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Re: Differences Between the 2009 and 2007 Homeless Counts

There are four possible explanations for the 25,914 person count differences between the 2009 Greater Los Angeles Homeless Count (HC09) and the 2007 Greater Los Angeles Homeless Count (HC07). Differences might be attributable to the sampling approaches, estimation approaches, measurement approaches, or a real reduction in the homeless population.

The greatest reduction in homeless counts between 2009 and 2007 came from the unsheltered street count (HC09 17,750 - HC07 35,333 = -17,583). In terms of magnitude, the hidden homeless estimate from the telephone survey (HC09 9,968 - HC07 20,746 = -10,778) was next, followed by the youth count (HC09 926 - HC07 1087 = -161) and a positive gain in the sheltered homeless count (HC09 14,050 - HC07 11,442 = +2608).

Sampling Approaches

It is highly unlikely that the approach to sampling is the primary reason for the differences in estimated street counts since comparably designed probability samples of census tracts (CTs) were used for both counts. In 2007, 505 of the roughly 1,900 CTs in the LAHSA Continuum of Care were randomly sampled from strata that were based on Service Planning Area (SPA) and hotspot/non-hotspot designations. Hotspots were sampled with certainty and non-hotspots were disproportionately sampled among SPAs. In 2009, a somewhat larger sample of 647 CTs was randomly chosen with stratification once again by SPA and hotspot/non-hotspot designations with hotspot CTs being sampled at a disproportionately higher rate than non-hotspot CTs. Additional features of the HC09 sample of CTs were: (i) control of sample composition for opt-in cities, (ii) the use of statistically optimum (Neyman) allocation in as many sampling strata as possible.

In terms of the hidden homeless telephone survey, both HC07 AND HC09 samples were probability-based list-assisted Random Digit Dial (RDD) samples. In HC09, we used a more sophisticated list of stratification variables based on consultations with HUD, ABT Associations and the Urban Institute. In addition, we sampled four times as many households in HC09. Observed differences are due in large part to sampling error resulting from the extreme rarity of hidden homelessness.

Estimation Approaches

While somewhat different estimation approaches were used for the HC07 and HC09 street counts, these differences produce similar results with the same data and thus would not have been a major contributor to the observed street count differences. In 2007, the estimate street count was the sum of observed counts from the 505 sampled CTs and statistically imputed counts for the CTs that had not been selected in the sample. Imputation of non-sampled CTs was based on a predictive model involving the use of ancillary CT data such as median

household income, percent of dwellings vacant, and percent of land-use for residential purposes to actual counts. In 2009, conventional extrapolation methods were used to produce estimated street counts based solely on observed counts from the sampled CTs. Extrapolation here took into account how the sample was drawn (i.e., probability of selection and stratification).

Direct evidence of the similarity of the two estimation approaches was produced by obtaining the observed HC07 street counts for the 505 sampled CTs and applying the HC09 estimation approach to these counts. The resulting estimated street count was 36,021, which was slightly higher than the estimated street count of 35,333 that was published following the HC07 estimation approach. Thus, the predictive imputation (HC07) and extrapolation (HC09) approaches when applied to the same (HC07) data produced very similar estimated counts.

Measurement Approaches

It is not completely clear what effect changes in the measurement protocol might have had on the estimated street counts for the HC07 and HC09. Components of this protocol may be important since who obtains the counts of street homeless in the sample of CTs, what they are trained to do in completing the counts, how they are trained to do so, and how the quality of their work is monitored will all affect the raw counts and thus the estimated street counts from the sample. One piece of evidence involving a comparison of the observed counts in CTs that were in both the HC07 and HC09 samples, suggests that a closer examination of the two measurement protocols might enable us to better understand the reasons for the reported difference in the 2007 and 2009 estimated street counts.

By chance alone, 185 CTs were in both of the HC07 and HC09 samples. Comparing the HC07 and HC09 field counts in these overlapping CTs we generally found the HC07 field counts to be greater (i.e., 1,075 more raw homeless counts in HC07). Even though the differences between HC07 and HC09 were evenly split among the tracts (i.e., 92 tracts were negative or larger in 2007, one overlapping tract had no change, and 92 tracts were positive or smaller in 2007), the amount of negative change in HC09 was substantial. Specifically, the reduction seen in HC09 amongst the overlapping tracts was -2604 (avg = -28) with the three largest tracts yielding losses as great as -351, -241 and -209. Among the tracts which gained counts, the total was only +1529 (avg= +16) and the three largest tracts were +172, +132 and +115. This suggests two possibilities: (i) the methods used to count the homeless differed significantly between the two counts, or (ii) the differences are real. Since UNC was not responsible for conducting the street counts and cannot offer detailed comparisons of the field procedures for measurement, we cannot comment directly on the possible role of measurement approaches in explaining street count differences. We can say that nothing we have read about the HC07 counting procedures departs significantly from the HC09 documentation.

Real Differences

Assuming that differences in the estimated counts for HC07 and HC09 are not attributable to the three possibilities just discussed, the only other possible conclusion is that the realized difference in these two estimated counts is a reflection of real reduction in the size of the number of street homeless in the LAHSA Continuum of Care.

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