direct estimate.

In applying dual system estimation of the population, we used several fixed-effect logistic regression models to create a "synthetic" estimator. The parameters of these models were estimated using data from the entire national sample, and then applied synthetically for any given domain of estimation. Thus, the domains were subject to a potential synthetic bias. The bias in the synthetic estimator represents the difference, if any, in the domain's population estimate one would obtain by applying the synthetic model versus by simply tabulating over the true population (if it were known). For most estimation domains, main effects and interactions related to the domain were included in these models to minimize the synthetic bias in the population estimates.

For governmental entities like states, counties, and places, there was concern that the standard errors for the population estimates, percent net undercount, and percent omissions would underestimate the true error by not capturing the synthetic bias. For these governmental entities, we produced estimates of root mean squared error for the total population estimates, percent net undercount, and percent omissions. These estimates of error added an estimate of synthetic bias to the sampling variance of the synthetic estimates that used fixed-effect logistic regression.

3.2 *Other Sources of Nonsampling Error*

Nonsampling error is a catch-all term for errors that are not a function of selecting and using a sample. They include errors that can occur during data collection and processing survey data. For example, while an interview is in progress, the respondent might make an error answering a question, or the interviewer might make an error asking a question or recording the answer. Sometimes interviews fail to take place or households provide incomplete data. Other examples of nonsampling error for the 2010 CCM include matching error, modeling error, and classification error. Unlike sampling error, nonsampling error is difficult to quantify.

3.3 *Omissions*

Omissions were estimated by subtracting the estimate of correct enumerations from the DSE. Because DSEs were not calculated for some estimation domains, we cannot provide omissions for some types of estimates.

4. Results for the Household Population

4.1 *National Estimates of Components of Census Coverage*

Table 1 shows the estimates and percentages of the components of census coverage for the household population. The first part of the table shows how the census population count of 300.70 million was divided among correct enumerations, erroneous enumerations, and whole-person census imputations. The CCM estimated that 284.67 million (94.7%) were correct enumerations, 10.04 million (3.3%) were erroneous enumerations, and 5.99 million (2.0%) were whole-person census imputations.

The CCM estimated 284.67 million correct enumerations using the geographic requirement that the person was in a housing unit anywhere in the nation. Table 1 breaks this overall estimate into four groups based on stricter geographic requirements.

The CCM estimated that 280.85 million (93.4%) were included in the correct CCM block cluster search area. The block cluster search area was defined as the CCM sample block cluster and the one ring of blocks that surround the sample block cluster. See Section 2.1 for more information on the CCM search area.

For the remaining three geographic categories, the CCM estimated that 2.04 million (0.7%) were enumerated outside the block cluster search area but in the same county as where the person should have been enumerated. Another 830,000 (0.3%) were enumerated in the same state but should have been included in a different county. Finally, 948,000 (0.3%) should have been enumerated in a different state.

The table continues by providing details about the 10.04 million erroneous enumerations in the 2010 Census. Of the total, 8.52 million (2.8%) were erroneous enumerations due to duplication, and 1.52 million (0.5%) were erroneous enumerations for other reasons. The third component of the census count was the 5.99 million (2.0%) whole-person census imputations.

The next part of the table summarizes the CCM population estimates. The CCM estimated that the household population was 300.67 million people. The CCM population estimate was broken into two groups: correct enumerations and omissions. The correct enumerations were the same 284.67 estimate shown earlier. Based on the CCM estimate of 300.67 million, the correct enumeration percentage was 94.7%.

The CCM estimated that 16.00 million people were omitted from the census. Omissions are people who *should have been* enumerated in the United States, but were not. Many of these people may have been accounted for by the 5.99 million whole-person census imputations.

Table 1: Components of Census Coverage for the United States Household Population
(in Thousands)

Component of Census Coverage	Estimate	SE (EST)	Percent	SE (Percent)
Census Count	300,703	0	100.0	
Correct Enumerations [1]	284,668	199	94.7	0.07
Enumerated in the same block cluster [2]	280,852	220	93.4	0.07
Enumerated in the same county, though in a different block cluster	2,039	55	0.7	0.02
Enumerated in the same state, though in a different county	830	34	0.3	0.01
Enumerated in a different state	948	31	0.3	0.01
Erroneous Enumerations	10,042	199	3.3	0.07
Due to Duplication	8,521	194	2.8	0.06
For Other Reasons [3]	1,520	45	0.5	0.01
Whole-Person Census Imputations [4]	5,993	0	2.0	0
Estimate of Population from the Census Coverage Measurement [5]	300,667	429	100.0	
Correct Enumerations [1]	284,668	199	94.7	0.1
Omissions [6]	15,999	440	5.3	0.1
Net Undercount	-36	429	-0.01	0.14

1. For the national table, someone who should have been counted is considered a correct enumeration if he or she was enumerated anywhere in the United States
2. More precisely, enumerated in the *search area* for the correct block cluster. For definitions of block cluster and search area, see accompanying text.
3. Other reasons include fictitious people, those born after April 1, 2010, those who died before April 1, 2010, etc.
4. These imputations represent people for whom we did not collect sufficient information. Their records are included in the census count.
5. This number is the CCM estimate of people who should have been counted in the CCM household universe. It does not include people in group quarters or people living in the Remote Alaska type of enumeration area.
6. Omissions are people who *should have been* enumerated in the United States, but were not. Many of these people may have been accounted for in the whole-person census imputations above.

Note that correct and erroneous enumeration estimates in subsequent tables have been benchmarked to the national estimates in Table 1. This was done to ensure consistency across results.

4.2   Component Estimates by Demographic Characteristics

This section summarizes the census coverage for demographic and tenure groups. These include estimates of coverage by

- Race and Hispanic Origin
- Tenure
- Age and Sex

Race and Hispanic Origin

Table 2 shows the components of census coverage by race and Hispanic origin. Race results are shown based on being reported alone-or-in-combination with other races. Because of this, a person will fall into several rows if several races were reported. Additional estimates are shown for the Non-Hispanic White alone and American Indian and Alaskan Native (AIAN) populations. For the AIAN alone-or-in-combination population, the estimates are broken down by whether this population lives on an American Indian Reservation, on an American Indian Area[3] off Reservation, or in the remainder of the nation.

The Black alone-or-in-combination and Hispanic populations had larger percent omissions (9.3% and 7.7%, respectively) than the Non-Hispanic White alone population (3.8%). These two groups also had higher percentages of whole-person census imputations. Part of the omissions for these two groups may have been accounted for by the whole-person census imputations.

Table 2: Components of Census Coverage by Race Alone-Or-In-Combination and Hispanic Origin

Race Alone-Or-In-Combination and Hispanic Origin	Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
			Duplication	Other					
U.S. Total	300,703	94.7	2.8	0.5	2.0	300,667	94.7	-0.01	5.3
	(0)	(<0.1)	(<0.1)	(<0.1)	(0)	(429)	(0.1)	(0.14)	(0.1)
White	225,547	95.2	2.7	0.4	1.7	224,341	95.7	-0.54*	4.3
	(0)	(<0.1)	(<0.1)	(<0.1)	(0)	(319)	(0.1)	(0.14)	(0.1)
Non-Hispanic White Alone	191,997	95.4	2.6	0.4	1.6	190,413	96.2	-0.83*	3.8
	(0)	(<0.1)	(<0.1)	(<0.1)	(0)	(291)	(0.1)	(0.15)	(0.1)
Black	40,153	92.6	3.6	0.7	3.1	40,999	90.7	2.06*	9.3
	(0)	(0.2)	(0.2)	(<0.1)	(0)	(209)	(0.4)	(0.50)	(0.4)
American Indian and Alaskan Native	5,056	92.5	4.1	0.6	2.9	5,063	92.4	0.15	7.6
	(0)	(0.6)	(0.6)	(<0.1)	(0)	(36)	(0.6)	(0.71)	(0.6)
On Reservation	571	90.8	4.7	0.4	4.1	600	86.3	4.88*	13.7
	(0)	(0.6)	(0.6)	(<0.1)	(0)	(15)	(2.1)	(2.37)	(2.1)
American Indian Area Off Reservation	527	87.8	9.7	1.0	1.5	507	91.2	-3.86	8.8
	(0)	(4.1)	(3.9)	(0.5)	(0)	(15)	(2.6)	(2.99)	(2.6)
Balance of the U.S.	3,959	93.4	3.2	0.6	2.9	3,956	93.4	-0.05	6.6
	(0)	(0.4)	(0.4)	(<0.1)	(0)	(23)	(0.6)	(0.58)	(0.6)
Asian	16,969	94.7	2.4	0.9	2.1	16,969	94.7	0.00	5.3
	(0)	(0.2)	(0.2)	(<0.1)	(0)	(88)	(0.5)	(0.52)	(0.5)
Native Hawaiian or Pacific Islander	1,189	93.1	3.4	0.8	2.8	1,201	92.1	1.02	7.9
	(0)	(0.6)	(0.6)	(0.2)	(0)	(25)	(2.0)	(2.06)	(2.0)
Some Other Race	21,448	92.9	3.5	0.7	2.9	21,803	91.4	1.63*	8.6
	(0)	(0.3)	(0.3)	(<0.1)	(0)	(69)	(0.4)	(0.31)	(0.4)
Hispanic Origin	49,580	93.7	3.2	0.7	2.4	50,356	92.3	1.54*	7.7
	(0)	(0.2)	(0.2)	(<0.1)	(0)	(168)	(0.3)	(0.33)	(0.3)

A person can be included in multiple rows.
Standard Errors are shown in parentheses below the estimate. An asterisk (*) denotes a percent net undercount that is significantly different than zero.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

[3] American Indian Areas are lands considered (either wholly or partially) on an American Indian Reservation/trust land, Oklahoma Tribal Statistical Area, Tribal Designated Statistical Area, or Alaska Native Village Statistical Area.

Tenure

Table 3 shows the components of census coverage by tenure. Renters had higher percentages of erroneous enumerations due to duplication (3.7% versus 2.4%), erroneous enumeration due to other reasons (0.7% versus 0.4%) and whole-person census imputations (3.0% versus 1.5%).

Table 3: Components of Census Coverage by Tenure

Tenure	Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
			Duplication	Other					
U.S. Total	300,703 (0)	94.7 (<0.1)	2.8 (<0.1)	0.5 (<0.1)	2.0 (0)	300,667 (429)	94.7 (0.1)	-0.01 (0.14)	5.3 (0.1)
Owner	201,241 (0)	95.7 (<0.1)	2.4 (<0.1)	0.4 (<0.1)	1.5 (0)	200,109 (244)	96.3 (0.1)	-0.57* (0.12)	3.7 (0.1)
Renter	99,463 (0)	92.5 (0.1)	3.7 (0.1)	0.7 (<0.1)	3.0 (0)	100,558 (307)	91.5 (0.3)	1.09* (0.30)	8.5 (0.3)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.
An asterisk (*) denotes a percent net undercount that is significantly different than zero.

Age and Sex

Table 4 summarizes the components of census coverage based on the nine age/sex groupings. For children under 18, we estimated erroneous enumeration due to duplication estimates of about 3%. Males and females between the ages of 18 to 29 had slightly higher estimates of erroneous enumerations due to duplication (about 4%) and whole-person census imputations (about 3%). Males and females 30+ had percentages of erroneous enumerations due to duplication between 2.1% and 2.5%. The percentage of whole-person census imputations for males and females between the ages of 30 to 49 was between the percentages seen for the 18 to 29 and the 50+ age groupings.

Table 4: Components of Census Coverage by Age and Sex

Age and Sex	Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
			Duplication	Other					
U.S. Total	300,703 (0)	94.7 (<0.1)	2.8 (<0.1)	0.5 (<0.1)	2.0 (0)	300,667 (429)	94.7 (0.1)	-0.01 (0.14)	5.3 (0.1)
0 to 4	20,158 (0)	94.0 (0.2)	3.2 (0.2)	0.6 (<0.1)	2.2 (0)	20,304 (81)	93.4 (0.3)	0.72* (0.40)	6.6 (0.3)
5 to 9	20,315 (0)	94.8 (0.1)	3.0 (0.1)	0.2 (<0.1)	2.0 (0)	20,248 (62)	95.1 (0.3)	-0.33 (0.31)	4.9 (0.3)
10 to 17	33,430 (0)	94.7 (0.1)	3.2 (0.1)	0.3 (<0.1)	1.9 (0)	33,108 (96)	95.6 (0.3)	-0.97* (0.29)	4.4 (0.3)
18 to 29 Males	23,982 (0)	91.8 (0.2)	4.0 (0.2)	1.2 (<0.1)	2.9 (0)	24,274 (111)	90.7 (0.4)	1.21* (0.45)	9.3 (0.4)
18 to 29 Females	23,912 (0)	92.2 (0.2)	4.2 (0.2)	0.8 (<0.1)	2.8 (0)	23,845 (85)	92.4 (0.3)	-0.28 (0.36)	7.6 (0.3)
30 to 49 Males	40,256 (0)	94.9 (<0.1)	2.3 (<0.1)	0.6 (<0.1)	2.2 (0)	41,748 (86)	91.5 (0.2)	3.57* (0.20)	8.5 (0.2)
30 to 49 Females	41,815 (0)	95.5 (<0.1)	2.1 (<0.1)	0.3 (<0.1)	2.0 (0)	41,640 (86)	95.9 (0.2)	-0.42* (0.21)	4.1 (0.2)
50+ Males	44,886 (0)	95.5 (<0.1)	2.5 (<0.1)	0.5 (<0.1)	1.5 (0)	44,744 (63)	95.8 (0.1)	-0.32* (0.14)	4.2 (0.1)
50+ Females	51,950 (0)	95.7 (<0.1)	2.5 (<0.1)	0.4 (<0.1)	1.4 (0)	50,755 (72)	98.0 (0.1)	-2.35* (0.14)	2.0 (0.1)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.
An asterisk (*) denotes a percent net undercount that is significantly different than zero.

4.3   Component Estimates for States, Counties, and Places

States
Table 5 summarizes the components of census coverage for the states and the District of
Columbia. The CCM produced estimates of correct and erroneous enumerations based on the
direct estimate of the states while benchmarking to national totals. Since direct estimation was
used, some states had high standard errors for correct and erroneous enumerations.

Counties
Table A1 (in Attachment A) summarizes the components of census coverage for the 128 counties
with a total census population greater than or equal to 500,000. An estimate for the balance of
the state - all other counties within the state combined - is provided as well. Note that, for each
state estimate in Table A1, the correct enumeration/erroneous enumeration distinction is based
on the state definition used in Table 5. As a result, persons counted in the wrong county, but
within the correct state are correct enumerations on the state row. For county estimates
(including the balance of state), the correct enumeration/erroneous enumeration distinction is
based on the county definition. As a result, persons counted in the wrong county, but within the
correct state are erroneous enumerations in the county rows. Some states had no counties with a
population greater than 500,000. For these states, only the state estimate is displayed.

Places
Table A2 (in Attachment A) summarizes the components of census coverage for the 33 places
with a total census population greater than or equal to 500,000. Similar to the county table, an
estimate for the balance of the state is provided as well. The same concepts described above for
the county table apply to the place table as well. That is, persons counted in the wrong place, but
within the correct state are correct enumerations within the state rows but erroneous
enumerations within the place rows.

Measures of uncertainty for States, Counties, and Places are in Attachment B. Tables B1, B2,
and B3 reflect two different measurements of uncertainty depending on the column of interest.
The rightmost four columns are an estimate of the root mean squared error. All other columns
are an estimate of the standard error since they are direct estimates.

