

# Permanent Fund Dividends and Poverty in Alaska

Matthew Berman  
Random Reamey  
Institute of Social and Economic Research  
University of Alaska Anchorage  
3211 Providence Drive  
Anchorage, Alaska 99508

The authors gratefully acknowledge support for this research from the National Science Foundation, award #1216399, First Alaskans Institute, and the Alaska Children's Trust.

November 2016

All ISER publications are solely the work of the individual authors. This report and its findings should be attributed to the authors, not to ISER, the University of Alaska Anchorage, or the research sponsors.



## Introduction

The Alaska Permanent Fund is a sovereign wealth fund for the State of Alaska. State voters passed a constitutional amendment in 1976 to create the fund as a mechanism to save a portion of nonrenewable oil revenues for future public needs (Alaska Constitution, Article IX, Section 15). In 1980, the Alaska Legislature enacted the Permanent Fund Dividend program to generate political support for conservative management of the fund, to increase the likelihood that the principal would be protected over time. Since 1982, the Permanent Fund Dividend (PFD) program has distributed equal annual payments to residents unconditionally, regardless of need.<sup>1</sup>

The PFD program has unequivocally succeeded in its primary purpose. Investment earnings, along with annual contributions from oil revenues, enabled the Permanent Fund principal to grow to \$55 billion—approximately \$75,000 per resident—by September 2016. Royalties from oil production continue contributions to the principal. However, low current and projected state revenues due to declining oil production and low prices have forced state leaders to consider whether to start using Permanent Fund earnings for their original purpose: providing funds for state government operations. Diverting Permanent Fund earnings to state government operations would require substantially reducing or eliminating the PFD. It is therefore an appropriate time to consider what the PFD program has accomplished, beyond its success in protecting the principal, and lessons the program might offer for other jurisdictions managing sovereign wealth funds or considering establishing them.

The PFD represents a unique social experiment in providing "basic income" to an entire population.<sup>2</sup> Although there are many questions one could ask about the effects of the program, we focus this study on the effects of the PFD on alleviating poverty. In particular, we address three main questions about the effects on poverty:

1. What has been the overall effect of the PFD on poverty reduction in Alaska?
2. How have the PFDs affected poverty among different populations, such as Alaska Native people, older Alaskans, children, and rural Alaskans?
3. What would be the likely effect on Alaska poverty rates of reducing or eliminating the PFD?

Before considering effects of the PFD on poverty, it is important to consider how the size of the dividend has changed over time. Figure 1 shows the annual PFD amount since the program's inception in 1982, along with the percentage of per-capita personal income that it represented each year. The figure shows percentages under two definitions of income: the U.S. Census Bureau definition, which is based on self-reported

---

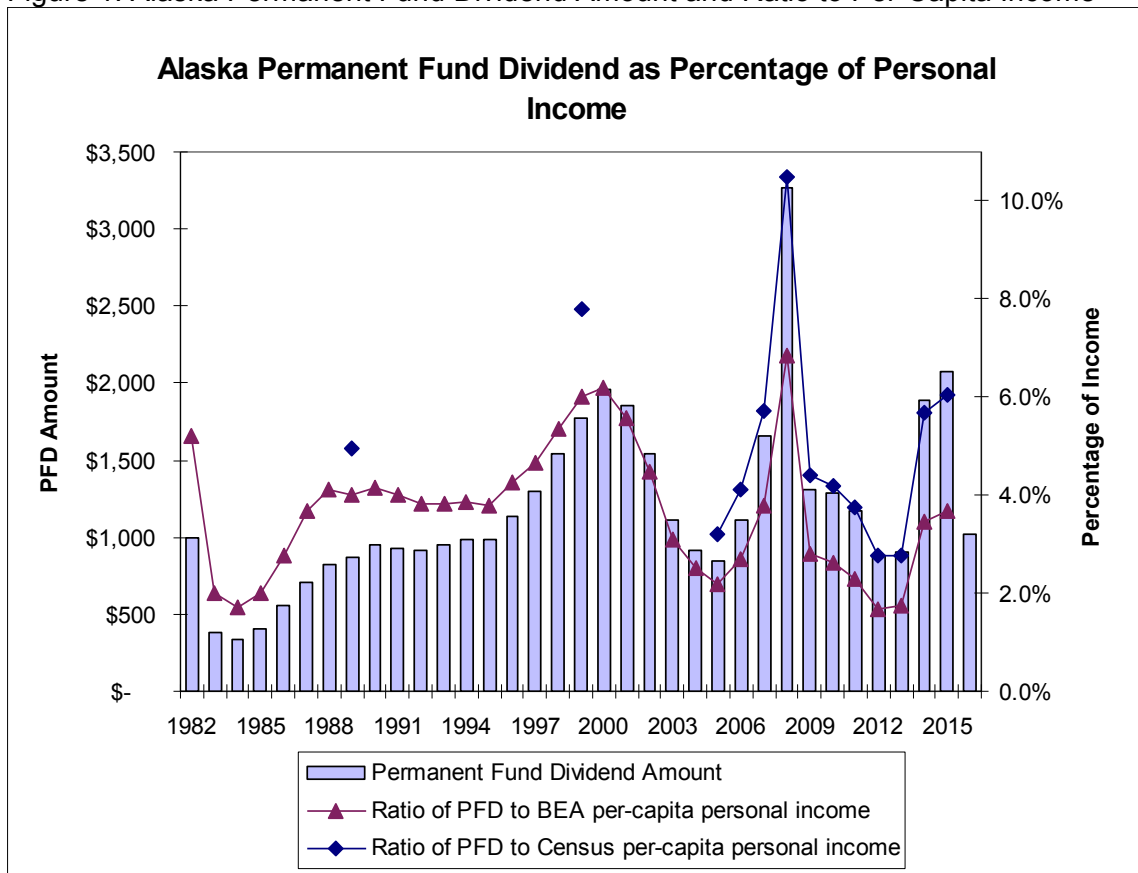
<sup>1</sup> Residence requirements have changed slightly over time (see <https://pfd.alaska.gov/Division-Info/Historical-Timeline>). Persons serving jail time or sentenced during the previous year for felony convictions are also ineligible. Current eligibility requirements are listed at <https://pfd.alaska.gov/Eligibility/Requirements>.

<sup>2</sup> The concept of basic income -- a periodic cash payment paid unconditionally to all individuals in a society -- has a long history dating back at least to Renaissance Europe. For a full account, see Vanderborght, Yannick & Van Parijs Philippe. 2005. *L'allocation universelle*, Paris: La Découverte.

cash income, and the Bureau of Economic Analysis definition, which includes in-kind receipts.

One-half the fund's earnings are reinvested to protect the principal from the effects of inflation, with the other half available for dividends. The formula for paying out dividends ties the annual amount on the average of fund earnings over the previous five years. Although the five-year average smoothes volatility of earnings somewhat, the annual PFD has nevertheless shown substantial variation from year to year. Over the long term, however, the Permanent Fund principal and its associated earnings have increased. But the number of residents and their incomes have increased as well—although income growth just kept up with inflation. Recent PFD payments, although generally larger than those in earlier years, have not increased as fast as inflation and therefore represented a smaller percentage of per-capita personal income than PFDs during much of the 1990s.

Figure 1. Alaska Permanent Fund Dividend Amount and Ratio to Per-Capita Income



Source: Appendix A, Table 1.

## Methods

Evaluating the effects of the Permanent Fund dividend on poverty in Alaska involves making estimates of income with and without the dividend for low-income Alaska households and comparing the estimates to a poverty threshold. This turns out to be more challenging than it might first seem, for a number of reasons. We first discuss the challenges that complicate the effort, then review data sources and the methods we applied to address these challenges.

### Challenges for Assessing the Role of the PFD in Reducing Poverty in Alaska

Assessing the effect of the PFD on poverty requires that we face three big challenges. First, we need an empirical measure that fairly represents what we mean by poverty. No statistical measure perfectly represents the social construct of poverty. Second, estimating the effect on poverty of changes in a component of income requires data on the distribution of income across households. Household-level data for a large enough sample of Alaskans to represent changes in income distribution are extremely limited. Third, one must be able to distinguish PFD income from other income in the household data that are available.

Statistical measures of poverty in the United States date back to the Johnson Administration's "War on Poverty" initiative in the mid 1960s.<sup>3</sup> The official definition of poverty used by the U.S. Census Bureau for reporting poverty rates is complex and imperfect. It is based on a family living together in one household. Poverty status refers to the ratio of family income to a threshold level that differs by household size, number of children in the household, and age of the household head. Different poverty thresholds exist for 47 different family configurations (see Table 1). Unmarried partners and children living in the household who are not related to the household head are not considered as family members in poverty calculations.

---

<sup>3</sup> The official definition of the poverty threshold in the United States was developed by the Social Security Administration to represent a proportion of the family income required to purchase a survey-based economy food plan. There have been only minor changes in the definition since 1969, other than to update the thresholds each year based on the percentage change in the Consumer Price Index. For more information, see Gordon M. Fisher, "The Development and History of the Poverty Thresholds," *Social Security Bulletin*, vol.55, no.4, Winter 1992, pp. 3-14.

Table 1. Poverty Thresholds for 2015 by Size of Family and Number of Related Children Under 18 Years

Size of family unit	Related children under 18 years								
	None	One	Two	Three	Four	Five	Six	Seven	Eight or more
One person (unrelated individual).....									
Under 65 years.....	12,331								
65 years and over.....	11,367								
Two people.....									
Householder under 65 years.....	15,871	16,337							
Householder 65 years and over.....	14,326	16,275							
Three people.....	18,540	19,078	19,096						
Four people.....	24,447	24,847	24,036	24,120					
Five people.....	29,482	29,911	28,995	28,286	27,853				
Six people.....	33,909	34,044	33,342	32,670	31,670	31,078			
Seven people.....	39,017	39,260	38,421	37,835	36,745	35,473	34,077		
Eight people.....	43,637	44,023	43,230	42,536	41,551	40,300	38,999	38,668	
Nine people or more.....	52,493	52,747	52,046	51,457	50,490	49,159	47,956	47,658	45,822

Source: U.S. Census Bureau.

Proctor, Bernadette D., Jessica L. Semega, and Melissa A. Kollar. 2016. *Income and Poverty in the United States: 2015*. U.S. Census Bureau, Current Population Reports, P60-256(RV), U.S. Government Printing Office, Washington, DC.

Poverty thresholds are adjusted every year for inflation in proportion to changes in the national Consumer Price Index. However, regional cost-of-living differences are ignored; the same poverty thresholds are applied to all areas of the United States. The cost of living in rural Alaska communities is typically much higher than in urban Alaska communities, but poverty thresholds are not adjusted. On the other hand, many rural Alaskans use local resources as important food sources, and this in-kind income is also not considered in the poverty calculation.

## Data sources

Household-level data for a representative sample of Alaskans that contain income and the detailed household characteristics needed to calculate poverty rates are extremely limited. The U.S. Census Bureau reports national poverty statistics using data from the Annual Social and Economic Supplement (ASEC) to the Current Population Survey (CPS). The Alaska sample for the CPS is relatively small—about 1,000 households per year—so poverty rates for the state derived from this source have a relatively high margin of error. Other large national surveys, such as the Consumer Expenditure Survey, have an even smaller Alaska sample.

Census data, collected since 2005 with the American Community Survey (ACS), provide household data for the largest sample of Alaskans. The ACS is an annual survey that currently targets about 8,000 Alaska households. Survey results include information on race, family relationships, and place of residence as well as income. Although national poverty rates are calculated from the CPS ASEC, the Census Bureau uses ACS results to estimate poverty rates for Alaska and other areas with smaller populations whose characteristics cannot be reliably estimated from CPS ASEC data.

The Census Bureau provides Public Use Microdata Samples (PUMS) for all these data sets. We obtained Alaska PUMS data sets from the Census Bureau for the 1990 and 2000 U.S. Census Long-Form Surveys well as for the ACS for all years available (2005 through 2015). The Census Long Form PUMS data represent a five percent sample of the population: 14,000 Alaska households in 2000 and 10,300 households in 1990. The ACS PUMS data sets represent much smaller sample sizes, ranging from 2,200 to 2,700 households per year. However, the combined ACS samples over a five-year period are similar in size to the Census Long Form data sets. We also examined the CPS ASEC data sets for the last seven years (2010 through 2016), available from the University of Minnesota Minnesota Population Center IPUMS data portal (<https://cps.ipums.org/>).<sup>4</sup> The data set for the CPS ASEC includes the entire Alaska sample, about 1,000 households per year.

