

ANAKTUVUK PASS SNAPSHOT

	2003	2010
Total Population	346	388
Sample Population	329	289
Population Growth Since 1990	33.6%	49.8%
Population Growth Since 1980	70.4%	91.1%
Population Growth Since 1970	249.5%	291.9%
Percent Female	48.2%	45.7%
Percent Iñupiat	88.3%	87.5%
Percent Caucasian	8.6%	6.6%
Percent Other	3.1%	5.9%
Number and Percent of Population Fluent Iñupiaq Speakers	59(20.1%)	40(16.2%)
Number and % of Population ≤ 16 (dependency ratio)	124(40%)	97(33.7%)
Number and % of population 16-64 (Labor Force)	178(54.0%)	188(64.4%)
Number and % of population ≥ 65 (dependency indicator)	20(5.8%)	9(2.9%)
Median Age of Females	21	27
Median Age of Males	26	24
Median Age of Total Population	23	25
Size of Labor Force	157	
Number of Individuals with permanent full-time employment	59	78
Number and percent of Labor Force unemployed	34(21.6%)	61(34.9%)
Number and Percent of Labor Force Underemployed*	80(50.9%)	89((54.9%)
Number and Percent of Labor Force Underemployed**	58(32.5%)	62(36.5%)
Total Number of dwelling units	104	118
Number of Vacant Units and Vacancy Rate	N/A	4(3.4%)
Total Number of Occupied Households	N/A	114
Total Number of Households Surveyed	93	80
Average Number of People per Household	3.54	3.61
Percent of Households in Census	72.0%	70.2%
Percent of total Population in Sample	92.4%	74.5%
Percent of Iñupiat Households Using Subsistence Foods	95.5%	100.0%
Percent of Households Receiving Half or more of diet from Subsistence foods	70.0%	66.9%
* Individuals working less than 10 months of the year		
**Individuals who perceive themselves to be underemployed		

North Slope Borough Economic Profile and Census Report 2010
Anaktuvuk Pass

Demography:

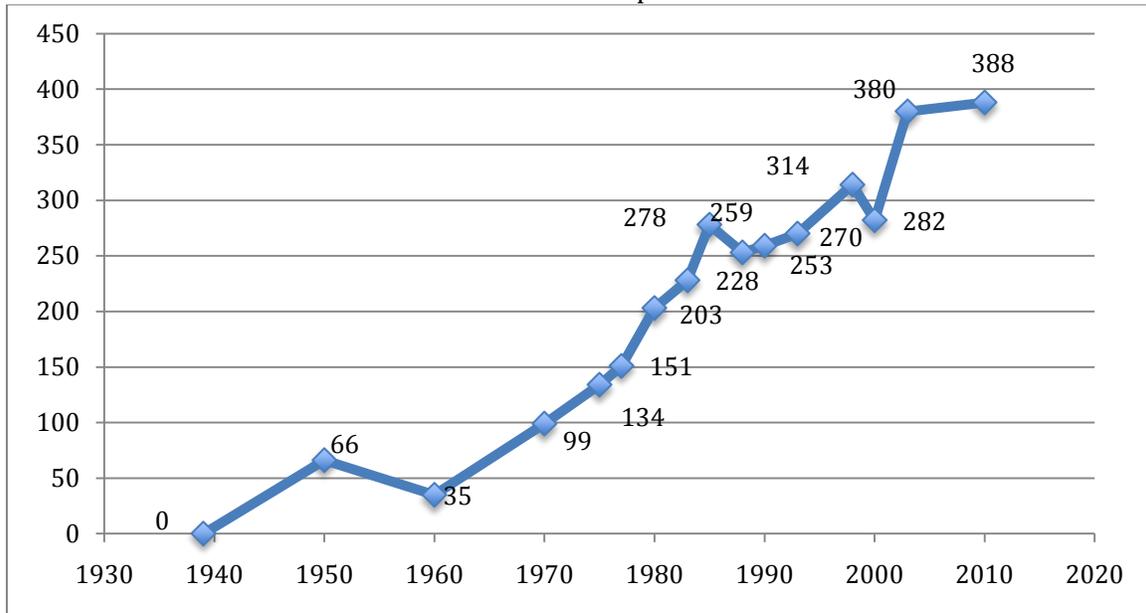
Table 1 below indicates the sampling proportion for Anaktuvuk Pass in 2003 and 2010. In 2010 eighty households were interviewed about 15% less that was accomplished in 2003. In 2010 the total number of households that could have been interviewed was 102 based on NSB electrical hookup data.

Our best estimate would indicate a constant population in Anaktuvuk Pass between 2003 and 2010. Slightly fewer households (two less) in 2010 are offset by a slightly higher average household size at this date.

Table 1: Anaktuvuk Pass Community Population Estimates 2003 to 2010.

Community	Anaktuvuk Pass 2003	Anaktuvuk Pass 2010
HH Sample Size (n)	93	80
#HH's Estimate (N)	104	102
Standard Error of Proportion{+/-}**	+/- 3.4%	+/- 5.2%
Sample - Ave. Household Size	3.54	3.61
Low Pop. Estimate	346 (356*)	349
Mid-Point Estimate	368	369
High Pop. Estimate	380	388

Chart 1: Anaktuvuk Pass: Population 1939-2010



As Chart 1 above indicates, there has been a fairly constant increase in the population of the community between 1969 and 2000. The 1998 NSB Census indicates 314

individuals with a sharp dip in the 2000 U.S. Census estimate of 282 (which is clearly an underestimate). Interpolating a curve from 1998 to 2010 (and excluding the 2000 U.S. Census outlier) indicates a fairly flat number of around 380+ individuals for the decade.

Ethnic Composition of Anaktuvuk Pass's sample population in 2010 is provided in the Table 2 below.

Table 2: Anaktuvuk Pass 2010 Sample Population – Ethnicity.

Individual's Ethnicity			
Ethnicity	Frequency	Percent	Cumulative Percent
Iñupiat	253	87.5	87.5
Caucasian	19	6.6	94.1
Athabascan	3	1.0	95.2
Yup'ik	3	1.0	96.2
American Indian	2	.7	96.9
African American	2	.7	97.6
Other (specify)	7	2.4	100.0
Total	289	100.0	

Table 3: Anaktuvuk Pass Ethnic Proportions of Population 1998-2010

	1998	2003	2010
Percent Iñupiat	92.0%	88.3%	87.5%
Percent Caucasian	6.4%	8.6%	6.6%
Percent Other Ethnicities	2.2%	3.1%	5.9%

As the two tables above indicate that between 1998 and 2010 there has been a slight decrease in the proportion of Iñupiat individuals and between 2003 and 2010 there has also been a decrease in the number of Caucasians. In addition, this same period has seen a small but significant increase in other ethnic individuals (mostly Athabascan and Yup'ik). In general, however, nine out of ten people living in Anaktuvuk Pass are Iñupiat.

Chart 2, below provides an Iñupiat population pyramid for Anaktuvuk Pass in 2010 in five-year intervals. In general for small rural, mostly indigenous communities, there usually tends to be a sharp drop in the number of women age 20-24 as they, usually better equipped with academic skills and for other reasons migrate to larger communities in search of employment. Conversely, young men in this age cohort tend to stay put because of their detailed knowledge of the local subsistence landscape. In Anaktuvuk Pass we find that in 2010 that this generalization also holds, there being slightly less than twice as many young men as young women in this 20-24-age cohort. Interestingly, this is a complete reversal from the 2003 NSB census where there were exactly twice as many women as men in this age cohort (NSB 2003).

Chart 2: Anaktuvuk Pass - 2010 Age Pyramid in Five-Year Intervals.

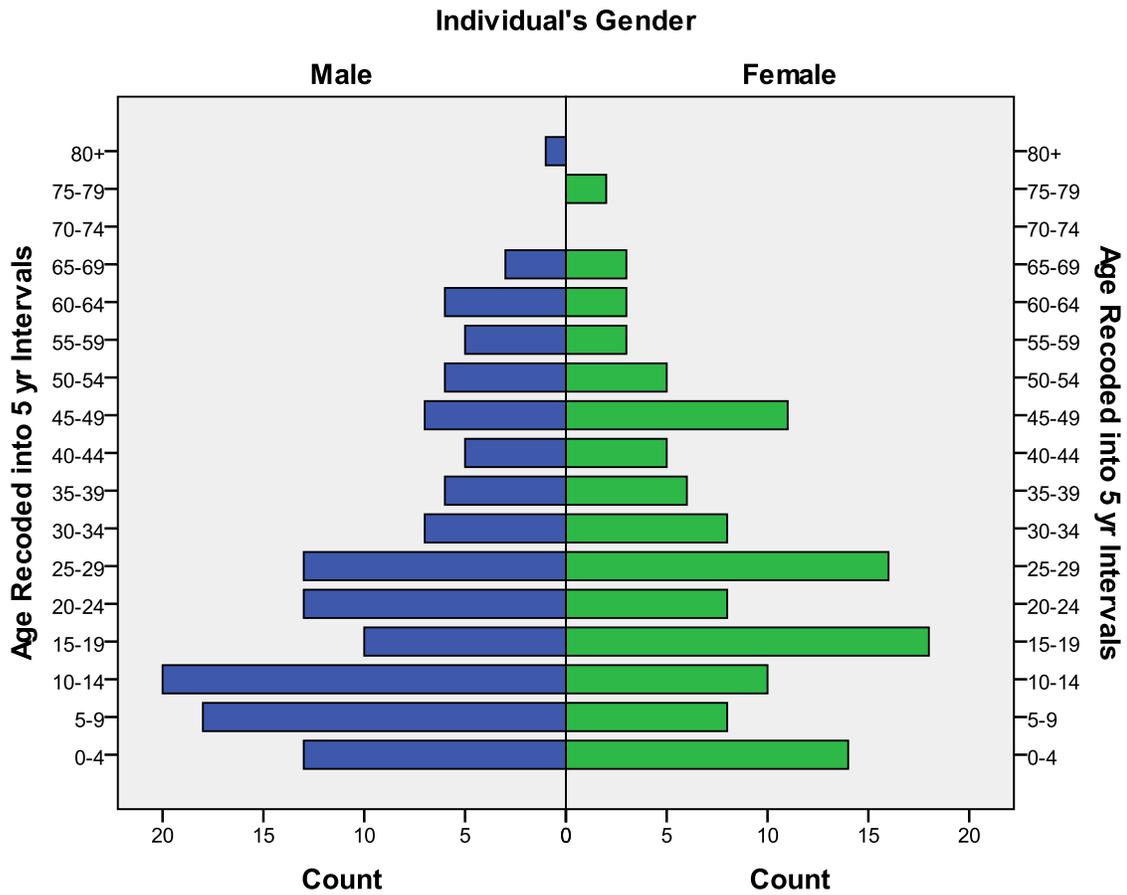
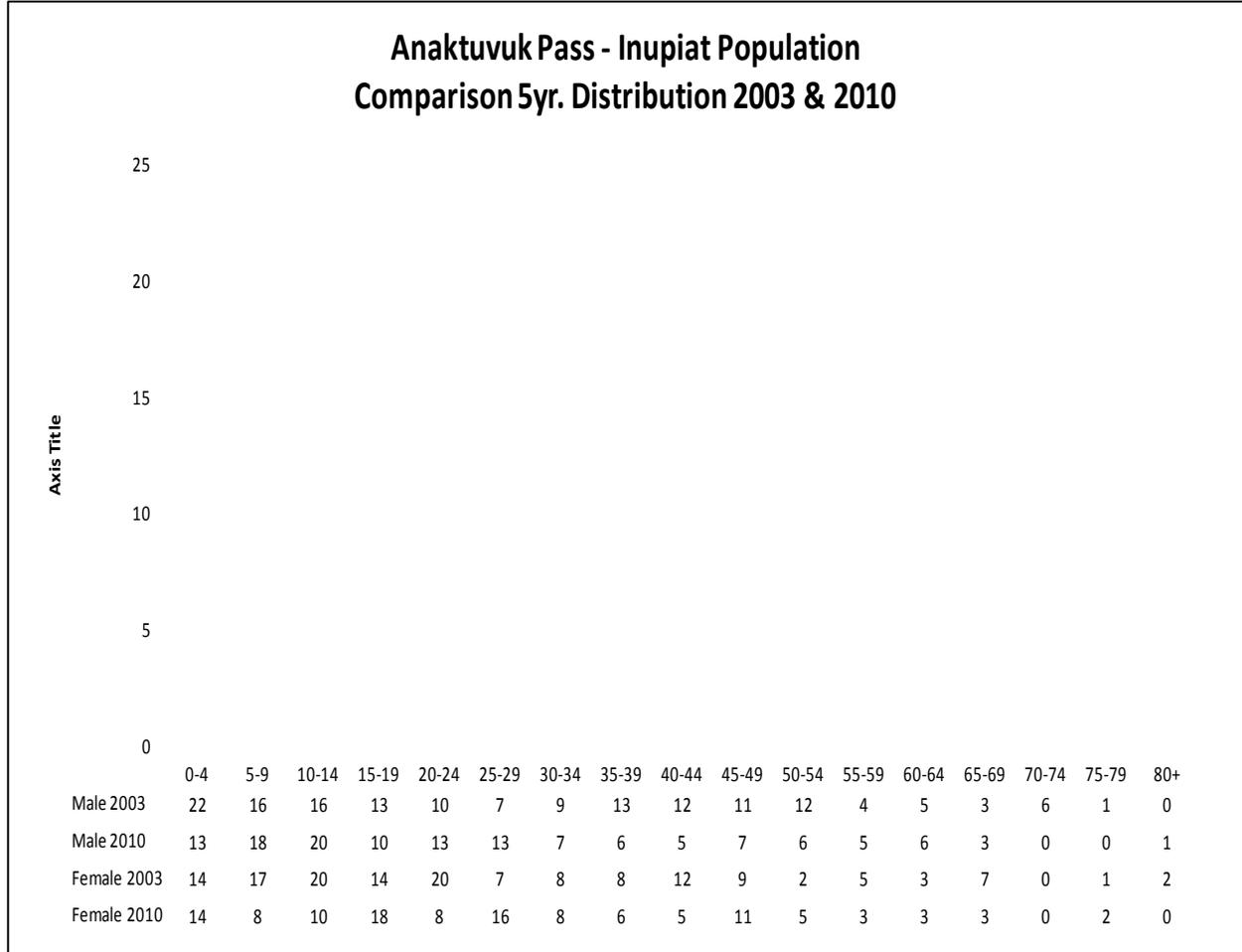


Chart 3, below provides a graphic comparison of the 2003 versus 2010 population pyramid using 5-year intervals to establish age cohorts. As mentioned above, there is a complete reversal, by gender, in the number of individuals in the 20-24-age cohort between 2003 and 2010. In addition, we note another complete reversal – men in the cohorts 35-54 years of age totaled 48 individuals in 2003. In contrast by 2010 there has been a halving of this population to 24 individuals. Since later cohorts, 55 years of age and above don't indicate the influx of younger men into these cohorts over the intervening 7 years one might assume differential migration and/or mortality.