Table 5: Components of Census Coverage for States

ST	Census Count (Thousands)	Correct (%)		Erroneous (%)			Whole-Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
		Same County	Different County	Different State	Duplication	Other					
AL	4,663.9	92.0	0.5	0.2	3.9	0.6	2.8	4,670.2	92.3	0.13	7.7
AK	629.1	93.2	0.6	0.4	3.8	0.7	1.4	623.8	94.5	-0.85	5.5
AZ	6,252.6	92.0	0.3	0.7	2.9	0.7	3.4	6,226.5	92.7	-0.42	7.3
AR	2,837.0	93.8	0.3	0.4	3.4	0.4	1.6	2,825.5	94.6	-0.41	5.4
CA	36,434.1	94.9	0.3	0.3	2.3	0.7	1.7	36,529.8	94.9	0.26	5.1
CO	4,913.3	93.6	0.2	0.4	2.1	0.4	3.3	4,899.2	94.1	-0.29	5.9
CT	3,455.9	95.5	0.2	0.2	2.3	0.4	1.3	3,440.3	96.1	-0.45	3.9
DE	873.5	94.2	0.2	0.4	2.0	0.4	2.8	878.3	93.8	0.55	6.2
DC	561.7	93.1	0.0	0.3	3.0	0.7	2.9	574.5	91.0	2.23	9.0
FL	18,379.6	92.6	0.3	0.6	3.2	0.7	2.7	18,463.0	92.5	0.45	7.5
GA	9,434.5	93.3	0.3	0.2	2.3	0.5	3.3	9,521.5	92.7	0.91	7.3
HI	1,317.4	91.6	0.2	0.4	4.0	0.7	3.0	1,311.6	92.2	-0.44	7.8
ID	1,538.6	93.9	0.3	0.2	2.5	0.5	2.6	1,538.1	94.2	-0.03	5.8
IL	12,528.9	94.8	0.2	0.3	2.6	0.4	1.8	12,469.1	95.4	-0.48	4.6
IN	6,296.9	95.5	0.2	0.2	2.8	0.2	1.1	6,254.9	96.4	-0.67	3.6
IA	2,948.2	96.8	0.3	0.2	1.5	0.3	0.9	2,940.0	97.4	-0.28	2.6
KS	2,774.0	95.3	0.3	0.3	3.1	0.3	0.7	2,755.5	96.3	-0.67	3.7
KY	4,213.5	94.0	0.4	0.3	3.2	0.2	1.8	4,208.0	94.5	-0.13	5.5
LA	4,405.9	92.4	0.5	0.5	2.8	0.8	3.1	4,389.2	93.2	-0.38	6.8
ME	1,292.8	96.0	0.3	0.3	1.7	0.5	1.1	1,301.3	95.8	0.65	4.2
MD	5,635.2	94.6	0.3	0.3	2.5	0.6	1.8	5,688.4	94.0	0.94	6.0
MA	6,308.7	93.7	0.2	0.3	4.3	0.5	1.1	6,276.4	94.3	-0.52	5.7
MI	9,654.6	94.6	0.3	0.4	2.7	0.4	1.6	9,591.6	95.5	-0.66	4.5
MN	5,168.5	94.8	0.2	0.2	3.3	0.3	1.0	5,139.7	95.6	-0.56	4.4
MS	2,875.3	91.0	0.3	0.4	5.5	0.9	1.9	2,882.3	91.1	0.24	8.9
MO	5,814.8	94.5	0.4	0.3	2.8	0.3	1.8	5,776.8	95.5	-0.66	4.5
MT	960.6	93.0	0.2	0.2	3.3	0.2	2.9	954.3	93.9	-0.65	6.1
NE	1,775.2	96.0	0.4	0.2	1.6	0.6	1.3	1,765.6	96.9	-0.54	3.1
NV	2,664.4	92.9	0.1	0.4	2.0	0.5	4.1	2,663.3	93.1	-0.04	6.9
NH	1,276.4	95.5	0.1	0.3	2.4	0.6	1.1	1,284.1	95.0	0.60	5.0
NJ	8,605.0	95.0	0.1	0.2	2.6	0.5	1.6	8,574.0	95.5	-0.36	4.5
NM	2,016.6	91.9	0.3	0.2	3.3	0.5	3.8	2,013.3	92.3	-0.16	7.7
NY	18,792.4	92.9	0.3	0.3	4.0	0.5	2.1	18,644.3	93.9	-0.79	6.1
NC	9,278.2	92.6	0.3	0.3	3.6	0.4	2.8	9,326.9	92.4	0.52	7.6
ND	647.5	95.8	0.4	0.6	2.0	0.3	0.9	648.1	96.1	0.09	3.9
OH	11,230.2	95.4	0.3	0.3	2.3	0.3	1.4	11,137.6	96.5	-0.83	3.5
OK	3,639.3	92.1	0.5	0.4	5.0	0.7	1.4	3,600.4	93.6	-1.08	6.4
OR	3,744.4	95.8	0.2	0.2	1.9	0.3	1.6	3,745.4	96.0	0.02	4.0
PA	12,276.3	95.4	0.2	0.3	2.4	0.4	1.2	12,293.7	95.5	0.14	4.5
RI	1,009.9	93.1	0.2	0.3	3.6	1.1	1.7	1,001.8	94.1	-0.81	5.9
SC	4,486.2	94.9	0.2	0.4	1.9	0.5	2.1	4,504.5	94.8	0.41	5.2
SD	780.1	95.1	0.1	0.2	2.4	0.3	1.9	780.9	95.1	0.10	4.9
TN	6,192.6	94.1	0.3	0.3	2.8	0.4	2.2	6,199.8	94.2	0.12	5.8
TX	24,564.4	93.6	0.3	0.3	2.7	0.6	2.6	24,803.9	93.1	0.97	6.9
UT	2,717.7	94.2	0.4	0.5	3.1	0.4	1.4	2,704.9	95.1	-0.48	4.9
VT	600.4	95.6	0.3	0.2	2.8	0.6	0.5	608.3	94.6	1.29	5.4
VA	7,761.2	94.3	0.5	0.3	2.4	0.6	1.9	7,805.5	94.2	0.57	5.8
WA	6,585.2	95.2	0.2	0.3	2.1	0.5	1.6	6,578.3	95.5	-0.10	4.5
WV	1,803.6	90.8	0.2	0.5	6.7	0.5	1.3	1,778.1	92.3	-1.43	7.7
WI	5,536.8	95.5	0.2	0.3	2.5	0.4	1.2	5,527.5	95.9	-0.17	4.1
WY	549.9	92.9	0.3	0.5	3.3	0.4	2.6	547.1	93.6	-0.51	6.4

The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

4.4 Component Estimates by Census Regions

Table 6 provides the component estimates for census regions. For this table, we take a national perspective when estimating correct enumerations. So, a person is a correct enumeration if he or she was counted once in the nation, regardless of *what* region he or she should have been counted in. In other words, if someone was counted in New York, but should have been counted in California, he or she is included in the Northeast in Table 6 as a correct enumeration.

The component results show that the duplication percentage ranged from 2.4% to 3.2%. The Midwest region had the lowest erroneous for other reasons percentage (0.3%), while the South region had the highest imputation and omission percentages (2.4% and 6.5% respectively).

Table 6: Components of Census Coverage by Census Regions

Region	Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
			Duplication	Other					
U.S. Total	300,703 (0)	94.7 (<0.1)	2.8 (<0.1)	0.5 (<0.1)	2.0 (0)	300,667 (429)	94.7 (0.1)	-0.01 (0.14)	5.3 (0.1)
Northeast	53,618 (0)	94.7 (0.2)	3.2 (0.2)	0.5 (<0.1)	1.6 (0)	53,424 (175)	95.1 (0.3)	-0.36 (0.33)	4.9 (0.3)
Midwest	65,156 (0)	95.7 (0.2)	2.6 (0.2)	0.3 (<0.1)	1.4 (0)	64,788 (157)	96.2 (0.2)	-0.57* (0.24)	3.8 (0.2)
South	111,606 (0)	93.9 (0.1)	3.1 (0.1)	0.6 (<0.1)	2.4 (0)	112,120 (324)	93.5 (0.3)	0.46 (0.29)	6.5 (0.3)
West	70,324 (0)	94.9 (<0.1)	2.4 (<0.1)	0.6 (<0.1)	2.2 (0)	70,336 (170)	94.8 (0.2)	0.02 (0.24)	5.2 (0.2)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.
An asterisk (*) denotes a percent net undercount that is significantly different than zero.

4.5 Component Estimates by Census Operational Areas

This section summarizes the coverage results for geographic areas associated with how the census was conducted. For census operational geography, we generated estimates for

- Type of Enumeration Area (TEA)
- Address Characteristic Type (ACT)
- Bilingual Mailing Areas
- Replacement Mailing Areas

Type of Enumeration Area

Table 7 shows the components of census coverage by TEA. The TEA accounts for how we obtained addresses and conducted the census in an area. We provide estimates by combining six TEAs into three main categories. (The Remote Alaska TEA is out of scope.)

The first was "Mailout/Mailback," which included the Mailout/Mailback and the Military Mailout/Mailback TEAs. Questionnaires were delivered to housing units by mail, and respondents were instructed to return the form by mail.

The second category was the "Update/Leave," which included the Update/Leave and the Urban Update/Leave TEAs. A census worker updated the address list and delivered questionnaires to each address that was on the updated address list. Respondents were instructed to return the form by mail.

The third was the "Update/Enumerate," which included the Remote Update/Enumerate and the Update/Enumerate TEAs. A census enumerator updated the address list and conducted the enumeration at each housing unit on the updated address list.

Table 7 shows that the Update/Leave areas had the highest percentage of erroneous enumerations due to duplication (4.7%), while the Update/Enumerate areas had the highest percentages of whole-person census imputations (5.3%) and omissions (16.0%).

Table 7: Components of Census Coverage by Type of Enumeration Area

Type of Enumeration Area	Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
			Duplication	Other					
U.S. Total	300,703 (0)	94.7 (<0.1)	2.8 (<0.1)	0.5 (<0.1)	2.0 (0)	300,667 (429)	94.7 (0.1)	-0.01 (0.14)	5.3 (0.1)
Mailout/Mailback	278,553 (0)	94.8 (<0.1)	2.7 (<0.1)	0.5 (<0.1)	2.0 (0)	278,611 (390)	94.8 (0.1)	0.02 (0.14)	5.2 (0.1)
Update/Leave	20,076 (0)	92.7 (0.3)	4.7 (0.3)	0.5 (<0.1)	2.2 (0)	19,804 (131)	93.9 (0.6)	-1.37* (0.67)	6.1 (0.6)
Update/Enumerate	2,074 (0)	91.1 (0.5)	3.0 (0.4)	0.5 (0.2)	5.3 (0)	2,252 (76)	84.0 (2.7)	7.87* (3.13)	16.0 (2.7)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.
An asterisk (*) denotes a percent net undercount that is significantly different than zero.

Address Characteristic Types

Table 8 shows the components of census coverage by ACT. The ACT classified a collection block to the predominant type of address in the block (city-style, rural route, P.O. Box, etc.) and whether or not the address was carried in the United States Postal Service Delivery Sequence File (DSF). The ACT classification was done prior to the start of 2010 Census operations; consequently, it does not reflect updates from Address Canvassing or later operations. There are 28 values of ACT. The CCM estimation summarized them to eight categories that were generally based on whether the block contained city-style or noncity-style addresses and the extent of DSF coverage. While the ACT was not specifically a census operation, it was the basis for defining the TEA.

The component results show that among city-style only addresses, the erroneous due to duplication percentage ranged from 2.1% to 4.9%. Whole-person census imputations ranged from 1.8% to 2.6%, and omission percentages ranged from 4.5% to 7.2%.

Table 8: Components of Census Coverage by Address Characteristic Type

Address Characteristic Type	Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
			Duplication	Other					
U.S. Total	300,703	94.7	2.8	0.5	2.0	300,667	94.7	-0.01	5.3
	(0)	(<0.1)	(<0.1)	(<0.1)	(0)	(429)	(0.1)	(0.14)	(0.1)
City-style, all DSF	155,566	95.6	2.1	0.5	1.8	155,684	95.5	0.08	4.5
	(0)	(<0.1)	(<0.1)	(<0.1)	(0)	(205)	(0.2)	(0.13)	(0.2)
City-style, some DSF	88,756	93.9	3.3	0.5	2.2	88,703	94.0	-0.06	6.0
	(0)	(0.2)	(0.2)	(<0.1)	(0)	(159)	(0.2)	(0.18)	(0.2)
City-style, no DSF	1,406	92.1	4.9	0.3	2.6	1,396	92.8	-0.70*	7.2
	(0)	(1.6)	(1.5)	(0.1)	(0)	(6)	(1.6)	(0.42)	(1.6)
City-style and noncity-style, all DSF or where city-style ≥ 85%	35,591	94.2	3.4	0.4	2.0	35,537	94.3	-0.15	5.7
	(0)	(0.2)	(0.2)	(<0.1)	(0)	(73)	(0.3)	(0.21)	(0.3)
City-style and noncity-style, no DSF or where city-style ≤ 84.99%	13,123	91.5	5.9	0.4	2.3	13,077	91.8	-0.35	8.2
	(0)	(0.5)	(0.5)	(<0.1)	(0)	(73)	(0.6)	(0.56)	(0.6)
Assorted noncity-style	836	91.8	4.9	0.6	2.6	831	92.4	-0.64	7.6
	(0)	(1.5)	(1.6)	(0.2)	(0)	(5)	(1.5)	(0.62)	(1.5)
Business, Post Office, Rural Route, and Others	776	88.7	5.8	1.0	4.5	778	88.5	0.24	11.5
	(0)	(1.8)	(1.9)	(0.6)	(0)	(2)	(1.8)	(0.31)	(1.8)
No Addresses Found	4,649	92.3	3.1	1.2	3.5	4,661	92.0	0.27	8.0
	(0)	(0.6)	(0.7)	(0.3)	(0)	(9)	(0.7)	(0.20)	(0.7)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.
An asterisk (*) denotes a percent net undercount that is significantly different than zero.

Bilingual Mailing Areas

Table 9 shows the components of census coverage of bilingual mailing areas broken down by Hispanic origin. For the 2010 Census, the Census Bureau mailed a bilingual (English and Spanish) census questionnaire to housing units in select areas that could require Spanish language assistance to complete their census form. For more information on bilingual mailing, see Bentley (2008) or Rothhaas et al. (2011). We estimated coverage for the areas that received the bilingual questionnaire versus the remainder of the country.

The table shows that bilingual mailing areas had higher erroneous due to duplication (3.5% versus 2.7%) and whole-person census imputation (2.3% versus 1.9%) percentages than non-bilingual areas. Also, note the higher omission percentage (7.3% versus 5.1%) in bilingual mailing areas. In bilingual mailing areas, Hispanics had a 2.2% imputation percentage compared to 2.6% for Hispanics in non-bilingual areas.

Table 9: Components of Census Coverage by Bilingual Mailing Areas and Hispanic Origin

Bilingual Mailing Area and Hispanic Origin	Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
			Duplication	Other					
U.S. Total	300,703	94.7	2.8	0.5	2.0	300,667	94.7	-0.01	5.3
	(0)	(<0.1)	(<0.1)	(<0.1)	(0)	(429)	(0.1)	(0.14)	(0.1)
Bilingual Mailing Area	35,204	93.5	3.5	0.7	2.3	35,488	92.7	0.80*	7.3
	(0)	(0.2)	(0.2)	(<0.1)	(0)	(143)	(0.3)	(0.40)	(0.3)
Hispanic	22,498	93.3	3.8	0.7	2.2	22,800	92.1	1.33*	7.9
	(0)	(0.3)	(0.3)	(<0.1)	(0)	(96)	(0.4)	(0.42)	(0.4)
Non-Hispanic	12,706	93.8	3.0	0.6	2.6	12,687	94.0	-0.15	6.0
	(0)	(0.3)	(0.3)	(<0.1)	(0)	(64)	(0.5)	(0.50)	(0.5)
Balance of U.S.	265,499	94.8	2.7	0.5	1.9	265,179	94.9	-0.12	5.1
	(0)	(<0.1)	(<0.1)	(<0.1)	(0)	(413)	(0.1)	(0.16)	(0.1)
Hispanic	27,082	94.1	2.7	0.6	2.6	27,556	92.4	1.72*	7.6
	(0)	(0.2)	(0.2)	(<0.1)	(0)	(116)	(0.4)	(0.42)	(0.4)
Non-Hispanic	238,418	94.9	2.7	0.5	1.9	237,623	95.2	-0.33*	4.8
	(0)	(<0.1)	(<0.1)	(<0.1)	(0)	(371)	(0.1)	(0.16)	(0.1)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.
An asterisk (*) denotes a percent net undercount that is significantly different than zero.

Replacement Mailing Areas

Table 10 shows the components of census coverage by replacement mailing areas. For the 2010 Census, the Census Bureau mailed a replacement mailing package to some housing units in Mailout/Mailback areas of the country that had low mail response in Census 2000. Areas with low response in Census 2000 had a blanketed distribution where all housing units received a replacement mailing. For areas with mid-range response in 2000, only nonresponding housing units received a replacement mailing; this is referred to as targeted distribution. The balance of the United States did not receive a replacement questionnaire in the mail. We provided separate estimates for the two types of replacement mailing areas (blanketed and targeted) and the balance of the United States. For more information on the replacement mailing areas and the official counts, see Letourneau (2010).

The component results show that blanketed areas had a higher erroneous due to duplication (4.2%) percentage than the targeted areas or the no replacement areas. The blanketed areas also had higher imputation (2.9%) and omission (8.2%) percentages as well.

Table 10: Components of Census Coverage by Replacement Mailing Areas

Replacement Mailing Areas	Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
			Duplication	Other					
U.S. Total	300,703 (0)	94.7 (<0.1)	2.8 (<0.1)	0.5 (<0.1)	2.0 (0)	300,667 (429)	94.7 (0.1)	-0.01 (0.14)	5.3 (0.1)
Blanketed Mailing Area	53,651 (0)	92.2 (0.2)	4.2 (0.2)	0.7 (<0.1)	2.9 (0)	53,854 (242)	91.8 (0.4)	0.38 (0.45)	8.2 (0.4)
Targeted Mailing Area	65,952 (0)	94.2 (0.2)	3.2 (0.2)	0.6 (<0.1)	2.1 (0)	66,081 (237)	94.0 (0.3)	0.19 (0.36)	6.0 (0.3)
Balance of U.S.	181,100 (0)	95.6 (<0.1)	2.3 (<0.1)	0.4 (<0.1)	1.7 (0)	180,733 (274)	95.8 (0.1)	-0.20 (0.15)	4.2 (0.1)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

4.6   Component Estimates by Census Operational Outcomes

This section summarizes the components of census coverage for person records based on the result of the census operations. This includes Mail Return Status, Nonresponse Followup (NRFU), and Coverage Followup (CFU). The components of census coverage discussed are correct enumerations, erroneous enumerations, and whole-person census imputations. Because operational outcomes are characteristics of the census records that we cannot measure in the P sample, we cannot generate dual system estimates for census operational outcomes. Therefore, this section does not show estimates of net coverage or omissions.

Mail Return Eligible Cases
Table 11 shows the component results by mail return status of the housing unit where the person was enumerated.

The mail return universe included all occupied housing units in mailback TEAs that had addresses that were not checked in as undeliverable as addressed (UAA) and were not pre-identified as having inadequate addresses for mailout. While most people in a housing unit for which we have a valid mail return were included on the mail return for that unit, some of the people in that housing unit were enumerated in a subsequent census operation. This analysis does not differentiate between these cases. In addition to showing estimates by the date of the mail return, we show the component estimates for persons who were in housing units in the mail return universe but did not send back a valid return.

For completeness, the table shows the component structure of the 18.44 million person records that were not in the mail return universe. These included the enumerations of people in housing units in a) Update/Enumerate and Remote Update/Enumerate TEAs, b) in mailback areas whose addresses were pre-identified as having inadequate address information for mailing, c) were determined to be UAA, d) were not eligible for NRFU, but were eligible for supplemental NRFU, or e) units deleted during the Update/Leave operation that were later determined to be occupied.

Letourneau (2012) has more information on the mailback operation and the official counts.

Table 11 shows erroneous due to duplication percentages from 1.4% to 3.0% for the valid return categories. The whole-person census imputation percentages rose from 0.2% to 0.5% as the valid return date extended further beyond Census Day. The "No Valid Return" category had an imputation percentage of 6.9%. Finally, person records "Not in the Mail Return Universe" had the largest erroneous due to duplication (11.0%) and imputation (7.1%) percentages.