To preserve anonymity of respondents, all these data sets report place of residence in highly aggregated geography. Census PUMS microdata areas (PUMAs) must have at least 100,000 residents as of the previous decennial census. The ACS currently has five PUMAs, with two of the five representing the Municipality of Anchorage. The rural Alaska region (PUMA 400) changed slightly as a result of the 2010 Census. To maintain consistency over time, we aggregated the PUMAs into three areas: Anchorage, other urban Alaska, and rural Alaska. The other urban Alaska region includes the Fairbanks

---

<sup>4</sup> Sarah Flood, Miriam King, Steven Ruggles, and J. Robert Warren. Integrated Public Use Microdata Series, Current Population Survey: Version 4.0. [Machine-readable database]. Minneapolis: University of Minnesota, 2015.

North Star, Mat-Su, Kenai Peninsula, Juneau, and Ketchikan Gateway Boroughs. The remainder of Alaska is included in the rural region. The CPS ASEC PUMS has even more limited geography, reporting only whether or not the residence is within the Anchorage Metropolitan Statistical Area (Anchorage plus Mat-Su Borough).

In addition to the PUMS data sets, we obtained the annual applicable poverty thresholds from the Census Bureau. We obtained annual PFD data, including the number of applications, number of dividends received, and the dividend amount, from the Alaska Permanent Fund Dividend Division.

### **Reporting of Alaska Permanent Fund Dividend income in Census Bureau data**

The ACS has some limitations for evaluating the effects of the PFD on poverty. The ACS calculates income as the sum of self-reported income over the previous 12 months in a number of categories. Because of survey timing and the wording of questions, people may forget to report their PFD income. The survey is conducted throughout the year. However, most interviews are completed before the PFD is paid out in October, so respondents would have to remember to report their previous year's dividend. In addition, no information about income is asked or recorded for children under age 15.

One should note that these potential issues with reporting of PFD income are not unique to the American Community Survey. Prior to the implementation of the ACS, the U.S. Census Bureau collected household social and economic data in the Decennial Census Long-Form Surveys. The income questions for the ACS are unchanged from the questions in the 1990 and 2000 Census Long-Form Surveys, when Alaskans also received PFD income. The Census Long-Form Survey was fielded in April and May of census years. The ASEC supplement to the Current Population Survey is conducted every March. As with the ACS and the Census Long Form, the CPS ASEC does not ask any questions specifically about the Alaska PFD, or ask for or record any information on income of children under age 15. Consequently, the reporting of PFD income in data from all these sources cannot be assumed to be accurate and must be investigated.

Since the PFD is not mentioned specifically in the questionnaire, Alaskans responding to the ACS might reasonably report the PFD in either one of the two categories of unearned income. One is interest, rent and dividends; the other is "other income," a category for all remaining income not reported elsewhere. Since the amount of the PFD each year is known, one may easily discern from inspection of individual records in the PUMS that most respondents who do report PFD receipts report them as "other income." The problem is that only about half of Alaska households responding to the ACS reported receiving any "other income." A relatively small percentage of households that did not report the PFD as "other income" appear to have reported PFD receipts in the "interest, rent, and dividends" category. Still, Alaska ACS results clearly under-report PFD income.

Table 2 shows a cross-tabulation of the percentage of households reporting the two types of unearned income in the most recent two years. In 2014 and 2015, just over half of respondents reported that at least one person in the household had "other income." About two-fifths reported that anyone had received interest, rent, and dividends. About thirty percent reported no one receiving any income of either type. Data from the Alaska Permanent Fund Dividend Division show that the number of Alaskans receiving PFD

payments annually exceeds 90 percent of the population. The percentages of households reporting interest, rent, and dividends, and reporting other income, varied somewhat from year to year—but the overall pattern remained unchanged across all the ACS years, extending back to the U.S. Census Long- Form Surveys for 1990 and 2000. Data from the Alaska CPS ASEC PUMS show even lower reported rates of interest, rent and dividends, and “other income” than in the ACS; only about one-third of CPS ASEC households have been reporting “other income.”

Table 2. Percent of Alaska households reporting unearned income in 2014 and 2015.

2014	No other income	Some other income	Total
No interest, rent, dividends	30%	31%	60%
Some interest, rent, dividends	22%	18%	40%
Total	51%	49%	100%

2015	No other income	Some other income	Total
No interest, rent, dividends	29%	29%	58%
Some interest, rent, dividends	23%	19%	42%
Total	52%	48%	100%

Source: Estimated from the American Community Survey Public Use Microdata Sample data

More troubling still is the fact that neither the ACS nor CPS ASEC asks any questions about income of children under 15 years old. Data for all income categories are recorded as missing for household members under 15, and total household income is equal to the sum of income reported for members age 15 and older. We asked Census Bureau staff how they addressed reporting of the Permanent Fund dividend in the ACS. The official response was that ACS survey staff were including PFD income in the ACS as “other income” when it was reported, and that parents should be including income of their children under 15 in their own income.<sup>5</sup>

One may test the hypothesis statistically that adults are reporting unearned income of children by correlating the amount of household income with the number of adults and children in the household. If parents are reporting income of children, then the household total “other income” should be positively correlated with the number of children in the household as well as the number of adults. We estimated linear regression equations to test this hypothesis for each year of the ACS and for the Census Long-Form Surveys in 1990 and 2000. We estimated separate equations for each year because the coefficients would be expected to vary with the annual PFD amount.

Table 3 shows an example of the regression results for one year: 2014. The first column of numbers in the table shows the coefficients for the equations for other income for all households, while the second equation includes only those households that reported

<sup>5</sup> Jeff Sisson, Assistant Division Chief, U.S. Census Bureau, American Community Survey Office. Personal communication, May 12, 2016.



some income in the “other” category. The third column shows the coefficients for interest, rent, and dividends. The 2013 PFD was \$900. The coefficients for adults—an adult is defined as a household member age 15 or older—are all somewhat larger, about \$1,200, and statistically significant ( $p < .005$ ). The coefficient for children in the other income equation is positive (but small) in the equation that includes all households, but effectively zero when only households that reported any “other income” are included. Adults with children are apparently more likely to report receiving some “other income.” However, the amount they received is not related to the number of children in the household, which it clearly would be if the children’s PFDs were being reported.

Table 3. Regression equations for how household unearned income varied with the number of children and adults in the household, Alaska respondents to the 2014 American Community Survey.

	Other income		Other income		Interest, rent,	
	All households		HH w. other inc.		and dividends	
Variable	Effect	p	Effect	p	Effect	p
Children under 15	\$ 211	0.03	\$ (3)	0.98	\$ (418)	0.06
Adults	\$ 1,216	0.00	\$ 1,282	0.00	\$ 1,126	0.00
Constant term	\$ (92)	0.68	\$ 1,772	0.00	\$ 1,154	0.02

Source: Estimated from the American Community Survey Public Use Microdata Sample data.

The coefficient for the number of children is negative in the interest, rent, and dividends equation. This appears to be related to the fact that households with young children are less likely to have any savings. When we added age of the respondent as an explanatory variable, the magnitude of the negative coefficient fell to near zero. Other years show nearly identical results as those for 2014. The only difference is that the coefficients for adults in the “other income” regressions change among years in line with annual changes in the size of the PFD. Coefficients for the number of children are always near zero or negative and statistically insignificant. Consequently, we find no evidence that ACS respondents are including their children’s PFDs—or indeed any unearned income of their children—in the income reported in the ACS. Similar equations estimated with the CPS ASEC PUMS data likewise showed no evidence of reporting of children’s unearned income in income of adults.

It is important to note that the non-reporting of income of children under 15 is not limited to the PFD and affects national income and poverty measures calculated from the Census Bureau data. However, the downward bias is almost certainly more acute in Alaska. In addition to the PFD, which nearly all Alaska children receive, Alaska Native corporations have been paying dividends to children. Some children have received shares through inheritance or gifts, and several corporations have enrolled descendants of the original beneficiaries. Table 4 shows annual dividends per 100 shares (the amount original ANCSA beneficiaries received) for the 12 regional corporations. As the table shows, many of the regional corporations have been paying substantial dividends. Even if a relatively small portion of children owned these shares, the larger dividend amounts could significantly affect poverty calculations for Alaska Native families.

Four of the regional corporations—Arctic Slope (ASRC), NANA, Doyon, and Sealaska—have enrolled descendants. ASRC and NANA award 100 shares at birth. Doyon awards 30 shares at birth and the remaining 70 at age 18. Sealaska awards 100 shares at age 18. A fifth regional corporation, Calista, has voted to enroll descendants starting in 2017. Figure 2 shows the payments to minor descendants from 2005-2014 for the three corporations that enrolled new shareholders at birth. Dividends to ASRC shareholders are particularly large: \$5,000 or more since 2007. It is likely that virtually no ASRC shareholders are actually living in poverty. But the poverty statistics will not reflect that fact, since neither the children’s PFDs nor their ANCSA corporation dividends are being recorded in the data used to calculate poverty rates.

Figure 2.

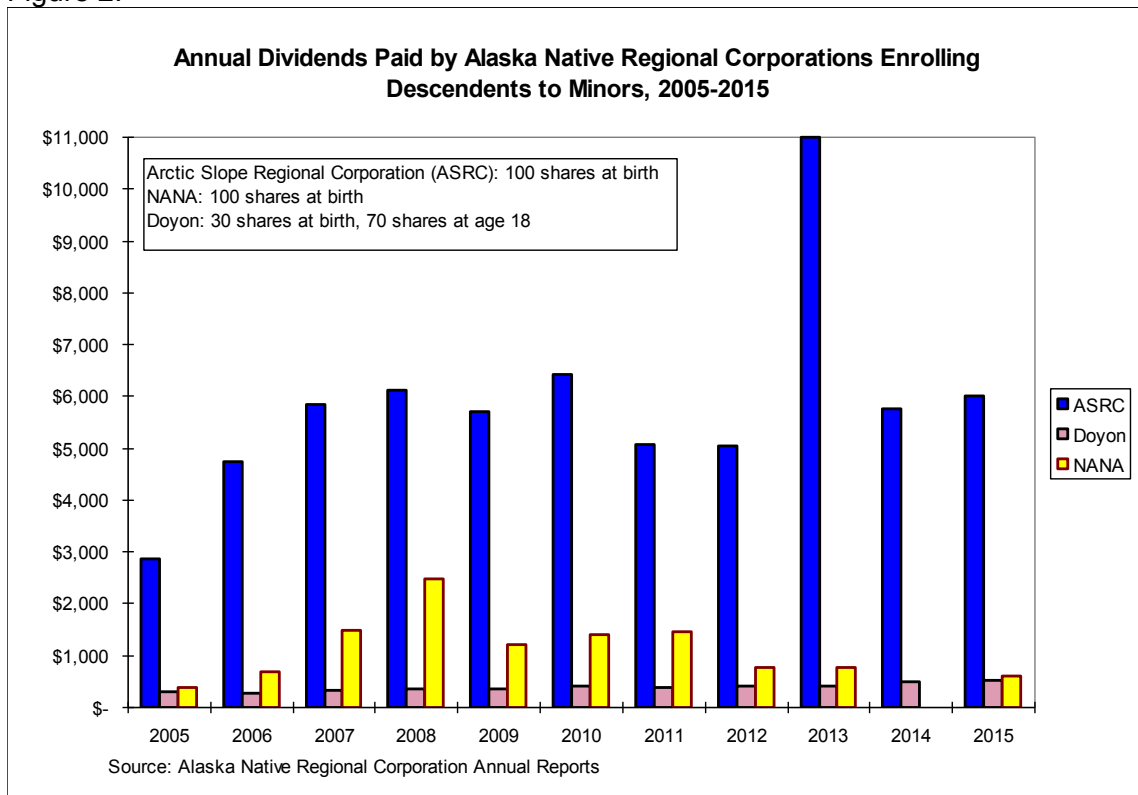


Table 4. Annual Dividends per 100 Shares Paid by Alaska Native Regional Corporations, 2005 - 2015

<i>Year</i>	<i>Ahtna</i>	<i>Aleut</i>	<i>ASRC</i>	<i>BSNC</i>	<i>BBNC</i>	<i>Calista</i>	<i>Chugach</i>	<i>CIRI</i>	<i>Doyon</i>	<i>Koniag</i>	<i>NANA</i>	<i>Sealaska</i>
2005	\$ 0	\$ 450	\$ 2,861	\$ 0	\$ 800	\$ 0	\$ 4,150	\$ 3,100	\$ 311	\$ 370	\$ 381	\$ 433
2006	0	500	4,741	0	860	0	4,640	3,100	275	118	700	602
2007	279	0	5,855	0	960	0	5,251	3,393	322	300	1,500	761
2008	279	560	6,110	100	1,100	178	5,030	3,539	356	600	2,475	432
2009	279	600	5,712	100	1,200	211	4,072	3,524	368	873	1,200	215
2010	400	2,100	6,426	150	1,280	262	4,192	3,542	421	1,000	1,400	356
2011	202	2,000	5,084	235	1,380	313	4,000	3,498	388	1,050	1,470	224
2012	353	500	5,038	235	2,200	342	4,000	3,537	415	1,065	772	221
2013	530	600	11,000	250	2,500	369	4,000	3,499	423	300	772	225
2014	442	700	5,750	300	2,700	519	4,000	3,506	495	300	0	136
2015	443	400	6,000	325	3,000	581	4,000	3,651	518	300	600	260

Source: Annual reports filed by Alaska Native Regional Corporations with the Alaska Division of Banking and Securities.

