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DSSD REVISED A.C.E. ESTIMATES MEMORANDUM SERIES PP- 2

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Subject:                    Revised Preliminary Estimates of Net Undercounts for Seven  
                                  Race/Ethnicity Groupings

This memorandum documents the Revised Preliminary Estimates of net undercounts for seven race/ethnicity groupings. Revised estimates of percent net undercount released in October, 2001 were only made for three groupings. To obtain estimates for seven groups, the same methodology was expanded to include finer race/ethnicity groups. We used the same assumptions here as were used in the October, 2001 revised estimates. For more information, see Thompson et al (2001).

The methodology approximated a revised percent net undercount by subtracting the percent of additional erroneous enumerations not detected by the Accuracy and Coverage Evaluation (A.C.E.) Survey from the original A.C.E. percent net undercount released in March, 2001. Fay (2001) estimated the additional erroneous enumerations by analyzing data from the Measurement Error Reinterview and Person Duplication study. This analysis accounted for the potential overlap between the two sources so the additional errors were not double counted. For more information, see Fay (2001) and Fay (2002).

The seven race/ethnicity groupings covered in this memorandum are:

- American Indian and Alaskan Native,
- Black or African American (not Hispanic),
- Hispanic Origin (of any race),
- Asian (not Hispanic) or Native Hawaiian and Pacific Islander (not Hispanic) together,
- Asian (not Hispanic) separately,
- Native Hawaiian and Pacific Islander (not Hispanic) separately,
- White (not Hispanic) or Some Other Race (not Hispanic).

The three race/ethnicity groupings used in the October, 2001 estimates were:

- Black or African American (not Hispanic),
- Hispanic Origin (of any race),
- Other.

The Other grouping in the October, 2001 estimates included all of the following:

- White (not Hispanic),
- American Indian and Alaskan Native,
- Native Hawaiian and Pacific Islander (not Hispanic),
- Asian (not Hispanic),
- Some Other Race (not Hispanic).

The race and Hispanic categories in this memorandum are consistent with the race/ethnicity domains in A.C.E. These categories represent estimation groupings used in developing estimates based on the A.C.E. survey and do not conform with race and Hispanic categories that appeared in the redistricting files and other Census 2000 data products.

Table 1 shows seven estimates of percent net undercount for A.C.E. and preliminary revisions of these net undercounts. The A.C.E. estimates of undercount are consistent with those released in March, 2001 and given in Davis (2001). A negative net undercount estimate indicates a net overcount. The table shows that there may still be a differential net undercount. The revised estimates show Native Hawaiian and Pacific Islanders (not Hispanic) with a high percent net undercount (4.64) but it is not significant from zero (standard error = 2.79). The revised estimates show White and Some Other Race (not Hispanic) with a low percent overcount (-0.33) but it is not significant from zero (standard error = 0.21).

We are in the process of developing a methodology for revising the A.C.E. estimates. As such, these estimates are preliminary.

These preliminary estimates serve several purposes:

- to show that evaluation data indicates that a substantial revision of the Accuracy and Coverage Evaluation (A.C.E.) estimates is required,
- to explain that we now have a candidate explanation for the discrepancies between the A.C.E. estimates and demographic analysis, since that had been the key basis of the March, 2001 Executive Steering Committee on Accuracy and Coverage Evaluation Policy (ESCAP) recommendation and
- to show that, in spite of this finding, we expect a revised A.C.E. to continue to show a differential net undercount.

**Table 1: Estimates of Percent Net Undercount: A.C.E. (March, 2001) and Revised Preliminary**

Race/Ethnicity Grouping	A.C.E. (March, 2001)		Revised Preliminary	
	Estimate	Standard Error	Estimate	Standard Error
Black or African American	2.17	0.35	0.78	0.45
Hispanic Origin	2.85	0.38	1.25	0.54
Asian and Pacific Islander	1.17	0.65	-0.06	0.90
Asian (not Hispanic)	0.96	0.64	-0.31	0.91
Native Hawaiian and Other Pacific Islander (not Hispanic)	4.60	2.77	4.64	2.79
American Indian and Alaskan Native	3.66	1.03	3.44	1.60
White or Some Other Race (not Hispanic)	0.67	0.14	-0.33	0.21
<b>Total</b>	<b>1.18</b>	<b>0.13</b>	<b>0.06</b>	<b>0.18</b>

**NOTES:**

- The A.C.E. estimates released in March, 2001 were shown to be flawed and are included here for comparison purposes.
- A negative estimate indicates an overcount.
- The race and Hispanic categories shown on this table represent estimation groupings used in developing estimates based on the A.C.E. Survey and do not conform with race and Hispanic categories that appeared in the redistricting (P.L. 94-171) files and other Census 2000 data products. For a complete description of the estimation groups, see DSSD Memorandum Q-37 which will be provided on request.
- In general, American Indians and Alaska Natives (AIAN) are included in that category, regardless of whether they marked another race or are Hispanic. A few exceptions apply, especially for those who do not live on a reservation, on trust lands, or in an AIAN statistical area.
- Similarly, Native Hawaiians and Other Pacific Islanders (NHPI) generally are included in that category unless they lived outside of Hawaii and marked more than one race or marked Hispanic.
- Hispanics are mostly in that category, unless they marked AIAN and lived on a reservation, on trust lands, or in an AIAN statistical area or marked NHPI and lived in Hawaii.
- People who marked Black or African American are generally in that category unless they fell in the categories described above; similarly those who marked Asian are generally in that category, unless they fell in the categories described above.
- The final category includes most people who marked only White or only Some Other Race or marked three or more races but did not fall into the categories described above. The White and Some Other Race group in this table is different than the Other group in the October, 2001 estimates.
- The data in this table contain sampling and non-sampling error. The Revised Preliminary estimates have high variances.

## References

Davis, Peter (2001), "Accuracy and Coverage Evaluation: Dual System Estimation Results," DSSD Census 2000 Procedures and Operations Memorandum Series B-9, February 28, 2001, U.S. Census Bureau.

Fay, Robert (2001), "Evidence of Additional Erroneous Enumerations from the Person Duplication Study," Executive Steering Committee on Accuracy and Coverage Evaluation Policy II, Report Number 9 (Preliminary), October 17, 2001, U.S. Census Bureau.

Fay, Robert (2002), "Evidence of Additional Erroneous Enumerations from the Person Duplication Study," Executive Steering Committee on Accuracy and Coverage Evaluation Policy II, Report Number 9 (Revision), March 27, 2002, U.S. Census Bureau.

Thompson, John; Waite, Preston and Fay, Robert, (2001), 'Basis of "Revised Early Approximation" of Undercounts Released October 17, 2001,' Executive Steering Committee on Accuracy and Coverage Evaluation Policy II, Report Number 9a, October 26, 2001, U.S. Census Bureau.

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