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Table 11: Components of Census Coverage by Mail Return Date and Other Groups

Mail Returns		Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)
				Duplication	Other	
U.S. Total		300,703	94.7	2.8	0.5	2.0
		(0)	(<0.1)	(<0.1)	(<0.1)	(0)
Valid Return	2/25-3/17	8,065	97.4	2.1	0.3	0.2
		(0)	(0.3)	(0.3)	(<0.1)	(0)
	3/18-3/24	83,659	98.1	1.4	0.3	0.2
		(0)	(<0.1)	(<0.1)	(<0.1)	(0)
	3/25-3/31	65,740	97.5	1.9	0.4	0.2
		(0)	(<0.1)	(<0.1)	(<0.1)	(0)
	4/1-4/7	31,060	96.9	2.4	0.5	0.3
		(0)	(0.2)	(0.1)	(<0.1)	(0)
	4/8-4/15	14,990	96.5	2.7	0.5	0.3
		(0)	(0.2)	(0.2)	(<0.1)	(0)
	4/16-4/30	13,267	96.1	3.0	0.5	0.4
		(0)	(0.3)	(0.3)	(<0.1)	(0)
	5/1-9/7	4,174	96.5	2.4	0.6	0.5
		(0)	(0.4)	(0.3)	(0.1)	(0)
No Valid Return		61,307	88.6	3.7	0.9	6.9
		(0)	(0.1)	(0.1)	(<0.1)	(0)
Not in Mail Return Universe		18,442	81.2	11.0	0.8	7.1
		(0)	(0.8)	(0.8)	(<0.1)	(0)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

Nonresponse Followup Cases
The 2010 NRFU Operation included four field operations:

- NRFU Field Operation
- NRFU Reinterview (RI)
- NRFU Vacant Delete Check (VDC), and
- NRFU Residual

The NRFU field operation primarily involved census enumerators interviewing and verifying the status of housing units in areas that received a mailback 2010 Census questionnaire but did not respond by mail. NRFU RI was a quality control check on the enumerators' work during the NRFU field operation. The NRFU VDC operation verified housing units determined to be vacant or nonexistent during the NRFU field operation. Additionally, the VDC included a first-time enumeration of housing units.

The NRFU Residual operation came about because monitoring of the NRFU field operation detected a potentially large number of occupied housing units lacking information about the number of people living in the housing unit. The NRFU Residual operation was the last attempt to complete a full interview for this type of unit. Its workload also included housing units from the NRFU field operation for which a questionnaire was completed, but no data were captured for the case in the data capture system. Jackson et al. (2012) assesses the 2010 NRFU operation and provides official workload totals and more detailed information about the operation. Differences in counts between the census assessment and the CCM occur because we evaluated

only the persons included in the final census while the NRFU assessment also includes housing units deleted during census processing.

Table 12 displays the components of census coverage by respondent type in the NRFU field operation. Tables 13 through 16 show the results for each of the four NRFU operations. The component structure of all persons in a given housing unit is itemized in each table, albeit in different rows. For example, consider an occupied housing unit that was contacted as part of the NRFU field operation and NRFU RI, but was not contacted as part of NRFU VDC or NRFU Residual. As a result, the component structure of all persons in that housing unit is itemized in

- one of the respondent type rows in Table 12 (Household Member, Proxy, or Unknown Respondent Type).
- one of the five completion month rows in Table 13 (April, May, June, July and August, or Unknown Month).
- one of the four completion month rows in Table 14 (April and May, June, July and August, or Unknown Month).
- the "Not in NRFU VDC, but in another NRFU operation" row of Table 15.
- the "Not in NRFU Residual, but in another NRFU operation" row of Table 16.

For another example, consider an occupied housing unit that was contacted in none of the four above NRFU field operations. The component structure of all persons in that housing unit is in the "Not in NRFU Field Operation" row in Table 12 and in the "Not in any NRFU Universe" row in Tables 13 through 16.

Nonresponse Followup (NRFU)

For persons in housing units that were part of the NRFU field operation, Table 12 shows the components of census coverage by respondent type for the housing unit. In other words, each person in a housing unit is assigned the respondent type of that unit. As a contrast, the table also shows the components for the 222.38 million persons in housing units that were not a part of the NRFU field operation. This number is further broken down in Table 13 by records that were "Not in NRFU Field Operation, but in another NRFU operation" and those "Not in any NRFU universe."

Proxy response cases had 5.6% erroneous enumerations due to duplication and 23.1% whole-person census imputations. Household member respondent cases were 4.2% erroneous enumerations due to duplication and 1.6% whole-person census imputations.

Table 12: Components of Census Coverage for Nonresponse Followup Field Operation by Respondent Type

Nonresponse Followup Field Operation Respondent Type	Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)
			Duplication	Other	
U.S. Total	300,703 (0)	94.7 (<0.1)	2.8 (<0.1)	0.5 (<0.1)	2.0 (0)
Household Member	61,437 (0)	93.4 (0.2)	4.2 (0.2)	0.8 (<0.1)	1.6 (0)
Proxy	16,294 (0)	70.1 (0.3)	5.6 (0.3)	1.1 (<0.1)	23.1 (0)
Unknown Respondent Type	589 (0)	68.2 (1.1)	3.3 (1.1)	0.5 (0.1)	28.0 (0)
Not in NRFU Field Operation	222,384 (0)	96.9 (<0.1)	2.2 (<0.1)	0.4 (<0.1)	0.5 (0)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

For persons in housing units that were part of the NRFU field operation, Table 13 shows the components of census coverage by completion month. As a contrast, the table also shows the components for persons that were in housing units in another field operation besides the NRFU field operation and those not in any NRFU universe.

For the NRFU field operation, most of the person records were from housing units worked in May and June. As the enumeration gets further from Census Day, the table shows increasing imputation percentages (from 2.9% to 17.5%) for known completion months. The erroneous due to duplication percentage ranged from 3.8% in April to 6.5% in July and August.

For the 3.18 million persons in housing units that were in another operation besides the NRFU field operation, the component structure shows that 15.3% of these cases were erroneous enumerations due to duplication and 14.2% required whole-person census imputation.

Table 13: Components of Census Coverage for Nonresponse Followup Field Operation

Nonresponse Followup (NRFU) Field Operation		Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)
				Duplication	Other	
U.S. Total		300,703 (0)	94.7 (<0.1)	2.8 (<0.1)	0.5 (<0.1)	2.0 (0)
In NRFU Field Operation	April	1,755 (0)	92.7 (0.9)	3.8 (0.9)	0.6 (0.2)	2.9 (0)
	May	60,788 (0)	89.5 (0.2)	4.3 (0.2)	0.8 (<0.1)	5.4 (0)
	June	15,375 (0)	83.8 (0.5)	5.3 (0.5)	1.0 (<0.1)	9.9 (0)
	July and August	221 (0)	74.9 (4.0)	6.5 (4.2)	1.1 (0.8)	17.5 (0)
	Unknown Month	181 (0)	66.4 (1.3)	2.3 (1.2)	0.5 (0.2)	30.8 (0)
Not in NRFU Field Operation, but in another NRFU operation		3,177 (0)	69.7 (2.1)	15.3 (2.1)	0.7 (0.2)	14.2 (0)
Not in any NRFU Universe		219,207 (0)	97.3 (<0.1)	2.1 (<0.1)	0.4 (<0.1)	0.3 (0)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

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NRFU Reinterview

Table 14 provides the component breakdown of coverage results for persons in housing units that were part of NRFU RI. As a contrast, the table also shows the components for persons in housing units in another field operation besides NRFU RI and those not in any NRFU universe.

The NRFU RI table shows a component structure similar to that seen for the NRFU field operation (Table 13). As the enumeration gets further from Census Day, the table shows imputation percentages ranging from 3.4% to 14.4% for known completion months. Additionally, erroneous enumeration percentages due to duplication ranged from 2.6% in April and May to 4.4% in July and August.

Table 14: Components of Census Coverage for Nonresponse Followup Reinterview

Nonresponse Followp (NRFU) Reinterview (RI) Field Operation		Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)
				Duplication	Other	
U.S. Total		300,703 (0)	94.7 (<0.1)	2.8 (<0.1)	0.5 (<0.1)	2.0 (0)
In NRFU RI	April and May	1,726 (0)	93.4 (0.6)	2.6 (0.5)	0.6 (0.2)	3.4 (0)
	June	1,998 (0)	87.7 (0.7)	4.0 (0.6)	1.0 (0.3)	7.2 (0)
	July and August	439 (0)	80.4 (1.2)	4.4 (1.2)	0.9 (0.3)	14.4 (0)
	Unknown Month	28 (0)	92.9 (0.6)	0.0 (<0.1)	0.5 (0.6)	6.6 (0)
Not in NRFU RI, but in another NRFU operation		77,306 (0)	87.5 (0.2)	5.0 (0.2)	0.8 (<0.1)	6.6 (0)
Not in any NRFU Universe		219,207 (0)	97.3 (<0.1)	2.1 (<0.1)	0.4 (<0.1)	0.3 (0)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

NRFU Vacant Delete Check

Table 15 shows the components of census coverage for the NRFU VDC field operation. The results show that the census records in housing units that were part of the NRFU VDC field operation had 15.8% erroneous enumerations due to duplication and 15.4% whole-person census imputations.

Table 15: Components of Census Coverage for Nonresponse Followup Vacant Delete Check

Nonresponse Followup (NRFU) Vacant Delete Check (VDC) Field Operation	Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)
			Duplication	Other	
U.S. Total	300,703 (0)	94.7 (<0.1)	2.8 (<0.1)	0.5 (<0.1)	2.0 (0)
In NRFU VDC	5,221 (0)	67.4 (1.3)	15.8 (1.3)	1.4 (0.2)	15.4 (0)
Not in NRFU VDC, but in another NRFU operation	76,275 (0)	89.0 (0.2)	4.2 (0.2)	0.8 (<0.1)	6.0 (0)
Not in any NRFU Universe	219,207 (0)	97.3 (<0.1)	2.1 (<0.1)	0.4 (<0.1)	0.3 (0)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

NRFU Residual

Table 16 shows the components of census coverage for the NRFU Residual field operation. The results show that the census records in housing units that were part of the NRFU Residual field operation had 6.0% erroneous enumerations due to duplication and 32.8% whole-person census imputations.

Table 16: Components of Census Coverage for Nonresponse Followup Residual

Nonresponse Followup (NRFU) Residual Field Operation	Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)
			Duplication	Other	
U.S. Total	300,703 (0)	94.7 (<0.1)	2.8 (<0.1)	0.5 (<0.1)	2.0 (0)
In NRFU Residual	1,057 (0)	60.5 (1.4)	6.0 (1.4)	0.7 (0.3)	32.8 (0)
Not in NRFU Residual, but in another NRFU operation	80,440 (0)	88.0 (0.2)	4.9 (0.2)	0.8 (<0.1)	6.3 (0)
Not in any NRFU Universe	219,207 (0)	97.3 (<0.1)	2.1 (<0.1)	0.4 (<0.1)	0.3 (0)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

Coverage Followup Cases
During the CFU operation, telephone interviews were conducted with respondents to determine if changes were required to their household roster as reported on their initial census return. The telephone interview consisted of questions intended to identify if people were missed or counted in error, and to collect missing demographic data for all persons in the household. Govern et al. (2012) has the official counts and provides more information on the operation.

The CFU operation focused on situations where there might be erroneous enumerations or omissions in the 2010 Census. This section focuses on parts of the operations designed to account for coverage discrepancies. For cases that went to CFU, we report results by whether the CFU interview was a completed or a non-completed case. This allows the component structure of complete cases to be compared to non-complete cases to see if the completion of the interview changed the distribution of correct, erroneous, and whole-person census imputations in the final census. The CCM did not evaluate whether cases that were deleted by the CFU operation were correctly removed from the census.

Results are shown for the following five categories of CFU cases:

- Large Household Cases
- Administrative Records Cases
- Count Discrepancy Cases
- Overcount Cases
- Undercount Cases

CFU Large Household Cases

Table 17 shows the component results for large household cases in the CFU operation. One objective for these cases was to obtain the remaining demographic characteristics for all of the people in the unit. While doing this, the interview could have determined that some of these cases were erroneous enumerations and should have been removed.

In large household cases, the respondent-provided population count was equal to or greater than the amount of space allotted to enumerate people on the census form. Possible large household cases were those in which the respondent-provided population count was blank, but the space allotted to enumerate people was completely filled out.

The table shows that for large household cases the component structure of correct, erroneous, and whole-person census imputations was similar for the completed and non-completed cases. The possible large household category had an erroneous due to duplication percentage of 6.6% for completed cases and a 12.5% for non-completed cases.

Table 17: Components of Census Coverage for Coverage Followup Large Household

Coverage Followup Large Household		Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)
				Duplication	Other	
U.S. Total		300,703 (0)	94.7 (<0.1)	2.8 (<0.1)	0.5 (<0.1)	2.0 (0)
Large Household	Complete	6,654 (0)	96.5 (0.4)	3.0 (0.4)	0.5 (<0.1)	0.0 (0)
	Non-Complete	3,788 (0)	96.1 (0.7)	3.1 (0.6)	0.6 (0.1)	0.1 (0)
Possible Large Household	Complete	118 (0)	93.3 (5.3)	6.6 (5.4)	0.1 (0.1)	0.0 (0)
	Non-Complete	141 (0)	86.8 (5.7)	12.5 (5.2)	0.8 (0.7)	0.0 (0)
Not a CFU Large Household Case		290,002 (0)	94.6 (<0.1)	2.8 (<0.1)	0.5 (<0.1)	2.1 (0)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

CFU Administrative Records Cases

To determine CFU administrative records cases, first a list of CFU eligible housing units was compiled. Then, various administrative record sources were used to generate an "expected number of persons" residing at each unit. If the difference between the number of rostered persons in the census and the "expected number of persons" was greater than or equal to .20, the housing unit was sent to CFU. Table 18 shows the results for these cases by the interview completion status.

Completed administrative records cases had 1.2% erroneous enumerations due to duplication and 0.3% erroneous due to other reasons. The same estimates for non-complete cases were 2.9% and 1.3%, respectively.

Table 18: Components of Census Coverage for Coverage Followup Administrative Records

Coverage Followup Administrative Records		Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)
				Duplication	Other	
U.S. Total		300,703 (0)	94.7 (<0.1)	2.8 (<0.1)	0.5 (<0.1)	2.0 (0)
Administrative Records Matching	Complete	1,389 (0)	98.5 (0.5)	1.2 (0.5)	0.3 (0.1)	0.0 (0)
	Non-Complete	916 (0)	95.4 (1.0)	2.9 (0.9)	1.3 (0.4)	0.5 (0)
Not a CFU Administrative Case		298,398 (0)	94.6 (<0.1)	2.8 (<0.1)	0.5 (<0.1)	2.0 (0)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

CFU Count Discrepancy Cases

Table 19 shows the components of census coverage for the person records in housing units that had discrepancies between the reported population count and the number of valid people listed on the questionnaire. A high discrepancy occurred when the number of valid people listed was more than the reported population count. A low discrepancy case occurred when the number of valid people listed was less than the reported population count.

For high discrepancy cases, when comparing completed to non-completed cases, the percentage of erroneous enumerations due to duplication was seven percentage points lower (4.7% versus 11.7%) and the percentage of erroneous enumerations due to other reasons was one percentage point lower (0.8% versus 1.8%). For the low discrepancy cases, there were no whole-person census imputations when the interview was completed, compared to 13.6% of the non-complete cases.

Table 19: Components of Census Coverage for Coverage Followup Count Discrepancy

Coverage Followup Count Discrepancy		Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)
				Duplication	Other	
U.S. Total		300,703 (0)	94.7 (<0.1)	2.8 (<0.1)	0.5 (<0.1)	2.0 (0)
High Discrepancy Case	Complete	2,347 (0)	94.4 (0.6)	4.7 (0.6)	0.8 (0.2)	0.0 (0)
	Non-Complete	1,704 (0)	86.4 (1.1)	11.7 (1.0)	1.8 (0.4)	0.1 (0)
Low Discrepancy Case	Complete	943 (0)	96.5 (0.9)	2.8 (0.8)	0.7 (0.3)	0.0 (0)
	Non-Complete	1,039 (0)	80.1 (1.2)	4.4 (1.1)	1.9 (0.5)	13.6 (0)
Not a CFU Discrepancy Case		294,671 (0)	94.8 (<0.1)	2.8 (<0.1)	0.5 (<0.1)	2.0 (0)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

CFU Overcount Cases
An additional reason cases went to CFU was the overcount coverage probe. For each person on the form, the respondent could indicate if the person sometimes stays or lives in college housing, military, jail, nursing home, or other places. Positive responses for a person or several people in a housing unit triggered the CFU interview for the housing unit.

Table 20 shows the results for select overcount question probes by interview outcome. When the overcount reason was college, CFU completed interviews had 3.4% erroneous enumerations due to duplication and 0.8% erroneous enumerations due to other reasons. For non-completed cases, the estimates were 16.2% and 3.5%, respectively. When several people in a housing unit indicated that they may have lived somewhere else, completed interview cases had a 6.2% estimate of erroneous enumerations due to duplication. Non-completed cases had a 13.8% estimate. When the other place was a jail, completed cases had 6.5% erroneous enumerations due to duplication and 4.1% erroneous enumerations due to other reasons. Non-completed cases for this reason had estimates of 2.4% and 2.6%, respectively. An explanation for this unexpected result is a processing error that affected the roster change rate for those in the overcount reason "in jail or prison," as documented in Govern et al. (2012).