Chart 3: Anaktuvuk Pass – Comparison 2003 vs. 2010 Age Cohorts (5 yr. interval) by Gender.



Household Size:

Table 4: Anaktuvuk Pass – NSB Sample - Average Household Size by Ethnicity.

Iñupiat Average Household Size	Caucasian – Average Household Size	Anaktuvuk Pass 2010 All HH's Average Household Size
3.8 people	2.18 people	3.61 people
n= 65	n=11	n=80

Table 5 below reveals the distribution of household size by ethnicity. All Caucasian households are four persons or less while about half of all Iñupiat households have four persons or more.

Table 5: Anaktuvuk Pass 2010: Household Size by Ethnicity

Recode Number of People in HH to Ordinal for Comparisons	Recode Ethnicity into Three Categories					
	Iñupiat		Caucasian		Other	
	Count	Column %	Count	Column %	Count	Column%
1	19	29.2%	3	27.3%	1	25.0%
2	9	13.8%	5	45.5%	1	25.0%
3	5	7.7%	1	9.1%	0	.0%
4	10	15.4%	2	18.2%	0	.0%
5	6	9.2%	0	.0%	1	25.0%
6	8	12.3%	0	.0%	1	25.0%
7	2	3.1%	0	.0%	0	.0%
8	2	3.1%	0	.0%	0	.0%
9+	4	6.2%	0	.0%	0	.0%

Average Length of Residency:

Most Iñupiat household heads are lifetime residents of Anaktuvuk Pass. In contrast, more than 82% of Caucasian household heads, drawn by employment, have lived here less than 2 years.

Table 6: Anaktuvuk Pass 2010 Average Length of Residency Household Head by Ethnicity.

Iñupiat Household Head – Average Length of Residency	Caucasian Household Head – Average Length of Residency
38.63 years	3.09 years
n= 65	n=11

Dependency Ratios:

Table 7 below compares the proportions (%) of the total Anaktuvuk Pass population that fall into various age intervals (cohorts). These age intervals are selected to create a total dependency ratio, a child dependency ratio and an age dependency ratio.

Table 7: Anaktuvuk Pass – Age Cohorts and Dependency Ratios 2003 and 2010.

	Anaktuvuk Pass 2003	Anaktuvuk Pass 2010
% 15 yrs. & under	36.10%	32.10%
% 18 yrs. & under	42.3%	39.4%
% 18-24 years of age	10.3%	12.5%
% 55-64 years of age	5.1%	6.3%
% 62 years and older	7.4%	3.5%
% 65 years and older.	5.8%	2.4%
%16-64 years of age	57.4%	64.8%
% 18-64 years of age	51.2%	61.0%
Youth Dependency Ratio	63.0	49.0
Age Dependency Ratio	11.0	4.8
Total Dependency Ratio	74.0	54.0

The important thing to note in this table is the precipitous 25 percent drop in the total dependency ratio for Anaktuvuk Pass between 2003 and 2010. The drop is accounted for by the fact that there are 50 percent fewer elders in Anaktuvuk Pass in 2010 and in addition there has been a 10 percent drop in children under the age of 15. What the implications of these changes mean will require further detailed analysis, especially given the 50 percent drop in males 34-55 years of age between 2003 and 2010. Also of some interest is the fact the total dependency ratio for Anaktuvuk Pass is now below the State of Alaska (55.5 percent) and the U.S. ratio (59.2 percent). Economists view lower dependency ratios as a positive measure – that is lower proportions of “dependent” cohorts (relative to the work force) should equal greater productivity. However, this supposition might be incorrect and the changes in dependency ratios in Anaktuvuk Pass may be more indicative of the rural-urban-rural migration patterns resulting from contemporary economic problems.

Employment:

Anaktuvuk Pass’s length of employment is detailed in Table 8, below. Note that for 2010 less than half (44.4%) the work force worked the entire year. In addition, more than half the work force (54.9%) worked less than 10 months. Working less than 10 months is a typical criterion for defining underemployment. Strikingly 30% of the labor force for which we have information did not work at all during the reference year, which compares with 22% in 2003. In 2010 only 10 (12%) of the 81 respondents (mostly permanent and full time) replied that they had little concern about being underemployed.

Table 8: Anaktuvuk Pass 2010 - Employment
 {Individual household member's months of employment.}

Number of Months	2010 Frequency	2010 Percent
0	49	30.2
1	2	1.2
3	3	1.9
3	6	3.7
4	4	2.5
5	6	3.7
6	10	6.2
7	2	1.2
9	7	4.3
10	1	.6
12	72	44.4
Total	162	100.0

Table 9, below, compares a number employment measures for Anaktuvuk Pass between 2003 and 2010. Numbers with one asterisk (*) indicate results from the sample population. For example, the sample of individuals included in interviews for 2003 was 329 individuals while for 2010 it was 289. Other numbers in the same cell represent the total number of individuals, revised upward from the sample population by using proportions from the sample population multiplied times the estimated total population of the community.

If we include individuals with zero months of employment in our “average of months employed” we arrive at an average of 6.1 (**) months of employment for 2010. This contrasts, not unsurprisingly given their recruitment and migration, with Caucasians who average 10.3 months of employment. If we exclude Iñupiat individuals who have not worked at all during the reference year, then the average increases to 7.35 months of employment in 2010. For 2003 comparable averages are 5.9 (**) months of employment or by including only those that worked 7.58 months. There is remarkable consistency through time for Iñupiat employment as the average number of months worked between 2003 and 2010 are nearly exactly the same. Similar consistency is also found for measures for the number of persons in the labor force and the for the average months unemployed. Note, in addition, that the average months unemployed for Caucasians is 1.36 months.

Table 9: Employment Characteristics of Anaktuvuk Pass 1998 -2010

Anaktuvuk Pass	1998	2003	2010
Total Population	314	368 (329*)	388 (289*)
Persons 16-64*	165	197	239(187*)
Persons in Labor Force	147	166*	170*
Respondents Reporting Underemployment	11	60*	62*
Respondents Working < 10 months*	11	79*	89* (54.9%)
Ave. Months Employed	-	5.9** (7.58)	6.1** (7.35)
Ave. Months Unemployed	-	8.79*	8.99*

*Sample population **Average includes unemployed individuals in the denominator.

Clearly those residents of Anaktuvuk Pass, who are by definition in the labor force (16-64), face considerable difficulties with an unemployment rate three and a half times the national average (see Table 10 below). Note the age variable for this data set was recoded to select only individuals 16-64 years of age. By this process five individuals ≥ 65 years of age were excluded from the retirement category.

Table 10: Anaktuvuk Pass 2010 – Employment Status – Individuals in the Work Force.

Employment Status	2010 Frequency	2010 Percent	Cumulative Percent
Permanent full time	76	43.4	43.4
Temporary seasonal	13	7.4	50.9
Part-time	16	9.1	60.0
Unemployed	61	34.9	94.9
Retired	9	5.1	100.0
Total	175	100.0	

A comparison of the employment status for individuals in the labor force between 2003 and 2010 is very instructive. During this interval there has been a 20 percent increase in permanent full time employment (i.e. from 35 percent to 43 percent). However, this gain has come at the expense of a drastically reduced seasonal employment (perhaps related to a decrease in Capital Improvement Projects [CIP] and/or the impact of dividend payouts), which has led to a 40 percent increase in unemployment during this seven-year period.

Table 11: Anaktuvuk Pass Comparison of Employment Status 2003 to 2010 (in %).

For Individuals 16-64 yrs. Of age.	Percent 2003	Percent 2010
Permanent Full Time	34.9%	43.4%
Seasonal Employment	26.6%	7.4%
Part-time Employment	11.2%	9.1%
Unemployed	20.1%	34.9%
Retired	3.0%	5.1%

Although, as we shall see below in Table 12, there has been some re-arrangement and movement of female Iñupiat from some employers, in general however, the employment status of Iñupiat by gender seems to lack any bias. Nearly equal numbers are employed as permanent full time employees and nearly equal proportions share unemployment, although Iñupiat women have slightly higher proportions of unemployment and significantly lower proportions of part-time employment.

Table 12: NSB 2010 – Anaktuvuk Pass – Employment Status Iñupiat Only, by Gender.

Iñupiat	Employment 2010	Count	Column %
Male Employment	Permanent full time	29	36.3%
	Temporary seasonal	6	7.5%
	Part-time	10	12.5%
	Unemployed	28	35.0%
	Retired	7	8.8%
	Total	80	100%
Female Employment	Permanent full time	29	38.2%
	Temporary seasonal	6	7.9%
	Part-time	4	5.3%
	Unemployed	32	42.1%
	Retired	5	6.6%
	Total	76	100%

Employer:

Table 13 below details the major employers for individuals in Anaktuvuk Pass by employer, gender and ethnicity. We can see from the table that regional or local government employs more than 75 percent of the Iñupiat who are employed. By far the largest employer is the North Slope Borough followed by Village Corporation (or its subsidiaries) with the School District being a close third. Ninety-eight percent of all employment is by government entities with private sector employment accounting for less than two percent. Three quarters of all non-Iñupiat employment is either with the School District or with the NSB. The NSB or Village Corporations predominantly employ male Iñupiat, whereas Iñupiat females are mainly employed by the School District while being represented in nearly equal proportions (as are Males) by the Village Corporation.

Table 13: NSB 2010 Anaktuvuk Pass – All Individuals:
Employer by Gender and Ethnicity.

Employer	Gender	Iñupiat	Caucasian	Other
Federal government	Male	0	0	0
	Female	1	0	0
State government	Male	1	0	0
	Female	0	0	0
City government	Male	2 (6)	0(2)	1
	Female	3 (4)	0	1
NSB government	Male	23 (22)	3(7)	2
	Female	13 (22)	1(0)	1
NSB School district	Male	2 (5)	5(7)	1
	Female	10(14)	2(4)	2
NSB CIP	Male	0	0	0
	Female	0	0	0
Oil industry	Male	0	0	0
	Female	0	0	0
Private construction firm	Male	1	0	0
	Female	0	0	0
ASRC or subsidiary	Male	0	0	0
	Female	1	0	0
Village corp./subsidiary	Male	9(9)	2(3)	1
	Female	6(7)	0	0
Finance/insurance	Male	0	0	0
	Female	0	0	0
Transportation	Male	0	1	0
	Female	0	0	0
Communications	Male	0	0	0
	Female	0	0	0
Other	Male	9	0	0
	Female	6	0	0
Total		87	14	9

Note: numbers in parenthesis represent counts from the 2003 NSB Census

Numbers in the table contained in parenthesis are counts from the 2003 NSB Census (note counts of single individuals are not included from the NSB 2003 Census).

Several points stand out. First is the 40 percent reduction in employment by the City Government between 2003 and 2010. Employment by the Borough has decreased by about 15 percent during this same period; however, the number of Iñupiat women employed by the NSB has nearly decreased by half. Nearly exactly the same number of Iñupiat males are employed between 2003 (50) and 2010 (49), however, employment of Iñupiat females has decreased by approximately 20 percent (49/40). Note, however, as described above, permanent full-time employment is fairly balanced between Iñupiat males and females. Of course these are numbers from the sample population and more individuals were contacted and interviewed in 2003. Nevertheless with standard errors of +/- 5% for 2010 all these changes mentioned remain statistically significant.

