Population Estimates for Estimating Suicide Death Rates

0fficial estimates of the II-IS service population (those persons living on or near reservations or in urban settings where IHS has facilities) by age and gender are currently not available. Therefore population estimates used to calculate rates for this report should be considered as ''unofficial.

Two methods for estimating the IHS adolescent service population were considered. The first method, which was used for this report, uses the following calculations:

- The age and sex distribution for adolescents from the 1980 census data on the reservation states population was applied to the 1980 estimated service population (those living on or near reservations) to obtain a count of 10-14 and 15-19 year olds. (No count of the actual 1980 service population is available.)
- Five year age cohorts for the ages 5-9 (to be used for step #3), 10-14, and 15-19 were calculated for males and females using the age and gender distribution for reservation states in 1980. Each five year cohort was divided by five to obtain single year age estimates. Also, for step #3, estimates of 4 year old males and females were calculated for 1980.
- For the years 1981 through 1986, the population was "aged" forward by one-year. Thus, 1O-year olds in

1980 became 11 year olds in 1981 and so forth. Since mortality data for the IHS service population is available by single year of age and gender, deaths occurring in each single year age group were subtracted.

An alternative method would have been to calculate population estimates using the 1980 reservation states age and gender distribution and apply it against the total IHS service population estimates developed for the IHS chart series (355a). These estimates show that the overall IHS population is increasing by approximately 2 percent per year. However, using this technique would also imply that all age groups are growing at an even rate when, in fact, this is not the case. The increase in the IHS service population is occurring primarily through increased births and decreased deaths in the older age cohorts. If this method for calculating the adolescent population were used in computing either age-specific death or fertility rates, those data would show artificially sharp declines (due to increases in population versus a decrease in the absolute number of events) in comparison to other adolescent populations.

Tables B-1 and B-2 show a comparison of the results for the two population estimation methods.

Table B-1-II-IS Service Area Population Estimates Using Method #1

	1980	f981	1982	1983	1984	1985	1986
females:							
10-14	45,665	45,150	44,637	44,134	43,633	43,167	43,305
15-19	49,725	46,864	48,012	47,169	46,340	45,522	45,017
Total	95,390	94,014	92,649	91,303	89,973	88,689	88,322
Males:							
10-14	47,155	46,511	45,862	45,226	44,575	43,949	44,174
15-19	50,535	49,728	48,962	48,233	47,555	46,969	46,310
Total	97,690	96,239	94,824	93,459	92,130	90,918	90,484

S0URCE: Office of Technology Assessment, 1990.

Table B-2—IHS Service Area Population Estimates Using Method #2

	1980	1981	1982	1983	1984	1985	1986
Females:							
10-14	**45,665**	**46,810**	**48,013**	**49,790**	**51,708**	**53,107**	**54,518**
15-19	**49,725**	**50,972**	**52,282**	**54,217**	**56,306**	**57,828**	**59,365**
Total	**95,390**	**97,288**	**100,295**	**100,407**	**108,014**	**110,935**	**113,883**
Males							
10-14	**47,007**	**48,186**	**49,424**	**51,253**	**53,228**	**54,668**	**56,120**
15-19	**50,537**	**51,804**	**53,135**	**55,102**	**57,225**	**58,773**	**60,334**
Total	**97,554**	**99,990**	**102,559**	**106,355**	**110,453**	**113,441**	**116,454**

SOURCE: Office of Technology Assessment, 1990.