Table 20: Components of Census Coverage for Coverage Followup Overcount Cases

Coverage Followup Overcount Question Status		Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)
				Duplication	Other	
U.S. Total		300,703 (0)	94.7 (<0.1)	2.8 (<0.1)	0.5 (<0.1)	2.0 (0)
College	Complete	2,034 (0)	95.8 (0.5)	3.4 (0.5)	0.8 (0.2)	0.0 (0)
	Non-Complete	1,224 (0)	80.2 (1.2)	16.2 (1.1)	3.5 (0.6)	0.1 (0)
Military	Complete	913 (0)	96.9 (0.6)	1.2 (0.5)	1.8 (0.4)	0.0 (0)
	Non-Complete	572 (0)	90.6 (1.6)	3.5 (1.2)	5.8 (1.0)	0.1 (0)
Jail	Complete	167 (0)	89.4 (1.9)	6.5 (1.7)	4.1 (1.3)	0.0 (0)
	Non-Complete	142 (0)	94.8 (1.6)	2.4 (1.2)	2.6 (1.1)	0.2 (0)
Nursing Home	Complete	75 (0)	90.7 (3.3)	9.1 (3.3)	0.1 (<0.1)	0.0 (0)
	Non-Complete	94 (0)	78.0 (4.6)	16.9 (3.9)	4.7 (2.7)	0.4 (0)
Multiple Reasons for Person	Complete	283 (0)	92.2 (1.5)	7.4 (1.6)	0.4 (0.3)	0.0 (0)
	Non-Complete	204 (0)	89.0 (2.3)	9.2 (2.3)	1.5 (0.6)	0.3 (0)
Multiple People in HH Case	Complete	1,201 (0)	92.0 (1.1)	6.2 (1.1)	1.8 (0.4)	0.0 (0)
	Non-Complete	827 (0)	83.5 (1.6)	13.8 (1.5)	2.7 (0.6)	0.0 (0)
Not a CFU Overcount Case		292,967 (0)	94.8 (<0.1)	2.7 (<0.1)	0.5 (<0.1)	2.0 (0)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

CFU Undercount Cases

Table 21 provides the component breakdown of coverage results of persons in housing units in which the return indicated that additional people were staying at the household who were not included in the household population count box. For example, the respondent marked that a child was not included as part of the household population count box. Table 21 reports results for all persons in these housing units by reasons and by interview outcome.

When the return indicated that a relative was not included in the household population count box, CFU completed interviews had 3.3% erroneous enumerations due to duplication and 0.7% erroneous enumerations due to other reasons. For non-completed cases, the estimates were 5.3% and 1.3%, respectively.

Table 21: Components of Census Coverage for Coverage Followup Undercount Cases

Coverage Followup Undercount Question Status		Census Count (Thousands)	Correct (%)	Erroneous (%)		Whole-Person Imputations (%)
				Duplication	Other	
U.S. Total		300,703	94.7	2.8	0.5	2.0
		(0)	(<0.1)	(<0.1)	(<0.1)	(0)
Child	Complete	766	95.9	3.8	0.2	0.0
		(0)	(1.3)	(1.3)	(0.1)	(0)
	Non-Complete	639	93.2	5.3	1.0	0.5
		(0)	(1.4)	(1.3)	(0.3)	(0)
Relative	Complete	1,855	96.0	3.3	0.7	0.0
		(0)	(0.6)	(0.6)	(0.2)	(0)
	Non-Complete	1,258	93.0	5.3	1.3	0.4
		(0)	(0.8)	(0.8)	(0.3)	(0)
Non-Relative	Complete	438	95.7	3.7	0.6	0.0
		(0)	(1.4)	(1.4)	(0.3)	(0)
	Non-Complete	346	97.1	0.7	1.5	0.7
		(0)	(0.7)	(0.3)	(0.7)	(0)
Temporary	Complete	1,291	95.8	3.3	0.9	0.0
		(0)	(0.7)	(0.7)	(0.3)	(0)
	Non-Complete	817	93.3	4.2	1.9	0.6
		(0)	(1.1)	(1.0)	(0.6)	(0)
Multiple Reasons for Person	Complete	256	95.8	3.7	0.5	0.0
		(0)	(1.8)	(1.8)	(0.4)	(0)
	Non-Complete	187	90.9	7.6	0.4	1.2
		(0)	(3.1)	(3.1)	(0.1)	(0)
Not a CFU Undercount Case		292,851	94.7	2.8	0.5	2.0
		(0)	(<0.1)	(<0.1)	(<0.1)	(0)

Standard Errors are shown in parentheses below the estimate.
The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

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Attachment A: Component Results of Counties and Places ≥ 500,000 People
Table A1: Components of Census Coverage for Counties ≥ 500,000 People

COUNTY	Census Count (Thousands)	Correct (%)	Erroneous (%)	Whole Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
Alabama (01)	4,663.9	92.5	4.8	2.8	4,670.2	92.3	0.13	7.7
Jefferson County (073)	642.7	90.0	6.3	3.7	646.6	89.5	0.61	10.5
Balance of Alabama	4,021.2	92.3	5.1	2.6	4,023.5	92.3	0.06	7.7
Alaska (02)	629.1	93.7	4.8	1.4	623.8	94.5	-0.85	5.5
Arizona (04)	6,252.6	92.3	4.3	3.4	6,226.5	92.7	-0.42	7.3
Maricopa County (013)	3,763.9	92.6	4.2	3.2	3,749.9	93.0	-0.37	7.0
Pima County (019)	956.1	90.7	6.6	2.7	952.8	91.0	-0.35	9.0
Balance of Arizona	1,532.6	91.3	4.4	4.3	1,523.8	91.8	-0.57	8.2
Arkansas (05)	2,837.0	94.2	4.2	1.6	2,825.5	94.6	-0.41	5.4
California (06)	36,434.1	95.1	3.2	1.7	36,529.8	94.9	0.26	5.1
Alameda County (001)	1,472.8	96.0	3.2	0.8	1,478.0	95.7	0.35	4.3
Contra Costa County (013)	1,038.7	96.5	2.9	0.6	1,039.4	96.4	0.06	3.6
Fresno County (019)	912.9	95.0	3.1	1.9	916.6	94.6	0.40	5.4
Kern County (029)	802.9	92.4	5.1	2.5	802.5	92.4	-0.05	7.6
Los Angeles County (037)	9,646.9	95.1	3.5	1.4	9,696.2	94.6	0.51	5.4
Orange County (059)	2,971.0	95.3	3.1	1.6	2,975.0	95.1	0.14	4.9
Riverside County (065)	2,153.8	92.4	5.3	2.3	2,151.3	92.5	-0.12	7.5
Sacramento County (067)	1,395.0	96.8	2.1	1.1	1,394.8	96.8	-0.01	3.2
San Bernardino County (071)	1,995.2	94.6	3.7	1.7	1,997.7	94.5	0.13	5.5
San Diego County (073)	2,993.3	95.3	2.2	2.5	2,990.5	95.4	-0.09	4.6
San Francisco County (075)	781.0	93.2	5.5	1.3	781.5	93.2	0.07	6.8
San Joaquin County (077)	671.0	95.6	2.3	2.1	672.1	95.5	0.17	4.5
San Mateo County (081)	709.6	94.0	4.2	1.9	710.8	93.8	0.17	6.2
Santa Clara County (085)	1,751.3	95.1	3.1	1.8	1,757.1	94.7	0.33	5.3
Stanislaus County (099)	508.1	95.7	2.8	1.6	507.7	95.8	-0.10	4.2
Ventura County (111)	812.7	94.8	4.0	1.2	814.1	94.7	0.17	5.3
Balance of California	5,817.9	94.3	3.7	2.0	5,844.5	93.9	0.46	6.1
Colorado (08)	4,913.3	93.8	2.9	3.3	4,899.2	94.1	-0.29	5.9
Arapahoe County (005)	567.1	93.9	2.6	3.5	567.0	94.0	-0.02	6.0
Denver County (031)	584.2	92.4	4.4	3.2	586.5	92.0	0.40	8.0
El Paso County (041)	603.1	91.8	2.7	5.5	600.3	92.2	-0.47	7.8
Jefferson County (059)	527.1	96.2	1.9	1.9	526.2	96.4	-0.17	3.6
Balance of Colorado	2,631.8	93.7	3.1	3.1	2,619.3	94.2	-0.48	5.8
Connecticut (09)	3,455.9	95.7	3.0	1.3	3,440.3	96.1	-0.45	3.9
Fairfield County (001)	897.7	95.7	2.7	1.6	893.1	96.2	-0.51	3.8
Hartford County (003)	865.8	94.1	4.7	1.2	860.5	94.7	-0.61	5.3
New Haven County (009)	833.3	96.2	2.3	1.4	829.2	96.7	-0.49	3.3
Balance of Connecticut	859.2	96.0	2.9	1.1	857.5	96.2	-0.20	3.8
Delaware (10)	873.5	94.3	2.8	2.8	878.3	93.8	0.55	6.2
New Castle County (003)	521.3	94.2	2.7	3.1	525.4	93.5	0.77	6.5
Balance of Delaware	352.2	94.1	3.5	2.4	352.9	93.9	0.21	6.1
District of Columbia (11)	561.7	93.1	4.0	2.9	574.5	91.0	2.23	9.0

The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

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Table A1 Continued: Components of Census Coverage for Counties ≥ 500,000 People

COUNTY	Census Count (Thousands)	Correct (%)	Erroneous (%)	Whole Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
Florida (12)	18,379.6	92.9	4.5	2.7	18,463.0	92.5	0.45	7.5
Brevard County (009)	535.6	93.5	3.3	3.1	534.0	93.8	-0.30	6.2
Broward County (011)	1,731.2	92.3	5.4	2.3	1,745.8	91.5	0.84	8.5
Duval County (031)	844.3	92.1	3.4	4.5	846.9	91.8	0.30	8.2
Hillsborough County (057)	1,207.2	92.0	6.3	1.7	1,213.2	91.5	0.50	8.5
Lee County (071)	610.3	91.4	5.6	3.1	608.4	91.6	-0.30	8.4
Miami-Dade County (086)	2,456.4	94.4	3.9	1.8	2,483.3	93.4	1.09	6.6
Orange County (095)	1,112.3	89.8	6.1	4.0	1,120.2	89.2	0.71	10.8
Palm Beach County (099)	1,300.2	93.3	4.0	2.7	1,307.5	92.8	0.56	7.2
Pinellas County (103)	896.9	94.0	3.6	2.4	894.2	94.3	-0.30	5.7
Polk County (105)	589.8	92.5	3.9	3.6	589.9	92.5	0.01	7.5
Balance of Florida	7,095.6	92.5	4.9	2.6	7,119.6	92.1	0.34	7.9
Georgia (13)	9,434.5	93.5	3.1	3.3	9,521.5	92.7	0.91	7.3
Cobb County (067)	679.0	94.7	3.1	2.2	686.6	93.7	1.10	6.3
DeKalb County (089)	678.8	91.3	5.0	3.7	694.0	89.3	2.18	10.7
Fulton County (121)	889.2	93.6	2.4	4.0	905.5	91.9	1.80	8.1
Gwinnett County (135)	799.6	94.3	1.0	4.8	810.4	93.0	1.32	7.0
Balance of Georgia	6,387.8	93.2	3.7	3.1	6,425.1	92.6	0.58	7.4
Hawaii (15)	1,317.4	91.8	5.2	3.0	1,311.6	92.2	-0.44	7.8
Honolulu County (003)	917.9	92.2	5.0	2.7	917.5	92.3	-0.04	7.7
Balance of Hawaii	399.5	90.0	6.2	3.7	394.1	91.3	-1.38	8.7
Idaho (16)	1,538.6	94.2	3.2	2.6	1,538.1	94.2	-0.03	5.8
Illinois (17)	12,528.9	95.0	3.3	1.8	12,469.1	95.4	-0.48	4.6
Cook County (031)	5,104.4	92.7	4.7	2.5	5,071.3	93.4	-0.65	6.6
DuPage County (043)	904.8	96.2	2.7	1.1	896.9	97.0	-0.88	3.0
Kane County (089)	508.5	97.4	2.1	0.5	504.1	98.3	-0.87	1.7
Lake County (097)	682.8	92.0	7.0	1.0	676.7	92.8	-0.89	7.2
Will County (197)	669.0	97.0	2.4	0.6	664.2	97.7	-0.73	2.3
Balance of Illinois	4,659.4	96.5	2.1	1.5	4,655.9	96.5	-0.08	3.5
Indiana (18)	6,296.9	95.7	3.2	1.1	6,254.9	96.4	-0.67	3.6
Marion County (097)	886.7	96.5	1.5	2.0	880.5	97.2	-0.71	2.8
Balance of Indiana	5,410.2	95.4	3.6	1.0	5,374.4	96.0	-0.67	4.0
Iowa (19)	2,948.2	97.1	2.0	0.9	2,940.0	97.4	-0.28	2.6
Kansas (20)	2,774.0	95.6	3.7	0.7	2,755.5	96.3	-0.67	3.7
Johnson County (091)	539.0	95.3	3.5	1.1	534.2	96.2	-0.90	3.8
Balance of Kansas	2,235.0	95.3	4.1	0.6	2,221.3	95.9	-0.62	4.1
Kentucky (21)	4,213.5	94.4	3.7	1.8	4,208.0	94.5	-0.13	5.5
Jefferson County (111)	726.9	95.8	2.4	1.8	728.5	95.5	0.22	4.5
Balance of Kentucky	3,486.6	93.7	4.5	1.8	3,479.4	93.8	-0.20	6.2
Louisiana (22)	4,405.9	92.9	4.0	3.1	4,389.2	93.2	-0.38	6.8
Maine (23)	1,292.8	96.4	2.5	1.1	1,301.3	95.8	0.65	4.2

The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

COUNTY	Census Count (Thousands)	Correct (%)	Erroneous (%)	Whole Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
Maryland (24)	5,635.2	94.9	3.4	1.8	5,688.4	94.0	0.94	6.0
Anne Arundel County (003)	523.5	95.2	2.9	1.9	525.9	94.8	0.45	5.2
Baltimore County (005)	784.2	94.4	3.3	2.2	789.6	93.8	0.67	6.2
Montgomery County (031)	962.9	95.3	3.1	1.6	971.2	94.5	0.85	5.5
Prince George's County (033)	844.1	93.9	3.7	2.5	864.0	91.7	2.30	8.3
Baltimore City (510)	595.8	90.4	7.7	2.0	608.8	88.4	2.14	11.6
Balance of Maryland	1,924.7	95.6	3.0	1.3	1,929.1	95.4	0.23	4.6
Massachusetts (25)	6,308.7	93.8	5.1	1.1	6,276.4	94.3	-0.52	5.7
Bristol County (005)	532.4	93.9	5.2	0.9	526.4	94.9	-1.14	5.1
Essex County (009)	726.7	93.7	5.8	0.6	719.4	94.6	-1.02	5.4
Middlesex County (017)	1,447.7	95.7	3.7	0.6	1,441.4	96.1	-0.43	3.9
Norfolk County (021)	653.2	94.9	4.1	1.0	650.9	95.2	-0.35	4.8
Suffolk County (025)	674.8	85.1	13.1	1.7	665.8	86.3	-1.36	13.7
Worcester County (027)	771.5	94.7	3.3	2.0	769.2	95.0	-0.30	5.0
Balance of Massachusetts	1,502.4	94.4	4.4	1.3	1,503.2	94.3	0.05	5.7
Michigan (26)	9,654.6	94.9	3.5	1.6	9,591.6	95.5	-0.66	4.5
Kent County (081)	591.3	95.5	2.8	1.7	586.5	96.3	-0.82	3.7
Macomb County (099)	833.5	97.6	1.4	1.0	826.3	98.5	-0.88	1.5
Oakland County (125)	1,189.9	92.7	6.2	1.1	1,181.6	93.4	-0.70	6.6
Wayne County (163)	1,796.7	94.4	2.9	2.7	1,786.4	95.0	-0.58	5.0
Balance of Michigan	5,243.2	94.4	4.1	1.5	5,210.8	95.0	-0.62	5.0
Minnesota (27)	5,168.5	95.1	3.9	1.0	5,139.7	95.6	-0.56	4.4
Hennepin County (053)	1,127.3	96.8	2.4	0.8	1,121.7	97.3	-0.50	2.7
Ramsey County (123)	490.3	96.2	3.1	0.7	486.2	97.1	-0.84	2.9
Balance of Minnesota	3,550.9	94.0	4.8	1.2	3,531.9	94.5	-0.54	5.5
Mississippi (28)	2,875.3	91.3	6.7	1.9	2,882.3	91.1	0.24	8.9
Missouri (29)	5,814.8	94.9	3.4	1.8	5,776.8	95.5	-0.66	4.5
Jackson County (095)	662.9	94.4	3.7	1.9	658.0	95.1	-0.76	4.9
St. Louis County (189)	979.5	94.2	4.3	1.5	973.2	94.8	-0.65	5.2
Balance of Missouri	4,172.3	94.6	3.6	1.8	4,145.6	95.2	-0.64	4.8
Montana (30)	960.6	93.3	3.8	2.9	954.3	93.9	-0.65	6.1
Nebraska (31)	1,775.2	96.4	2.4	1.3	1,765.6	96.9	-0.54	3.1
Douglas County (055)	504.9	97.0	1.9	1.0	500.6	97.9	-0.87	2.1
Balance of Nebraska	1,270.3	95.6	3.1	1.3	1,265.1	96.0	-0.41	4.0
Nevada (32)	2,664.4	93.0	2.9	4.1	2,663.3	93.1	-0.04	6.9
Clark County (003)	1,929.3	92.0	3.4	4.6	1,924.1	92.2	-0.27	7.8
Balance of Nevada	735.1	95.3	2.0	2.7	739.2	94.8	0.55	5.2
New Hampshire (33)	1,276.4	95.6	3.3	1.1	1,284.1	95.0	0.60	5.0

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Table A1 Continued: Components of Census Coverage for Counties ≥ 500,000 People