Table 14, below, shows Iñupiat household members' reasons for unemployment. These reasons are very consistent over time. Both in 2003 and 2010 about 60 percent of respondents cited the number one reason that they were unemployed is because they could not find a job. Another 20 percent cited family responsibilities such as care of a family member. Interestingly, since 2003 three males have cited family responsibilities as a reason that they could not take a job.

Table 14: NSB 2010 – Anaktuvuk Pass – Iñupiat Household Member's Reasons for Unemployment by Gender

Iñupiat			
		Count	Column N %
Did not want job	Male	4 (7)	57%
	Female	3 (5)	43%
Could not find job	Male	25 (26)	53%
	Female	22 (27)	47%
Physical disability/poor health	Male	3 (2)	50%
	Female	3 (0)	50%
Wage work with conflict with subsistence	Male	1 (1)	100%
	Female	0 (0)	0%
Family responsibilities (e.g. care of elder)	Male	3 (0)	20%
	Female	12 (9)	80%
College or technical training	Male	3 (1)	50%
	Female	3 (2)	50%
Other	Male	2 (2)	100%
	Female	0 (2)	0%
	Total	81 (84)	

Income:

Consideration of income for individuals and households in Anaktuvuk Pass is going to be much more complicated than described in previous surveys. These complications arise from changes in the questionnaire between 2003 and 2010, with the 2010 questionnaire asking a more expanded and comprehensive set of income questions. The other complication arises from the large proportion of missing information found in the total "estimated" household income variable.

In 2010 about 31 percent (25/80) of the households did not provide information to the question – "What was the total household income that you and all other members of your household received in 2009?" About three quarters of this non-response was due to missing information (another 5 households refused to answer). By missing information we mean that the coding boxes for this variable were empty – why they were empty is difficult to discern. It could be the case the respondent could not come up with an answer or it might be that after getting no response the interviewer didn't push the question and it might be a case of a polite or tacit "refused to answer".

In 2010 of the 80 households contained in the sample 55 (69%) contained "estimated" household income. Thus 25 households (~31%) lacked estimated total

household income in 2010. Reducing the sample community population (289) by slightly less than 31% yields 89 individuals which, when subtracted from the total sample population, yields a denominator of 200 individuals. The sum of all households reporting estimated income was \$3,227,020 (remember three fewer households were contacted in 2010). Table 15, below, summarizes the outcomes of this process in comparing results from the 2003 and 2010 surveys.

Table 15: Anaktuvuk Pass - Comparison of Average Estimated Household Income and Per Capita Income (weighted for non-response) 2003 vs. 2010.

Income	2003 in constant \$'s	2010 (% change)
Average "Estimated" Household Income	\$48,837 (\$41,083)*	\$58,673 (+17%)
"Estimated" Per Capita Income	\$13,746 (\$11,564)*	\$16,135 (+15%)

*Numbers in parenthesis are in 2003 dollars.

Estimated versus Calculated Total Household Income:

Table 16, below, shows the average household and per capita income for both the estimated and calculated income.

Table 16: Anaktuvuk Pass 2010 - "Estimated" versus "Calculated" Household Income.

Income	Calculated	Estimated
Average Household Income	\$55,340*	\$58,673 (+5.4%)
Per Capita Income	\$15,339*	\$16,135 (+6.0%)

*Eliminating one household that reported no income from any source.

In summary, there can be any number of reasons why the calculated income averages are lower than the estimated income averages. In some cases the calculated total income contains missing data in one or more of the measures – yet the total household income is treated as valid. The same household might have been eliminated as missing data in the estimated household measure. In addition, the estimated measure has a household sample of 55 that might be over represented by wage earners (and/or younger respondents) who have higher incomes or a better grasp on household income inputs.

Further analysis would be necessary to pin down what sources of information might be systematically overlooked (e.g., dividend income) and perhaps the analysis would reveal what sources might need to be weighted in the calculated measure. Analysis will also be conducted on any skewing by age, employment, ethnicity, gender and so forth between the two measures. As it now stands the aggregate income inputs to Anaktuvuk Pass are better represented by the calculated measure and stand well above four million dollars. As for household averages and per capita calculations, subsequent analysis (below) reveals that staying with the calculated averages as the parameters provides very little difference for Iñupiat income but increases the representation considerably (by 30%).

Table 17: Comparisons of Anaktuvuk Pass Average Household/Per Capita Incomes

Income	U.S. Census	Profiles AK Nationalrelocation.com	Anaktuvuk Pass 2010 (% difference)
Average Household Income	-	\$221,804	\$58,673
Median Household Income	\$69,543 (U.S.)	\$51,571	\$57,000 [-18%]* (\$54,500)**
Per Capita Income	\$42,603 (AK)	\$22,660	\$16,135 (~30%***)

*Percent difference between U.S. Census and Anaktuvuk Pass 2010 (NSB Census)

**NSB "Calculated" Total Household Income Distribution in parenthesis.

*** Percent difference between Profiles AK and Anaktuvuk Pass 2010 (NSB Census)

Table 17 above provides a number of comparisons between summary measures between Anaktuvuk Pass household income and parameters representing the U.S. and Alaska households.

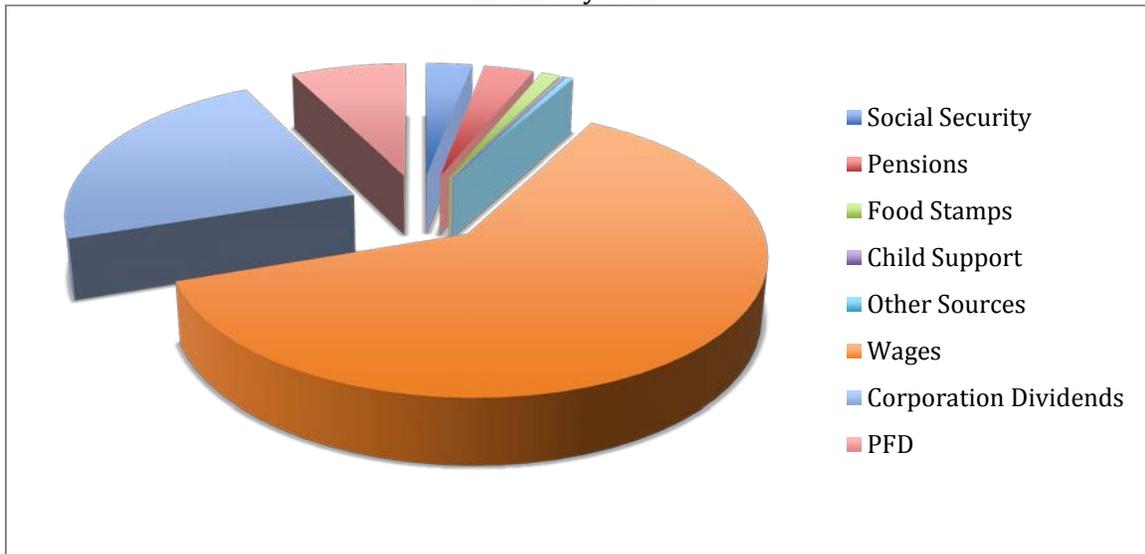
The U.S. Census uses very different inputs to calculate the numerator for per capita income in Alaska, and the Alaska profile underestimates median household income while overestimating per capita income. The best estimate is that Anaktuvuk Pass's per capita income is about 30% less than the state average. The U.S. Census median income for the United States (2010 figure calculated in constant dollars from the 2008 figure) seems reasonable and represents about an 18% shortfall for Anaktuvuk Pass.

Table 18: Anaktuvuk Pass 2010- Total Household Income by Source in Percent

Source of Income	Total \$ Amount*	Percent Contribution
Social Security	\$130,929	3.0%
Pensions	\$141,800	3.2%
Food Stamps	\$52,110	1.2%
Child Support	\$8,680	0.2%
Other Sources	\$20,475	0.5%
Wage	\$2,697,900	61.7%
Corporation Dividends	\$995,027	22.8%
PFD	\$324,945	7.4%
Total	\$4,371,866	100%

In Anaktuvuk Pass in 2010 three sources of income - wages, corporation dividends and PFD, provide 92% of the total community income.

Chart 4: Anaktuvuk Pass 2010 - Proportional Contribution to Total (Calculated) Household Income by Source



* Figures are derived from Sample Household Population. Data used in Chart 4 above.

Total Household Income by Ethnicity:

Table 19: Anaktuvuk Pass 2010 – Estimated Total Household Income by Ethnicity.

Recode Estimated Total Household Income #3 into 12 Categories	Recode Ethnicity into Three Categories					
	Iñupiat		Caucasian		Other	
	Count	Column %	Count	Column %	Count	Column %
0-\$15,000	6	13.6%	0	.0%	0	.0%
15,001-29,999	6	13.6%	0	.0%	0	.0%
30,000-39,999	4	9.1%	0	.0%	0	.0%
40,000-49,999	3	6.8%	1	11.1%	0	.0%
50,000-59,999	9	20.5%	1	11.1%	0	.0%
60,000-69,999	3	6.8%	2	22.2%	0	.0%
70,000-79,999	4	9.1%	3	33.3%	0	.0%
80,000-89,999	3	6.8%	1	11.1%	0	.0%
90,000-99,999	2	4.5%	1	11.1%	0	.0%
100,000-124,999	3	6.8%	0	.0%	2	100.0%
125,000-149,999	0	.0%	0	.0%	0	.0%
150,000+	1	2.3%	0	.0%	0	.0%
	44 (65)*	100%	9 (11)*	100%	2 (4)*	100%

*Numbers in parenthesis represent total number of sample households of that ethnicity in 2010.

As we can observe from Table 19 above about two-thirds of Iñupiat households estimated their total household income. In contrast 82% of the Caucasian households estimated their total income so most of the households picked up in the calculated total household income will be Iñupiat. One can see that 64 percent, nearly two-thirds of Iñupiat households, make less than \$60,000 while in contrast, three-quarters (78 percent) of Caucasian households make more than \$60,000.

Comparing the 2010 Anaktuvuk Pass household income distribution with those of 2003 (in constant dollars) we find that 89 percent of the Iñupiat households fell below the 2010 - \$60,000 threshold. To make this comparison valid we used the 2003 value of \$71,348, that is, \$60k in 2010 constant dollars.

In the frequencies and proportions of the calculated total household income seen in the table below we note about 62 percent are below the \$60,000 threshold, about 4 percent less than the estimated total household income detailed in the Table 19, above. Now, however, we have 62 (95 percent) of the total Iñupiat households represented with income totals. This is about a 30 percent increase in Iñupiat household representation with only modest changes in the income distributions. In contrast the “missing” two Caucasian households are both very low income. Similarly the two missing “other” ethnicity households both have incomes of less than \$60,000. It seems that the use of the “calculated” total household income reduces (in an ordinal sense) income slightly (~5 percent) but increases representation of Iñupiat households by the significant proportion of 30 percent.

Table 20: Anaktuvuk Pass 2010 – Calculated Total Household Income by Ethnicity.

Recode of Calculated Total Household Income into 12 Categories		Recode Ethnicity into Three Categories					
		Iñupiat		Caucasian		Other	
		Count	Column%	Count	Column %	Count	Column %
	0-\$15,000	15	23.1%	2	18.2%	1	25.0%
	15,001-29,999	10	15.4%	0	.0%	0	.0%
	30,000-39,999	2	3.1%	0	.0%	0	.0%
	40,000-49,999	6	9.2%	1	9.1%	0	.0%
	50,000-59,999	7	10.8%	1	9.1%	1	25.0%
	60,000-69,999	5	7.7%	2	18.2%	0	.0%
	70,000-79,999	2	3.1%	1	9.1%	0	.0%
	80,000-89,999	7	10.8%	3	27.3%	0	.0%
	90,000-99,999	4	6.2%	1	9.1%	1	25.0%
	100,000-124,999	6	9.2%	0	.0%	1	25.0%
	125,000-149,999	0	.0%	0	.0%	0	.0%
	150,000+	1	1.5%	0	.0%	0	.0%
	Total	62(65)*	100%	11(11)*	100%	4(4)*	100%

There is less than 1.4 percent difference between the average Iñupiat estimated and calculated income. This is encouraging as it seems most of the variance between the two estimates is accounted for by households of other ethnicities.

Table 21: Anaktuvuk Pass 2010 – Average Estimated & Calculated Total Household Income by Ethnicity.

	Iñupiat	Caucasian	Other
Ave. Estimated Total Household Income.	\$53,730 (44)	\$69,211 (9)	\$120,000 (2)
Ave. Calculated Total Household Income	\$53,010 (62)	\$58,624 (11)	\$70,323 (4)

Numbers in parenthesis represent the number of households from the sample population used for calculation.

Poverty Level:

Table 22, below, shows the distribution of Iñupiat households below the poverty level that has been adjusted for their household size (i.e., larger households have lower thresholds than do smaller households). For example, poverty guidelines (for 2010) indicate that for the state of Alaska any single person household with income of less than \$13,530 is below the poverty threshold. As the table indicates there are 13 Iñupiat households (highlighted) with household sizes ranging from one to 10 people with incomes under \$13,530. In essence any household on or above the diagonal falls under the poverty threshold. For Iñupiat households 19/65 or 29 percent fall below the federal guidelines for poverty. If one uses the results from all the households in the community then 23/80 or about 29 percent of all households fall below the poverty threshold. Thus Iñupiat and non-Iñupiat households fall below the poverty threshold in the same proportions.