## Analysis steps

The information reported in the ACS PUMS is insufficient to be able to determine which households have missing ANCSA dividend income for children. However, it is possible to determine whether individuals, including children, were likely eligible to receive the PFD, with minor exceptions.<sup>6</sup> Data on the number of dividends paid out annually suggest that nearly all eligible individuals do receive dividends. We therefore used the information in the PUMS data to estimate PFD receipts and associated poverty rates with and without the dividend. The procedure included the following steps.

The first step was to calculate the ratio of family income to the poverty threshold for each individual in the ACS PUMS and the 1990 and 2000 Census Long-Form Surveys. Although the PUMS variables include a variable for the ratio of income to the poverty threshold, we reproduced the calculation to ensure that we could correctly calculate each individual's poverty status, given the reported incomes of household members and their reported family relationships. Using the applicable Census Bureau poverty definition for each year, and the age and relationship of each household member to the respondent, we calculated family income and the applicable ratio of income to the poverty threshold for each sample person in PUMS. We were able to replicate the reported ratio of income to poverty for each person within a small round-off error.<sup>7</sup>

The second step was to determine for which individuals PFD income had been reported, and then remove that income to estimate income without the PFD. To determine if PFD income had been reported, we checked whether either "other income" or interest, rent, and dividends was less than the current or previous year's PFD amount, whichever was smaller, rounded down to the nearest \$100. If neither category of unearned income achieved this threshold, we assumed that reported income did not include the PFD, and used reported income to estimate income without the PFD. If either "other income" or interest, rent, and dividends was equal to or greater than the PFD threshold amount, we assumed that PFD income might have been reported, and might need to be removed to calculate income without the PFD. Before deciding to remove PFD income from these individuals, we checked the response to the question about residence one year ago to determine if the previous year's place of residence was in Alaska and would therefore qualify the individual to receive the PFD. If the previous year's residence was in Alaska, we assumed that the person received a PFD, and that PFD income had to be removed to estimate income without the PFD.

To determine the amount of PFD income to remove, we first checked whether reported "other income" was between the amount of the previous year's PFD rounded down and the amount rounded up to the nearest \$100. If so, we removed the amount of "other income" reported. If the first test failed, we performed the same test using interest, rent, and dividends. If that test failed, too, we repeated the procedure using the current year's PFD amount. If that test also failed, but the amount of either "other income" or interest, rent, and dividends was nevertheless greater than the PFD threshold, we assumed that

---

<sup>6</sup> Some Alaska residents responding to the ACS may have reported living in Alaska the previous year, but were nevertheless out of state for more than 180 days during the previous year and therefore ineligible.

<sup>7</sup> Income and the poverty ratio in the PUMS are both rounded to protect anonymity of respondents. The PUMS reports a value of 501 when family income exceeds 500 percent of the poverty threshold.

the individual had received unearned income in addition to the PFD. In that case, we estimated income without the PFD by removing the amount of the previous year's PFD from reported income.

The third step in the analysis was to estimate individual income with the PFD. For all those individuals whose response to the previous place of residence indicated that they likely would have qualified to receive the PFD, we added the current year's PFD to the calculated income without PFD income. The calculated income with the PFD therefore differed from reported income for nearly all individuals, because it included the amount of the current year's PFD, which few respondents had yet received, rather than the previous year's amount. We decided this was a more accurate representation of the effect of the PFD, since the timing of the residence question corresponded closely to the timing of the application for the current rather than the previous year's PFD. Nearly all eligible respondents would be receiving the current year's PFD in October of the survey year.

For the final step of the analysis, we estimated family income with and without the PFD by adding the respective income amounts for related individuals as per the Census Bureau definition of family. We compared the estimated family income with and without PFD income to the applicable poverty threshold for that family for the survey year.

As an additional test, we also compared estimated family income with and without PFD income to the poverty threshold for a definition of family that included unmarried partners. To determine the poverty threshold applicable to this "social family" definition, we included as family members the unmarried partner and his or her children living in the household, regardless of whether they were recorded as related to the respondent. Including unmarried partners as family members could affect poverty status either way, depending on the amount of income partners earned relative to the number of their children from previous relationships currently living with them.<sup>8</sup>

---

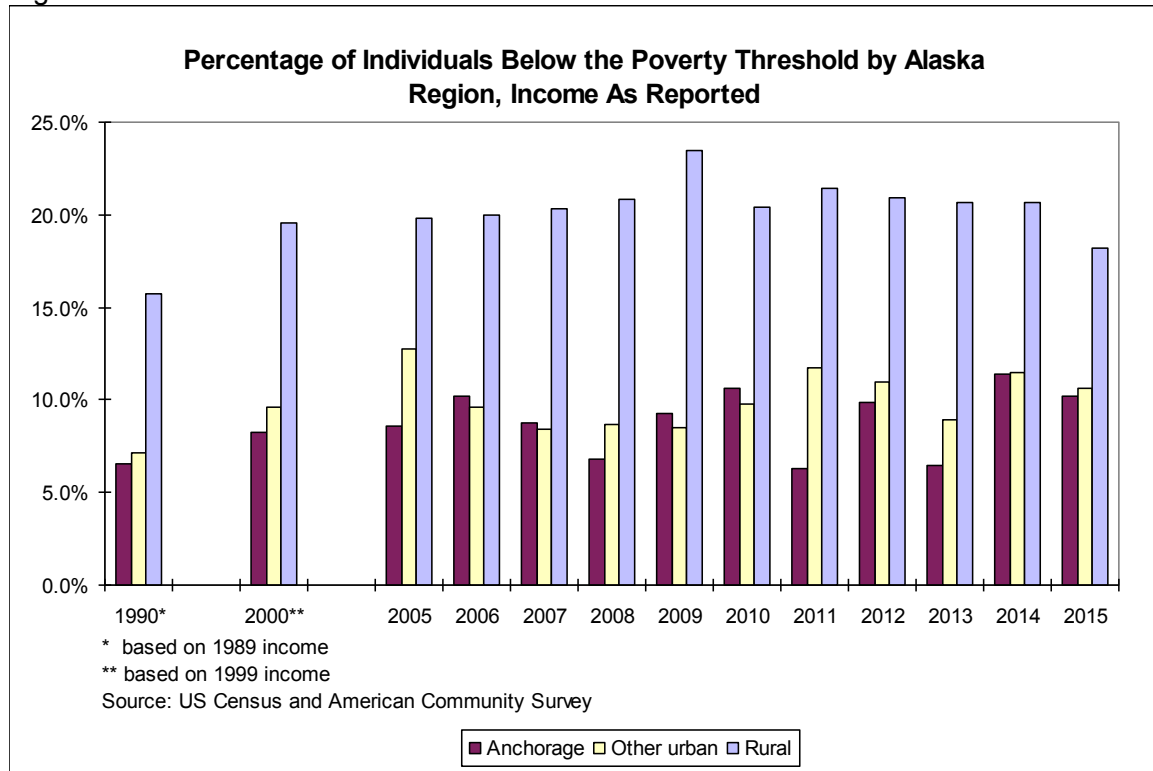
<sup>8</sup> It is interesting to note that the Census Bureau added in 2008 a new relationship type to the ACS questionnaire for "stepson or stepdaughter." Children in this new category were considered "related" for the definition of family for poverty calculations. Although it is not possible to determine how individual respondents reacted to this change, and the number of survey households in this category is relatively small, it appears that after the option of stepchild became available, more children in unmarried partner households were being reported as stepchildren instead of unrelated children. Since the unmarried partner's income was not considered in the poverty threshold either before or after the change in options for reporting children, the additions of the stepchild category might have caused official poverty rates to increase slightly after 2007. The calculated "social family" poverty rate would not be affected by the change in reporting, however.

## Findings

### Alaska Poverty Rates from income as reported in Census Bureau data

Before discussing the estimated poverty rates with and without PFD income, we briefly review the poverty figures for Alaska as reported by the Census Bureau. Census poverty rates (with PFD income substantially underreported) show large regional and ethnic disparities. Figure 3 shows the percentages of Alaskans reported as being below the poverty threshold in Census Bureau data from 1990 through 2015. Rates in urban areas have fluctuated somewhat, but consistently remain far lower than poverty rates in rural Alaska. Poverty rates from reported income range between five and ten percent for Anchorage and other urban Alaska. Rural Alaska poverty rates have averaged around 20 percent. Since the cost of living is higher in rural Alaska, the disparity is actually greater than the official statistics reveal.

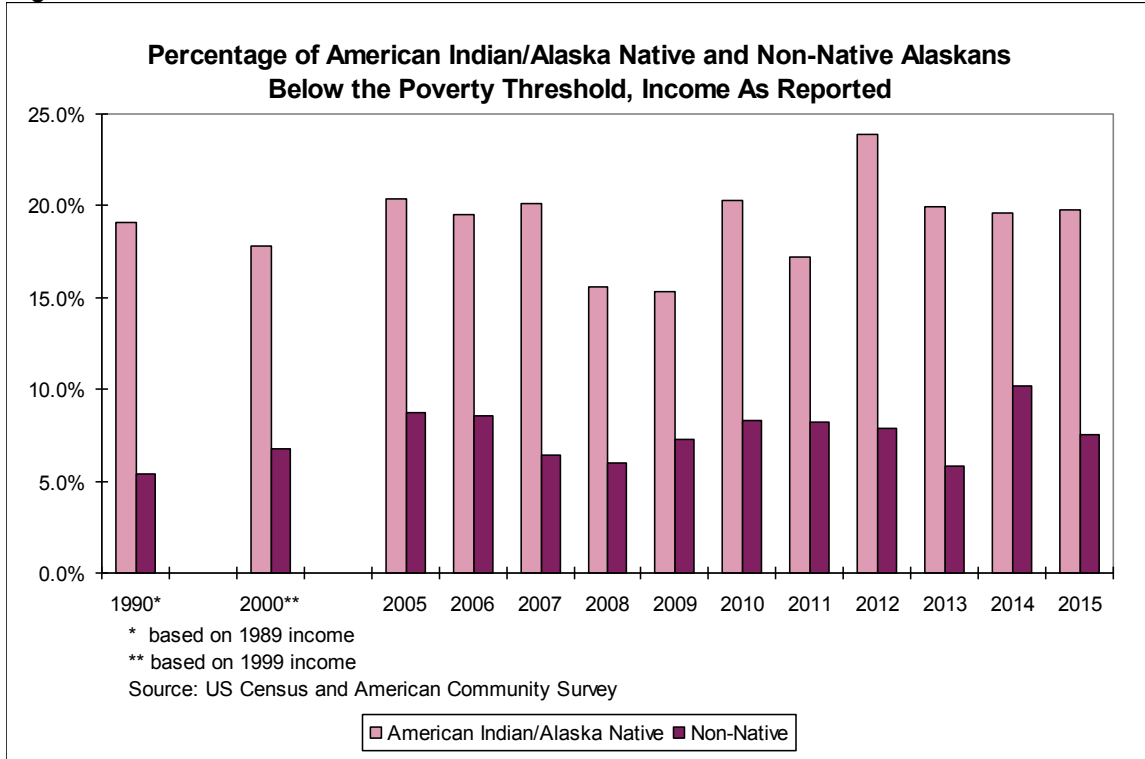
Figure 3.



Source: Appendix A, Table A3b.

Poverty rates reported for Alaska Natives are substantially higher than rates for non-Native Alaskans, as Figure 4 illustrates. Because the number of Alaska Natives represented in the ACS PUMS each year is relatively small, the fluctuation from year to year is likely due to in part to sampling error.

