

Department of International Health and Development



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Murder rates in New Orleans 2007

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Abstract:

The minimum murder rate for New Orleans during 2007 is calculated using voter turnout numbers from the fall 2007 and fall 2003 elections and extrapolation from earlier census counts to estimate maximum plausible levels of population size in New Orleans during 2007. The lowest plausible murder rate for 2007 was either 81.1 per 100,000 population or 76.4 per 100,000, depending upon which base 2006 mid-year population is used as a starting point to calculate the mid-year 2007 population.

Compared to a murder rate of 72.5 for 2006, a rate based upon the Census mid-year population estimate for 2006 and a rate widely cited by local officials; the murder rate for 2007 was higher than that in 2006 by at least 5%. The 2007 murder rate is higher than that in 2004 (the last year before Katrina) by at least 34%.

Background and Introduction:

Calculations of the murder rate for New Orleans for 2006 by the author (VanLandingham 2007) conclude that the best data available translate the 162 recorded homicides into a 2006 murder rate of 96.6 per 100,000, a record high. An alternative measure of 72.5 can be calculated using the Census Bureau's 2006 mid-year population estimate of 223,388 for the city. This Census Bureau population estimate for mid-year 2006 is at odds with all of the other systematic and well-documented estimates undertaken during 2006, including estimates by the Louisiana Recovery Authority (LRA 2006) and Rand (McCarthy et al. 2006). It is also at odds with estimates based upon the national change of address database, which resulted in an estimate of 171,000 for June 2006 (Times Picayune 2006). All of the above – excluding Census' 223,388 figure - imply a mid-year 2006 New Orleans population of about 175,000. Murder rates employing the Census Bureau estimate are also unable to take into account unsteady rates of re-population that occurred during 2006, which the estimate cited above (VanLandingham 2007) does. Similarly well-documented population estimates for 2007 are unfortunately not available, but using voter turnout in the fall 2007 and 2003 elections alongside population extrapolations provide an upper bound to population size in New Orleans in the fall and summer of 2007 and a lower-bound for the 2007 murder rate.

Data and Methods:

Election turnout in New Orleans on Oct 3, 2003 was 121,841. By forward projection from the official July 1, 2003 Census estimate, the city's population on Oct 3, 2003 was 467,332 . Election turnout in New Orleans on Oct 20, 2007 was 75,880 . If one assumes that turnout was the same in both elections, this leads to a maximum New Orleans population of 291,045 on October 20, 2007. By backwards projection using the growth rate implied by this (291,045) figure and the Census estimate of July 1, 2006 (employed here to eventually provide the lowest plausible or most conservative measure of the murder rate), this gives a maximum (highest plausible) estimate of 273,382 for New Orleans' mid-year population in 2007. Alternatively, if one employs the consensus estimate of 175,000 for New Orleans' mid-year population in 2006 for the calculation, it results in a maximum (highest plausible) population estimate of 258,036 for New Orleans' mid-year population in 2007.

The minimum (lowest plausible) murder rate is obtained simply by dividing the number of recorded homicides committed in New Orleans during 2006 (209) by the mid-year population count.

These 2007 population figures should be considered upper-bound estimates for the following reasons. The 2007 election took place on a day with perfect weather, with the significance of the election outcomes never greater, and with substantial recent demographic shifts in the city towards groups who are more likely to vote (compared to 2003). Other research has shown that voter turnout rates in smaller entities (countries, in this case) are higher than in larger entities (Blais and Dobrzynska 1998), although the effects are small. Thus, it is virtually certain that turnout in 2007 was in fact higher than it was in 2003, and so these population figures based on the assumption of "no difference in turnout" result in the highest plausible population figures for 2007; and the resulting murder rate is the lowest plausible. In other words, the true population size is most likely to be lower and the true murder rate is most likely to be higher.

It should also be noted that by employing the (high) Census mid-year 2006 estimate in the calculations results in a substantially higher mid-year 2007 population base for the murder rate, and thus a lower murder rate.

Results:

The 209 recorded homicides and these two estimates for maximum population size for New Orleans at mid-year 2007 result in two alternative minimum murder rates for 2007. If one accepts the consensus estimate of approximately 175,000 for the mid-year 2006 population and extrapolates to 2007 from there, the resulting minimum murder rate in New Orleans during 2007 is 81.0 per 100,000.

If one accepts the Census Bureau's 2006 mid-year population estimate of 223,388 and extrapolates to 2007 from there, the resulting minimum murder rate in New Orleans during 2007 is 76.4 per 100,000.

If one also accepts the low figure of 72.5 for the 2006 murder rate, based upon the Census mid-year population estimate of 223,388 and a murder count of 162 – and a rate widely cited by local authorities; this means that New Orleans' murder rate in 2007 was higher than that in 2006 by no less than 5%; and higher than that in 2004 (the last year before Katrina) by no less than 34%.

Conclusions:

This 2007 murder rate minimum estimate for New Orleans tells us that based on the best data available for 2007 and on assumptions that lead to the lowest possible plausible murder rate, the murder rate for 2007 remains stubbornly elevated at extraordinarily high levels since Hurricane Katrina, and has yet to begin a decline to even pre-storm levels, which were very high in the first place.

New Orleans urgently needs a nationally-recognized and independent organization to work collaboratively with the Census Bureau to provide the city with reliable measures of population size and composition on a regular basis – at least once every six months - over the next several years. Reliable population measures are required for accurately assessing murder trends and a wide range of other phenomena affecting post-Katrina New Orleans.

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