

ATQASUK SNAPSHOT

| | 2003 | 2010 |
|---|--------|--------|
| Total Population | 250 | 268 |
| Sample Population | 209 | 231 |
| Population Growth Since 1998 | 11.6% | 19.6% |
| Population Growth Since 1990 | 15.8% | 24.1% |
| Population Growth Since 1980 | 134.0% | 150.5% |
| Percent Female | 48.5% | 43.7% |
| Percent Iñupiat | 91.4% | 92.2% |
| Percent Caucasian | 5.1% | 5.6% |
| Percent Other Minorities | 2.5% | 2.2% |
| | | |
| Number of Individuals 0-4 | 12 | 29 |
| Percent of Individuals 0-4 | 7% | 12.7% |
| Number of Individuals 17 or Younger | 68 | 91 |
| Percent of Individuals 17 or Younger | 29.0% | 39.7% |
| Number of Individuals 16-64 | 96 | 135 |
| Percent of Individuals 16-64 | 56.0% | 58.9% |
| Number of Individuals 65 and Older | 10 | 12 |
| Percent of Individuals 65 and Older | 6.0% | 5.2% |
| Median Age of Females | 27.5 | 22 |
| Median Age of Males | 29 | 20 |
| Median Age of Total Population | 27.5 | 20 |
| Size of Labor Force | 72 | 112 |
| Rate of Unemployment | 18.1% | 26.5% |
| Rate of Perceived Underemployment* | 67.2% | 25.9% |
| Rate of Underemployment** | 43.0% | 56.9% |
| Total Number of Households | 74 | 68 |
| Total Number of Households Surveyed | 64 | 61 |
| Average Number of People per Household | 3.67 | 3.78 |
| Percent of Households in Census | 86.5% | 89.7% |
| Percent of Total Population in Sample | 87.0% | 86.2% |
| Percent of Individuals with High School Diploma or Higher | 43.0% | 43.2% |
| Number of Fluent Iñupiaq Speakers | 55 | 42.0% |
| * Refers to individuals who feel they are underemployed **Refers to individuals working less than 40 weeks a year | | |

Population

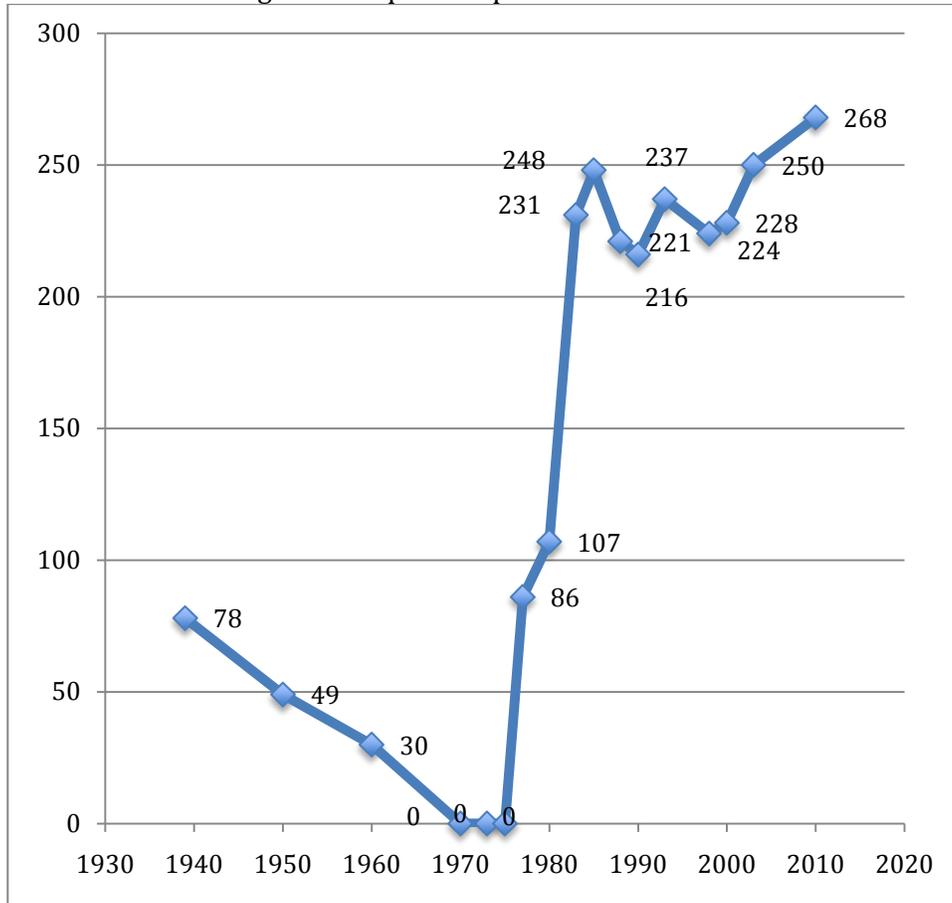
Table 1 below indicates the sampling proportion for Atqasuk in 2003 and 2010. Sixty-one households were interviewed in 2010, three less than were interviewed in 2003. The total number of households that could have been interviewed was 68.

Table 1: Atqasuk Community Population Estimates 2003 to 2010

| | Atqasuk 2003 | Atqasuk 2010 |
|-----------------------------------|--------------|--------------|
| Number of Households Sample (n) | 64 | 61 |
| Number of Households Estimate (N) | 74 | 68 |
| Sample - Average Household Size | | 3.79 |
| Estimate - Average Household Size | 3.67 | 3.82 |
| Population Estimate | 250 | 268 |

Table 1 indicates that the 2003 population estimate was 250. Our best estimate is that the number of housing units in Atqasuk has increased by 6 between 2003 and 2010 and the total population has increased by 18 from 250 to 268.