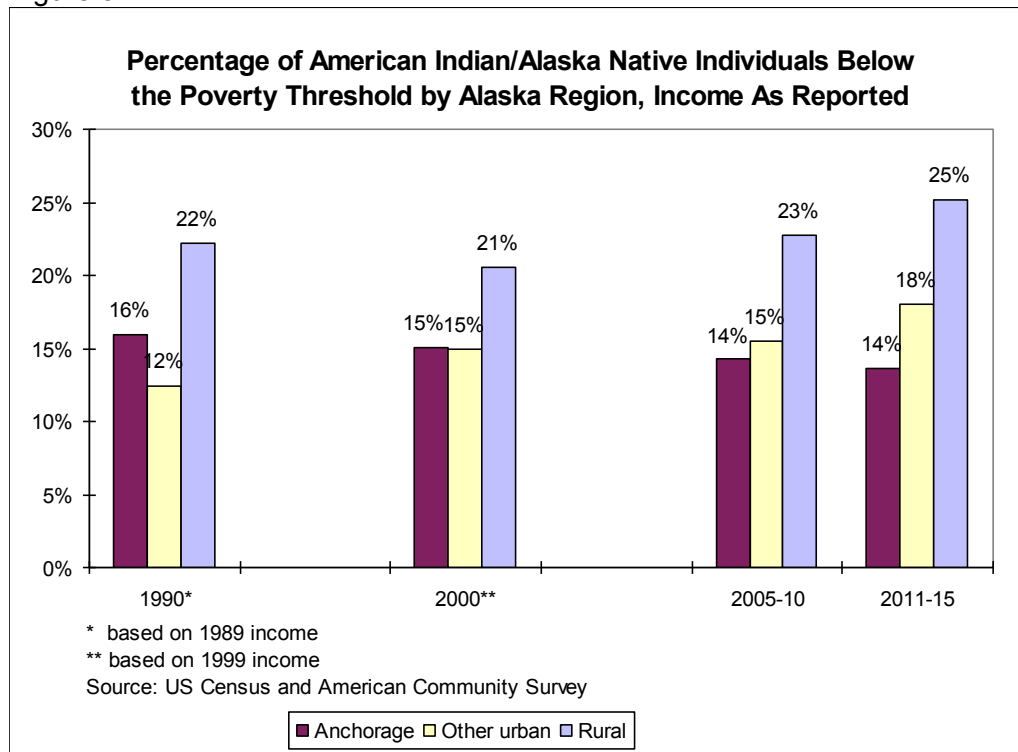
Figure 4.



Source: Appendix A, Table A2.

The regional poverty disparities shown for the population as a whole in Figure 3 also apply to Alaska Native people. Reported poverty rates for Alaska Natives living in Anchorage have been declining slightly, and recently have averaged about 14 percent. At the same time, poverty rates for Alaska Natives living in other areas of the state, and particularly in rural Alaska, have been rising (Figure 5). However, we advise caution in interpreting these rates, due to the effect of underreporting of PFD income in Census data. We now discuss estimated poverty rates with PFD income more accurately included, as well as with PFD income removed.

Figure 5.



Source: Appendix A, Table A4b.

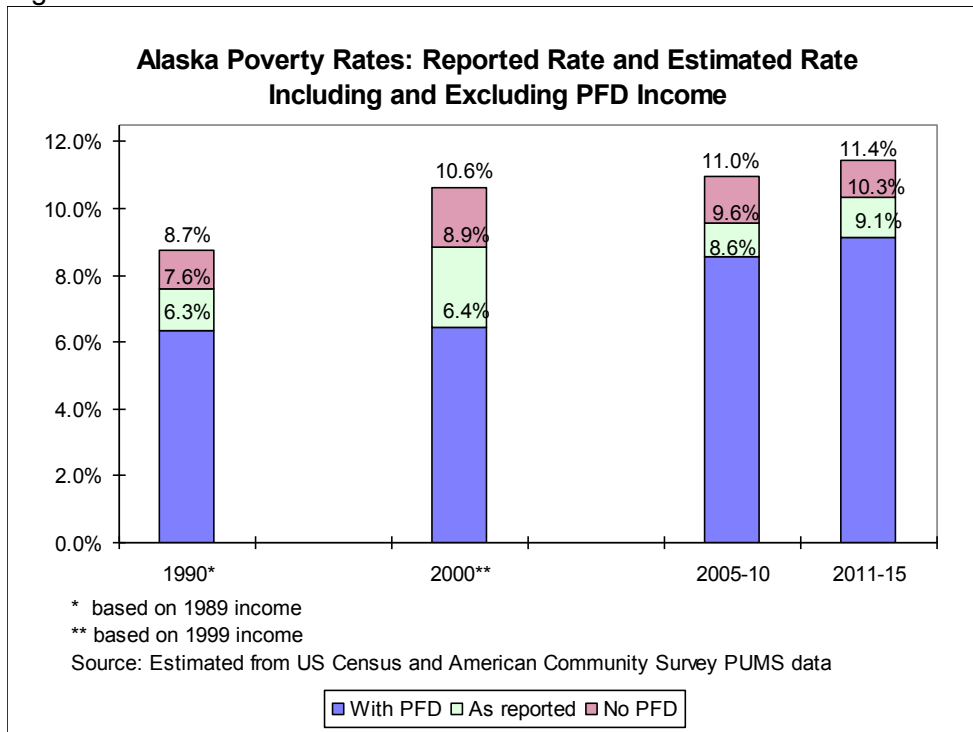


## Effects of the PFD on Alaska poverty rates

Our estimates reveal that the PFD has reduced Alaska poverty rates by 2.3 percentage points on average over the past five years; about 25 percent more people would have fallen below the poverty threshold without the PFD (Figure 6). In general, we estimate that underreporting of PFD income in census data appears to inflate official poverty rates by about one-half the amount by which they would increase if the PFD were absent. Appendix Tables A3, A5, and A7 show the estimated numbers and percentages of people below the poverty threshold each year.

The degree that underreporting of PFD income in census data biases poverty rates depends on the distribution of income as well as the size of the PFD. In 2000, the PFD reduced the number of people in poverty by 40 percent. Although the PFD represented a somewhat larger share of per-capita income in 2000, more people were living close to the poverty threshold then as well, so a relatively small increment in income had a big effect on poverty rates.

Figure 6.

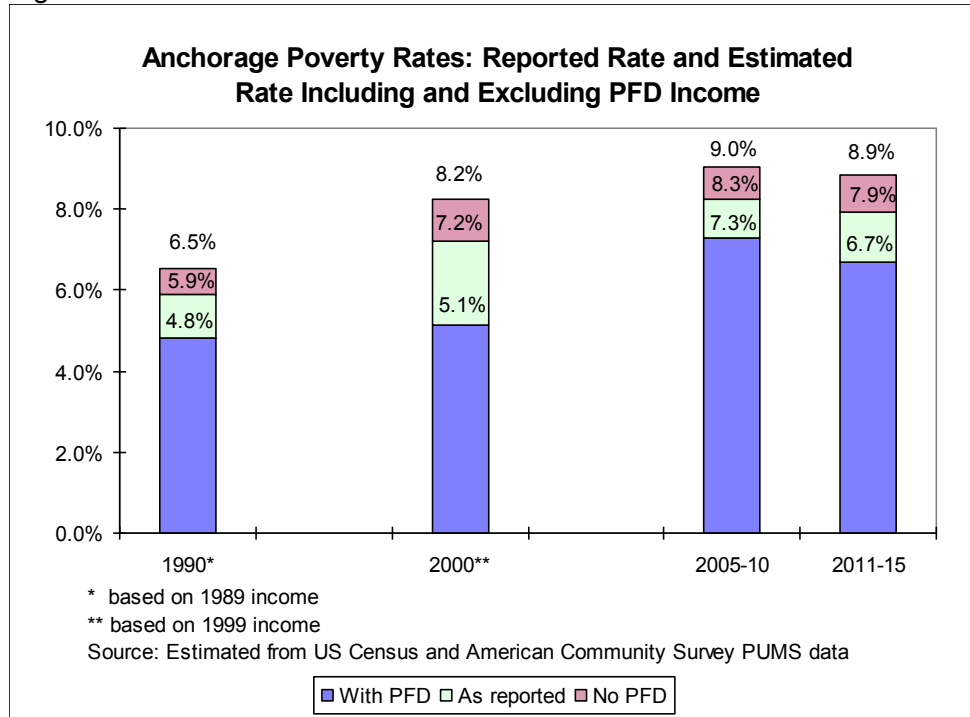


Source: Appendix A, Tables A3b, A5b, and A6b.

In recent years, the PFD appears to have been increasingly less able to ameliorate poverty. The dividend amount has been falling somewhat, if we adjust for the effects of inflation. More important, however, is that poverty rates excluding PFD income have been rising. The rise in poverty rates in Alaska parallels increases in the U.S. as a whole. Despite low unemployment rates, stagnating wages have pushed more low-wage workers below the poverty threshold in Alaska as well as nationwide.

A large rise in the estimated poverty rate without PFD income took place in Anchorage during the first decade of the 21st century. Although the Anchorage poverty rate has actually fallen in the past five years, this decline appears due entirely to the effect of the PFD (Figure 7). Immigration appears to be an important cause of the pattern in Anchorage. ACS data show that the city has welcomed about 1,800 foreign immigrants annually since 2005. Between 2005 and 2009, 45% of these immigrants were poor, and of course not eligible to receive the PFD until the year after they arrived. Those who remained poor now qualify for the PFD, and more recent immigrants appear to have arrived better off than those that came 5-10 years ago.

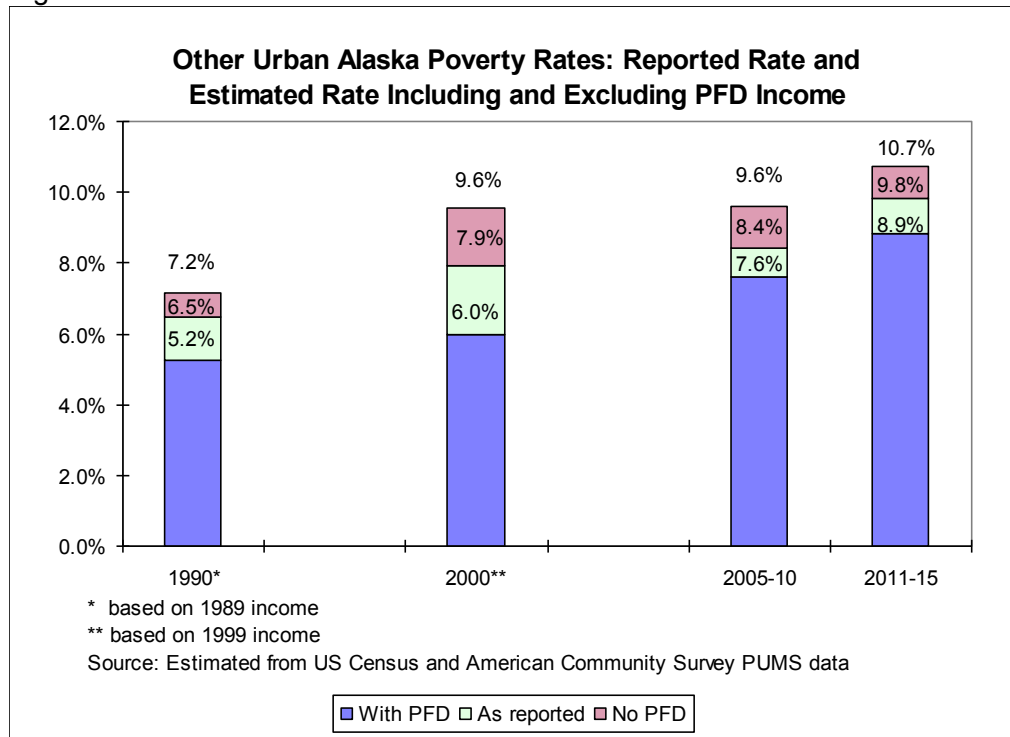
Figure 7.



Source: Appendix A, Tables A3b, A5b, and A6b.

The continued increase in Alaska poverty rates during the past five years has been concentrated in the other urban Alaska region (Figure 8). The increase in poverty rates with PFD income included was somewhat larger than the increase without PFD income. In this case, the effect is likely linked to new residents moving to Alaska from other states following the national recession.