COUNTY	Census Count (Thousands)	Correct (%)	Erroneous (%)	Whole Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
New Jersey (34)	8,605.0	95.1	3.3	1.6	8,574.0	95.5	-0.36	4.5
Bergen County (003)	894.7	95.7	3.3	1.0	889.7	96.2	-0.56	3.8
Camden County (007)	506.2	96.4	3.1	0.6	506.0	96.4	-0.05	3.6
Essex County (013)	760.2	90.4	6.7	2.9	755.5	91.0	-0.62	9.0
Hudson County (017)	624.9	91.8	6.1	2.1	617.0	93.0	-1.27	7.0
Middlesex County (023)	786.0	93.5	4.2	2.3	785.1	93.6	-0.12	6.4
Monmouth County (025)	622.7	97.3	1.8	0.9	620.2	97.7	-0.41	2.3
Ocean County (029)	569.4	93.2	5.1	1.8	565.6	93.8	-0.67	6.2
Passaic County (031)	490.2	93.5	3.3	3.2	486.9	94.1	-0.67	5.9
Union County (039)	529.7	94.3	3.4	2.4	529.2	94.3	-0.10	5.7
Balance of New Jersey	2,821.0	97.2	1.9	0.9	2,818.8	97.2	-0.08	2.8
New Mexico (35)	2,016.6	92.2	4.0	3.8	2,013.3	92.3	-0.16	7.7
Bernalillo County (001)	650.6	93.8	3.9	2.3	650.1	93.8	-0.08	6.2
Balance of New Mexico	1,365.9	91.0	4.5	4.5	1,363.2	91.2	-0.20	8.8
New York (36)	18,792.4	93.1	4.8	2.1	18,644.3	93.9	-0.79	6.1
Bronx County (005)	1,338.4	90.7	6.2	3.1	1,333.2	91.1	-0.39	8.9
Erie County (029)	890.7	95.2	3.8	1.0	883.2	96.1	-0.85	3.9
Kings County (047)	2,469.1	87.4	8.4	4.2	2,406.3	89.6	-2.61	10.4
Monroe County (055)	718.1	94.9	4.6	0.5	715.7	95.2	-0.33	4.8
Nassau County (059)	1,317.9	95.1	3.3	1.6	1,307.1	95.9	-0.82	4.1
New York County (061)	1,518.5	93.0	5.1	1.8	1,509.2	93.6	-0.62	6.4
Queens County (081)	2,202.7	91.3	6.4	2.3	2,158.8	93.2	-2.04	6.8
Suffolk County (103)	1,463.9	94.7	3.4	1.9	1,461.6	94.9	-0.16	5.1
Westchester County (119)	920.4	91.7	4.8	3.5	914.8	92.2	-0.61	7.8
Balance of New York	5,952.8	94.8	4.0	1.1	5,954.5	94.8	0.03	5.2
North Carolina (37)	9,278.2	92.8	4.4	2.8	9,326.9	92.4	0.52	7.6
Mecklenburg County (119)	903.6	91.3	3.9	4.8	912.3	90.4	0.95	9.6
Wake County (183)	880.0	95.7	2.0	2.3	885.4	95.1	0.61	4.9
Balance of North Carolina	7,494.6	92.4	5.0	2.6	7,529.2	91.9	0.46	8.1
North Dakota (38)	647.5	96.1	2.9	0.9	648.1	96.1	0.09	3.9
Ohio (39)	11,230.2	95.7	2.9	1.4	11,137.6	96.5	-0.83	3.5
Cuyahoga County (035)	1,250.9	92.8	5.3	1.8	1,241.2	93.5	-0.78	6.5
Franklin County (049)	1,138.2	94.9	3.0	2.1	1,129.3	95.6	-0.79	4.4
Hamilton County (061)	782.9	93.9	4.7	1.4	777.8	94.5	-0.65	5.5
Montgomery County (113)	521.0	96.4	1.8	1.7	516.2	97.3	-0.94	2.7
Summit County (153)	531.8	97.0	1.0	2.0	526.9	97.9	-0.93	2.1
Balance of Ohio	7,005.5	96.0	2.9	1.2	6,946.3	96.8	-0.85	3.2
Oklahoma (40)	3,639.3	92.6	6.0	1.4	3,600.4	93.6	-1.08	6.4
Oklahoma County (109)	703.6	94.1	2.9	3.0	704.7	94.0	0.16	6.0
Tulsa County (143)	593.6	93.2	5.8	0.9	592.9	93.3	-0.12	6.7
Balance of Oklahoma	2,342.1	91.2	7.9	1.0	2,302.8	92.7	-1.71	7.3
Oregon (41)	3,744.4	96.0	2.4	1.6	3,745.4	96.0	0.02	4.0
Multnomah County (051)	715.8	96.1	2.8	1.1	713.8	96.3	-0.28	3.7
Washington County (067)	522.9	94.8	4.3	0.9	522.4	94.9	-0.09	5.1
Balance of Oregon	2,505.8	96.0	2.2	1.8	2,509.2	95.9	0.14	4.1

The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

Table A1 Continued: Components of Census Coverage for Counties ≥ 500,000 People

COUNTY	Census Count (Thousands)	Correct (%)	Erroneous (%)	Whole Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
Pennsylvania (42)	12,276.3	95.6	3.1	1.2	12,293.7	95.5	0.14	4.5
Allegheny County (003)	1,188.3	96.0	2.9	1.1	1,183.9	96.3	-0.37	3.7
Bucks County (017)	617.0	97.9	1.4	0.7	616.2	98.0	-0.13	2.0
Delaware County (045)	535.9	96.8	1.8	1.4	536.4	96.7	0.08	3.3
Lancaster County (071)	506.8	96.7	3.0	0.3	505.8	96.9	-0.20	3.1
Montgomery County (091)	778.9	95.2	3.9	0.9	780.5	95.0	0.21	5.0
Philadelphia County (101)	1,468.6	92.4	4.6	3.0	1,459.0	93.1	-0.66	6.9
Balance of Pennsylvania	7,180.7	95.5	3.5	1.0	7,211.9	95.1	0.43	4.9
Rhode Island (44)	1,009.9	93.3	5.0	1.7	1,001.8	94.1	-0.81	5.9
Providence County (007)	598.9	92.0	6.1	2.0	593.2	92.8	-0.96	7.2
Balance of Rhode Island	411.0	94.9	3.9	1.3	408.6	95.4	-0.58	4.6
South Carolina (45)	4,486.2	95.2	2.7	2.1	4,504.5	94.8	0.41	5.2
South Dakota (46)	780.1	95.2	2.9	1.9	780.9	95.1	0.10	4.9
Tennessee (47)	6,192.6	94.3	3.5	2.2	6,199.8	94.2	0.12	5.8
Davidson County (037)	600.8	94.1	3.2	2.7	605.5	93.3	0.77	6.7
Shelby County (157)	909.3	93.6	2.5	3.9	918.5	92.6	1.00	7.4
Balance of Tennessee	4,682.5	94.2	4.1	1.8	4,675.8	94.3	-0.14	5.7
Texas (48)	24,564.4	94.0	3.5	2.6	24,803.9	93.1	0.97	6.9
Bexar County (029)	1,672.8	92.5	4.4	3.1	1,679.4	92.1	0.39	7.9
Collin County (085)	778.4	97.0	0.6	2.4	783.1	96.4	0.60	3.6
Dallas County (113)	2,337.7	91.9	5.3	2.8	2,380.3	90.3	1.79	9.7
Denton County (121)	652.3	94.3	2.2	3.5	657.1	93.6	0.73	6.4
El Paso County (141)	784.9	93.5	2.9	3.6	799.5	91.8	1.83	8.2
Fort Bend County (157)	579.4	93.9	2.9	3.2	582.6	93.4	0.54	6.6
Harris County (201)	4,047.9	95.5	2.4	2.1	4,109.4	94.1	1.50	5.9
Hidalgo County (215)	767.8	87.8	8.1	4.1	811.9	83.1	5.43	16.9
Tarrant County (439)	1,788.4	95.5	3.3	1.2	1,805.2	94.6	0.93	5.4
Travis County (453)	1,001.2	95.2	3.0	1.8	1,013.2	94.0	1.18	6.0
Balance of Texas	10,153.6	93.1	4.2	2.6	10,182.2	92.9	0.28	7.1
Utah (49)	2,717.7	94.6	4.0	1.4	2,704.9	95.1	-0.48	4.9
Salt Lake County (035)	1,015.6	90.9	7.6	1.5	1,012.2	91.2	-0.34	8.8
Utah County (049)	502.7	96.6	2.2	1.1	500.0	97.2	-0.53	2.8
Balance of Utah	1,199.4	96.0	2.6	1.4	1,192.7	96.6	-0.57	3.4
Vermont (50)	600.4	95.9	3.7	0.5	608.3	94.6	1.29	5.4
Virginia (51)	7,761.2	94.7	3.3	1.9	7,805.5	94.2	0.57	5.8
Fairfax County (059)	1,072.4	96.0	2.1	1.9	1,080.6	95.3	0.76	4.7
Balance of Virginia	6,688.8	94.0	4.1	2.0	6,724.8	93.5	0.54	6.5
Washington (53)	6,585.2	95.4	2.9	1.6	6,578.3	95.5	-0.10	4.5
King County (033)	1,894.1	96.9	2.0	1.1	1,891.3	97.1	-0.15	2.9
Pierce County (053)	777.3	94.4	4.2	1.4	772.8	95.0	-0.58	5.0
Snohomish County (061)	702.9	95.1	3.0	1.9	699.1	95.7	-0.54	4.3
Balance of Washington	3,210.8	94.4	3.7	1.9	3,215.1	94.3	0.13	5.7
West Virginia (54)	1,803.6	91.0	7.7	1.3	1,778.1	92.3	-1.43	7.7
Wisconsin (55)	5,536.8	95.7	3.1	1.2	5,527.5	95.9	-0.17	4.1
Milwaukee County (079)	923.2	97.0	1.6	1.3	919.0	97.5	-0.47	2.5
Balance of Wisconsin	4,613.5	95.2	3.6	1.1	4,608.5	95.3	-0.11	4.7
Wyoming (56)	549.9	93.2	4.2	2.6	547.1	93.6	-0.51	6.4

The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

Table A2: Components of Census Coverage for Places ≥ 500,000 People

PLACE	Census Count (Thousands)	Correct (%)	Erroneous (%)	Whole Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
Alabama (01)	4,663.9	92.5	4.8	2.8	4,670.2	92.3	0.13	7.7
Alaska (02)	629.1	93.7	4.8	1.4	623.8	94.5	-0.85	5.5
Arizona (04)	6,252.6	92.3	4.3	3.4	6,226.5	92.7	-0.42	7.3
Phoenix city (55000)	1,423.9	93.1	3.3	3.6	1,424.6	93.1	0.05	6.9
Tucson city (77000)	499.4	96.4	1.6	2.0	499.0	96.5	-0.08	3.5
Balance of Arizona	4,329.3	90.8	5.7	3.5	4,302.9	91.4	-0.62	8.6
Arkansas (05)	2,837.0	94.2	4.2	1.6	2,825.5	94.6	-0.41	5.4
California (06)	36,434.1	95.1	3.2	1.7	36,529.8	94.9	0.26	5.1
Los Angeles (44000)	3,708.0	95.1	3.5	1.4	3,734.9	94.4	0.72	5.6
San Diego city (66000)	1,255.4	95.1	2.6	2.3	1,257.2	95.0	0.14	5.0
San Francisco city (67000)	781.0	93.2	5.5	1.3	781.5	93.2	0.07	6.8
San Jose city (68000)	932.6	93.7	4.5	1.8	937.3	93.2	0.50	6.8
Balance of California	29,757.1	94.5	3.7	1.7	29,818.8	94.3	0.21	5.7
Colorado (08)	4,913.3	93.8	2.9	3.3	4,899.2	94.1	-0.29	5.9
Denver city (20000)	584.2	92.4	4.4	3.2	586.5	92.0	0.40	8.0
Balance of Colorado	4,329.1	93.6	3.0	3.4	4,312.7	94.0	-0.38	6.0
Connecticut (09)	3,455.9	95.7	3.0	1.3	3,440.3	96.1	-0.45	3.9
Delaware (10)	873.5	94.3	2.8	2.8	878.3	93.8	0.55	6.2
District of Columbia (11)	561.7	93.1	4.0	2.9	574.5	91.0	2.23	9.0
Florida (12)	18,379.6	92.9	4.5	2.7	18,463.0	92.5	0.45	7.5
Jacksonville (35000)	802.0	91.8	3.6	4.6	804.7	91.5	0.34	8.5
Balance of Florida	17,577.6	92.4	5.0	2.6	17,658.3	92.0	0.46	8.0
Georgia (13)	9,434.5	93.5	3.1	3.3	9,521.5	92.7	0.91	7.3
Hawaii (15)	1,317.4	91.8	5.2	3.0	1,311.6	92.2	-0.44	7.8
Idaho (16)	1,538.6	94.2	3.2	2.6	1,538.1	94.2	-0.03	5.8
Illinois (17)	12,528.9	95.0	3.3	1.8	12,469.1	95.4	-0.48	4.6
Chicago city (14000)	2,635.4	90.9	5.6	3.4	2,623.6	91.3	-0.45	8.7
Balance of Illinois	9,893.5	95.6	3.1	1.3	9,845.5	96.0	-0.49	4.0
Indiana (18)	6,296.9	95.7	3.2	1.1	6,254.9	96.4	-0.67	3.6
Indianapolis city (36003)	804.4	96.2	1.7	2.1	798.9	96.9	-0.69	3.1
Balance of Indiana	5,492.5	95.3	3.8	1.0	5,455.9	95.9	-0.67	4.1
Iowa (19)	2,948.2	97.1	2.0	0.9	2,940.0	97.4	-0.28	2.6
Kansas (20)	2,774.0	95.6	3.7	0.7	2,755.5	96.3	-0.67	3.7
Kentucky (21)	4,213.5	94.4	3.7	1.8	4,208.0	94.5	-0.13	5.5
Louisville/Jefferson County (48006)	584.8	95.6	2.5	1.9	586.4	95.3	0.28	4.7
Balance of Kentucky	3,628.7	93.6	4.6	1.8	3,621.5	93.8	-0.20	6.2
Louisiana (22)	4,405.9	92.9	4.0	3.1	4,389.2	93.2	-0.38	6.8

The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

Table A2 Continued: Components of Census Coverage for Places ≥ 500,000 People

PLACE	Census Count (Thousands)	Correct (%)	Erroneous (%)	Whole Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
Maine (23)	1,292.8	96.4	2.5	1.1	1,301.3	95.8	0.65	4.2
Maryland (24)	5,635.2	94.9	3.4	1.8	5,688.4	94.0	0.94	6.0
Baltimore (04000)	595.8	90.4	7.7	2.0	608.8	88.4	2.14	11.6
Balance of Maryland	5,039.4	94.9	3.3	1.8	5,079.7	94.2	0.79	5.8
Massachusetts (25)	6,308.7	93.8	5.1	1.1	6,276.4	94.3	-0.52	5.7
Boston city (07000)	571.4	83.9	14.3	1.8	564.2	84.9	-1.27	15.1
Balance of Massachusetts	5,737.4	94.5	4.5	1.0	5,712.1	94.9	-0.44	5.1
Michigan (26)	9,654.6	94.9	3.5	1.6	9,591.6	95.5	-0.66	4.5
Detroit city (22000)	699.0	93.3	2.7	4.0	699.4	93.3	0.05	6.7
Balance of Michigan	8,955.6	94.5	4.1	1.5	8,892.2	95.1	-0.71	4.9
Minnesota (27)	5,168.5	95.1	3.9	1.0	5,139.7	95.6	-0.56	4.4
Mississippi (28)	2,875.3	91.3	6.7	1.9	2,882.3	91.1	0.24	8.9
Missouri (29)	5,814.8	94.9	3.4	1.8	5,776.8	95.5	-0.66	4.5
Montana (30)	960.6	93.3	3.8	2.9	954.3	93.9	-0.65	6.1
Nebraska (31)	1,775.2	96.4	2.4	1.3	1,765.6	96.9	-0.54	3.1
Nevada (32)	2,664.4	93.0	2.9	4.1	2,663.3	93.1	-0.04	6.9
Las Vegas city (40000)	574.3	93.8	2.9	3.4	574.7	93.7	0.07	6.3
Balance of Nevada	2,090.1	92.3	3.4	4.3	2,088.7	92.4	-0.07	7.6
New Hampshire (33)	1,276.4	95.6	3.3	1.1	1,284.1	95.0	0.60	5.0
New Jersey (34)	8,605.0	95.1	3.3	1.6	8,574.0	95.5	-0.36	4.5
New Mexico (35)	2,016.6	92.2	4.0	3.8	2,013.3	92.3	-0.16	7.7
Albuquerque (02000)	538.2	94.5	3.3	2.3	538.0	94.5	-0.03	5.5
Balance of New Mexico	1,478.4	90.5	5.2	4.4	1,475.3	90.7	-0.21	9.3
New York (36)	18,792.4	93.1	4.8	2.1	18,644.3	93.9	-0.79	6.1
New York (51000)	7,989.6	90.6	6.5	2.9	7,858.4	92.1	-1.67	7.9
Balance of New York	10,802.8	94.4	4.1	1.5	10,785.8	94.6	-0.16	5.4
North Carolina (37)	9,278.2	92.8	4.4	2.8	9,326.9	92.4	0.52	7.6
Charlotte city (12000)	718.1	90.0	4.8	5.2	726.6	89.0	1.17	11.0
Balance of North Carolina	8,560.2	92.7	4.7	2.6	8,600.3	92.2	0.47	7.8
North Dakota (38)	647.5	96.1	2.9	0.9	648.1	96.1	0.09	3.9
Ohio (39)	11,230.2	95.7	2.9	1.4	11,137.6	96.5	-0.83	3.5
Columbus (18000)	765.9	93.9	3.5	2.6	761.0	94.5	-0.65	5.5
Balance of Ohio	10,464.3	95.3	3.4	1.3	10,376.6	96.1	-0.84	3.9
Oklahoma (40)	3,639.3	92.6	6.0	1.4	3,600.4	93.6	-1.08	6.4
Oklahoma City (55000)	567.9	94.1	3.2	2.7	569.9	93.7	0.35	6.3
Balance of Oklahoma	3,071.5	91.4	7.5	1.1	3,030.6	92.6	-1.35	7.4

