## EXTENDED ABSTRACT for the 2006 Population Association of America Conference:

Level of Participation in the Census Bureau's 2004 Overseas Enumeration Test

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Congressional and stakeholder interest in changing the way overseas Americans are considered in the decennial census prompted the U.S. Census Bureau to design and conduct the 2004 Overseas Enumeration (OE) Test. The OE Test was designed to obtain initial information on the feasibility of enumerating all Americans living overseas in the 2010 Census. The OE Test solicited response from U.S. citizens living in France, Kuwait, and Mexico, along with their families.

The Census Bureau designed the OE Test without knowing whether Congress would want to use the 2010 results for apportionment, redistricting, federal funds distribution, or for other purposes. Accordingly, the OE Test was designed as a first step to collect basic information regarding the feasibility, quality, and cost of collecting data from U.S. citizens living overseas.

The Census Bureau has traditionally evaluated decennial censuses with measurements of coverage, often using a follow-up survey for comparison with census counts. Such a post-enumeration survey was infeasible in the 2004 OE Test, and it was impossible to obtain a measurement of coverage that was comparable to the traditional measurement standards of the Census Bureau. For example, we cannot compute confidence intervals or other statistically valid error measures.

The research objective of this study was to determine the level of participation from U.S. citizens overseas, where level is defined as the absolute number of people counted in the OE Test. Because the size and characteristics of the target population were obscure or unknown before the OE Test was conducted and it was not possible to measure the coverage of the test, we needed another mechanism to evaluate the participation level for each country in the OE Test.

In order to estimate the population of all Americans living overseas, we used administrative records as a basis for our comparisons. Our source of administrative records includes the Census Bureau's Statistical Administrative Records System (StARS), which is an administrative records database built from several national-level data files, including files from the Center for Medicare and Medicaid Services, Housing and Urban Development, Indian Health Services, Internal Revenue Service, Selective Service System, and Social Security Administration. Independent from StARS, we also used estimates from both the State Department and the Department of Defense.

Participation levels in each country were tabulated and compared with distributions of

demographic categories, including age, race, sex, and Hispanic origin, from administrative records. Our analysis aimed for a rudimentary sense of the participation level of the target population along with an assessment of its characteristics.

To accomplish this, we compared the overall enumeration counts with the administrative records estimates by county. We also compared participation levels for several demographic groups. For example, military and federal civilian counts were compared with Department of Defense records, the population 65 years-of-age and older was compared with Medicare records, and age, sex, race and Hispanic origin groups were compared with similar groups from administrative records.

Our analysis found that participation in the OE Test was lower than the numbers observed in StARS administrative records, and lower than estimates obtained from the State Department and the Department of Defense. While the administrative data are only estimates of the target population, they were substantially larger than counts observed in the OE Test.

In each of the three countries, France, Kuwait, and Mexico, a majority of participants in the OE Test were U.S. Citizens, 78.0 percent, 83.7 percent, and 78.4 percent, respectively. We also found that the majority were not serving on active duty, nor were they employed by the U.S. government. However, the methodology used in the test did not incorporate any special efforts to find and include Department of Defense personnel stationed overseas. The OE Test appears to have largely missed this population, especially in Kuwait.

Our analysis using the statistical chi-square goodness of fit test showed that the demographic distributions were significantly different between the OE Test data and StARS data. However, the graphical comparisons indicated that the general trends and patterns in the OE Test data were similar to those found in administrative records data. We conclude that while the participation level of the OE Test was much lower than estimates found in administrative records, the demographic characteristics of participants were similar.