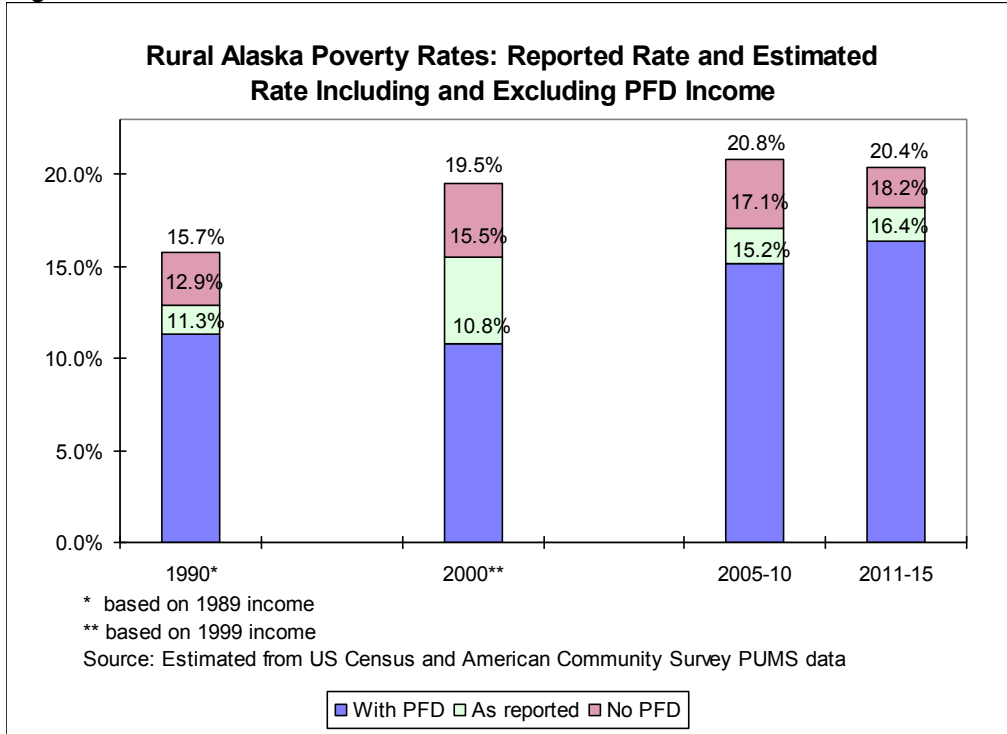
Figure 8.



Source: Appendix A, Tables A3b, A5b, and A6b.

Still, the PFD has remained much more important in reducing poverty in rural Alaska than in the urban areas of the state. Without the PFD, more than one in five rural Alaskans would be pushed below the poverty threshold (Figure 9). Many of the poor rural Alaskans are Alaska Natives.

Figure 9.

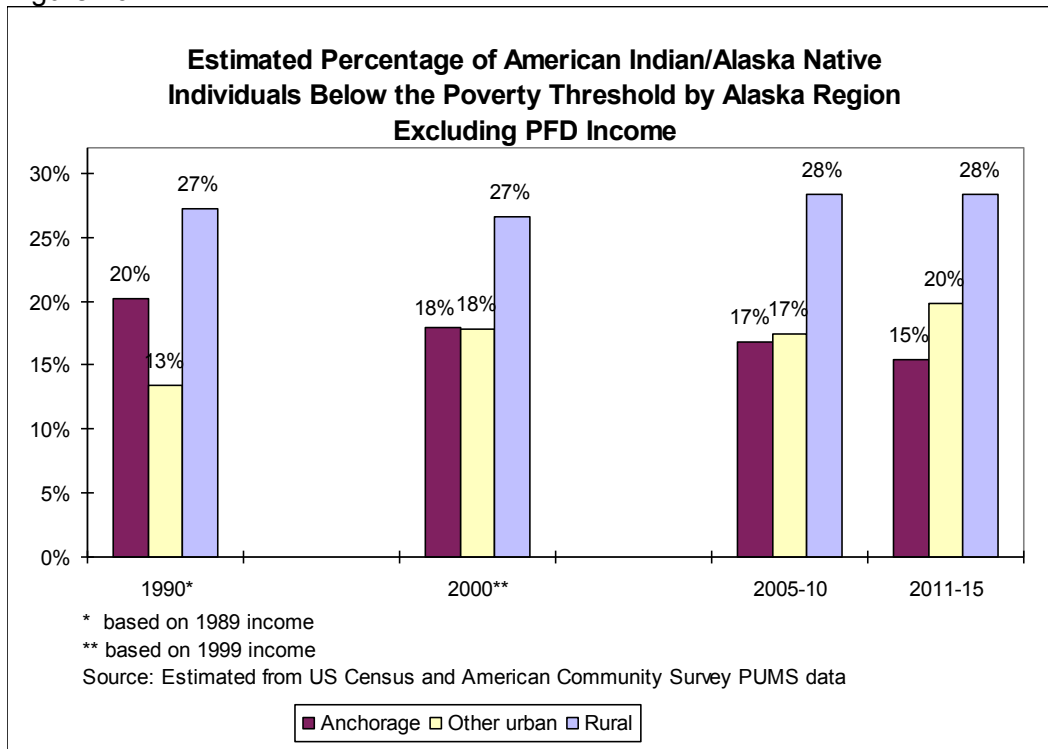


Source: Appendix A, Tables A3b, A5b, and A6b.

## Effects of PFD for Alaska Native people

As Figure 4 shows, poverty rates for Alaska Natives have remained about 2.5 times those for non-Native Alaskans. The disparity does not appear to be diminishing over time. Without the PFD, Alaska Native poverty rates in rural Alaska would be especially high. On average over the past eleven years, 28 percent of rural Alaska Native people would have been below the poverty threshold without the PFD (Figure 10).

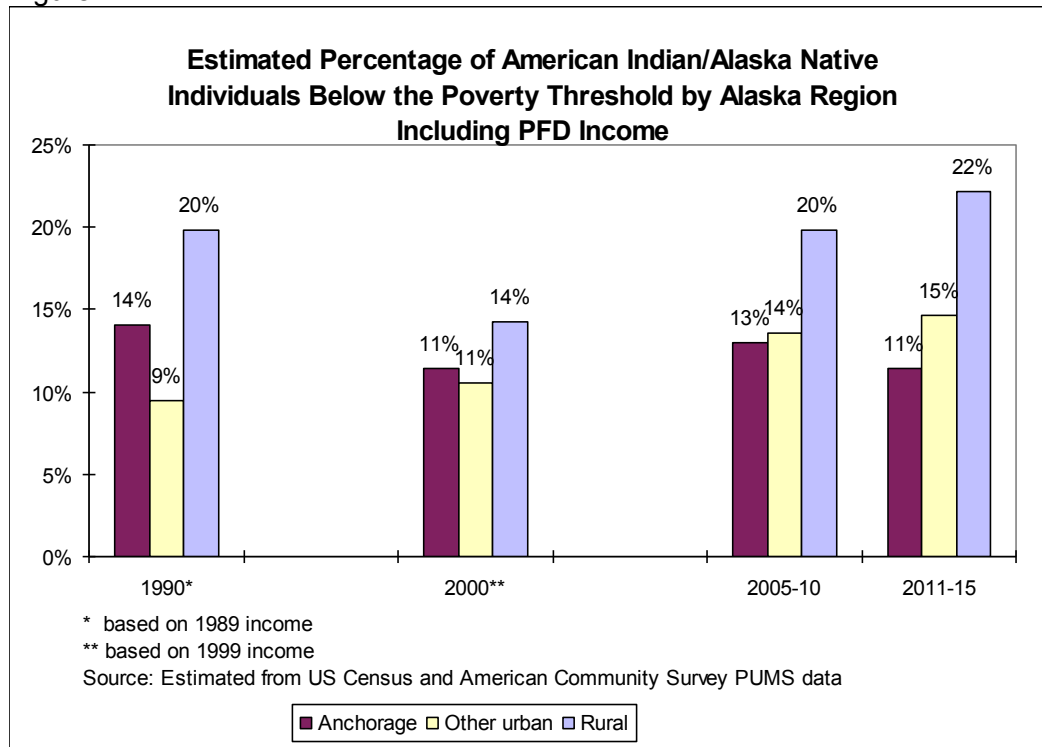
Figure 10.



Source: Appendix A, Table A13b.

The PFD has substantially mitigated poverty among rural Alaska Natives. However, the ability of the PFD to mitigate poverty for Alaska Natives living outside Anchorage has been declining (Figure 11).

Figure 11.

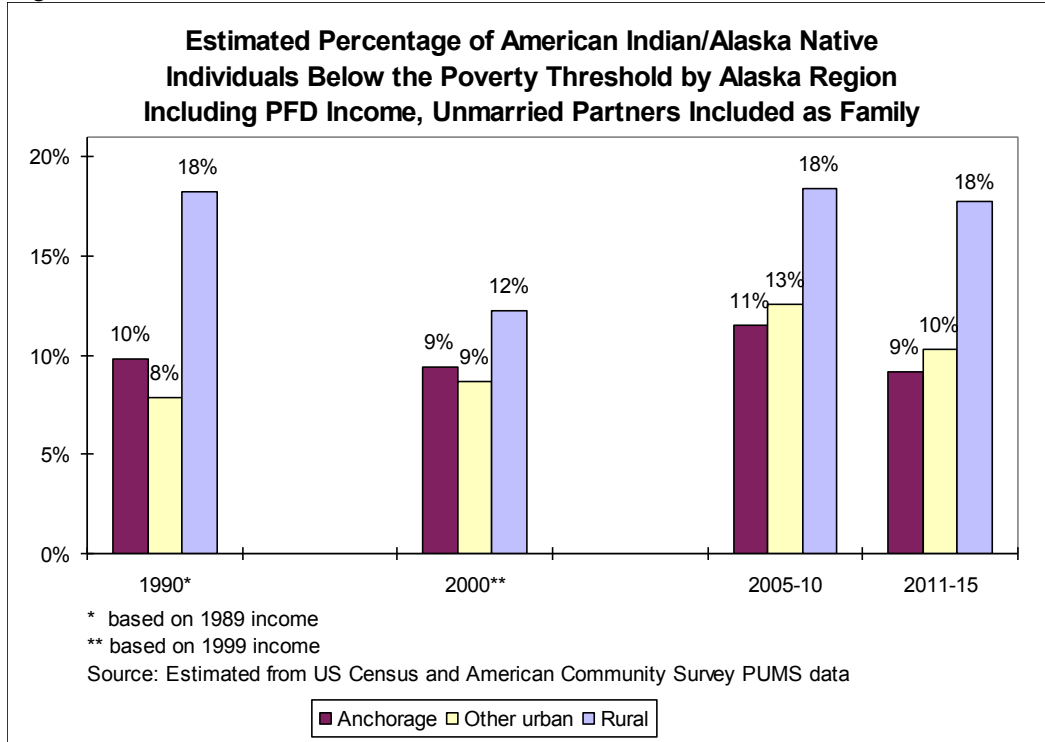


Source: Appendix A, Table A14b.

The main reason for the reduced effectiveness of the PFD in cutting poverty among rural Alaska Natives appears to be related to the increase in the number of unmarried partner households with children. The Census Bureau does not include unmarried partners (or their income) as family members for poverty calculations, even though in many cases the partner is a parent of the respondent's children.

If unmarried partners and their children were considered family members, the effect of the PFD on poverty would still be substantial for Alaska Native families, and poverty rates would not show an increasing trend (Figure 12). The beneficial effect of including unmarried partners as family members is especially strong for Alaska Native people living outside Anchorage—a reduction of four to five percentage points—where poverty rates are higher. Unmarried partners reduce poverty rates for non-Native Alaskans, too, but the effect is stronger for Alaska Native families. Appendix Tables A15 through A19 show the detailed estimates of poverty rates recalculated to include unmarried partners and their children as family members.

Figure 12.

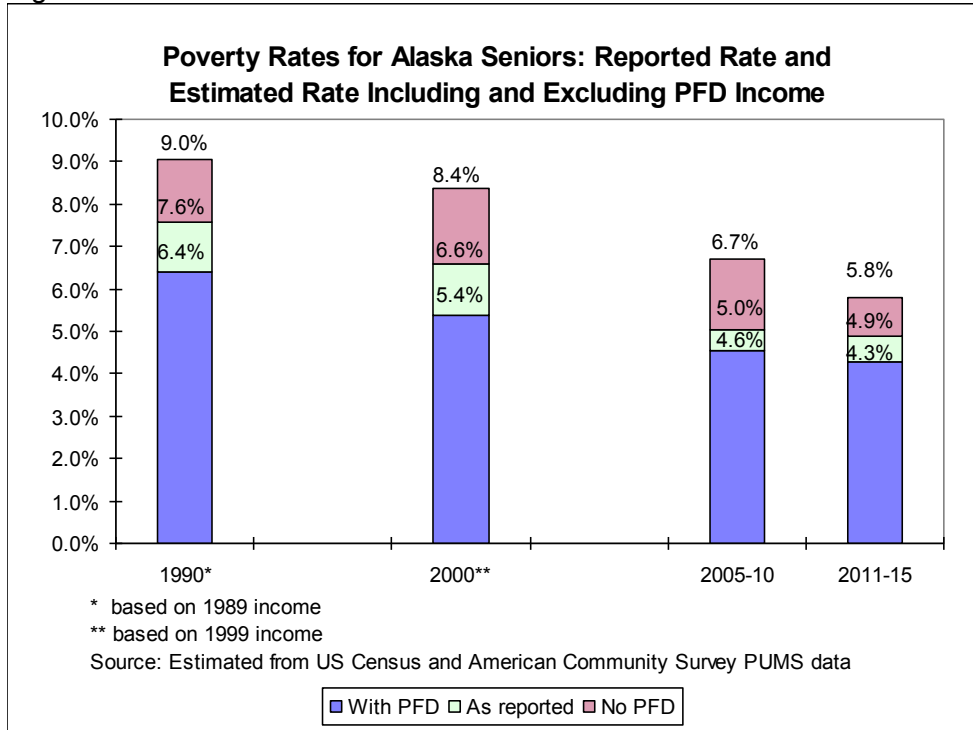


Source: Appendix A, Table A18b.