The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

Table A2 Continued: Components of Census Coverage for Places ≥ 500,000 People

PLACE	Census Count (Thousands)	Correct (%)	Erroneous (%)	Whole Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
Oregon (41)	3,744.4	96.0	2.4	1.6	3,745.4	96.0	0.02	4.0
Portland (59000)	566.0	95.8	3.2	1.0	565.0	95.9	-0.18	4.1
Balance of Oregon	3,178.4	95.6	2.7	1.7	3,180.3	95.6	0.06	4.4
Pennsylvania (42)	12,276.3	95.6	3.1	1.2	12,293.7	95.5	0.14	4.5
Philadelphia (60000)	1,468.6	92.4	4.6	3.0	1,459.0	93.1	-0.66	6.9
Balance of Pennsylvania	10,807.6	95.6	3.4	1.0	10,834.7	95.4	0.25	4.6
Rhode Island (44)	1,009.9	93.3	5.0	1.7	1,001.8	94.1	-0.81	5.9
South Carolina (45)	4,486.2	95.2	2.7	2.1	4,504.5	94.8	0.41	5.2
South Dakota (46)	780.1	95.2	2.9	1.9	780.9	95.1	0.10	4.9
Tennessee (47)	6,192.6	94.3	3.5	2.2	6,199.8	94.2	0.12	5.8
Memphis city (48000)	630.4	92.6	3.4	4.0	639.4	91.3	1.42	8.7
Nashville-Davidson metropolitan (52006)	575.4	93.9	3.4	2.7	580.2	93.1	0.82	6.9
Balance of Tennessee	4,986.9	94.2	4.0	1.9	4,980.2	94.3	-0.13	5.7
Texas (48)	24,564.4	94.0	3.5	2.6	24,803.9	93.1	0.97	6.9
Austin city (05000)	770.1	94.0	4.0	2.0	782.0	92.6	1.52	7.4
Dallas city (19000)	1,179.1	89.0	7.9	3.2	1,209.3	86.7	2.50	13.3
El Paso city (24000)	639.7	93.6	3.3	3.1	639.4	93.6	-0.04	6.4
Fort Worth (27000)	727.2	95.4	3.4	1.2	735.6	94.3	1.14	5.7
Houston (35000)	2,062.4	94.7	3.0	2.3	2,108.4	92.6	2.18	7.4
San Antonio (65000)	1,299.6	92.3	4.6	3.2	1,306.7	91.8	0.54	8.2
Balance of Texas	17,886.3	93.6	3.8	2.6	18,022.5	92.9	0.76	7.1
Utah (49)	2,717.7	94.6	4.0	1.4	2,704.9	95.1	-0.48	4.9
Vermont (50)	600.4	95.9	3.7	0.5	608.3	94.6	1.29	5.4
Virginia (51)	7,761.2	94.7	3.3	1.9	7,805.5	94.2	0.57	5.8
Washington (53)	6,585.2	95.4	2.9	1.6	6,578.3	95.5	-0.10	4.5
Seattle (63000)	583.7	98.1	0.7	1.2	584.8	98.0	0.18	2.0
Balance of Washington	6,001.4	94.7	3.6	1.7	5,993.5	94.8	-0.13	5.2
West Virginia (54)	1,803.6	91.0	7.7	1.3	1,778.1	92.3	-1.43	7.7
Wisconsin (55)	5,536.8	95.7	3.1	1.2	5,527.5	95.9	-0.17	4.1
Milwaukee city (53000)	576.4	96.6	1.7	1.7	575.4	96.8	-0.18	3.2
Balance of Wisconsin	4,960.3	95.2	3.7	1.1	4,952.1	95.4	-0.17	4.6
Wyoming (56)	549.9	93.2	4.2	2.6	547.1	93.6	-0.51	6.4

The 2010 Census count excludes persons in group quarters and persons in Remote Alaska.

Attachment B: Measures of Uncertainty Tables for States, Counties, and Places
Table B1: Measures of Uncertainty for States

ST	Census Count (Thousands)	Correct (%)		Erroneous (%)			Whole-Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
		Same County	Different County	Different State	Duplication	Other					
AL	(0)	(0.8)	(0.1)	(<0.1)	(0.7)	(0.2)	(0)	(58.1)	(1.4)	(1.24)	(1.4)
AK	(0)	(0.9)	(0.2)	(0.1)	(0.9)	(0.2)	(0)	(13.8)	(2.3)	(2.22)	(2.3)
AZ	(0)	(0.5)	(<0.1)	(0.2)	(0.4)	(0.1)	(0)	(73.9)	(1.2)	(1.19)	(1.2)
AR	(0)	(0.6)	(0.1)	(0.1)	(0.5)	(0.1)	(0)	(40.7)	(1.5)	(1.45)	(1.5)
CA	(0)	(0.1)	(<0.1)	(<0.1)	(0.1)	(<0.1)	(0)	(265.6)	(0.7)	(0.73)	(0.7)
CO	(0)	(0.4)	(<0.1)	(<0.1)	(0.3)	(<0.1)	(0)	(59.9)	(1.2)	(1.23)	(1.2)
CT	(0)	(0.5)	(<0.1)	(<0.1)	(0.5)	(0.1)	(0)	(45.8)	(1.4)	(1.34)	(1.4)
DE	(0)	(0.7)	(<0.1)	(0.1)	(0.6)	(0.1)	(0)	(17.1)	(1.9)	(1.93)	(1.9)
DC	(0)	(0.4)	(0.0)	(<0.1)	(0.4)	(0.2)	(0)	(12.9)	(2.1)	(2.20)	(2.1)
FL	(0)	(0.4)	(<0.1)	(<0.1)	(0.3)	(<0.1)	(0)	(160.3)	(0.9)	(0.86)	(0.9)
GA	(0)	(0.4)	(<0.1)	(<0.1)	(0.3)	(<0.1)	(0)	(99.9)	(1.0)	(1.04)	(1.0)
HI	(0)	(0.5)	(<0.1)	(<0.1)	(0.5)	(0.1)	(0)	(27.2)	(2.0)	(2.08)	(2.0)
ID	(0)	(0.6)	(0.1)	(<0.1)	(0.5)	(0.2)	(0)	(26.1)	(1.7)	(1.70)	(1.7)
IL	(0)	(0.4)	(<0.1)	(<0.1)	(0.4)	(<0.1)	(0)	(126.1)	(1.1)	(1.02)	(1.1)
IN	(0)	(0.5)	(<0.1)	(<0.1)	(0.5)	(<0.1)	(0)	(71.1)	(1.2)	(1.14)	(1.2)
IA	(0)	(0.4)	(0.1)	(<0.1)	(0.4)	(0.1)	(0)	(41.4)	(1.4)	(1.41)	(1.4)
KS	(0)	(0.7)	(<0.1)	(<0.1)	(0.7)	(<0.1)	(0)	(39.3)	(1.5)	(1.44)	(1.5)
KY	(0)	(0.6)	(0.1)	(<0.1)	(0.5)	(<0.1)	(0)	(53.6)	(1.3)	(1.28)	(1.3)
LA	(0)	(0.6)	(0.2)	(0.1)	(0.5)	(0.2)	(0)	(57.2)	(1.3)	(1.31)	(1.3)
ME	(0)	(0.6)	(0.1)	(0.1)	(0.5)	(0.2)	(0)	(26.0)	(2.0)	(1.99)	(2.0)
MD	(0)	(0.5)	(<0.1)	(<0.1)	(0.4)	(0.2)	(0)	(68.6)	(1.2)	(1.19)	(1.2)
MA	(0)	(0.8)	(<0.1)	(<0.1)	(0.8)	(<0.1)	(0)	(72.0)	(1.4)	(1.15)	(1.4)
MI	(0)	(0.4)	(<0.1)	(<0.1)	(0.4)	(<0.1)	(0)	(97.7)	(1.0)	(1.02)	(1.0)
MN	(0)	(1.2)	(<0.1)	(<0.1)	(1.2)	(0.1)	(0)	(61.5)	(1.7)	(1.20)	(1.7)
MS	(0)	(1.1)	(<0.1)	(0.1)	(1.1)	(0.4)	(0)	(41.8)	(1.7)	(1.45)	(1.7)
MO	(0)	(0.5)	(0.1)	(<0.1)	(0.4)	(<0.1)	(0)	(68.2)	(1.2)	(1.19)	(1.2)
MT	(0)	(0.5)	(<0.1)	(<0.1)	(0.5)	(<0.1)	(0)	(19.0)	(1.9)	(2.01)	(1.9)
NE	(0)	(0.4)	(0.2)	(<0.1)	(0.3)	(0.1)	(0)	(28.3)	(1.6)	(1.61)	(1.6)
NV	(0)	(0.3)	(<0.1)	(0.1)	(0.4)	(0.1)	(0)	(38.8)	(1.4)	(1.46)	(1.4)
NH	(0)	(0.8)	(<0.1)	(0.1)	(0.6)	(0.2)	(0)	(26.8)	(2.1)	(2.07)	(2.1)
NJ	(0)	(0.4)	(<0.1)	(<0.1)	(0.4)	(0.1)	(0)	(91.2)	(1.1)	(1.07)	(1.1)
NM	(0)	(0.7)	(<0.1)	(<0.1)	(0.7)	(0.1)	(0)	(31.8)	(1.6)	(1.58)	(1.6)
NY	(0)	(0.3)	(<0.1)	(<0.1)	(0.3)	(<0.1)	(0)	(170.7)	(0.9)	(0.92)	(0.9)
NC	(0)	(0.7)	(<0.1)	(<0.1)	(0.7)	(<0.1)	(0)	(96.2)	(1.2)	(1.03)	(1.2)
ND	(0)	(0.8)	(0.2)	(0.3)	(0.5)	(0.1)	(0)	(14.1)	(2.2)	(2.17)	(2.2)
OH	(0)	(0.3)	(<0.1)	(<0.1)	(0.2)	(<0.1)	(0)	(110.2)	(1.0)	(1.00)	(1.0)
OK	(0)	(0.8)	(0.2)	(<0.1)	(0.8)	(0.1)	(0)	(49.9)	(1.5)	(1.40)	(1.5)
OR	(0)	(0.5)	(<0.1)	(<0.1)	(0.4)	(0.1)	(0)	(49.6)	(1.4)	(1.32)	(1.4)
PA	(0)	(0.3)	(<0.1)	(<0.1)	(0.3)	(<0.1)	(0)	(119.8)	(1.0)	(0.97)	(1.0)
RI	(0)	(0.9)	(<0.1)	(0.1)	(0.7)	(0.3)	(0)	(19.0)	(2.0)	(1.91)	(2.0)
SC	(0)	(0.6)	(<0.1)	(0.1)	(0.5)	(0.1)	(0)	(56.6)	(1.3)	(1.25)	(1.3)
SD	(0)	(0.6)	(<0.1)	(<0.1)	(0.5)	(0.1)	(0)	(16.0)	(2.0)	(2.05)	(2.0)
TN	(0)	(0.4)	(<0.1)	(<0.1)	(0.4)	(<0.1)	(0)	(71.5)	(1.2)	(1.15)	(1.2)
TX	(0)	(0.3)	(<0.1)	(<0.1)	(0.3)	(<0.1)	(0)	(212.1)	(0.8)	(0.85)	(0.8)
UT	(0)	(1.6)	(0.1)	(0.2)	(1.6)	(<0.1)	(0)	(38.9)	(2.1)	(1.44)	(2.1)
VT	(0)	(0.7)	(<0.1)	(<0.1)	(0.6)	(0.2)	(0)	(14.9)	(2.4)	(2.43)	(2.4)
VA	(0)	(0.4)	(<0.1)	(<0.1)	(0.3)	(<0.1)	(0)	(83.4)	(1.1)	(1.06)	(1.1)
WA	(0)	(0.4)	(<0.1)	(<0.1)	(0.3)	(<0.1)	(0)	(75.0)	(1.1)	(1.14)	(1.1)
WV	(0)	(2.0)	(<0.1)	(0.4)	(1.8)	(0.2)	(0)	(29.8)	(2.6)	(1.70)	(2.6)
WI	(0)	(0.4)	(<0.1)	(<0.1)	(0.4)	(<0.1)	(0)	(66.0)	(1.2)	(1.20)	(1.2)
WY	(0)	(0.7)	(<0.1)	(0.1)	(0.7)	(0.1)	(0)	(12.6)	(2.3)	(2.31)	(2.3)

The rightmost four columns are an estimate of the root mean squared error. All other columns are an estimate of the standard error.

Table B2: Measures of Uncertainty for Counties

COUNTY	Census Count (Thousands)	Correct (%)	Erroneous (%)	Whole Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
Alabama (01)	(0)	(0.8)	(0.8)	(0)	(58.1)	(1.4)	(1.24)	(1.4)
Jefferson County (073)	(0)	(2.2)	(2.2)	(0)	(13.8)	(2.9)	(2.12)	(2.9)
Balance of Alabama	(0)	(0.9)	(0.9)	(0)	(59.0)	(1.6)	(1.46)	(1.6)
Alaska (02)	(0)	(0.9)	(0.9)	(0)	(13.8)	(2.3)	(2.22)	(2.3)
Arizona (04)	(0)	(0.4)	(0.4)	(0)	(73.9)	(1.2)	(1.19)	(1.2)
Maricopa County (013)	(0)	(0.5)	(0.5)	(0)	(55.5)	(1.5)	(1.49)	(1.5)
Pima County (019)	(0)	(1.5)	(1.5)	(0)	(18.8)	(2.3)	(1.98)	(2.3)
Balance of Arizona	(0)	(1.1)	(1.1)	(0)	(26.4)	(1.9)	(1.74)	(1.9)
Arkansas (05)	(0)	(0.6)	(0.6)	(0)	(40.7)	(1.5)	(1.45)	(1.5)
California (06)	(0)	(0.1)	(0.1)	(0)	(265.6)	(0.7)	(0.73)	(0.7)
Alameda County (001)	(0)	(0.6)	(0.6)	(0)	(26.3)	(1.8)	(1.77)	(1.8)
Contra Costa County (013)	(0)	(0.8)	(0.8)	(0)	(19.9)	(2.0)	(1.91)	(2.0)
Fresno County (019)	(0)	(0.9)	(0.9)	(0)	(18.3)	(2.1)	(1.99)	(2.1)
Kern County (029)	(0)	(1.2)	(1.2)	(0)	(16.5)	(2.3)	(2.06)	(2.3)
Los Angeles County (037)	(0)	(0.2)	(0.2)	(0)	(116.2)	(1.2)	(1.19)	(1.2)
Orange County (059)	(0)	(0.7)	(0.7)	(0)	(45.5)	(1.6)	(1.53)	(1.6)
Riverside County (065)	(0)	(0.6)	(0.6)	(0)	(35.4)	(1.6)	(1.65)	(1.6)
Sacramento County (067)	(0)	(0.3)	(0.3)	(0)	(25.3)	(1.8)	(1.82)	(1.8)
San Bernardino County (071)	(0)	(0.6)	(0.6)	(0)	(33.2)	(1.7)	(1.66)	(1.7)
San Diego County (073)	(0)	(0.3)	(0.3)	(0)	(46.4)	(1.5)	(1.55)	(1.5)
San Francisco County (075)	(0)	(1.6)	(1.6)	(0)	(16.1)	(2.5)	(2.06)	(2.5)
San Joaquin County (077)	(0)	(0.7)	(0.7)	(0)	(14.3)	(2.1)	(2.13)	(2.1)
San Mateo County (081)	(0)	(1.8)	(1.8)	(0)	(14.8)	(2.7)	(2.08)	(2.7)
Santa Clara County (085)	(0)	(0.7)	(0.7)	(0)	(30.0)	(1.8)	(1.70)	(1.8)
Stanislaus County (099)	(0)	(0.6)	(0.6)	(0)	(11.4)	(2.2)	(2.25)	(2.2)
Ventura County (111)	(0)	(1.0)	(1.0)	(0)	(16.5)	(2.2)	(2.02)	(2.2)
Balance of California	(0)	(0.4)	(0.4)	(0)	(81.1)	(1.4)	(1.38)	(1.4)
Colorado (08)	(0)	(0.4)	(0.4)	(0)	(59.9)	(1.2)	(1.23)	(1.2)
Arapahoe County (005)	(0)	(1.0)	(1.0)	(0)	(12.4)	(2.3)	(2.19)	(2.3)
Denver County (031)	(0)	(1.4)	(1.4)	(0)	(12.8)	(2.5)	(2.17)	(2.5)
El Paso County (041)	(0)	(0.7)	(0.7)	(0)	(13.0)	(2.1)	(2.17)	(2.1)
Jefferson County (059)	(0)	(0.5)	(0.5)	(0)	(11.7)	(2.2)	(2.23)	(2.2)
Balance of Colorado	(0)	(0.6)	(0.6)	(0)	(40.6)	(1.6)	(1.56)	(1.6)
Connecticut (09)	(0)	(0.5)	(0.5)	(0)	(45.8)	(1.4)	(1.34)	(1.4)
Fairfield County (001)	(0)	(1.2)	(1.2)	(0)	(17.6)	(2.2)	(1.99)	(2.2)
Hartford County (003)	(0)	(1.3)	(1.3)	(0)	(17.5)	(2.4)	(2.05)	(2.4)
New Haven County (009)	(0)	(0.7)	(0.7)	(0)	(16.7)	(2.1)	(2.02)	(2.1)
Balance of Connecticut	(0)	(1.2)	(1.2)	(0)	(15.5)	(2.1)	(1.81)	(2.1)
Delaware (10)	(0)	(0.7)	(0.7)	(0)	(17.1)	(1.9)	(1.93)	(1.9)
New Castle County (003)	(0)	(0.8)	(0.8)	(0)	(11.8)	(2.2)	(2.22)	(2.2)
Balance of Delaware	(0)	(1.2)	(1.2)	(0)	(7.2)	(2.3)	(2.04)	(2.3)
District of Columbia (11)	(0)	(0.4)	(0.4)	(0)	(12.9)	(2.1)	(2.20)	(2.1)

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Table B2 Continued: Measures of Uncertainty for Counties