Table 22: Anaktuvuk Pass 2010 – Iñupiat Households: Household Size by Poverty Income Threshold.

Recoded Calculated Total Household Income to Poverty Level	Recoded HH Size to Ordinal for Poverty Calculations												
	1	2	3	4	5	6	7	8	9	10	11	12	13+
	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count	Count
\$0-13,530	6	2	0	1	1	2	0	0	0	1	0	0	0
\$13,351- 18,210	2	1	0	0	0	0	0	0	0	0	0	0	0
\$18,211- 22,890	2	1	0	0	0	0	0	0	0	0	0	0	0
\$22,891- 27,570	0	0	0	3	0	0	0	0	0	0	0	0	0
\$27,571- 32,250	1	1	1	0	0	1	0	0	0	0	0	0	0
\$32,251- 36,930	1	0	0	0	0	0	0	0	0	0	0	0	0
\$36,931- 41,610	0	0	0	0	0	0	0	0	0	0	0	0	0
\$41,611- 46,290	2	0	1	0	0	0	0	0	0	0	0	0	0
\$46,291- 50,970	0	1	1	0	0	0	0	1	0	0	0	0	0
\$50,971- 55,650	1	1	0	1	0	1	0	0	0	0	0	0	0
\$55,651- 60,330	3	0	0	0	0	1	0	0	0	0	0	0	0
\$60,331- 65,010	1	0	1	0	1	0	0	0	0	0	0	0	0
\$65,011- highest	0	2	1	5	4	3	2	1	0	2	0	0	1
	6/19	3/9	0/5	4/10	1/6	3/8	0/2	0/2	0/0	1/3	0/0	0/0	1/1

Educational Attainment:

With the exception of a marked increase in Vocational Technical graduates in 2010 there are only modest differences in the proportions across the three NSB Censuses (1998, 2003, 2010) in educational status.

Table 23: Anaktuvuk Pass Educational Status of Household Members 1998-2010.

Educational Status	1998 Percent	2003 Percent	2010 Percent
Has Not Started School	2%	13%	10%
Still in Elementary School	17%	13%	14%
Still in Middle School	10%	9%	7%
Still in High School	11%	5%	9%
Did Not Finish High School	14%	13%	9%
GED	5%	6%	5%
High School Diploma	25%	31%	28%
Some College	9%	4%	2%
Vocational Technical Graduate	4%	1%	9%
B.A. Degree	2%	4%	3%
Master's Degree	1%	2%	4%
Professional Degree/ P.H.D.	0%	1%	1%
Total	100%	102%	101%

With respect to “Background and Education Interests” (Table 24 below) the differences in the comparison between 2010 and 2003 are so dramatic that one suspects a change in coding procedures. The omission of two categories “retired” and “combination of 2 & 3” only accounted for about 10% of the responses in 2003. If taken at face value we notice a huge four fold reduction in the “primarily a student” category, a significant increase (35%) in permanent jobs and more than a doubling of individuals who see no connection between employment and educational attainment.

Table 24: Anaktuvuk Pass – Background & Educational Interests 2003-2010 for Iñupiat Household Members

	2010 Number	2010 Percent	2003 Percent*	2003 Number*
Primarily a student	16	10.6%	39.6%	90
Job situation unsettled	23	15.2%	11.5%	26
Job is permanent	49	32.5%	21.1%	48
No connection between employ. & educ.	63	41.7%	17.6%	40
Total	151	100%	89.8%*	204
*Two categories "retired" "2 & 3" not used in 2010				

As in past surveys there continues to be a considerable contrast in educational achievement by ethnicity. Slightly less than 10 percent of the Iñupiat individuals within the community have some college experience, a B.A. and/or advanced degrees. This contrasts with 75 percent of the Caucasian population with the same level of attainment. Of course these proportions are highly skewed. Caucasians in the general U.S. population have about one third this level of attainment. Thus, like many other NSB communities the non-Iñupiat labor force is mostly college educated and disproportionally drawn to the NSB by the employment opportunities that require these skills.

Table 25: Anaktuvuk Pass 2010 Educational Attainment by Ethnicity.

Individual's Highest Level of Education	Ethnicity Recoded 3 Attributes					
	Iñupiat		Caucasian		Other	
	Count	Column %	Count	Column %	Count	Column %
Has not started school	26	10.3%	1	5.3%	3	17.6%
Elementary school	37	14.7%	0	.0%	2	11.8%
Middle school	21	8.3%	0	.0%	0	.0%
High school	26	10.3%	0	.0%	0	.0%
Did not finish high school	24	9.5%	0	.0%	1	5.9%
High school diploma	76	30.2%	2	10.5%	2	11.8%
GED	11	4.4%	1	5.3%	2	11.8%
Voc/Tec graduate	4	1.6%	1	5.3%	0	.0%
Some college	22	8.7%	3	15.8%	2	11.8%
B.A. degree	2	.8%	6	31.6%	0	.0%
M.A. degree	3	1.2%	3	15.8%	5	29.4%
Professional degree	0	.0%	2	10.5%	0	.0%
Other (specify)	0	.0%	0	.0%	0	.0%
Total	252	100%	19	100%	17	100%

There has been an increase in the proportion of Iñupiat from Anaktuvuk Pass never enrolling in college. This generalization is substantiated by the fact that during the last 12 years there has been a one third decline in Iñupiat enrollment in college. On the other hand during that same period the number of college graduates has gone from one (1%) to seven (4.5%).

Table 26: Anaktuvuk Pass – Iñupiat Individuals’ College Experience & Participation 1998-2010.

	1998 Percent	2003 Percent	2010 Percent	2010 Count
Never enrolled	50%	60%	75.8%	119
Enrolled, but no courses completed	5%	17%	0.0%	0
Currently enrolled for first time	5%	3%	4.5%	7
Completed courses for credit	39%	17%	15.3%	24
Graduated from college	1%	3%	4.5%	7
Total	100%	100%	100.1%	157

Training:

Unless there has been a systematic interviewer error the result of Iñupiat who believe education can help their career has been completely reversed in a seven-year period with 3 in 4 Iñupiat now being pessimistic about the role of education in their careers. This contrasts dramatically with the eight in ten Iñupiat in 2003 that believed that education can help their careers.

Table 27: Anaktuvuk Pass – Inupiat Respondents Only –
Can Additional Education Help Career? 2003 – 2010

Response	2003 Percent	2010 Percent	2010 Count
Yes	82.8%	28%	42
No	17.2%	72%	108
Total	100%	100%	150

In 2010 of those limited number of Iñupiat individuals who believe education/training would be beneficial to their careers more than eight in ten would be willing to leave home to obtain these skills, a proportion very similar to the 2003 Iñupiat respondents.

Table 28: Anaktuvuk Pass – Iñupiat Respondents Who Believe Additional Education
Would be Beneficial – Would They Leave Home for Additional Training: 2003-2010.

Response	2003 Percent	2010 Percent	2010 Count
Yes	82.6%	85.4%	35
No	17.40%	14.6%	6
Total	100%	100%	41

Where Iñupiat trainees would prefer to receive there training has slightly shifted since 1998 away from local training at Ilisagvik to a proportionally modest increase in interest at UAA.

Table 29: Anaktuvuk Pass 1998-2010 – Iñupiat Respondents' Preferred Location for New Training.

	1998 Frequency	1998 Percent	2003 Frequency	2003 Percent	2010 Frequency	2010 percent
Ilisagvik	22	50%	34	32%	6	21.4%
UAF	0	0%	28	26%	7	25.0%
UAA	0	0%	3	3%	4	14.3%
Voc-tech school	0	0%	6	6%	0	0.0%
College outside Alaska	22	50%	7	7%	3	10.7%
Other	0	0%	23	21%	8	28.6%
Anywhere in Alaska	0	0%	2	2%	0	0.0%
Anywhere it's taught.	0	0%	4	4%	0	0.0%
Total	44	100%	107	100%	28	100%

Preferred length of training for Iñupiat trainees has decreased considerably (in a proportional sense) between 2003 and 2010 from a short term on-the-job training to a more long term academic commitment in two or four year programs.

Table 30: Anaktuvuk Pass 2003-2020 – Iñupiat Respondents Preferred Length of Training.

Preferred Length of Training	2010 Frequency	2010 Percent	2003 Percent	2003 Frequency
Short term on-the-job	6	20%	48%	50
Long term on-the-job	9	30%	31%	33
Two year program	9	30%	10%	10
Four year degree program	6	20%	12%	12
Total	30	100%	100%	105

With respect to preferred occupations there is considerable difference between 2010 and previous censuses in 2003 and 1998. First, the number of respondents has gone down by two thirds (102 to 30). Second, important occupations from previous censuses comprising 30% (2003) and 20% (1998) of previously preferred occupations are missing.

Occupations such as food service, oil field worker and most important welding (the highest preference in 2003 at 17%) were not chosen as preferred occupations in 2010. Perhaps this is due to a shift in emphasis in vocational training programs or perhaps reflects occupations already saturated with too many skilled workers. Whatever the case, the precipitous drop in individuals desiring training has now shifted the emphasis to business management and mechanic.

Table 31: Anaktuvuk Pass 1998-2010 Iñupiat Respondents Preferred Occupation for Additional Training.

Occupation	2010 Frequency	2010 Percent	2003 Percent	1998 Percent
Word processing	3	8.3%	6.9%	12%
Accounting	2	5.6%	6.9%	6%
Heavy equipment	4	11.1%	9.8%	18%
Public administration	1	2.8%	1.0%	3%
Business Mgt.	5	13.9%	5.9%	3%
Teacher	1	2.8%	5.9%	0%
Health worker	4	11.1%	9.8%	18%
Carpentry	2	5.6%	4.9%	0%
Mechanic	5	13.9%	7.8%	0%
Electronics	2	5.6%	1.0%	0%
Pilot	1	2.8%	0.0%	0%
Other	6	16.7%	9.8%	19%
Total	36	100%	70%*	79%*

Housing:

The major shift in type of housing in Anaktuvuk Pass between 2003 and 2010 is a substantial increase in the use of mobile home/trailers as a dwelling structure, with 10% of the sample households now living in such a structure.

Table 32: Anaktuvuk Pass 2003 – 2010 Households by Type of Living Structure.

Type of Living Structure	2010 Frequency	2010 Percent	2003 Percent	2003 Frequency
Mobile home/trailer	8	10%	1%	1
Single-family house	64	80%	85%	79
Building with 3-4 housing units	2	3%	4%	4
Building with 5 > housing units	5	6%	5%	5
Other	1	1%	5%	4
Total	80	100%	100%	93

A majority (58%) of household heads own their own house, another one third of households live in rental dwellings.

Table 33: Anaktuvuk Pass 2010 – Housing “Who owns the building in which you are living?”

Who owns the building in which you are living?	Frequency	Percent	Valid Percent
TNHA (rental)	12	15.0	15.4
North Slope Borough (rental)	9	11.3	11.5
Privately owned rental	8	10.0	10.3
TNHA (Mutual help home ownership)	1	1.3	1.3
Owned by you (or someone in HH) with mortgage/loan	3	3.8	3.8
Owned by you or someone in household free and clear	45	56.3	57.7
Total Valid Responses	78	97.5	100.0
Missing Information	2	2.5	
Total Responses	80	100.0	

One substantial change in housing in Anaktuvuk Pass between 2003 and 2010 is that in 2003 60% of the families lived in four rooms or less, while in 2010 three quarters of the families lived in four rooms or more. The average number of bedrooms for houses in Anaktuvuk Pass is 2.75. Seventy five percent of households have 3 bedrooms or less and 95% have 4 or fewer bedrooms.

Table 34: Anaktuvuk Pass 2003-2010– Total Rooms in Dwelling (excluding bathrooms)

Number of Rooms	2010 Frequency	2010 Percent	2003 Percent	2003 Frequency
1	6	7.5%	6.5%	6
2	4	5.0%	11.8%	11
3	9	11.3%	20.4%	19
4	17	21.3%	20.4%	19
5	22	27.5%	19.4%	18
6	16	20.0%	11.8%	11
7	4	5.0%	6.5%	6
8	1	1.3%	1.1%	1
9	1	1.3%	1.1%	1
Total	80	100%	98%	92

The size of dwellings in Anaktuvuk Pass averaged 988 ft² but half the dwellings were less than 800 ft² and only two dwellings were over 1,400 ft².

Utilities – Heating and Water Systems:

Aside from slight decreases in forced-air systems and a slight increase (from 2003) in stand-alone heaters – the type of system used to heat houses has remained fairly constant in Anaktuvuk Pass for the last seven years. With respect to the source for heating dwellings - 91% of the dwellings depended on diesel fuel and 6% on electricity, with one household depending on wood.

Table 35: Anaktuvuk Pass Heating Systems 1998 – 2010.

Heating System Type	Percent 1998	Percent 2003	Percent 2010	Frequency 2010
Stand-Alone Stove		19%	16.3%	13
Stand-Alone Heater	53%	9%	17.5%	14
Forced-Air Furnace	28%	25%	20.0%	16
Baseboard/ Boiler System	18%	48%	43.8%	35
Portable Heater/Other	1%	1%	2.6%	2
Total	100% (57)	100% (92)	100%	80

Numbers in parenthesis represent sample size for that year.