## Effects on seniors and children

One of the interesting patterns that emerges from examining poverty rates over time in Alaska is the disparity between trends in poverty rates for seniors and children. Poverty rates for Alaska seniors have been declining steadily since 1990 (Figure 13). When PFD income is counted in a way we believe is accurate, poverty rates for Alaskans age 65 and older have averaged only 4.3 percent over the past five years. This represents a decline of about one third since 1990. The population of seniors in Alaska has increased more than threefold since 1990. Many Alaskans who have stayed after retirement have pensions that keep them well above the poverty threshold. Others have moved from other states to join family members already living here. Few of these migrants are poor, either. Without the PFD, poverty rates for Alaskans age 65 and older would increase by one-third, however. Many of the seniors who would be dropped into poverty by elimination of the PFD are rural Alaska Natives.

Figure 13.

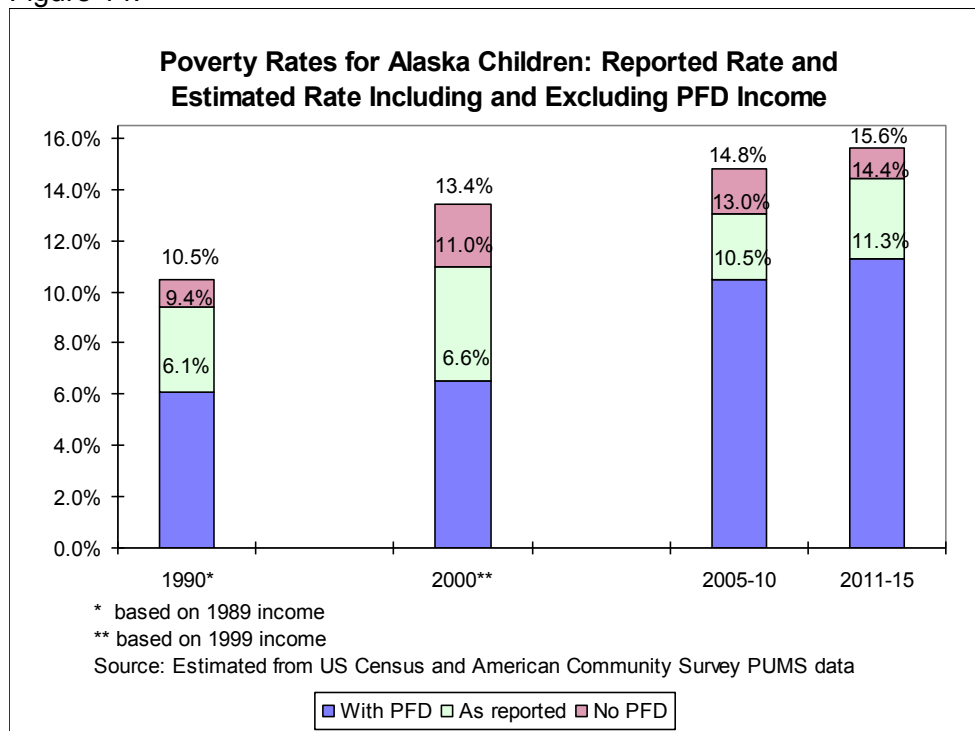


Source: Appendix A, Tables A7b, 8b, and 9b.



Poverty rates for Alaska children show exactly the opposite trend (Figure 14). Taking account of estimated PFD income, poverty rates for children under 18 have increased by 85 percent since 1990. Without PFD income, poverty rates for Alaska children under age 18 would have increased by 50 percent since 1990. Between 1990 and 2000, the PFD mitigated the rise quite effectively. Since then, however, the PFD has been increasingly ineffective. The 11.3 percent average rate that we estimated over the past five years is nevertheless more than three percentage points lower than the official rate based on income reported in Census Bureau data. So while child poverty rates have indeed been rising, the true rate is substantially lower than the official rate. One might also note that if unmarried partners had been counted as family members, we estimate, as reported in Appendix A, Table A19b, that the child poverty would be 1.5 percentage points lower, or 9.8 percent rate averaged over the past five years.

Figure 14.



Source: Appendix A, Tables A10b, 11b, and 12b.

## **Conclusion**

Our estimates show that the Alaska Permanent Fund Dividend has lifted 15,000 to 25,000 Alaskans out of poverty annually, depending on the size of the dividend and the state of the economy that year. We made our own estimates of income and associated poverty rates because we found strong evidence that PFD income has been systematically underreported in the Census Bureau data used to calculate official poverty rates. The PFD has been especially important in mitigating poverty among Alaska Native people. Without the PFD, one-third more Alaska Natives would have seen their income drop below the poverty threshold. The PFD has also played a major role in reducing poverty rates for Alaska children. Based on average rates over the past five years, we estimate that eliminating the PFD would increase the number of children living below the poverty threshold by more than one-third.

Despite the ameliorating effects of the PFD, poverty rates have been rising in Alaska, especially for children and for residents of urban areas. One reason the PFD has become less effective in stemming the increase in child and urban poverty is that more new Alaska residents are arriving in urban areas poor and not eligible to receive the PFD right away. But despite the recent rise in poverty in urban Alaska, poverty rates there remain far below rates in rural Alaska, where employment opportunities are fewer. Reducing or eliminating the PFD to help fill the budget gap will significantly increase the number of Alaskans below the poverty threshold. However, unless the Census Bureau revises its survey methods for collecting income data, official poverty rates will show a much smaller increase in poverty rates than will actually occur.

## Appendix A. Permanent Fund Dividends and Poverty in Alaska: Reference Tables

Table A1. Alaska Permanent Fund Dividend Amount and Ratio to Per-Capita Income

Year	Permanent Fund Dividend Amount <sup>a</sup>	Per-capita income, BEA <sup>b</sup>	Ratio of PFD to BEA per-capita income	Per-capita income, Census <sup>c</sup>	Ratio of PFD to Census per-capita income
1982	\$ 1,000	\$ 19,150	5.2%		
1983	386	19,191	2.0%		
1984	331	19,391	1.7%		
1985	404	20,230	2.0%		
1986	556	19,969	2.8%		
1987	708	19,340	3.7%		
1988	827	20,066	4.1%		
1989	873	21,820	4.0%	\$ 17,610	5.0%
1990	953	22,863	4.2%		
1991	931	23,149	4.0%		
1992	916	23,938	3.8%		
1993	949	24,753	3.8%		
1994	984	25,404	3.9%		
1995	990	26,041	3.8%		
1996	1,130	26,565	4.3%		
1997	1,297	27,812	4.7%		
1998	1,541	28,771	5.4%		
1999	1,770	29,498	6.0%	22,660	7.8%
2000	1,963	31,651	6.2%		
2001	1,850	33,108	5.6%		
2002	1,541	34,271	4.5%		
2003	1,108	35,591	3.1%		
2004	920	36,791	2.5%		
2005	846	38,876	2.2%	26,310	3.2%
2006	1,107	40,845	2.7%	26,919	4.1%
2007	1,654	43,723	3.8%	28,891	5.7%
2008 <sup>d</sup>	3,269	47,791	6.8%	31,175	10.5%
2009	1,305	46,834	2.8%	29,504	4.4%
2010	1,281	48,614	2.6%	30,598	4.2%
2011	1,174	51,405	2.3%	31,405	3.7%
2012	878	52,638	1.7%	31,890	2.8%
2013	900	51,416	1.8%	32,474	2.8%
2014	1,884	54,582	3.5%	33,062	5.7%
2015	2,072	56,147	3.7%	34,352	6.0%
2016 <sup>e</sup>	1,022				

<sup>a</sup> Source: Alaska Permanent Fund Corporation

<sup>b</sup> Source: U.S. Bureau of Economic Analysis (BEA). BEA income includes in-kind income such as employee benefits, food stamps, and imputed rent from owner-occupied housing..

<sup>c</sup> Source: U.S. Census Bureau. Census Bureau income is self-reported and includes only cash income.

<sup>d</sup> The 2008 Permanent Fund Dividend was \$2,069. Governor Palin proposed and the Alaska Legislature agreed to add \$1,200 to the PFD payment appropriated from the state general fund.

<sup>e</sup> Governor Walker's veto reduced the PFD in 2016 from an estimated \$2,052. Source: Nathaniel Herz, Walker's veto cuts Alaska Permanent Fund dividends to \$1,022. *Alaska Dispatch News*, September 23, 2016.

Table A2. Number and percentage of persons below the poverty threshold, income as reported by the U.S. Census Bureau, All Alaska

Year	Number of persons below the poverty threshold, as reported American Indian/ Alaska Native	Non-Native	All Persons	Percentag e below the poverty threshold, as reported AI/AN	Non- Native	All Persons
1990*	16,652	25,144	41,796	19.1%	5.4%	7.6%
2000**	21,251	34,206	55,457	17.8%	6.7%	8.9%
2005	25,904	46,458	72,362	20.3%	8.8%	11.0%
2006	22,469	47,535	70,004	19.5%	8.6%	10.4%
2007	24,852	35,799	60,651	20.2%	6.4%	8.9%
2008	19,526	33,810	53,336	15.5%	6.0%	7.8%
2009	19,880	41,482	61,362	15.3%	7.3%	8.8%
2010	28,325	47,486	75,811	20.3%	8.3%	10.6%
2011	24,344	47,611	71,955	17.2%	8.2%	10.0%
2012	34,722	46,144	80,866	23.9%	7.9%	11.1%
2013	29,386	34,447	63,833	20.0%	5.9%	8.7%
2014	28,117	60,578	88,695	19.6%	10.2%	12.0%
2015	28,405	44,794	73,199	19.8%	7.5%	9.9%

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: U.S. Census and American community Survey, Public Use Microdata Sample data

Table A3a. Number of persons below the poverty threshold, as reported by the U.S. Census Bureau, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	13,504	13,288	15,004	41,796
2000**	18,658	21,136	15,663	55,457
2005	22,851	33,107	16,404	72,362
2006	27,648	25,766	16,590	70,004
2007	21,848	22,518	16,285	60,651
2008	16,130	21,707	15,499	53,336
2009	23,150	22,072	16,140	61,362
2010	28,040	29,399	18,372	75,811
2011	17,271	35,152	19,532	71,955
2012	26,404	33,629	20,833	80,866
2013	18,073	23,875	21,885	63,833
2014	31,939	35,109	21,647	88,695
2015	25,145	30,307	17,747	73,199

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: U.S. Census and American community Survey, Public Use Microdata Sample data

Table A3b. Percentage of persons below the poverty threshold, as reported by the U.S. Census Bureau, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	5.9%	6.5%	12.9%	7.6%
2000**	7.2%	7.9%	15.5%	8.9%
2005	8.4%	11.3%	17.8%	11.0%
2006	9.9%	8.8%	16.9%	10.4%
2007	7.8%	7.3%	17.2%	8.9%
2008	5.8%	7.0%	15.8%	7.8%
2009	8.1%	7.0%	16.6%	8.8%
2010	9.6%	9.2%	18.2%	10.6%
2011	5.8%	10.9%	18.6%	10.0%
2012	8.8%	10.5%	18.5%	11.1%
2013	6.0%	7.4%	19.4%	8.7%
2014	10.6%	10.9%	19.0%	12.0%
2015	8.4%	9.4%	15.6%	9.9%

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: U.S. Census and American community Survey, Public Use Microdata Sample data

Table A4a. Number of American Indian and Alaska Native persons below the poverty threshold, as reported by the U.S. Census Bureau, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	2,567	2,177	11,908	16,652
2000**	3,919	4,780	12,552	21,251
2005	4,401	7,612	13,891	25,904
2006	4,427	5,043	12,999	22,469
2007	5,152	5,595	14,105	24,852
2008	2,661	5,020	11,845	19,526
2009	3,744	4,174	11,962	19,880
2010	6,358	6,510	15,457	28,325
2011	2,717	6,377	15,250	24,344
2012	8,122	9,778	16,822	34,722
2013	4,468	7,050	17,868	29,386
2014	3,546	7,650	16,921	28,117
2015	6,019	7,542	14,844	28,405

\* Poverty in 1990 based on 1989 income.

