

Methods for the Intercensal 1990-2000 Alaska Population Estimates (Vintage 2012)

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Introduction

The Alaska Department of Labor and Workforce Development, Research and Analysis Section (AKDOL), has produced “intercensal” 1990-2000 population estimates by age, sex, race, and Hispanic origin for Alaska and its boroughs/census areas. These intercensal estimates are distinct from other estimates products in that they take into account information from both the 1990 and 2000 Censuses to improve the time series of annual numbers back to 1990. All of these intercensal estimates are consistent with 2000 Census geography.

Population Estimates by Age, Sex, Bridged Race and Hispanic Origin

Production of the intercensal 1990-2000 age, sex, race, and Hispanic origin estimates for Alaska and its boroughs/census areas began with the 1990-1999 total population estimates by borough/census area (vintage 1999) [1], which include adjustments to the April 1990 Census, as well as boundary changes through 1999. For 2000, total population numbers were taken from the 2000 Census [2], with adjustments added for known errors.

The age by sex by borough/census area estimates were based on a censal-ratio method [3], using ratios of the Census Bureau’s adjusted 1990 and 2000 Census populations by age, sex, and borough/census area to 1990 and 2000 Permanent Fund Dividend (PFD) applications (respectively) by age, sex, and borough/census area of applicant, with proportional adjustments to annual total population estimates by borough/census area. To account for changes in ratios of census counts to PFD applications between the 1990 and 2000 Censuses, the 1990 and 2000 ratios were linearly interpolated by age, sex, and borough/census area.^{1,2}

Race and Hispanic origin information was added to the estimates by proportionally adjusting National Center for Health Statistics 1990-2000 bridged race and Hispanic origin data by age, sex, and borough/census [4] to match the developed 1990-2000 age, sex, borough/census area estimates.

¹ Due to changes to the length of the PFD application period, estimates for 0 to 4 year olds utilize 1990 Census to PFD ratios for 1990 to 1992, 2000 Census to births ratios for 1993, and 2000 Census to PFD ratios for 1994 to 1999.

²The group quarters populations in Aleutians West Census Area and Bristol Bay Borough declined after 1993. To account for this, 1990 Census to PFD ratios were used for the 1991 to 1993 estimates, and 2000 Census to PFD ratios were used for the 1994 to 1999 data.

References

[1] Alaska Department of Labor and Workforce Development (2000). *Alaska Population Overview: 1999 Estimates*. Available from: <http://laborstats.alaska.gov/pop/estimates/pub/99popover.pdf> as of April 16, 2013.

[2] U.S. Census Bureau. Census of Population and Housing, 2000. Available from: <http://www.census.gov/prod/www/decennial.html> as of April 16, 2013.

[3] Swanson, D. and Siegel, J. (2004). *The Methods and Materials of Demography, Second Edition*. Elsevier Science and Technology Books.

[4] National Center for Health Statistics. Bridged-Race Population Estimates, United States July 1st resident population by state, county, age, sex, bridged-race, and Hispanic origin, on CDC WONDER Online Database. Available from: http://www.cdc.gov/nchs/nvss/bridged_race.htm as of April 16, 2013.