Since 2003 almost nine out of ten Anaktuvuk Pass households have access to running water. Ninety percent of Anaktuvuk Pass households have piped water while another 4% rely on water trucks and the remaining 6% obtain it through other means.

Table 36: Anaktuvuk Pass 1998 – 2010 – “Does your house have running water?”

Running Water?	1998 Percent	2003 Percent	2010 Percent
Yes	25%	90%	86%
No	75%	10%	14%
Total	100%	100%	100%

In 2010 86% of the households in Anaktuvuk Pass had flush toilets and 14% used honey-buckets. Of those with flush toilets 94% were hooked to sewer lines while another 6% had holding tanks.

Housing and Utility Costs:

Table 37, below, shows utility costs for Anaktuvuk Pass between 1998 and 2010. The percent change column compares the costs for utilities between 2003 and 2010. However, the original 2003 costs have been raised to constant dollars, that is - \$157 in 2003 dollars would purchase \$187 worth of goods in 2010. Subtracting the corrosive influence of inflation between these two points accounts for these differences. The percent change is the proportion of 2003 constant dollars divided by 2010 dollars. In real purchasing power the cost of heating has gone up by one fifth and the cost of water by one third in the seven years between surveys.

Table 37: Cost of Utilities – Anaktuvuk Pass – 1998 – 2010.

Average Monthly Utility Costs \$'s	1998	2003	2003 Constant \$'s	2010	Percent Change
Heating	\$143	\$157	\$187	\$230	19%
Electricity	\$117	\$217	\$258	\$257	0%
Water	\$60	\$85	\$71	\$111	36%
Total Average Utility Costs	\$324	\$459	\$516	\$598	14%

Applying the same reasoning as discussed above we can see that in constant dollars there has been almost no increase in the cost of housing in Anaktuvuk Pass over the last seven years.

Table 38: Anaktuvuk Pass – Rental and Mortgage Costs 1998 -2010.

Average Monthly Costs of:	1998	2003	2003 Constant \$'s	2010	Percent Change
Mortgage payment	\$250	\$415	\$494	\$524	6%
Rental payment	\$272	\$370	\$440	\$458	4%

Only three households (4%) were taking (or planned to take) advantage of the AHFC energy assistance program. About half of the sample respondents had never heard of the program and a nearly equal proportion, which had heard of the program, do not plan to apply.

Table 39: Anaktuvuk Pass 2010 – “Did you receive any AHFC Energy Assistance in 2009?”

Did your household receive any benefits from AHFC Energy Assistance during 2009?	Frequency	Percent	Valid Percent
Yes we received	2	2.5	2.6
We applied waiting to be audited	1	1.3	1.3
Planning to apply to program	2	2.5	2.6
Haven't heard about the program	37	46.3	48.7
No plan to utilize program	34	42.5	44.7
Total Valid Responses	76	95.0	100.0
Missing Information	4	5.0	
Total Responses	80	100.0	

In contrast to the AHFC energy assistance program, which had few participants, the Weatherization program had considerable subscription. Nearly half (42%) of the respondents had received benefits, were awaiting an energy audit or were planning to apply, thirteen percent had not heard of the program and the remainder (46%) were not planning to utilize the program.

Table 40: Anaktuvuk Pass 2010 – “Did you receive any benefits for the Weatherization Program in 2009?”

Did your household receive any benefits from the Weatherization Program during 2009?	Frequency	Percent	Valid Percent
Yes we received new ...	9	11.3	11.4
Public housing on waiting list	4	5.0	5.1
Low income awaiting energy audit	5	6.3	6.3
Planning to apply to program	15	18.8	19.0
Haven't heard of program	10	12.5	12.7
Don't plan to utilize program	36	45.0	45.6
Total Valid Responses	79	98.8	100.0
Missing Information	1	1.3	
Total Responses	80	100.0	

Subsistence:

Table 41: Anaktuvuk Pass – Subsistence Use of Local Resources 1998-2010
All Households

Amount	Anaktuvuk Pass 1998	Anaktuvuk Pass 2003	Anaktuvuk Pass 2010 Percent	Anaktuvuk Pass 2010 Frequency
None	2%	1%	0.0%	0
Very little	6%	13%	24.1%	19
Less than half	17%	15%	8.9%	7
Half	27%	24%	19.0%	15
More than half	27%	24%	20.3%	16
Nearly all	8%	15%	27.8%	22
All	13%	7%	0.0%	0
Total	100% (48)	100%(82)	100%(79)	79

Although the individual cell percentages (in Table 41 above) appear changed, subsistence use by households has actually remained fairly constant between 2003 and 2010. During this period roughly one third of all households acquire less than half their diet from wildlife resources, with about two thirds obtaining half or more of their diet from subsistence resources.

The previous table looks at subsistence use by all households in Anaktuvuk Pass in 2010, however, as one might expect – if ethnicity is taken into account discernable differences appear. As Table 42, below, indicates all Caucasian households receive less than half their diet from subsistence. In contrast, about three fourths of Iñupiat households receive half or more of their diet from subsistence.

Table 42: Anaktuvuk Pass 2010 - Amount of Diet from Local Subsistence Foods by Ethnicity.

Household - How much of your household diet came from subsistence foods in 2009?	Recode Ethnicity into Three Categories					
	Iñupiat		Caucasian		Other	
	Count	Column %	Count	Column %	Count	Column %
1. None	0	.0%	0	.0%	0	.0%
2. Very little	10	15.4%	8	80.0%	1	25.0%
3. Less than half	5	7.7%	2	20.0%	0	.0%
4. Half	14	21.5%	0	.0%	1	25.0%
5. More than half	14	21.5%	0	.0%	2	50.0%
6. Nearly all	22	33.8%	0	.0%	0	.0%
7. All	0	.0%	0	.0%	0	.0%
Total	65	100.0%	10	100.0%	4	100.0%

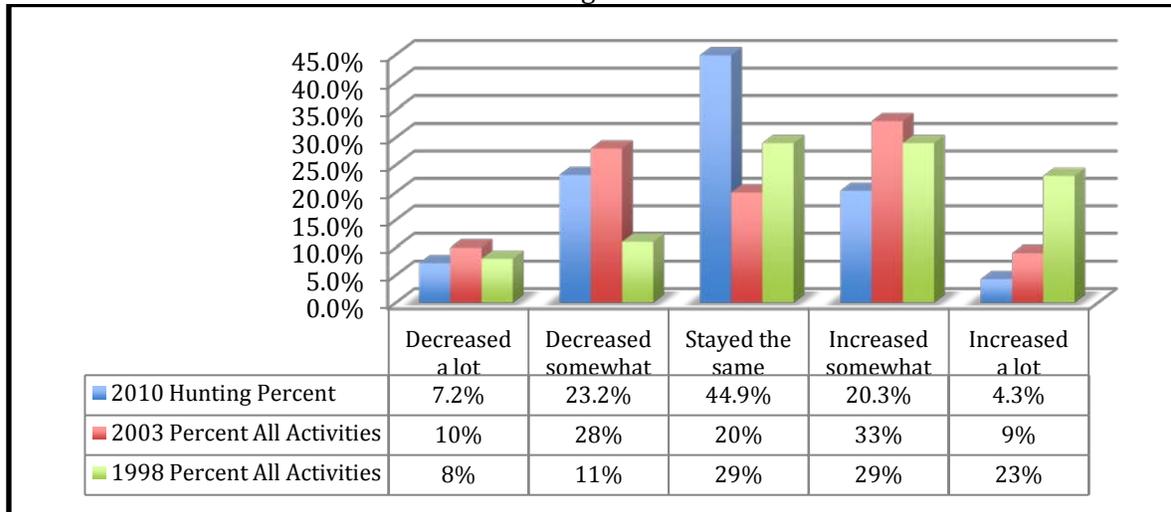
Table 43, below describes respondents impression of changes in three subsistence resources – hunting, fishing and gathering – during the last 5 years. 2010 is the first year that the question has been asked of specific resources, previous questionnaires asked only one question and that question characterized all the resources. As a basis of comparison, and given Anaktuvuk Pass’s dependence on caribou, one could use the hunting measure to compare with the earlier assessments over time. In general, for 2010, about 70 percent of respondents indicated those resources had stayed the same or increased. This is somewhat more optimistic than the 2003 assessments (62 percent) but significantly less than 1998 estimate of 81 percent.

Table 43: Anaktuvuk Pass 1998 – 2010 – Changes in Subsistence Activities Last Five Years.

Degree of Use	2010 Hunting Percent	2010 Fishing Percent	2010 Gathering Percent	2003 Percent All Activities	1998 Percent All Activities
1. Decreased a lot	7.2%	2.9%	5.7%	10%	8%
2. Decreased somewhat	23.2%	21.4%	18.6%	28%	11%
3. Stayed the same	44.9%	50.0%	58.6%	20%	29%
4. Increased somewhat	20.3%	20.0%	12.9%	33%	29%
5. Increased a lot	4.3%	5.7%	4.3%	9%	23%
Total	100%	100%	100%	100%	100%

Chart 5, below, graphically portrays resource assessments for Anaktuvuk Pass over time. As the bars indicate 1998 (green) were much more emphatic that resources had increased during the previous 5 years.

Chart 5: Anaktuvuk Pass 1998-2010 – Changes in Subsistence Activities Last Five Years.



Sharing of Subsistence Resources:

In general, as revealed in Table 44 below, since 1998 there has been a steady increase (38% - 43% - 52%) in the proportion of households that receive half or more of their subsistence diet from other households (usually within the community). Planned subsequent analysis will try to untangle (using age, income and other measures) whether this changes indicates greater sharing by active households and/or whether there has been an increase in the number of “less active” households.

Table 44: Anaktuvuk Pass 1998-2010 – Percent Subsistence Diet Received from Other Households.

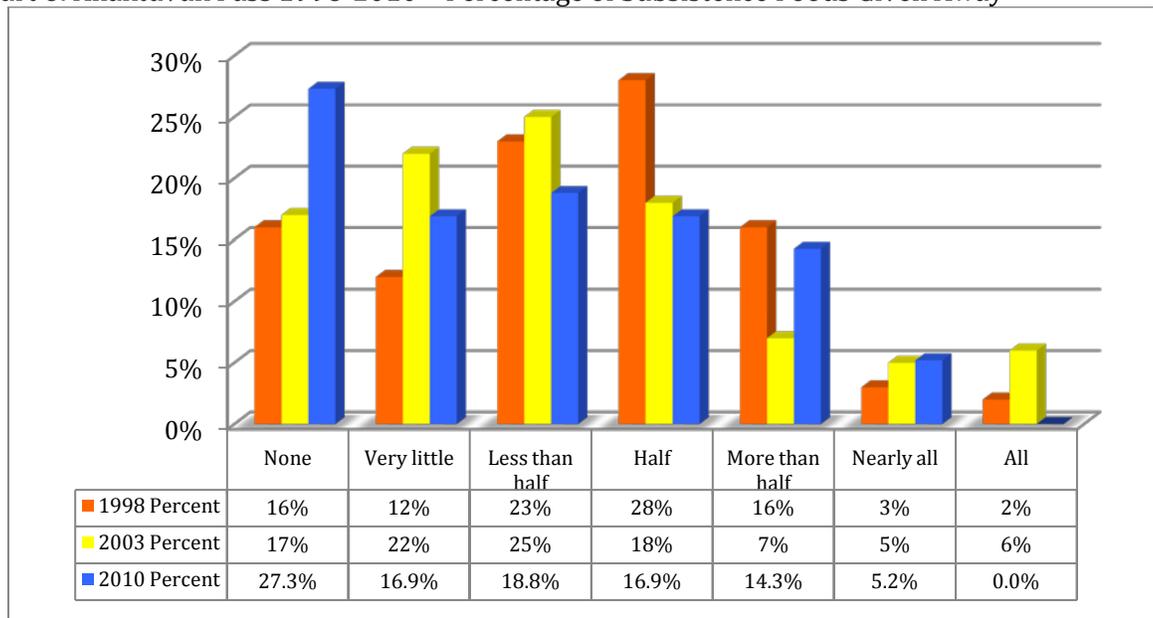
Percent Subsistence Diet Received from Other HH's	2010 Frequency	2010 Percent	2003 Percent	1998 Percent
1. None	10	13%	16%	6%
2. Very little	17	22%	24%	30%
3. Less than half	11	14%	17%	26%
4. Half	7	9%	16%	19%
5. More than half	11	14%	10%	9%
6. Nearly all	15	19%	10%	6%
7. All	8	10%	7%	4%
Total	79	100%	100%(82)	100%(42)

Table 45 and Chart 6 below, which assess how much a household gives away of their subsistence harvest, are very different from the over-time findings for receiving subsistence resources. In 2003 and 2010 exactly the same proportion (36%) give away half or more of their harvest. This is a substantial contrast from 1998 when half (49%) the households gave away half or more of their subsistence harvests. Chart 6 reveals that the big difference occurs in the “half” given away category.

Table 45: Anaktuvuk Pass 1998-2010 Percentage of Subsistence Foods Given Away.