\*\* Poverty in 2000 based on 1999 income

Source: U.S. Census and American community Survey, Public Use Microdata Sample data

Table A4b. Percentage of American Indian and Alaska Native persons below the poverty threshold, as reported by the U.S. Census Bureau, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	16.0%	12.5%	22.2%	19.1%
2000**	15.0%	15.0%	20.5%	17.8%
2005	13.4%	22.7%	22.7%	20.3%
2006	15.4%	16.5%	23.3%	19.5%
2007	18.4%	15.0%	24.3%	20.2%
2008	9.4%	12.8%	20.4%	15.5%
2009	12.0%	10.6%	20.3%	15.3%
2010	17.2%	15.4%	25.8%	20.3%
2011	7.4%	15.1%	24.3%	17.2%
2012	21.8%	23.1%	25.6%	23.9%
2013	11.2%	17.1%	27.1%	20.0%
2014	10.3%	17.6%	25.8%	19.6%
2015	17.5%	17.3%	22.6%	19.8%

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: U.S. Census and American community Survey, Public Use Microdata Sample data

Note: In the 1990 U.S. census, respondents reporting their race could designate only one race. So 1990 figures for Alaska Natives are based only on those who identified themselves as Alaska Native. Beginning with the 2000 U.S. census, respondents could choose more than one race. So figures from 2000 and later are based on those who reported themselves as being Alaska Native as well as Alaska Native and some other race.

Table A5a. Estimated number of persons below the poverty threshold excluding Permanent Fund Dividend income, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	15,007	14,703	18,346	48,056
2000**	21,337	25,460	19,743	66,540
2005	23,435	37,364	18,291	79,090
2006	28,342	28,160	19,561	76,063
2007	24,397	26,147	19,189	69,733
2008	18,892	26,703	20,470	66,065
2009	26,627	26,699	22,891	76,217
2010	31,120	31,305	20,599	83,024
2011	18,640	37,780	22,534	78,954
2012	29,490	35,130	23,466	88,086
2013	19,511	28,640	23,251	71,402
2014	34,243	36,922	23,616	94,781
2015	30,590	34,229	20,752	85,571

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table A5b. Estimated percentage of persons below the poverty threshold excluding Permanent Fund Dividend income, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	6.5%	7.2%	15.7%	8.7%
2000**	8.2%	9.6%	19.5%	10.6%
2005	8.6%	12.8%	19.8%	12.0%
2006	10.2%	9.6%	20.0%	11.4%
2007	8.7%	8.5%	20.3%	10.2%
2008	6.8%	8.6%	20.9%	9.6%
2009	9.3%	8.5%	23.5%	10.9%
2010	10.6%	9.8%	20.4%	11.6%
2011	6.3%	11.7%	21.4%	10.9%
2012	9.9%	11.0%	20.9%	12.0%
2013	6.5%	8.9%	20.7%	9.7%
2014	11.4%	11.4%	20.7%	12.9%
2015	10.2%	10.6%	18.2%	11.6%

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data



Table A6a. Estimated number of persons below the poverty threshold including Permanent Fund Dividend income, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	11,087	10,723	13,158	34,967
2000**	13,335	15,960	10,896	40,190
2005	22,812	32,348	15,952	71,112
2006	25,346	24,766	16,473	66,585
2007	16,892	19,920	13,764	50,576
2008	13,880	15,845	11,944	41,669
2009	20,869	21,124	13,814	55,807
2010	23,586	25,185	16,238	65,009
2011	16,099	32,674	18,020	66,793
2012	21,357	32,319	20,245	73,921
2013	16,369	25,196	20,897	62,462
2014	23,647	28,555	18,146	70,348
2015	22,362	23,715	14,229	60,306

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table A6b. Estimated percentage of persons below the poverty threshold including Permanent Fund Dividend income, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	4.8%	5.2%	11.3%	6.3%
2000**	5.1%	6.0%	10.8%	6.4%
2005	8.4%	11.0%	17.3%	10.8%
2006	9.1%	8.4%	16.8%	9.9%
2007	6.0%	6.4%	14.6%	7.4%
2008	5.0%	5.1%	12.2%	6.1%
2009	7.3%	6.7%	14.2%	8.0%
2010	8.0%	7.9%	16.1%	9.1%
2011	5.5%	10.1%	17.1%	9.2%
2012	7.1%	10.1%	18.0%	10.1%
2013	5.4%	7.8%	18.6%	8.5%
2014	7.9%	8.8%	15.9%	9.5%
2015	7.5%	7.3%	12.5%	8.2%

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table 7a. Number of persons age 65 and older below the poverty line, as reported by the U.S. Census Bureau, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	414	478	779	1,671
2000**	840	853	598	2,291
2005	812	1,910	920	3,642
2006	623	711	373	1,707
2007	747	1,191	370	2,308
2008	437	808	381	1,626
2009	745	654	226	1,625
2010	2259	609	559	3,427
2011	950	1,321	1229	3,500
2012	905	2,234	416	3,555
2013	2062	576	1088	3,726
2014	583	1,250	621	2,454
2015	708	1,117	677	2,502

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: U.S. Census and American community Survey, Public Use Microdata Sample data

Table 7b. Percentage of persons age 65 and older below the poverty line, as reported by the U.S. Census Bureau, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	5.2%	5.2%	15.7%	7.6%
2000**	6.2%	5.5%	10.5%	6.6%
2005	5.2%	9.8%	15.8%	8.9%
2006	3.4%	3.1%	6.5%	3.6%
2007	4.1%	5.3%	6.1%	4.9%
2008	2.1%	3.6%	6.4%	3.3%
2009	3.7%	2.6%	3.4%	3.1%
2010	10.6%	2.3%	8.0%	6.3%
2011	4.0%	4.7%	16.6%	5.9%
2012	3.9%	7.7%	4.7%	5.8%
2013	7.5%	1.9%	12.2%	5.5%
2014	2.3%	3.7%	6.8%	3.6%
2015	2.5%	3.3%	6.9%	3.5%

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: U.S. Census and American community Survey, Public Use Microdata Sample data

Table 8a. Estimated number of persons age 65 and older below the poverty threshold excluding Permanent Fund Dividend income, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	414	581	1,001	1,996
2000**	980	1,067	861	2,908
2005	812	2,103	1,326	4,241
2006	623	1,156	579	2,358
2007	1,727	1,416	687	3,830
2008	519	1,059	632	2,210
2009	874	941	937	2,752
2010	2,259	827	606	3,692
2011	1,042	1,378	1,608	4,028
2012	1,187	2,367	593	4,147
2013	2,062	1,128	1,205	4,395
2014	583	1,250	822	2,655
2015	708	1,811	1,089	3,608

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table 8b. Estimated percentage of persons age 65 and older below the poverty threshold excluding Permanent Fund Dividend income, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	5.2%	6.3%	20.2%	9.0%
2000**	7.2%	6.9%	15.1%	8.4%
2005	5.2%	10.8%	22.8%	10.3%
2006	3.4%	5.1%	10.1%	5.0%
2007	9.5%	6.3%	11.4%	8.2%
2008	2.5%	4.7%	10.6%	4.5%
2009	4.3%	3.7%	13.9%	5.3%
2010	10.6%	3.2%	8.7%	6.8%
2011	4.4%	4.9%	21.8%	6.8%
2012	5.1%	8.2%	6.6%	6.8%
2013	7.5%	3.6%	13.6%	6.5%
2014	2.3%	3.7%	9.0%	3.9%
2015	2.5%	5.3%	11.1%	5.0%

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table 9a. Estimated number of persons age 65 and older below the poverty threshold including Permanent Fund Dividend income, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	339	379	697	1,415
2000**	691	713	431	1,872
2005	716	2,038	1,041	3,795
2006	623	711	379	1,713
2007	481	1,201	370	2,052
2008	253	640	304	1,197
2009	471	692	154	1,317
2010	1,647	551	559	2,757
2011	900	1,158	1,240	3,298
2012	905	2,183	473	3,561
2013	1,139	983	1,018	3,140
2014	215	1,060	386	1,661
2015	617	974	554	2,145

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table 9b. Estimated percentage of persons age 65 and older below the poverty threshold including Permanent Fund Dividend income, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	4.3%	4.1%	14.0%	6.4%
2000**	5.1%	4.6%	7.5%	5.4%
2005	4.6%	13.0%	17.9%	9.2%
2006	3.4%	3.8%	6.6%	3.6%
2007	2.6%	6.6%	6.1%	4.4%
2008	1.2%	3.1%	5.1%	2.5%
2009	2.3%	3.4%	2.3%	2.5%
2010	7.7%	2.6%	8.0%	5.1%
2011	3.8%	4.8%	16.8%	5.6%
2012	3.9%	9.5%	5.3%	5.8%
2013	4.1%	3.6%	11.5%	4.7%
2014	0.8%	4.1%	4.2%	2.4%
2015	2.2%	3.5%	5.7%	3.0%

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table 10a. Number of children under age 18 below the poverty line, as reported by the U.S. Census Bureau, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	4,973	4,970	6,240	16,183
2000**	6,907	7,366	6,486	20,759
2005	7,831	11,494	6,376	25,701
2006	11,711	8,015	6,555	26,281
2007	9,150	6,225	6,294	21,669
2008	5,604	7,495	6,477	19,576
2009	9,946	6,698	7,677	24,321
2010	10,023	9,371	6,983	26,377
2011	7,180	13,965	6,006	27,151
2012	10,078	9,186	9,234	28,498
2013	4,154	7,282	9,624	21,060
2014	12,011	9,360	8,299	29,670
2015	10,749	10,667	6,729	28,145

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: U.S. Census and American community Survey, Public Use Microdata Sample data

Table 10b. Percentage of children under age 18 below the poverty line, as reported by the U.S. Census Bureau, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	7.3%	7.7%	16.0%	9.4%
2000**	9.2%	9.3%	18.5%	11.0%
2005	10.0%	13.9%	20.0%	13.3%
2006	15.5%	11.1%	23.3%	14.9%
2007	12.5%	7.8%	21.4%	11.9%
2008	7.9%	9.5%	22.1%	10.9%
2009	13.4%	8.3%	26.9%	13.3%
2010	13.1%	11.2%	24.3%	14.0%
2011	9.5%	16.9%	20.6%	14.5%
2012	14.0%	11.4%	28.8%	15.4%
2013	5.5%	9.0%	29.8%	11.2%
2014	16.0%	12.0%	25.1%	16.0%
2015	14.5%	13.3%	20.9%	15.1%

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: U.S. Census and American community Survey, Public Use Microdata Sample data

Table 11a. Estimated number of children under age 18 below the poverty threshold excluding Permanent Fund Dividend income, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	5,484	5,248	7,281	18,012
2000**	7,868	9,146	8,348	25,363
2005	7,831	12,880	7,017	27,728
2006	11,863	8,331	7,519	27,713
2007	9,660	7,360	7,484	24,504
2008	6,650	9,450	8,673	24,773
2009	11,340	7,666	10,430	29,436
2010	11,347	9,749	8,106	29,202
2011	7,658	14,694	7,002	29,354
2012	11,433	9,550	10,051	31,034
2013	4,154	8,354	10,176	22,684
2014	12,784	10,304	8,824	31,912
2015	11,344	11,635	7,592	30,571

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table 11b. Estimated percentage of children under age 18 below the poverty threshold excluding Permanent Fund Dividend income, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	8.0%	8.1%	18.7%	10.5%
2000**	10.5%	11.5%	23.8%	13.4%
2005	13.6%	7.7%	22.0%	14.4%
2006	14.8%	15.5%	26.7%	15.7%
2007	19.0%	8.0%	25.4%	13.4%
2008	14.3%	4.7%	29.5%	13.8%
2009	19.7%	11.1%	36.6%	16.0%
2010	20.3%	10.7%	28.2%	15.5%
2011	10.7%	9.2%	24.1%	15.6%
2012	27.9%	5.9%	31.4%	16.8%
2013	10.5%	1.9%	31.5%	12.0%
2014	18.8%	14.7%	26.7%	17.2%
2015	25.6%	7.3%	23.6%	16.4%

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table 12a. Estimated number of children under age 18 below the poverty threshold including Permanent Fund Dividend income, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	3,158	3,018	4,346	10,522
2000**	3,814	4,828	3,748	12,390
2005	7,831	10,842	6,033	24,706
2006	10,124	7,423	6,163	23,710
2007	6,754	4,693	4,747	16,194
2008	3,998	2,845	4,153	10,996
2009	8,719	5,771	5,868	20,358
2010	7,247	6,766	5,659	19,672
2011	7,088	12,516	5,074	24,678
2012	7,191	8,411	8,718	24,320
2013	3,570	7,169	8,980	19,719
2014	6,400	5,271	6,423	18,094
2015	7,992	6,318	4,370	18,680