COUNTY	Census Count (Thousands)	Correct (%)	Erroneous (%)	Whole Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
Florida (12)	(0)	(0.4)	(0.4)	(0)	(160.3)	(0.9)	(0.86)	(0.9)
Brevard County (009)	(0)	(1.1)	(1.1)	(0)	(11.8)	(2.3)	(2.22)	(2.3)
Broward County (011)	(0)	(1.7)	(1.7)	(0)	(30.3)	(2.3)	(1.72)	(2.3)
Duval County (031)	(0)	(1.0)	(1.0)	(0)	(17.1)	(2.1)	(2.01)	(2.1)
Hillsborough County (057)	(0)	(2.4)	(2.4)	(0)	(22.6)	(2.9)	(1.85)	(2.9)
Lee County (071)	(0)	(1.5)	(1.5)	(0)	(13.3)	(2.5)	(2.19)	(2.5)
Miami-Dade County (086)	(0)	(0.9)	(0.9)	(0)	(40.0)	(1.8)	(1.59)	(1.8)
Orange County (095)	(0)	(2.7)	(2.7)	(0)	(21.4)	(3.2)	(1.90)	(3.2)
Palm Beach County (099)	(0)	(0.8)	(0.8)	(0)	(24.1)	(1.9)	(1.83)	(1.9)
Pinellas County (103)	(0)	(1.0)	(1.0)	(0)	(17.8)	(2.1)	(1.99)	(2.1)
Polk County (105)	(0)	(2.0)	(2.0)	(0)	(12.9)	(2.9)	(2.18)	(2.9)
Balance of Florida	(0)	(0.6)	(0.6)	(0)	(97.0)	(1.4)	(1.36)	(1.4)
Georgia (13)	(0)	(0.3)	(0.3)	(0)	(99.9)	(1.0)	(1.04)	(1.0)
Cobb County (067)	(0)	(1.2)	(1.2)	(0)	(14.4)	(2.3)	(2.08)	(2.3)
DeKalb County (089)	(0)	(1.2)	(1.2)	(0)	(15.0)	(2.3)	(2.11)	(2.3)
Fulton County (121)	(0)	(0.8)	(0.8)	(0)	(18.4)	(2.0)	(1.99)	(2.0)
Gwinnett County (135)	(0)	(0.4)	(0.4)	(0)	(16.6)	(1.9)	(2.02)	(1.9)
Balance of Georgia	(0)	(0.5)	(0.5)	(0)	(88.4)	(1.4)	(1.37)	(1.4)
Hawaii (15)	(0)	(0.5)	(0.5)	(0)	(27.2)	(2.0)	(2.08)	(2.0)
Honolulu County (003)	(0)	(0.7)	(0.7)	(0)	(20.4)	(2.2)	(2.23)	(2.2)
Balance of Hawaii	(0)	(0.9)	(0.9)	(0)	(10.4)	(2.6)	(2.68)	(2.6)
Idaho (16)	(0)	(0.6)	(0.6)	(0)	(26.1)	(1.7)	(1.70)	(1.7)
Illinois (17)	(0)	(0.4)	(0.4)	(0)	(126.1)	(1.1)	(1.02)	(1.1)
Cook County (031)	(0)	(0.7)	(0.7)	(0)	(77.0)	(1.6)	(1.53)	(1.6)
DuPage County (043)	(0)	(0.6)	(0.6)	(0)	(18.0)	(2.1)	(2.03)	(2.1)
Kane County (089)	(0)	(0.9)	(0.9)	(0)	(11.7)	(2.4)	(2.33)	(2.4)
Lake County (097)	(0)	(6.3)	(6.3)	(0)	(14.5)	(6.6)	(2.17)	(6.6)
Will County (197)	(0)	(1.3)	(1.3)	(0)	(14.2)	(2.4)	(2.15)	(2.4)
Balance of Illinois	(0)	(0.3)	(0.3)	(0)	(67.8)	(1.4)	(1.46)	(1.4)
Indiana (18)	(0)	(0.5)	(0.5)	(0)	(71.1)	(1.2)	(1.14)	(1.2)
Marion County (097)	(0)	(0.4)	(0.4)	(0)	(17.7)	(2.0)	(2.02)	(2.0)
Balance of Indiana	(0)	(0.6)	(0.6)	(0)	(75.1)	(1.5)	(1.41)	(1.5)
Iowa (19)	(0)	(0.4)	(0.4)	(0)	(41.4)	(1.4)	(1.41)	(1.4)
Kansas (20)	(0)	(0.7)	(0.7)	(0)	(39.3)	(1.5)	(1.44)	(1.5)
Johnson County (091)	(0)	(2.4)	(2.4)	(0)	(11.9)	(3.2)	(2.24)	(3.2)
Balance of Kansas	(0)	(0.9)	(0.9)	(0)	(35.3)	(1.8)	(1.60)	(1.8)
Kentucky (21)	(0)	(0.5)	(0.5)	(0)	(53.6)	(1.3)	(1.28)	(1.3)
Jefferson County (111)	(0)	(0.6)	(0.6)	(0)	(15.1)	(2.1)	(2.07)	(2.1)
Balance of Kentucky	(0)	(0.7)	(0.7)	(0)	(52.0)	(1.6)	(1.50)	(1.6)
Louisiana (22)	(0)	(0.5)	(0.5)	(0)	(57.2)	(1.3)	(1.31)	(1.3)
Maine (23)	(0)	(0.6)	(0.6)	(0)	(26.0)	(2.0)	(1.99)	(2.0)

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Table B2 Continued: Measures of Uncertainty for Counties

COUNTY	Census Count (Thousands)	Correct (%)	Erroneous (%)	Whole Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
Maryland (24)	(0)	(0.5)	(0.5)	(0)	(68.6)	(1.2)	(1.19)	(1.2)
Anne Arundel County (003)	(0)	(1.3)	(1.3)	(0)	(11.7)	(2.5)	(2.22)	(2.5)
Baltimore County (005)	(0)	(0.8)	(0.8)	(0)	(16.1)	(2.1)	(2.03)	(2.1)
Montgomery County (031)	(0)	(0.9)	(0.9)	(0)	(18.9)	(2.0)	(1.93)	(2.0)
Prince George's County (033)	(0)	(0.9)	(0.9)	(0)	(17.5)	(2.0)	(1.97)	(2.0)
Baltimore City (510)	(0)	(3.4)	(3.4)	(0)	(13.8)	(3.9)	(2.22)	(3.9)
Balance of Maryland	(0)	(0.6)	(0.6)	(0)	(30.9)	(1.6)	(1.60)	(1.6)
Massachusetts (25)	(0)	(0.8)	(0.8)	(0)	(72.0)	(1.4)	(1.15)	(1.4)
Bristol County (005)	(0)	(2.6)	(2.6)	(0)	(11.7)	(3.4)	(2.26)	(3.4)
Essex County (009)	(0)	(1.3)	(1.3)	(0)	(15.0)	(2.4)	(2.10)	(2.4)
Middlesex County (017)	(0)	(1.2)	(1.2)	(0)	(25.6)	(2.1)	(1.78)	(2.1)
Norfolk County (021)	(0)	(0.9)	(0.9)	(0)	(13.8)	(2.2)	(2.12)	(2.2)
Suffolk County (025)	(0)	(5.0)	(5.0)	(0)	(14.7)	(5.4)	(2.24)	(5.4)
Worcester County (027)	(0)	(0.9)	(0.9)	(0)	(15.7)	(2.1)	(2.05)	(2.1)
Balance of Massachusetts	(0)	(1.3)	(1.3)	(0)	(25.8)	(2.1)	(1.71)	(2.1)
Michigan (26)	(0)	(0.4)	(0.4)	(0)	(97.7)	(1.0)	(1.02)	(1.0)
Kent County (081)	(0)	(1.2)	(1.2)	(0)	(12.8)	(2.4)	(2.20)	(2.4)
Macomb County (099)	(0)	(0.6)	(0.6)	(0)	(16.8)	(2.1)	(2.05)	(2.1)
Oakland County (125)	(0)	(1.8)	(1.8)	(0)	(22.2)	(2.5)	(1.90)	(2.5)
Wayne County (163)	(0)	(0.6)	(0.6)	(0)	(31.8)	(1.8)	(1.79)	(1.8)
Balance of Michigan	(0)	(0.6)	(0.6)	(0)	(73.1)	(1.5)	(1.41)	(1.5)
Minnesota (27)	(0)	(1.2)	(1.2)	(0)	(61.5)	(1.7)	(1.20)	(1.7)
Hennepin County (053)	(0)	(0.5)	(0.5)	(0)	(21.2)	(1.9)	(1.90)	(1.9)
Ramsey County (123)	(0)	(1.5)	(1.5)	(0)	(11.1)	(2.7)	(2.31)	(2.7)
Balance of Minnesota	(0)	(1.8)	(1.8)	(0)	(52.1)	(2.3)	(1.48)	(2.3)
Mississippi (28)	(0)	(1.1)	(1.1)	(0)	(41.8)	(1.7)	(1.45)	(1.7)
Missouri (29)	(0)	(0.5)	(0.5)	(0)	(68.2)	(1.2)	(1.19)	(1.2)
Jackson County (095)	(0)	(2.0)	(2.0)	(0)	(14.0)	(2.8)	(2.14)	(2.8)
St. Louis County (189)	(0)	(2.1)	(2.1)	(0)	(18.9)	(2.8)	(1.96)	(2.8)
Balance of Missouri	(0)	(0.5)	(0.5)	(0)	(61.6)	(1.5)	(1.50)	(1.5)
Montana (30)	(0)	(0.5)	(0.5)	(0)	(19.0)	(1.9)	(2.01)	(1.9)
Nebraska (31)	(0)	(0.3)	(0.3)	(0)	(28.3)	(1.6)	(1.61)	(1.6)
Douglas County (055)	(0)	(0.6)	(0.6)	(0)	(11.3)	(2.3)	(2.28)	(2.3)
Balance of Nebraska	(0)	(0.5)	(0.5)	(0)	(21.6)	(1.7)	(1.71)	(1.7)
Nevada (32)	(0)	(0.3)	(0.3)	(0)	(38.8)	(1.4)	(1.46)	(1.4)
Clark County (003)	(0)	(0.4)	(0.4)	(0)	(33.0)	(1.6)	(1.72)	(1.6)
Balance of Nevada	(0)	(0.6)	(0.6)	(0)	(13.6)	(1.9)	(1.84)	(1.9)
New Hampshire (33)	(0)	(0.8)	(0.8)	(0)	(26.8)	(2.1)	(2.07)	(2.1)

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Table B2 Continued: Measures of Uncertainty for Counties

COUNTY	Census Count (Thousands)	Correct (%)	Erroneous (%)	Whole Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
New Jersey (34)	(0)	(0.4)	(0.4)	(0)	(91.2)	(1.1)	(1.07)	(1.1)
Bergen County (003)	(0)	(0.5)	(0.5)	(0)	(17.6)	(2.0)	(1.98)	(2.0)
Camden County (007)	(0)	(0.6)	(0.6)	(0)	(11.3)	(2.2)	(2.24)	(2.2)
Essex County (013)	(0)	(2.1)	(2.1)	(0)	(16.3)	(2.9)	(2.17)	(2.9)
Hudson County (017)	(0)	(1.6)	(1.6)	(0)	(13.7)	(2.6)	(2.25)	(2.6)
Middlesex County (023)	(0)	(3.3)	(3.3)	(0)	(16.0)	(3.8)	(2.03)	(3.8)
Monmouth County (025)	(0)	(1.1)	(1.1)	(0)	(13.2)	(2.3)	(2.14)	(2.3)
Ocean County (029)	(0)	(3.2)	(3.2)	(0)	(12.4)	(3.8)	(2.20)	(3.8)
Passaic County (031)	(0)	(1.2)	(1.2)	(0)	(11.2)	(2.5)	(2.31)	(2.5)
Union County (039)	(0)	(1.2)	(1.2)	(0)	(11.8)	(2.4)	(2.23)	(2.4)
Balance of New Jersey	(0)	(0.5)	(0.5)	(0)	(43.1)	(1.6)	(1.53)	(1.6)
New Mexico (35)	(0)	(0.7)	(0.7)	(0)	(31.8)	(1.6)	(1.58)	(1.6)
Bernalillo County (001)	(0)	(0.8)	(0.8)	(0)	(13.9)	(2.2)	(2.14)	(2.2)
Balance of New Mexico	(0)	(1.0)	(1.0)	(0)	(23.6)	(1.9)	(1.74)	(1.9)
New York (36)	(0)	(0.3)	(0.3)	(0)	(170.7)	(0.9)	(0.92)	(0.9)
Bronx County (005)	(0)	(1.3)	(1.3)	(0)	(26.2)	(2.2)	(1.97)	(2.2)
Erie County (029)	(0)	(1.1)	(1.1)	(0)	(17.9)	(2.3)	(2.04)	(2.3)
Kings County (047)	(0)	(1.2)	(1.2)	(0)	(44.7)	(2.1)	(1.91)	(2.1)
Monroe County (055)	(0)	(1.2)	(1.2)	(0)	(15.1)	(2.3)	(2.11)	(2.3)
Nassau County (059)	(0)	(0.8)	(0.8)	(0)	(23.7)	(1.9)	(1.83)	(1.9)
New York County (061)	(0)	(0.6)	(0.6)	(0)	(27.4)	(1.8)	(1.83)	(1.8)
Queens County (081)	(0)	(1.3)	(1.3)	(0)	(39.5)	(2.2)	(1.87)	(2.2)
Suffolk County (103)	(0)	(0.7)	(0.7)	(0)	(29.3)	(2.0)	(2.01)	(2.0)
Westchester County (119)	(0)	(0.8)	(0.8)	(0)	(18.0)	(2.0)	(1.98)	(2.0)
Balance of New York	(0)	(0.5)	(0.5)	(0)	(86.1)	(1.5)	(1.45)	(1.5)
North Carolina (37)	(0)	(0.7)	(0.7)	(0)	(96.2)	(1.2)	(1.03)	(1.2)
Mecklenburg County (119)	(0)	(0.6)	(0.6)	(0)	(18.0)	(1.9)	(1.95)	(1.9)
Wake County (183)	(0)	(0.6)	(0.6)	(0)	(17.5)	(2.0)	(1.96)	(2.0)
Balance of North Carolina	(0)	(0.9)	(0.9)	(0)	(101.3)	(1.5)	(1.34)	(1.5)
North Dakota (38)	(0)	(0.7)	(0.7)	(0)	(14.1)	(2.2)	(2.17)	(2.2)
Ohio (39)	(0)	(0.3)	(0.3)	(0)	(110.2)	(1.0)	(1.00)	(1.0)
Cuyahoga County (035)	(0)	(1.4)	(1.4)	(0)	(23.2)	(2.3)	(1.88)	(2.3)
Franklin County (049)	(0)	(0.8)	(0.8)	(0)	(21.6)	(2.0)	(1.93)	(2.0)
Hamilton County (061)	(0)	(1.3)	(1.3)	(0)	(16.0)	(2.3)	(2.07)	(2.3)
Montgomery County (113)	(0)	(0.7)	(0.7)	(0)	(11.6)	(2.3)	(2.27)	(2.3)
Summit County (153)	(0)	(0.9)	(0.9)	(0)	(11.8)	(2.4)	(2.25)	(2.4)
Balance of Ohio	(0)	(0.3)	(0.3)	(0)	(94.2)	(1.3)	(1.37)	(1.3)
Oklahoma (40)	(0)	(0.8)	(0.8)	(0)	(49.9)	(1.5)	(1.40)	(1.5)
Oklahoma County (109)	(0)	(0.8)	(0.8)	(0)	(14.8)	(2.1)	(2.09)	(2.1)
Tulsa County (143)	(0)	(2.7)	(2.7)	(0)	(13.0)	(3.4)	(2.19)	(3.4)
Balance of Oklahoma	(0)	(1.1)	(1.1)	(0)	(38.8)	(1.9)	(1.72)	(1.9)
Oregon (41)	(0)	(0.5)	(0.5)	(0)	(49.6)	(1.4)	(1.32)	(1.4)
Multnomah County (051)	(0)	(0.9)	(0.9)	(0)	(14.9)	(2.2)	(2.10)	(2.2)
Washington County (067)	(0)	(2.2)	(2.2)	(0)	(11.7)	(3.0)	(2.23)	(3.0)
Balance of Oregon	(0)	(0.5)	(0.5)	(0)	(39.8)	(1.6)	(1.58)	(1.6)

The rightmost four columns are an estimate of the root mean squared error. All other columns are an estimate of the standard error.