Over the Past Year How Much of Your Subsistence Foods Did You Give Away?	2010 Frequency	2010 Percent	2003 Percent	1998 Percent
1. None	21	27.3%	17%	16%
2. Very little	13	16.9%	22%	12%
3. Less than half	15	18.8%	25%	23%
4. Half	13	16.9%	18%	28%
5. More than half	11	14.3%	7%	16%
6. Nearly all	4	5.2%	5%	3%
7. All	0	0.0%	6%	2%
Total	77	100%	100%	100%

Chart 6: Anaktuvuk Pass 1998-2010 – Percentage of Subsistence Foods Given Away



Recruitment for Subsistence Roles:

Recruitment of younger people for subsistence roles is an anxiety expressed by many elders. With subsistence activities forming the core value of Iñupiat culture elders are concerned about the sustainability of these values. Once again planned analysis will delve more deeply into this issue. The following analysis, because of Anaktuvuk Pass’s geographical location and its historic pattern of subsistence harvests, will not address

whaling or marine mammal hunting. Occasional participation in these subsistence pursuits does occur, however, the frequency is so low as to preclude inclusion in this chapter.

For this report one can note several results. For hunting (see Table 46, below), full participation by Iñupiat youth seems to occur at about 15 years of age. From this age cohort on more males (but not females) are engaged in hunting than are not, especially in the key age cohort of 25-29 when many single (or small family) young men hunt but share and distribute widely their harvest of subsistence resources. From 30 years of age until the mid-fifties there are a consistent number of Iñupiat men who engage in hunting and their frequency at every age cohort outnumber non-participants.

Table 46: Anaktuvuk Pass 2010 – Iñupiat Individuals Who Hunt Land Mammals By Age Interval and Gender.

Age Recoded into 5-Year Intervals	Subsistence participation - does individual HH member hunt land mammals?			
	Yes		No	
	Individual's Gender		Individual's Gender	
	Male	Female	Male	Female
	Count	Count	Count	Count
0-4	0	0	16	15
5-9	2	0	16	9
10-14	5	1	15	9
15-19	7	6	5	12
20-24	7	0	6	8
25-29	11	4	4	13
30-34	7	7	3	3
35-39	8	2	2	4
40-44	4	3	1	2
45-49	6	4	4	9
50-54	5	3	4	4
55-59	4	1	4	4
60-64	4	1	3	2
65-69	2	1	1	2
70-74	0	0	0	0
75-79	0	1	0	1
80+	1	1	0	0
Total	73	35	84	97

This distribution of participation by age cohorts from youngest to oldest speaks directly to the strong likelihood of the sustainability of these traditional practices.

Much the same analysis can be applied to Table 47 below on fishing participation – with these exceptions. Young children start to fish at much younger ages than they begin to hunt. In addition, as might be anticipated given the popularity of ice fishing, many more young girls participate in fishing (over hunting) and it is an activity they participate in all their lives. And like men, from an early age, more women engage in fishing activities than those who don't.

Table 47: Anaktuvuk Pass 2010 Iñupiat Individuals Who Fish By Age Interval and Gender.

Age Recoded into 5 yr. Intervals	Individual's Gender			
	Male		Female	
	Subsistence participation - does individual HH member fish?		Subsistence participation - does individual HH member fish?	
	Yes	No	Yes	No
	Count	Count	Count	Count
0-4	3	10	3	11
5-9	8	10	5	3
10-14	15	5	3	7
15-19	10	0	10	8
20-24	8	5	5	3
25-29	12	1	11	5
30-34	6	1	7	1
35-39	5	1	5	1
40-44	4	1	2	3
45-49	6	1	9	2
50-54	5	1	3	2
55-59	5	0	1	2
60-64	4	2	2	1
65-69	3	0	3	0
70-74	0	0	0	0
75-79	0	0	2	0
80+	1	0	0	0
Total	95	38	71	49

For gathering activities there are more participants over non-participants in almost all of the age cohorts. Note that by a wide margin more women than men engage in gathering activities.

Table 48: Anaktuvuk Pass 2010 – Iñupiat Individuals Who Gather Plants & Berries By Age Interval and Gender.

Age Recoded into 5-Year Intervals	Individual's Gender			
	Male		Female	
	Subsistence participation - does individual HH member pick berries and plants?		Subsistence participation - does individual HH member pick berries and plants?	
	Yes	No	Yes	No
	Count	Count	Count	Count
0-4	5	8	5	9
5-9	11	7	6	2
10-14	11	9	4	6
15-19	5	5	15	3
20-24	9	4	7	1
25-29	9	4	13	3
30-34	5	2	7	1
35-39	0	6	2	4
40-44	4	1	4	1
45-49	4	3	10	1
50-54	5	1	5	0
55-59	1	4	3	0
60-64	3	3	3	0
65-69	3	0	3	0
70-74	0	0	0	0
75-79	0	0	2	0
80+	1	0	0	0
Total	76	57	89	31

As might be expected from gender division of labor many more females sew skin and clothes than do men. Females after the age of 15 until about their mid-fifties have a fairly consistent and equal representation throughout the intervening age intervals.

Table 49: Anaktuvuk Pass 2010 – Iñupiat Individuals Who Sew Skins & Clothes By Age Interval and Gender.

Age Recoded into 5-Year Intervals	Individual's Gender			
	Male		Female	
	Subsistence participation - does individual HH member sew skins and clothes?		Subsistence participation - does individual HH member sew skins and clothes?	
	Yes	No	Yes	No
	Count	Count	Count	Count
0-4	0	13	0	14
5-9	0	18	0	8
10-14	0	20	0	10
15-19	0	10	4	14
20-24	0	13	2	6
25-29	2	11	4	12
30-34	1	6	5	3
35-39	0	6	1	5
40-44	1	4	3	2
45-49	1	6	6	5
50-54	2	4	3	2
55-59	0	5	2	1
60-64	1	5	2	1
65-69	1	2	2	1
70-74	0	0	0	0
75-79	0	0	1	1
80+	1	0	0	0
Total	10	123	35	85

Of course the exact opposite occurs for sled building and boat making. Many more men engage in these activities. However, as the distribution indicates very few Iñupiat men build these technologies and the recruitment from younger to older age intervals does not look sustainable. Perhaps much of this finding is due to the purchase of these technologies and we will look to see if marine mammal hunting communities (which utilize a number of skin boats) reverse this trend.

Table 50: Anaktuvuk Pass 2010 – Iñupiat Individuals Who Make Sleds & Boats by Age Interval and Gender.

Age Recoded into 5 yr Intervals	Individual's Gender			
	Male		Female	
	Subsistence participation - does individual HH member make sleds and boats?		Subsistence participation - does individual HH member make sleds and boats?	
	Yes	No	Yes	No
	Count	Count	Count	Count
0-4	0	13	0	14
5-9	0	18	0	8
10-14	1	19	0	10
15-19	2	8	1	17
20-24	2	11	0	8
25-29	1	12	0	16
30-34	2	5	1	7
35-39	0	6	0	6
40-44	1	4	0	5
45-49	2	5	1	10
50-54	4	2	0	5
55-59	0	5	0	3
60-64	2	4	0	3
65-69	1	2	0	3
70-74	0	0	0	0
75-79	0	0	0	2
80+	1	0	0	0
Total	19	114	3	117

Table 51 on processing and sharing indicates equal participation by both men and women. However, the question asks both cooking and processing of subsistence resources and it may be the case men engage primarily in dressing the animal while women probably do both – that is dress and cook the animal.

Table 51: Anaktuvuk Pass 2010 – Iñupiat Individuals Who Share, Cook, & Process Wild Foods by Age Interval and Gender.

Age in 5-Year Intervals	Male		Female	
	Yes	No	Yes	No
0-4	2	11	2	12
5-9	2	16	0	8
10-14	5	15	3	7
15-19	5	5	9	9
20-24	7	6	4	4
25-29	9	4	8	8
30-34	6	1	6	2
35-39	4	2	3	3
40-44	4	1	4	1
45-49	5	2	10	1
50-54	5	1	5	0
55-59	3	2	2	1
60-64	3	3	3	0
65-69	2	1	3	0
70-74	0	0	0	0
75-79	0	0	1	1
80+	1	0	0	0
Total	63	70	63	57

There is a consistent progression from 1998 to 2010 in expanding sharing in communities beyond Anaktuvuk Pass. Further inquiry may reveal differently but it doesn't appear that increased transportation access to other communities can account for these differences. In fact, a decrease in local carriers would lead to the opposite conclusion. Clearly there are increased contacts for Anaktuvuk Pass with other NSB communities, with the NANA region and with Fairbanks.

Table 52 Anaktuvuk Pass 1998-2010 – Communities Where Subsistence Foods are Shared.

Communities Where Subsistence Shared.	1998 Yes (n=47)	2003 Yes (n=72)	2010 Yes (n=68)
Anaktuvuk Pass	62%	99%	91%*
Other NSB community	32%	19%	48%**
NANA	0%	4%	18%
Anchorage	0%	4%	10%
Fairbanks	6%	19%	40%
Other areas	0%	6%	13%

*n=70 **n=69

Households that engage in subsistence activities can spend a considerable portion of their disposable income on technology, maintenance, and gas. The average amount spent by subsistence households (not including those that participate but spend no money) is \$3,752.

Table 53: Anaktuvuk Pass 2010 – Cost of Subsistence Activities – All Households.

Cost in \$'s	Frequency	Valid Percent	Cumulative Percent
9	1	1.9	17.3
30	1	1.9	19.2
180	1	1.9	21.2
300	1	1.9	23.1
400	2	3.8	26.9
450	1	1.9	28.8
500	2	3.8	32.7
700	1	1.9	34.6
1000	4	7.7	42.3
1400	1	1.9	44.2
1500	3	5.8	50.0
2000	4	7.7	57.7
2500	4	7.7	65.4
2750	1	1.9	67.3
3000	5	9.6	76.9
4000	1	1.9	78.8
5000	3	5.8	84.6
9000	1	1.9	86.5
10000	4	7.7	94.2
13000	1	1.9	96.2
15000	1	1.9	98.1
20000	1	1.9	100.0
Total	52	100.0	

The following health profile was prepared by Jana McAninch for the Borough Health Department. Questions regarding this section should be referred to the North Slope Borough Health Department rather than the authors.

Health Profile: Anaktuvuk Pass (by Jana McAninch)

Adults:

		AKP Household Heads	NSB Household Heads	All AKP adults*	All NSB adults*	Alaska adults
General Health	“Very good” or “excellent” general health	33%	44%	32%	46%	56% ¹
	“Fair” to “Poor” general health	10%	20%	4%	16%	13% ²
Chronic Health Problems	Ever told by a health professional have:					
	Thyroid problems	9%	6%	4%	4%	9% (U.S.) ³
	Diabetes	5%**	7%	4%	6%	6% ¹
	High Blood Pressure	26%	28%	17%	20%	25% ⁴
	High cholesterol	28%	19%	16%	13%	38% ⁴
	Heart disease	8%	7%	5%	5%	12% (U.S.)
	In the past 12 months, experienced:					
	Daily pain or arthritis that limits activities or requires prescription pain medicine	24%	29%	17%	21%	(ref) ⁵
	Frequent (3 or more) or chronic ear infections	8%	5%	4%	4%	
	Chronic breathing problems (such as asthma, emphysema, or a cough that won't go away)	19%	13%	9%	8%	(ref) ⁶
Health Insurance	Have health insurance, including IHS eligibility	97%	97%			83% ⁷
	Have health insurance, other than IHS eligibility	58%	64%			
Smoking	Smoke tobacco (in any form)	65%	50%	63%	49%	22% ¹
	Of those who smoke:					
	Smoke one or more packs per day	31%	25%			
	Are interested in quitting	69%	71%			
	Have tried to quit in the last 12 months	56%	62%			
	Permit smoking in the house	40%	33%			
	Support a tobacco tax to fund tobacco prevention or cessation programs	48%	53%			
Overweight and Obesity	Overweight (BMI 25-29.9 kg/m ² , based on self-reported height and weight)	32%	33%			37% ¹

	Obese (BMI 30 kg/m ² or higher, based on self-reported height and weight)	23%	39%			28% ¹
Physical Activity	Never get 30 minutes of moderate exercise in a day	18%	16%			9% ⁴
	Get at least 30 minutes of moderate exercise 5 days per week or more	39%	44%			47% ⁴
Sugar-sweetened beverages	On average, drink no soda or other sugar-sweetened beverage per day	30%	26%			53% ⁸
	On average, drink two or more sodas or other sugar-sweetened beverage per day	43%	45%			30% ⁸
Food security	Times last year when household found it difficult to get the foods they needed to eat healthy meals	57%	35%			
	If yes, because not able to get enough subsistence foods to eat healthy meals	71%	43%			
	If yes, because not able to get enough store foods to eat healthy meals	80%	90%			
	Percent with household members who at times did not have enough to eat	40%	19%			(4-11%) ¹⁰
Safety: Helmet use	Wear a helmet when riding a snowmachine or 4-wheeler (of household heads who ride on snowmachines or 4-wheelers)	11%	18%			(57%) ⁹
Drugs and alcohol	In the past 12 months, felt a household member had been hurt by drugs or alcohol	24%	24%			
	In the past 12 months, felt the health of their community had been hurt by drugs or alcohol					
	Often	57%	57%			
	Sometimes	40%	35%			

*Includes both household head (survey respondent) and all other household members, as reported by the household head. **based on cell count less than 5 (fewer than 5 respondents)

Notable findings:

- Overall, general health status among adults in Anaktuvuk Pass was reported to be good. Compared to the NSB as a whole, AKP residents were less likely to report “very good” to “excellent” health, but also less likely to report “fair” to “poor” health.
- The reported prevalence of the chronic health problems among AKP adults was similar to the prevalence in the NSB overall, with the exception of high

cholesterol. AKP household heads were significantly more likely than their counterparts in other North Slope villages to report a diagnosis of high cholesterol. Of note, residents of AKP typically get their health care in Fairbanks instead of Barrow, and this difference may in part reflect different screening practices in these different settings. It may also reflect differences in diet or other factors.