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table 12b. Estimated percentage of children under age 18 below the poverty threshold including Permanent Fund Dividend income, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	4.6%	4.7%	11.1%	6.1%
2000**	5.1%	6.1%	10.7%	6.6%
2005	13.6%	7.7%	19.0%	12.8%
2006	10.1%	14.9%	21.9%	13.5%
2007	11.2%	7.0%	16.1%	8.9%
2008	7.9%	3.3%	14.1%	6.1%
2009	15.2%	8.5%	20.6%	11.1%
2010	10.5%	8.5%	19.7%	10.4%
2011	10.4%	8.2%	17.4%	13.1%
2012	16.9%	4.1%	27.2%	13.2%
2013	8.6%	1.9%	27.8%	10.5%
2014	8.6%	7.9%	19.4%	9.7%
2015	18.2%	5.0%	13.6%	10.0%

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table A13a. Estimated number of American Indian and Alaska Native persons below the poverty threshold excluding Permanent Fund Dividend income, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	3,238	2,335	14,659	20,232
2000**	4,677	5,700	16,279	26,656
2005	4,401	8,897	15,544	28,842
2006	4,848	5,242	15,629	25,719
2007	6,267	5,801	16,836	28,904
2008	2,826	6,270	16,189	25,285
2009	4,836	4,714	18,110	27,660
2010	8,362	7,472	17,474	33,308
2011	2,978	6,718	17,600	27,296
2012	9,711	10,343	19,321	39,375
2013	4,468	9,167	18,936	32,571
2014	4,630	7,672	18,818	31,120
2015	6,429	8,257	17,582	32,268

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table A13b. Estimated percentage of American Indian and Alaska Native persons below the poverty threshold excluding Permanent Fund Dividend income, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	20.1%	13.4%	27.3%	23.2%
2000**	17.9%	17.9%	26.7%	22.4%
2005	13.4%	26.6%	25.4%	22.6%
2006	16.8%	17.1%	28.0%	22.3%
2007	22.4%	15.6%	29.0%	23.4%
2008	10.0%	15.9%	27.9%	20.1%
2009	15.4%	11.9%	30.7%	21.3%
2010	22.6%	17.6%	29.1%	23.9%
2011	8.1%	15.9%	28.1%	19.3%
2012	26.0%	24.4%	29.4%	27.1%
2013	11.2%	22.3%	28.7%	22.2%
2014	13.5%	17.6%	28.7%	21.7%
2015	18.7%	19.0%	26.8%	22.5%

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data



Table A14a. Estimated number of American Indian and Alaska Native persons below the poverty threshold including Permanent Fund Dividend income, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	2,264	1,649	10,673	14,585
2000**	2,987	3,359	8,711	15,057
2005	4,401	7,037	13,240	24,678
2006	3,793	4,206	12,678	20,677
2007	3,640	4,680	11,522	19,842
2008	2,478	3,455	8,481	14,414
2009	3,895	4,301	10,879	19,075
2010	6,250	6,031	13,148	25,429
2011	2,261	4,836	13,428	20,525
2012	5,161	9,187	16,301	30,649
2013	4,224	7,101	17,080	28,405
2014	3,738	4,825	13,873	22,436
2015	5,421	5,201	11,540	22,162

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table A14b. Estimated percentage of American Indian and Alaska Native persons below the poverty threshold including Permanent Fund Dividend income, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	14.1%	9.4%	19.9%	16.7%
2000**	11.4%	10.5%	14.3%	12.6%
2005	13.4%	21.0%	21.7%	19.4%
2006	13.2%	13.8%	22.7%	18.0%
2007	13.0%	12.6%	19.8%	16.1%
2008	8.8%	8.8%	14.6%	11.5%
2009	12.4%	10.9%	18.4%	14.7%
2010	16.9%	14.2%	21.9%	18.2%
2011	6.2%	11.5%	21.4%	14.5%
2012	13.8%	21.7%	24.8%	21.1%
2013	10.6%	17.2%	25.9%	19.3%
2014	10.9%	11.1%	21.1%	15.6%
2015	15.8%	11.9%	17.6%	15.4%

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table A15a. Estimated number of persons below the poverty threshold excluding Permanent Fund Dividend income, with unmarried partners considered as family, by Alaska region

	Anchorage	Other urban	Rural	Total
1990*	12,835	13,094	16,845	42,774
2000**	19,375	23,453	18,348	61,176
2005	21,091	33,070	15,803	69,964
2006	25,258	24,263	17,328	66,849
2007	20,731	21,551	16,228	58,510
2008	12,653	21,698	19,018	53,369
2009	23,738	23,805	20,630	68,173
2010	26,966	26,672	17,644	71,282
2011	16,564	33,088	19,727	69,379
2012	27,643	29,607	20,593	77,843
2013	16,503	22,597	20,619	59,719
2014	29,269	33,136	21,984	84,389
2015	21,938	17,944	14,122	54,004

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table A15b. Estimated percentage of persons below the poverty threshold excluding Permanent Fund Dividend income, with unmarried partners considered as family, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	5.6%	6.4%	14.5%	7.8%
2000**	7.5%	8.8%	18.1%	9.8%
2005	7.7%	11.3%	17.1%	10.6%
2006	9.1%	8.3%	17.7%	10.0%
2007	7.4%	7.0%	17.2%	8.6%
2008	4.5%	7.0%	19.4%	7.8%
2009	8.3%	7.6%	21.2%	9.8%
2010	9.2%	8.3%	17.5%	10.0%
2011	5.6%	10.3%	18.7%	9.6%
2012	9.3%	9.2%	18.3%	10.6%
2013	5.5%	7.0%	18.3%	8.1%
2014	9.8%	10.3%	19.3%	11.5%
2015	7.3%	5.6%	12.4%	7.3%

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table A16a. Estimated number of persons below the poverty threshold including Permanent Fund Dividend income and unmarried partners considered as family, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	9,216	9,498	11,979	30,694
2000**	11,842	13,892	9,405	35,139
2005	20,548	27,118	13,664	61,330
2006	21,696	20,484	14,426	56,606
2007	13,781	16,384	11,799	41,964
2008	8,401	11,406	9,959	29,766
2009	18,020	18,233	11,830	48,083
2010	19,947	20,994	14,408	55,349
2011	14,753	28,000	13,855	56,608
2012	20,127	27,326	16,868	64,321
2013	13,361	19,935	17,915	51,211
2014	19,008	24,703	16,182	59,893
2015	15,398	8,303	8,160	31,861

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table A16b. Estimated percentage of persons below the poverty threshold including Permanent Fund Dividend income and unmarried partners considered as family, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	4.0%	4.6%	10.3%	5.6%
2000**	4.6%	5.2%	9.3%	5.6%
2005	7.5%	9.3%	14.8%	9.3%
2006	7.8%	7.0%	14.7%	8.4%
2007	4.9%	5.3%	12.5%	6.1%
2008	3.0%	3.7%	10.1%	4.3%
2009	6.3%	5.8%	12.1%	6.9%
2010	6.8%	6.6%	14.3%	7.8%
2011	5.0%	8.7%	13.2%	7.8%
2012	6.7%	8.5%	15.0%	8.8%
2013	4.4%	6.2%	15.9%	7.0%
2014	6.3%	7.7%	14.2%	8.1%
2015	5.1%	2.6%	7.2%	4.3%

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table A17a. Estimated number of American Indian and Alaska Native persons below the poverty threshold excluding Permanent Fund Dividend income, with unmarried partners considered as family, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	2,662	1,931	13,637	18,230
2000**	3,948	5,014	15,216	24,178
2005	4,401	8,897	15,544	28,842
2006	4,848	5,242	15,629	25,719
2007	6,267	5,801	16,836	28,904
2008	2,129	5,117	14,802	22,048
2009	4,594	4,444	16,367	25,405
2010	7,541	6,657	14,776	28,974
2011	2,686	4,875	15,511	23,072
2012	9,350	8,697	16,730	34,777
2013	3,118	6,875	16,585	26,578
2014	4,002	6,475	17,734	28,211
2015	4,425	5,115	12,915	22,455

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table A17b. Estimated percentage of American Indian and Alaska Native persons below the poverty threshold excluding Permanent Fund Dividend income, with unmarried partners considered as family, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	16.6%	11.1%	25.4%	20.9%
2000**	15.1%	15.7%	24.9%	20.3%
2005	13.4%	26.6%	25.4%	22.6%
2006	16.8%	17.1%	28.0%	22.3%
2007	22.4%	15.6%	29.0%	23.4%
2008	7.5%	13.0%	25.5%	17.6%
2009	14.7%	11.2%	27.7%	19.6%
2010	20.4%	15.7%	24.6%	20.8%
2011	7.3%	11.6%	24.7%	16.3%
2012	25.1%	20.5%	25.5%	23.9%
2013	7.8%	16.7%	25.1%	18.1%
2014	11.6%	14.9%	27.0%	19.6%
2015	12.9%	11.7%	19.7%	15.6%

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table A18a. Estimated number of American Indian and Alaska Native persons below the poverty threshold including Permanent Fund Dividend income and unmarried partners considered as family, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	1,573	1,366	9,793	12,732
2000**	2,461	2,762	7,474	12,697
2005	4,401	7,037	13,240	24,678
2006	3,793	4,206	12,678	20,677
2007	3,640	4,680	11,522	19,842
2008	1,138	2,304	6,561	10,003
2009	3,300	3,960	9,285	16,545
2010	5,429	5,216	11,575	22,220
2011	1,969	3,057	10,439	15,465
2012	4,800	7,541	13,227	25,568
2013	2,874	5,660	14,436	22,970
2014	3,660	3,650	12,432	19,742
2015	3,417	1,814	7,387	12,618

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table A18b. Estimated percentage of American Indian and Alaska Native persons below the poverty threshold including Permanent Fund Dividend income and unmarried partners considered as family, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	9.8%	7.8%	18.2%	14.6%
2000**	9.4%	8.7%	12.2%	10.7%
2005	13.4%	21.0%	21.7%	19.4%
2006	13.2%	13.8%	22.7%	18.0%
2007	13.0%	12.6%	19.8%	16.1%
2008	4.0%	5.9%	11.3%	8.0%
2009	10.5%	10.0%	15.7%	12.7%
2010	14.7%	12.3%	19.3%	15.9%
2011	5.4%	7.3%	16.6%	10.9%
2012	12.9%	17.8%	20.2%	17.6%
2013	7.2%	13.7%	21.9%	15.6%
2014	10.6%	8.4%	18.9%	13.7%
2015	9.9%	4.2%	11.2%	8.8%

\* Poverty in 1990 based on 1989 income

\*\* Poverty in 2000 based on 1999 income

Source: Estimated from U.S. Census and American community Survey, Public Use Microdata Sample data

Table A19a. Estimated number of children under age 18 below the poverty threshold including Permanent Fund Dividend income and unmarried partners considered as family, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	4,472	4,354	5,983	14,809
2000**	3,641	4,419	3,169	11,230
2005	7,572	9,939	5,294	22,805
2006	8,414	6,467	5,478	20,359
2007	5,535	3,546	4,049	13,130
2008	1,752	1,678	3,512	6,942
2009	7,443	4,731	5,393	17,567
2010	6,452	5,918	5,235	17,605
2011	6,974	11,602	3,877	22,453
2012	7,301	6,584	7,323	21,208
2013	3,363	5,229	7,592	16,184
2014	6,304	3,954	5,614	15,872
2015	7,810	4,202	3,882	15,894

Table A19b. Estimated percentage of children under age 18 below the poverty threshold including Permanent Fund Dividend income and unmarried partners considered as family, by Alaska region

Year	Anchorage	Other urban	Rural	Total
1990*	6.5%	6.7%	15.3%	8.6%
2000**	4.9%	5.6%	9.0%	5.9%
2005	12.7%	7.7%	16.6%	11.8%
2006	5.3%	14.3%	19.5%	11.6%
2007	9.4%	5.6%	13.8%	7.2%
2008	1.9%	2.5%	12.0%	3.9%
2009	12.0%	7.9%	18.9%	9.6%
2010	9.7%	7.3%	18.2%	9.3%
2011	10.0%	8.2%	13.3%	12.0%
2012	16.9%	4.4%	22.9%	11.5%
2013	8.0%	1.9%	23.5%	8.6%
2014	11.0%	6.1%	17.0%	8.5%
2015	18.2%	4.6%	12.1%	8.5%