Table B2 Continued: Measures of Uncertainty for Counties

COUNTY	Census Count (Thousands)	Correct (%)	Erroneous (%)	Whole Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
Pennsylvania (42)	(0)	(0.3)	(0.3)	(0)	(119.8)	(1.0)	(0.97)	(1.0)
Allegheny County (003)	(0)	(0.5)	(0.5)	(0)	(22.3)	(1.9)	(1.89)	(1.9)
Bucks County (017)	(0)	(0.5)	(0.5)	(0)	(13.2)	(2.2)	(2.14)	(2.2)
Delaware County (045)	(0)	(1.2)	(1.2)	(0)	(11.9)	(2.4)	(2.21)	(2.4)
Lancaster County (071)	(0)	(1.2)	(1.2)	(0)	(11.4)	(2.5)	(2.25)	(2.5)
Montgomery County (091)	(0)	(1.0)	(1.0)	(0)	(15.8)	(2.2)	(2.02)	(2.2)
Philadelphia County (101)	(0)	(0.9)	(0.9)	(0)	(27.5)	(2.0)	(1.90)	(2.0)
Balance of Pennsylvania	(0)	(0.5)	(0.5)	(0)	(101.2)	(1.4)	(1.40)	(1.4)
Rhode Island (44)	(0)	(0.9)	(0.9)	(0)	(19.0)	(2.0)	(1.91)	(2.0)
Providence County (007)	(0)	(1.2)	(1.2)	(0)	(13.0)	(2.4)	(2.22)	(2.4)
Balance of Rhode Island	(0)	(1.3)	(1.3)	(0)	(8.1)	(2.3)	(1.99)	(2.3)
South Carolina (45)	(0)	(0.6)	(0.6)	(0)	(56.6)	(1.3)	(1.25)	(1.3)
South Dakota (46)	(0)	(0.6)	(0.6)	(0)	(16.0)	(2.0)	(2.05)	(2.0)
Tennessee (47)	(0)	(0.4)	(0.4)	(0)	(71.5)	(1.2)	(1.15)	(1.2)
Davidson County (037)	(0)	(0.5)	(0.5)	(0)	(13.1)	(2.1)	(2.15)	(2.1)
Shelby County (157)	(0)	(1.1)	(1.1)	(0)	(18.6)	(2.2)	(2.00)	(2.2)
Balance of Tennessee	(0)	(0.5)	(0.5)	(0)	(66.9)	(1.4)	(1.43)	(1.4)
Texas (48)	(0)	(0.3)	(0.3)	(0)	(212.1)	(0.8)	(0.85)	(0.8)
Bexar County (029)	(0)	(1.3)	(1.3)	(0)	(29.7)	(2.1)	(1.76)	(2.1)
Collin County (085)	(0)	(0.2)	(0.2)	(0)	(15.9)	(2.0)	(2.02)	(2.0)
Dallas County (113)	(0)	(1.7)	(1.7)	(0)	(40.0)	(2.3)	(1.65)	(2.3)
Denton County (121)	(0)	(0.8)	(0.8)	(0)	(13.9)	(2.1)	(2.11)	(2.1)
El Paso County (141)	(0)	(0.8)	(0.8)	(0)	(18.8)	(2.3)	(2.31)	(2.3)
Fort Bend County (157)	(0)	(0.8)	(0.8)	(0)	(12.6)	(2.2)	(2.15)	(2.2)
Harris County (201)	(0)	(0.4)	(0.4)	(0)	(60.4)	(1.4)	(1.45)	(1.4)
Hidalgo County (215)	(0)	(5.8)	(5.8)	(0)	(31.3)	(6.3)	(3.65)	(6.3)
Tarrant County (439)	(0)	(1.1)	(1.1)	(0)	(31.2)	(2.0)	(1.71)	(2.0)
Travis County (453)	(0)	(0.8)	(0.8)	(0)	(19.9)	(2.0)	(1.94)	(2.0)
Balance of Texas	(0)	(0.4)	(0.4)	(0)	(134.5)	(1.3)	(1.32)	(1.3)
Utah (49)	(0)	(1.6)	(1.6)	(0)	(38.9)	(2.1)	(1.44)	(2.1)
Salt Lake County (035)	(0)	(4.5)	(4.5)	(0)	(19.6)	(4.9)	(1.94)	(4.9)
Utah County (049)	(0)	(0.7)	(0.7)	(0)	(11.3)	(2.3)	(2.27)	(2.3)
Balance of Utah	(0)	(0.7)	(0.7)	(0)	(20.4)	(1.8)	(1.72)	(1.8)
Vermont (50)	(0)	(0.7)	(0.7)	(0)	(14.9)	(2.4)	(2.43)	(2.4)
Virginia (51)	(0)	(0.4)	(0.4)	(0)	(83.4)	(1.1)	(1.06)	(1.1)
Fairfax County (059)	(0)	(1.1)	(1.1)	(0)	(20.6)	(2.1)	(1.89)	(2.1)
Balance of Virginia	(0)	(0.5)	(0.5)	(0)	(90.6)	(1.3)	(1.34)	(1.3)
Washington (53)	(0)	(0.3)	(0.3)	(0)	(75.0)	(1.1)	(1.14)	(1.1)
King County (033)	(0)	(0.7)	(0.7)	(0)	(32.0)	(1.8)	(1.69)	(1.8)
Pierce County (053)	(0)	(1.4)	(1.4)	(0)	(15.9)	(2.4)	(2.07)	(2.4)
Snohomish County (061)	(0)	(1.2)	(1.2)	(0)	(14.7)	(2.3)	(2.11)	(2.3)
Balance of Washington	(0)	(0.5)	(0.5)	(0)	(48.9)	(1.5)	(1.52)	(1.5)
West Virginia (54)	(0)	(2.0)	(2.0)	(0)	(29.8)	(2.6)	(1.70)	(2.6)
Wisconsin (55)	(0)	(0.4)	(0.4)	(0)	(66.0)	(1.2)	(1.20)	(1.2)
Milwaukee County (079)	(0)	(0.7)	(0.7)	(0)	(18.5)	(2.1)	(2.02)	(2.1)
Balance of Wisconsin	(0)	(0.5)	(0.5)	(0)	(66.8)	(1.5)	(1.45)	(1.5)
Wyoming (56)	(0)	(0.7)	(0.7)	(0)	(12.6)	(2.3)	(2.31)	(2.3)

The rightmost four columns are an estimate of the root mean squared error. All other columns are an estimate of the standard error.

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Table B3: Measures of Uncertainty for Places

PLACE	Census Count (Thousands)	Correct (%)	Erroneous (%)	Whole Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
Alabama (01)	(0)	(0.8)	(0.8)	(0)	(58.1)	(1.4)	(1.24)	(1.4)
Alaska (02)	(0)	(0.9)	(0.9)	(0)	(13.8)	(2.3)	(2.22)	(2.3)
Arizona (04)	(0)	(0.4)	(0.4)	(0)	(73.9)	(1.2)	(1.19)	(1.2)
Phoenix city (55000)	(0)	(0.5)	(0.5)	(0)	(26.1)	(1.8)	(1.83)	(1.8)
Tucson city (77000)	(0)	(1.1)	(1.1)	(0)	(11.4)	(2.5)	(2.28)	(2.5)
Balance of Arizona	(0)	(0.6)	(0.6)	(0)	(63.3)	(1.5)	(1.48)	(1.5)
Arkansas (05)	(0)	(0.6)	(0.6)	(0)	(40.7)	(1.5)	(1.45)	(1.5)
California (06)	(0)	(0.1)	(0.1)	(0)	(265.6)	(0.7)	(0.73)	(0.7)
Los Angeles (44000)	(0)	(0.3)	(0.3)	(0)	(55.1)	(1.4)	(1.46)	(1.4)
San Diego city (66000)	(0)	(0.5)	(0.5)	(0)	(23.5)	(1.8)	(1.86)	(1.8)
San Francisco city (67000)	(0)	(1.6)	(1.6)	(0)	(16.1)	(2.5)	(2.06)	(2.5)
San Jose city (68000)	(0)	(1.3)	(1.3)	(0)	(18.3)	(2.2)	(1.94)	(2.2)
Balance of California	(0)	(0.2)	(0.2)	(0)	(331.7)	(1.1)	(1.11)	(1.1)
Colorado (08)	(0)	(0.4)	(0.4)	(0)	(59.9)	(1.2)	(1.23)	(1.2)
Denver city (20000)	(0)	(1.4)	(1.4)	(0)	(12.8)	(2.5)	(2.17)	(2.5)
Balance of Colorado	(0)	(0.4)	(0.4)	(0)	(62.4)	(1.4)	(1.45)	(1.4)
Connecticut (09)	(0)	(0.5)	(0.5)	(0)	(45.8)	(1.4)	(1.34)	(1.4)
Delaware (10)	(0)	(0.7)	(0.7)	(0)	(17.1)	(1.9)	(1.93)	(1.9)
District of Columbia (11)	(0)	(0.4)	(0.4)	(0)	(12.9)	(2.1)	(2.20)	(2.1)
Florida (12)	(0)	(0.4)	(0.4)	(0)	(160.3)	(0.9)	(0.86)	(0.9)
Jacksonville (35000)	(0)	(1.1)	(1.1)	(0)	(16.4)	(2.1)	(2.03)	(2.1)
Balance of Florida	(0)	(0.4)	(0.4)	(0)	(211.4)	(1.2)	(1.19)	(1.2)
Georgia (13)	(0)	(0.3)	(0.3)	(0)	(99.9)	(1.0)	(1.04)	(1.0)
Hawaii (15)	(0)	(0.5)	(0.5)	(0)	(27.2)	(2.0)	(2.08)	(2.0)
Idaho (16)	(0)	(0.6)	(0.6)	(0)	(26.1)	(1.7)	(1.70)	(1.7)
Illinois (17)	(0)	(0.4)	(0.4)	(0)	(126.1)	(1.1)	(1.02)	(1.1)
Chicago city (14000)	(0)	(0.9)	(0.9)	(0)	(48.8)	(1.9)	(1.87)	(1.9)
Balance of Illinois	(0)	(0.5)	(0.5)	(0)	(128.5)	(1.3)	(1.31)	(1.3)
Indiana (18)	(0)	(0.5)	(0.5)	(0)	(71.1)	(1.2)	(1.14)	(1.2)
Indianapolis city (36003)	(0)	(0.4)	(0.4)	(0)	(16.4)	(2.0)	(2.07)	(2.0)
Balance of Indiana	(0)	(0.6)	(0.6)	(0)	(76.1)	(1.5)	(1.40)	(1.5)
Iowa (19)	(0)	(0.4)	(0.4)	(0)	(41.4)	(1.4)	(1.41)	(1.4)
Kansas (20)	(0)	(0.7)	(0.7)	(0)	(39.3)	(1.5)	(1.44)	(1.5)
Kentucky (21)	(0)	(0.5)	(0.5)	(0)	(53.6)	(1.3)	(1.28)	(1.3)
Louisville/Jefferson County (48006)	(0)	(0.8)	(0.8)	(0)	(12.8)	(2.2)	(2.17)	(2.2)
Balance of Kentucky	(0)	(0.6)	(0.6)	(0)	(53.8)	(1.5)	(1.49)	(1.5)
Louisiana (22)	(0)	(0.5)	(0.5)	(0)	(57.2)	(1.3)	(1.31)	(1.3)

The rightmost four columns are an estimate of the root mean squared error. All other columns are an estimate of the standard error.

PLACE	Census Count (Thousands)	Correct (%)	Erroneous (%)	Whole Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
Maine (23)	(0)	(0.6)	(0.6)	(0)	(26.0)	(2.0)	(1.99)	(2.0)
Maryland (24)	(0)	(0.5)	(0.5)	(0)	(68.6)	(1.2)	(1.19)	(1.2)
Baltimore (04000)	(0)	(3.4)	(3.4)	(0)	(13.8)	(3.9)	(2.22)	(3.9)
Balance of Maryland	(0)	(0.4)	(0.4)	(0)	(72.5)	(1.4)	(1.42)	(1.4)
Massachusetts (25)	(0)	(0.8)	(0.8)	(0)	(72.0)	(1.4)	(1.15)	(1.4)
Boston city (07000)	(0)	(5.8)	(5.8)	(0)	(12.9)	(6.2)	(2.32)	(6.2)
Balance of Massachusetts	(0)	(0.6)	(0.6)	(0)	(79.5)	(1.5)	(1.40)	(1.5)
Michigan (26)	(0)	(0.4)	(0.4)	(0)	(97.7)	(1.0)	(1.02)	(1.0)
Detroit city (22000)	(0)	(0.7)	(0.7)	(0)	(16.3)	(2.3)	(2.32)	(2.3)
Balance of Michigan	(0)	(0.4)	(0.4)	(0)	(116.2)	(1.3)	(1.32)	(1.3)
Minnesota (27)	(0)	(1.2)	(1.2)	(0)	(61.5)	(1.7)	(1.20)	(1.7)
Mississippi (28)	(0)	(1.1)	(1.1)	(0)	(41.8)	(1.7)	(1.45)	(1.7)
Missouri (29)	(0)	(0.5)	(0.5)	(0)	(68.2)	(1.2)	(1.19)	(1.2)
Montana (30)	(0)	(0.5)	(0.5)	(0)	(19.0)	(1.9)	(2.01)	(1.9)
Nebraska (31)	(0)	(0.3)	(0.3)	(0)	(28.3)	(1.6)	(1.61)	(1.6)
Nevada (32)	(0)	(0.3)	(0.3)	(0)	(38.8)	(1.4)	(1.46)	(1.4)
Las Vegas city (40000)	(0)	(0.5)	(0.5)	(0)	(12.6)	(2.1)	(2.20)	(2.1)
Balance of Nevada	(0)	(0.4)	(0.4)	(0)	(33.5)	(1.5)	(1.60)	(1.5)
New Hampshire (33)	(0)	(0.8)	(0.8)	(0)	(26.8)	(2.1)	(2.07)	(2.1)
New Jersey (34)	(0)	(0.4)	(0.4)	(0)	(91.2)	(1.1)	(1.07)	(1.1)
New Mexico (35)	(0)	(0.7)	(0.7)	(0)	(31.8)	(1.6)	(1.58)	(1.6)
Albuquerque (02000)	(0)	(0.9)	(0.9)	(0)	(12.0)	(2.3)	(2.24)	(2.3)
Balance of New Mexico	(0)	(1.0)	(1.0)	(0)	(25.2)	(1.9)	(1.71)	(1.9)
New York (36)	(0)	(0.3)	(0.3)	(0)	(170.7)	(0.9)	(0.92)	(0.9)
New York (51000)	(0)	(0.5)	(0.5)	(0)	(110.0)	(1.4)	(1.42)	(1.4)
Balance of New York	(0)	(0.4)	(0.4)	(0)	(139.8)	(1.3)	(1.30)	(1.3)
North Carolina (37)	(0)	(0.7)	(0.7)	(0)	(96.2)	(1.2)	(1.03)	(1.2)
Charlotte city (12000)	(0)	(0.7)	(0.7)	(0)	(15.1)	(2.0)	(2.05)	(2.0)
Balance of North Carolina	(0)	(0.8)	(0.8)	(0)	(113.3)	(1.5)	(1.31)	(1.5)
North Dakota (38)	(0)	(0.7)	(0.7)	(0)	(14.1)	(2.2)	(2.17)	(2.2)
Ohio (39)	(0)	(0.3)	(0.3)	(0)	(110.2)	(1.0)	(1.00)	(1.0)
Columbus (18000)	(0)	(1.1)	(1.1)	(0)	(16.1)	(2.3)	(2.12)	(2.3)
Balance of Ohio	(0)	(0.3)	(0.3)	(0)	(133.9)	(1.3)	(1.30)	(1.3)
Oklahoma (40)	(0)	(0.8)	(0.8)	(0)	(49.9)	(1.5)	(1.40)	(1.5)
Oklahoma City (55000)	(0)	(1.3)	(1.3)	(0)	(12.5)	(2.4)	(2.19)	(2.4)
Balance of Oklahoma	(0)	(0.9)	(0.9)	(0)	(48.2)	(1.7)	(1.61)	(1.7)

The rightmost four columns are an estimate of the root mean squared error. All other columns are an estimate of the standard error.

Table B3 Continued: Measures of Uncertainty for Places

PLACE	Census Count (Thousands)	Correct (%)	Erroneous (%)	Whole Person Imputations (%)	Population Estimate (Thousands)	Correct (%)	Pct Undercount (%)	Omissions (%)
Oregon (41)	(0)	(0.5)	(0.5)	(0)	(49.6)	(1.4)	(1.32)	(1.4)
Portland (59000)	(0)	(1.1)	(1.1)	(0)	(12.4)	(2.4)	(2.20)	(2.4)
Balance of Oregon	(0)	(0.6)	(0.6)	(0)	(48.4)	(1.6)	(1.52)	(1.6)
Pennsylvania (42)	(0)	(0.3)	(0.3)	(0)	(119.8)	(1.0)	(0.97)	(1.0)
Philadelphia (60000)	(0)	(0.9)	(0.9)	(0)	(27.5)	(2.0)	(1.90)	(2.0)
Balance of Pennsylvania	(0)	(0.3)	(0.3)	(0)	(140.6)	(1.3)	(1.29)	(1.3)
Rhode Island (44)	(0)	(0.9)	(0.9)	(0)	(19.0)	(2.0)	(1.91)	(2.0)
South Carolina (45)	(0)	(0.6)	(0.6)	(0)	(56.6)	(1.3)	(1.25)	(1.3)
South Dakota (46)	(0)	(0.6)	(0.6)	(0)	(16.0)	(2.0)	(2.05)	(2.0)
Tennessee (47)	(0)	(0.4)	(0.4)	(0)	(71.5)	(1.2)	(1.15)	(1.2)
Memphis city (48000)	(0)	(1.6)	(1.6)	(0)	(14.3)	(2.6)	(2.21)	(2.6)
Nashville-Davidson metropolitan (52006)	(0)	(0.5)	(0.5)	(0)	(12.7)	(2.1)	(2.17)	(2.1)
Balance of Tennessee	(0)	(0.5)	(0.5)	(0)	(70.6)	(1.4)	(1.42)	(1.4)
Texas (48)	(0)	(0.3)	(0.3)	(0)	(212.1)	(0.8)	(0.85)	(0.8)
Austin city (05000)	(0)	(1.0)	(1.0)	(0)	(16.4)	(2.2)	(2.06)	(2.2)
Dallas city (19000)	(0)	(3.2)	(3.2)	(0)	(24.2)	(3.6)	(1.95)	(3.6)
El Paso city (24000)	(0)	(0.9)	(0.9)	(0)	(14.1)	(2.2)	(2.20)	(2.2)
Fort Worth (27000)	(0)	(2.4)	(2.4)	(0)	(15.3)	(3.1)	(2.06)	(3.1)
Houston (35000)	(0)	(0.7)	(0.7)	(0)	(36.3)	(1.7)	(1.68)	(1.7)
San Antonio (65000)	(0)	(1.6)	(1.6)	(0)	(24.5)	(2.4)	(1.87)	(2.4)
Balance of Texas	(0)	(0.2)	(0.2)	(0)	(221.9)	(1.2)	(1.22)	(1.2)
Utah (49)	(0)	(1.6)	(1.6)	(0)	(38.9)	(2.1)	(1.44)	(2.1)
Vermont (50)	(0)	(0.7)	(0.7)	(0)	(14.9)	(2.4)	(2.43)	(2.4)
Virginia (51)	(0)	(0.4)	(0.4)	(0)	(83.4)	(1.1)	(1.06)	(1.1)
Washington (53)	(0)	(0.3)	(0.3)	(0)	(75.0)	(1.1)	(1.14)	(1.1)
Seattle (63000)	(0)	(0.4)	(0.4)	(0)	(12.8)	(2.2)	(2.18)	(2.2)
Balance of Washington	(0)	(0.4)	(0.4)	(0)	(83.3)	(1.4)	(1.39)	(1.4)
West Virginia (54)	(0)	(2.0)	(2.0)	(0)	(29.8)	(2.6)	(1.70)	(2.6)
Wisconsin (55)	(0)	(0.4)	(0.4)	(0)	(66.0)	(1.2)	(1.20)	(1.2)
Milwaukee city (53000)	(0)	(0.7)	(0.7)	(0)	(13.2)	(2.3)	(2.30)	(2.3)
Balance of Wisconsin	(0)	(0.5)	(0.5)	(0)	(70.9)	(1.5)	(1.43)	(1.5)
Wyoming (56)	(0)	(0.7)	(0.7)	(0)	(12.6)	(2.3)	(2.31)	(2.3)

The rightmost four columns are an estimate of the root mean squared error. All other columns are an estimate of the standard error.