- Adult smoking rates are high in AKP, significantly higher than in the other North Slope villages.
- AKP household heads were significantly more likely to be at a healthy weight and significantly less likely to be obese than were their counterparts in the other North Slope villages overall. Reported physical activity and soda/sugared beverage consumption was similar to the NSB overall, however.
- The levels of reported food insecurity were very high in AKP. AKP household heads were significantly more likely to report difficulty getting foods for healthy meals and particularly getting enough subsistence foods, than were household heads in the other villages combined. AKP households were twice as likely as households in other villages to have household members who, at times last year, did not have enough to eat.
- As in other villages, reported helmet use was very low
- AKP household heads were equally as likely to report household and community impacts of alcohol or drugs as their counterparts in the other North Slope villages overall.

Children (under age 18)*:

		AKP Children	NSB Children	Alaska children
General Health	“Very good” or “excellent” general health	41%	63%	89% ¹¹
Chronic Health Problems	In the past 12 months, experienced:			
	Frequent (3 or more) or chronic ear infections	20%	19%	5% ¹¹
	Chronic breathing problems (such as asthma, emphysema, or a cough that won't go away)	5%	5%	(5-6%) ^{6,11}
Tobacco Smoking	Smoke tobacco (in any form)	6%**	3%**	

*As reported by the household head. All the other chronic health problems had a prevalence of less than 1% among children in the NSB and were not analyzed or reported by individual village.

**based on other surveys, likely to significantly underestimate the prevalence of smoking among children and teens.

Notable findings:

- The majority of children in AKP were reported to have “good” general health. Household heads were significantly less likely to report the health status of children in AKP to be “very good” or “excellent” than in other North Slope villages overall. This percentage was also less than half the statewide estimate of children with “very good” to “excellent” health.
- The prevalence of chronic ear infections in AKP was similar to that for the NSB overall and again, roughly four times the estimated prevalence for Alaskan children overall.
- The prevalence of breathing problems such as asthma in AKP children was similar to that among children in the NSB and Alaska overall.

Iñupiaq Language Use:

Table 54, below, indicates, by proportion, changes in the primary language spoken in Iñupiat homes from 1998 until 2010. It is unclear whether the 1998 sample frequencies included Iñupiat and non-Iñupiat households in their reporting so the comparisons in this analysis will focus on changes between 2003 and 2010.¹ Although the numbers are small there seems to be a significant drop off in homes that speak mostly Iñupiaq between 2003 (13%) and 2010 (6%). This can be indicative of monolingual elders either dying or emigrating (perhaps for health reasons) from Anaktuvuk Pass during the last 7 years and the gradual progression of younger cohorts that contain less fluent Iñupiaq speakers entering older age cohorts. Clearly there have been significant increases in monolingual English households among Iñupiat families over this short period.

Table 54, Anaktuvuk Pass 1998 – 2010: Primary Language Spoken in Iñupiat Households.

Language Used in Home	1998	1998	2003	2003	2010	2010
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Iñupiaq mostly	7	12%	9	13%	4	6%
Both English & Iñupiaq	29	33%	32	48%	25	39%
English mostly	19	51%	25	37%	34	53%
English & another language	2	4%	1	2%	1	2%
Total	57	100%	67	100%	64	100%

Conclusions reached in the preceding paragraph are reinforced in Table 55, below. The number of monolingual English speakers in Iñupiat households has increased significantly during the last 7 years. However, with nearly identical sample sizes between 2003 and 2010 the absolute number of Iñupiaq speakers has only dropped from 51 to 44 (about 14 percent).

¹ The 2003 NSB Economic Report and Census Profile tables on this variable reported for all the households (i.e., all ethnicities) in the community. Additional analysis was completed on the 2003 SPSS file to select only Iñupiat households for a comparison with the 2010 results.

Table 55, Anaktuvuk Pass 2003-2010: Iñupiat Households – “How Many Household Members Speak Iñupiaq Fluently”?

Members of Household	2003 Frequency	2003 Percent	2010 Frequency	2010 Percent
0	16	23.9%	21	32.3%
1	21	31.3%	31	47.7%
2	24	35.8%	8	12.3%
3	2	3.0%	1	1.5%
4	3	4.5%	4	6.2%
5	1	1.5%		
Total	67	100%	65	100.0%

Table 56, below, indicates some observable changes in language competency during the last seven years. The most basic difference is a one-quarter (proportional) decrease in fluent Iñupiaq speakers (regardless of their preference to speak it). The first three rows have decreased from a 21 percent proportion of fluency to about 16 percent fluency. On the other hand the last six rows, which indicate a minimal fluency, have remained fairly consistent with about 60 percent of the Iñupiat population in Anaktuvuk Pass having some, little or no competency in Iñupiaq.

Table 56: Anaktuvuk Pass 2003-2010: Iñupiat Household Members Competency in Iñupiaq.

Iñupiat Competency	2003 Frequency	2003 Percent	2010 Frequency	2010 Percent
Speaks Fluently & prefers Iñupiaq	38	13.4%	22	8.9%
Speaks Fluently & prefers English	12	4.2%	18	7.3%
Speaks Fluently but doesn't prefer either.	9	3.2%	-	-
Speaks with difficulty	7	2.5%	16	6.5%
Understands well & speaks enough	19	6.7%	22	8.9%
Understand well but hardly speaks	27	9.5%	20	8.1%
Understands some & speaks enough	5	1.8%	13	5.3%
Understands simple questions & speaks a little	46	16.3%	18	7.3%
Understands simple questions but hardly speaks	21	7.4%	55	22.4%
Understands two dozen words	32	11.3%	15	6.1%
Understands 5 or 6 words	27	9.5%	20	8.2%
Understands only a few words	40	14.1%	26	10.6%
Total	283	100%	245	100%

Table 57, below, is very reminiscent of a similar table from the 2003 NSB survey. All the fluent Iñupiaq speakers (rows 1-3) are clustered in the age groups 36 years of age and above. Using this criteria, of the 56 fluent Iñupiaq speakers 48 (85%) are 36 years or older. By comparison in 2003 of the 59 fluent speakers 54 (92%) were 36 years of age or older.

Table 57: Anaktuvuk Pass 2010 – Iñupiat Individuals Iñupiaq Competency by Age Category.

Iñupiaq fluency - how fluently does individual HH member speak Iñupiaq?	Recode of Individual's Age into Groups for Language Competency Comparison					
	0-2	3-15	16-35	36-60	61+	Total
	Count	Count	Count	Count	Count	Count
Speaks Iñupiaq fluently & prefers this language	0	0	0	14	8	22
Speaks Iñupiaq fluently but prefers another language	0	0	2	13	3	18
Speaks Iñupiaq but with difficulty or with minor flaws	1	2	6	7	0	16
Understands Iñupiaq well & speaks enough	0	2	5	14	1	22
Understands Iñupiaq well but hardly speaks it	0	4	12	4	0	20
Understands some Iñupiaq conversations & speaks enough	0	1	10	2	0	13
Understands simple questions and directions, speaks a little	0	10	8	0	0	18
Understands simple questions and directions but hardly speaks any	1	29	21	4	0	55
Understands at least two dozen Iñupiaq words.	1	5	9	0	0	15
Understands at least five or six Iñupiat words	1	8	10	1	0	20
Does not understand more than a few Iñupiaq words.	5	10	7	4	0	26
Total	9	71	90	63	12	245

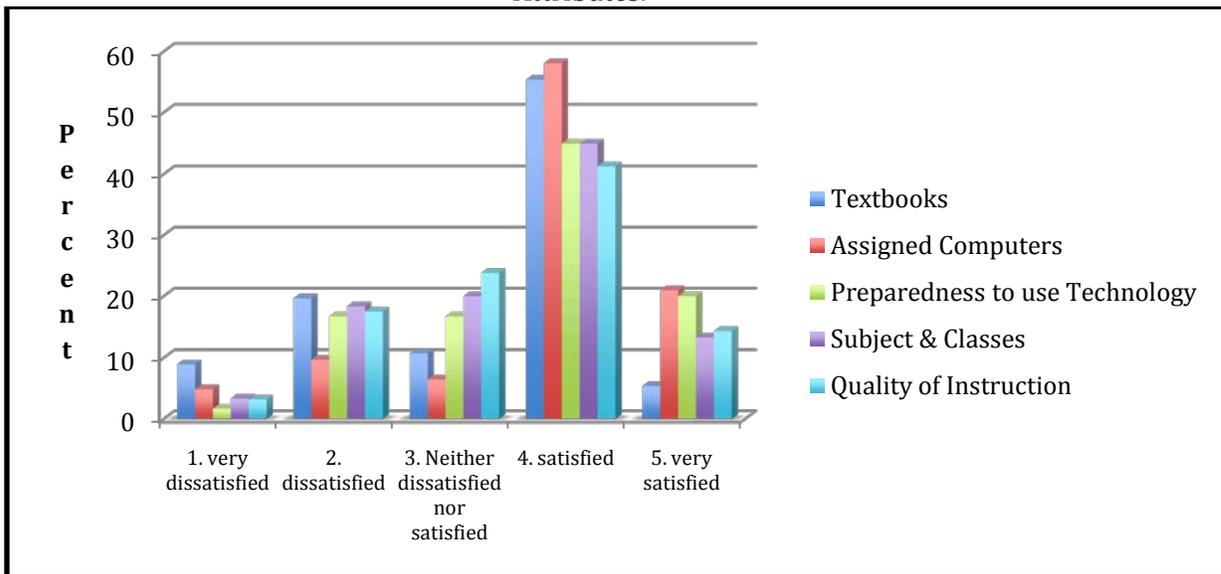
Schools:

Household heads in Anaktuvuk Pass varied somewhat from the overall NSB distribution of responses described in the NSB overview section. In general, Anaktuvuk Pass had higher levels and, in some cases, significantly higher levels of dissatisfaction. For example, dissatisfaction over textbooks was double that of the NSB and dissatisfaction with the quality of instruction their children received was almost double (21 percent) the proportion for the NSB (13 percent). In a separate measure, nearly three quarters of Anaktuvuk Pass respondents indicated their satisfaction with their school's extra curricular activities (e.g., band, basketball) offered to students

Table 58: Anaktuvuk Pass 2010 - Household Head Respondent's Satisfaction with School Attributes.

Household Head Opinions about School Attributes.	Textbooks	Assigned Computers	Preparedness to use Technology	Subjects & Classes	Quality of Instruction
Very dissatisfied	8.9%	4.8%	1.7%	3.3%	3.2%
Dissatisfied	19.6%	9.75%	16.7%	18.35	17.5%
Neither dissatisfied nor satisfied	10.7%	6.55%	16.7%	20.0%	23.8%
Satisfied	55.4%	58.15%	45.0%	45.0%	41.3%
Very satisfied	5.4%	21.05%	20.0%	13.3%	14.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Chart 7: Anaktuvuk Pass 2010 - Household Head Respondent's Satisfaction with School Attributes.



About 10% of the Anaktuvuk Pass household heads felt there should be less homework in Elementary School. In contrast about 45% thought there should be more homework in Middle and High School, with about a third expressing similar sentiments for Elementary School.

Table 59: Anaktuvuk Pass 2010 – Household Head Opinions about the Amount of Homework.

Opinions about Amount of Homework.	Elementary School	Middle School	High School
1. No homework	3.2%	5.5%	5.5%
2. Less homework	9.7%	5.5%	5.5%
3. About the same amount	53.2%	45.5%	43.6%
4. More homework	30.6%	40.0%	40.0%
5. A lot more homework	3.2%	3.6%	5.5%
Total	100.0%	100.0%	100.0%

Given previous opinions on other aspects of their community schools, which were in the vast majority positive, it was striking to note that nearly a third of respondents felt children in elementary school were disconnected. This proportion decreased to less than one fifth for Middle and High School students. In general, opinions about connectedness and involvement markedly increased from elementary through high school – proportions of positive assessments going from one third to nearly three quarters.

Table 60: Anaktuvuk Pass 2010 – Household Head’s Opinion of Child’s Involvement in School.

Child's Connectedness and Involvement in School	Elementary School	Middle School	High School
1. Very disconnected	25.8%	11.8%	4.5%
2. Somewhat disconnected	9.7%	5.9%	13.6%
3. Equally disconnected/connected	29.0%	29.4%	9.1%
4. Somewhat connected	6.5%	11.8%	22.7%
5. Very connected	29.0%	41.2%	50.0%
Total	100.0%	100.0%	100.0%

The results on respect for authority for the community’s school principal and elders strongly substantiate traditional values. While 97% of household heads express positive affirmation for respect for elders this proportion drops to less than one third for school principals. In fact, two thirds of respondents felt that elders were highly respected while less than two percent expressed a similar appreciation for school principals. Given these results one can only support the increased involvement of elders in school curriculum and activities.

Table 61: Anaktuvuk Pass 2010 – How would you rate the authority of the Principal and Elders in your community?

In Your Community - How would you rate the Authority:	Authority of Principal	Authority of Elders
1. Substantially disrespected	9.7%	0
2. Somewhat disrespected	14.5%	1.3%
3. Tolerated	43.5%	1.3%
4. Somewhat respectful	30.6%	31.6%
5. Highly respected	1.6%	65.8%
Total	100%	100%

Of some surprise and concern is the fact that nearly half the respondents in Anaktuvuk Pass felt that the major reason students left school before they graduated was because they were bored. About one quarter of respondents also cited being behind in credits and having a baby. Less than one in five respondents cited behavioral problems such as drugs or alcohol or being “kicked out of school” (presumably for truancy or fighting) as a reason that students left school.

Table 62: Anaktuvuk Pass 2010 – “Why during the last two years, did NSB students that you knew leave school without graduating?”

Reasons for students leaving school.	Yes	No
Illness	8.7%	91.3%
Bored with School	48.9%	51.1%
Behind in Credits	27.7%	72.3%
Drug/alcohol Problems	19.6%	80.4%
Needed to work	16.7%	83.3%
Had a baby	25.5%	74.5%
Kicked out of School	13.0%	87.0%

Respondents were asked to choose, from a list of potential strategies, the top two strategies they thought would improve school attendance. They were also offered the option to specify other strategies and in fact about half the respondents offered additional specific suggestions as one of their strategies. It was beyond the scope of this report to aggregate these open-ended questions and they will be left for subsequent analysis. Of the other available choices the two strategies that seem to stand out are “offer different courses” and provide “more activities”. Both these strategies, in part, address the majority belief that students leave school because they are bored.

Table 63: Anaktuvuk Pass 2010 – “What do you think would be the best two strategies to improve student attendance?”

Strategies to Improve Student Attendance	Strategy 1	Strategy 2	Total Percent
Stronger penalties for truancy citations	19.0%	6.7%	25.7%
Offer different courses	19.0%	26.7%	45.7%
Anti-bullying programs	5.2%	3.3%	8.5%
Provide attendance incentives	5.2%	23.3%	28.5%
More activities	27.6%	16.7%	44.3%
Other (specify)	24.1%	23.3%	47.4%
Total	100.0%	100.0%	

Despite generally positive ratings for textbooks, technology, curriculum and the quality of instruction as attributes of the NSB school system the ultimate judgment of Anaktuvuk Pass parents is sobering. Slightly over half of respondents felt their community schools did not prepare their children for life after high school and only one respondent felt they were exceptionally prepared.

Table 64: Anaktuvuk Pass 2010: “Do NSB Schools Prepare Students for Life After High School?”

Do NSB Schools Prepare Students for Life After High School?	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all prepared	18	22.5	25.4	25.4
2. Somewhat unprepared	18	22.5	25.4	50.7
3. Somewhat prepared	18	22.5	25.4	76.1
4. Prepared	16	20.0	22.5	98.6
5. Exceptionally prepared	1	1.3	1.4	100.0
Total Valid Responses	71	88.8	100.0	
Missing Information	9	11.3		
Total Responses	80	100.0		

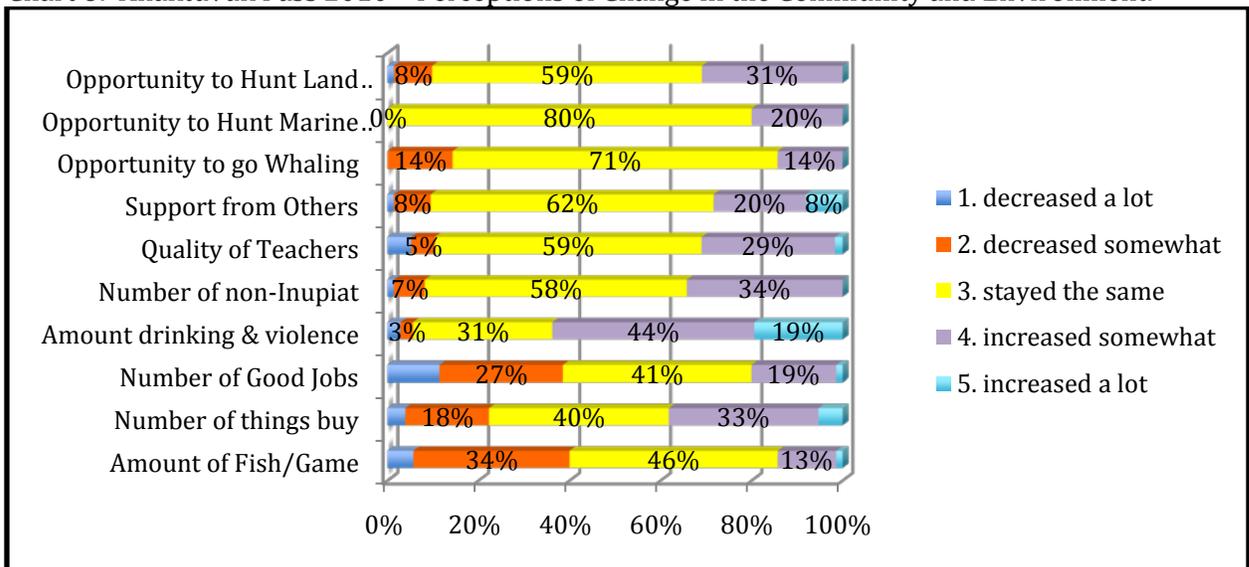
Perceptions about Changes in the Community:

The proportion of household heads in Anaktuvuk Pass who note substantial decreases in the amount of fish and game and the number of available good jobs far outweigh the proportion that saw increases in these categories. Respondents (by proportion) also saw some increases in the number of goods to buy and in the increase of non-Īnupiat within the community. Positive increases occurred in the perception of the quality of teachers and the support from others in the community. Most important, for an inland caribou dependent community, was the perception by 90% of respondents that the opportunity to hunt land mammals had stayed the same or increased. Most disturbing was the perception, by nearly two thirds of all respondents that the amount of drinking, drug use and violence had increased substantially.

Table 65: Anaktuvuk Pass 2010 – Perceptions of Change in the Community and Environment.

Perceptions of Change	Decreased a lot	Decreased somewhat	Stayed the same	Increased somewhat	Increased a lot
Amount of Fish/Game	6%	34%	46%	13%	1%
Number of things buy	4%	18%	40%	33%	5%
Number of Good Jobs	11%	27%	41%	19%	1%
Amount drinking & violence	3%	3%	31%	44%	19%
Number of non-Iñupiat	1%	7%	58%	34%	0%
Quality of Teachers	5%	5%	59%	29%	2%
Support from Others	1%	8%	62%	20%	8%
Opportunity to go Whaling	0%	14%	71%	14%	0%
Opportunity to Hunt Marine Mammals	0%	0%	80%	20%	0%
Opportunity to Hunt Land Mammals	1%	8%	59%	31%	0%

Chart 8: Anaktuvuk Pass 2010 – Perceptions of Change in the Community and Environment.



When one compares the responses on these same questions about changes in the community between the 2003 and 2010 surveys several items become noteworthy. Respondents in 2003 were slightly more optimistic about the amount of fish and game that were available. In contrast these same 2003 respondents were substantially more pessimistic about the availability of good jobs (by nearly a 30 percent margin). In 2010 respondents felt better about the quality of teachers and were slightly more positive about the support from other members of their community. Unfortunately, nearly two thirds of all respondents at both periods of time perceived that drinking, drugs and violence were on the increase. Given there is no quantitative benchmark measure of perception we cannot interpret that drinking, drugs and violence have a increased by two-thirds since 2003. What can be inferred is that the vast majority of the community, while optimistic about their opportunity to engage in subsistence activities, to be able to count on fellow community members for support and to feel better about the quality of school teachers

continue to be gravely concerned about the levels of substance abuse and violence within their communities.

Chart 9: Anaktuvuk Pass Community Perceptions of Change 2010 & 2003

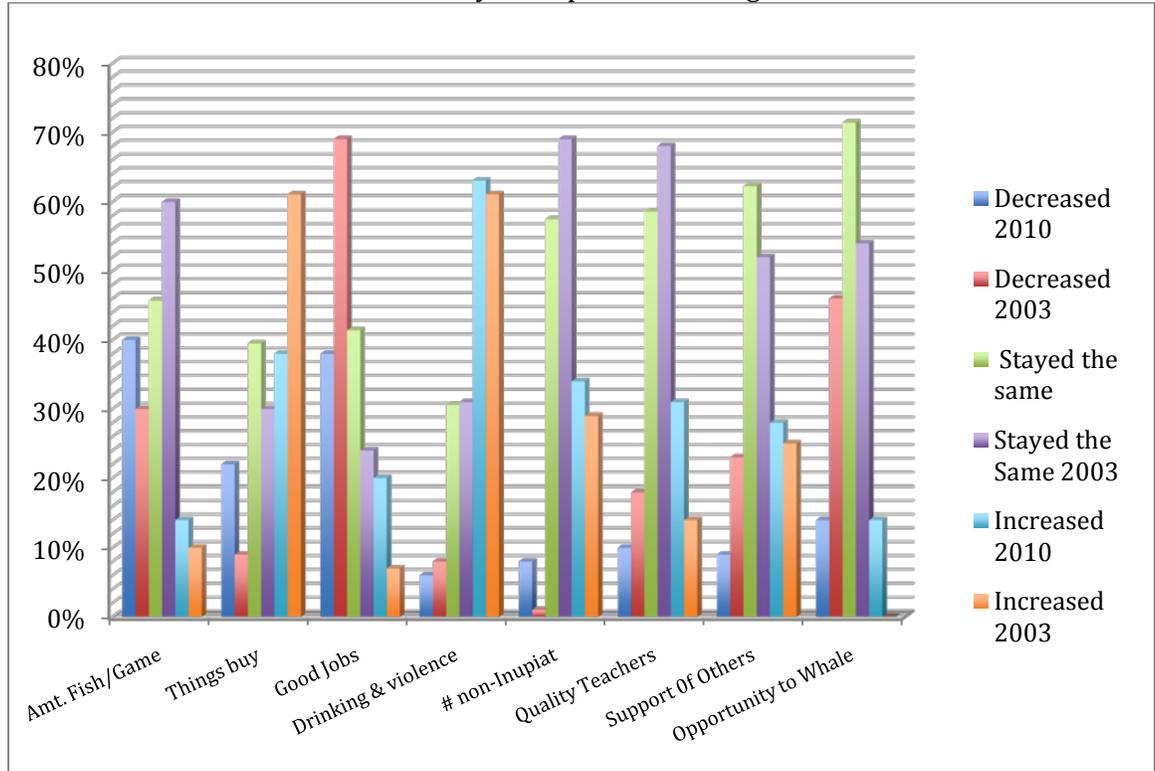


Table 66: Anaktuvuk Pass Community Perceptions of Change 2010 & 2003

Perception of Changes	Decreased 2010	Decreased 2003	Stayed the same 2010	Stayed the Same 2003	Increased 2010	Increased 2003
Amount of Fish/Game	40%	30%	46%	60%	14%	10%
Things to buy	22%	9%	40%	30%	38%	61%
Availability Good Jobs	38%	69%	41%	24%	20%	7%
Drinking & violence	6%	8%	31%	31%	63%	61%
Number of Non-Inupiat	8%	1%	58%	69%	34%	29%
Quality of Teachers	10%	18%	59%	68%	31%	14%
Support from Others	9%	23%	62%	52%	28%	25%
Opportunity to Whale	14%	46%	71%	54%	14%	0%

Voting:

A more extensive number of questions about voting behavior were asked in 2010 when compared with similar topics asked in 2003. Given this contrast the comparisons we can make seem to indicate that there has been very little difference in the proportion of

registered voters; however, there has been a substantial decline (30 percent) in the number of household heads that voted, at least between the state elections of 2002 and 2008.

Table 67: Anaktuvuk Pass 2010 – Voting Behavior & Selective Comparisons with 2003.

	Yes 2003	Yes 2010
Are you a registered voter in the North Slope Borough?	90%	89%
Did you vote in the last Borough election?	-	66%
Did you vote in the last City election?	-	69%
Did you vote in the last State election?	91%	65%
Did you vote in the last National election?	-	68%

Although more male household heads were interviewed, there are a slightly higher proportion of females who register to vote (92%) than do males (86%). In addition, among registered voters females are more likely to vote (82%) than are males (68%).

Table 68: Anaktuvuk Pass 2010 – Voting Behavior by Gender.

Household Head's - Gender			Voting - Did you vote in the last National election?		
			Yes	No	Total
Male	Voting - Are you a registered voter in the North Slope Borough?	Yes	26	12	38
		No	1	5	6
Female	Voting - Are you a registered voter in the North Slope Borough?	Yes	27	6	33
		No	0	3	3
Total	Voting - Are you a registered voter in the North Slope Borough?	Yes	53	18	71
		No	1	8	9