Figure 1: Atqasuk Population 1939-2010



As Figure 1 above indicates, the population in Atqasuk has varied from a high of 78 in 1939 to zero in the period between 1960 and 1976. It was re-established in 1977 by 86 individuals. Since 1983, there have been fluctuations in the population from 216 to 268. This variance in population density can be attributed to family and economic circumstances rather than demonstrating any particular pattern of population change in the community.

The Ethnic composition of Atqasuk’s sample population in 2010 is provided in Table 2 below.

Table 2: Atqasuk 2010 Population by Ethnicity

| Individual's Ethnicity | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------------------|-----------|---------|---------------|--------------------|
| Iñupiat | 211 | 92.5% | 92.5% | 92.5% |
| Caucasian | 13 | 5.7% | 5.7% | 98.2% |
| Haida | 1 | 0.4% | 0.4% | 98.7% |
| Yup'ik | 1 | 0.4% | 0.4% | 99.1% |
| African American | 1 | 0.4% | 0.4% | 99.6% |
| Chinese | 1 | 0.4% | 0.4% | 100.0% |
| Total | 228 | 100.0% | 100.0% | |

Includes only those individual responding to the survey and the question regarding ethnicity

As Table 2 above and Table 3 below indicate, there are slight fluctuations in the proportion of Iñupiat, Caucasian and Other populations in Atqasuk between 1998 and 2010, reflecting the overall fluctuations in the general population of the community.

Table 3: Atqasuk Ethnic Proportions of Population 1998-2010

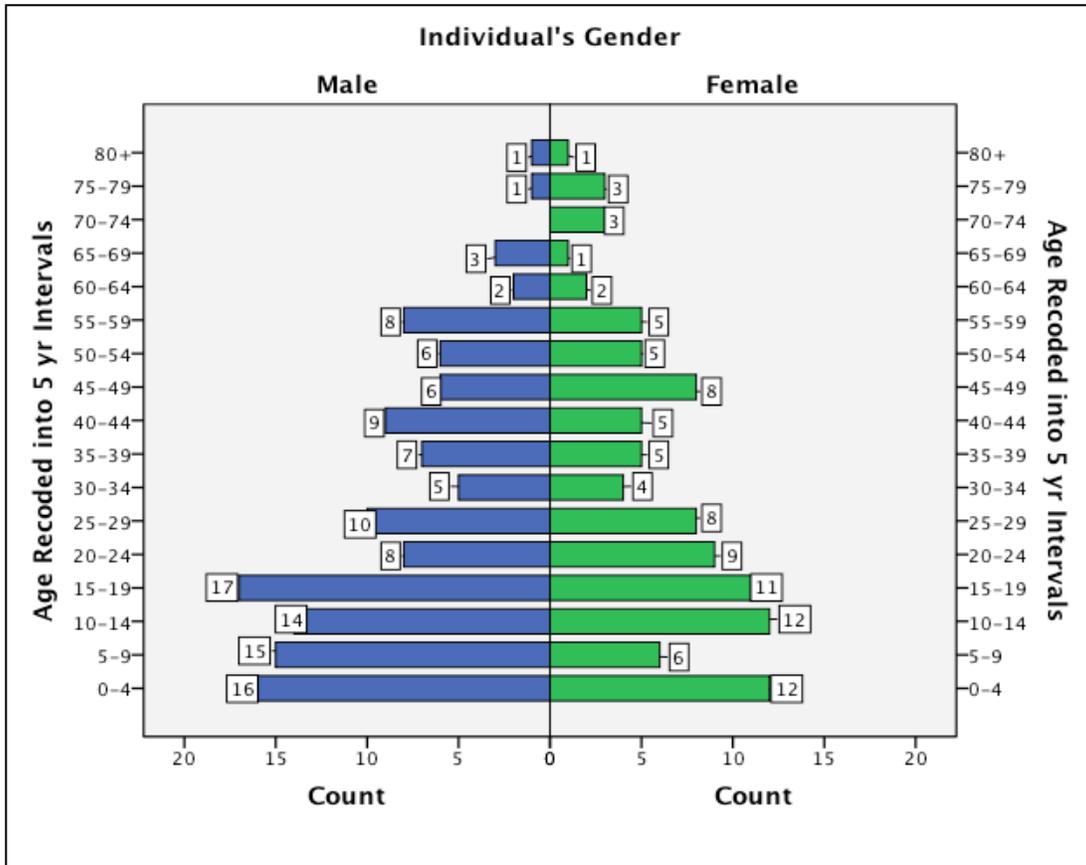
| ETHNICITY | 1998 | 2003 | 2010 |
|---------------------------|-------|-------|-------|
| Percent Iñupiat | 96% | 91.4% | 92.5% |
| Percent Caucasian | 0.0%* | 5.8% | 5.7% |
| Percent Other Ethnicities | 4.40% | 3.00% | 1.8% |
| *Teachers not included | | | |

The higher Iñupiat proportion of the population in 1998 is due in part to the fact that the predominately Caucasian teachers had left at the end of the school year prior to the census enumerators surveying the community.

Figures 2 and 3 below indicate a general shift in the population of Atqasuk between 2003 and 2010. There has been a significant shift in the population ages 0 to 24, from a total of 80 individuals in 2003 to a total of 119 individuals in 2010. The majority of that shift has occurred among the 0-4 grouping (from a total of 12 individuals in 2003 to a total of 29 in 2010) as well as in the 15-24-age cohort (from 19 individuals in 2003 to 44 individuals in 2010). Less dramatic shifts have occurred among the 25-54 population from

65 in 2003 to 71 in 2005, and among the population 55 years and above from 24 in 2003 to 23 in 2010.

Chart 1: Atqasuk 2010 Age Pyramid in Five-Year Intervals

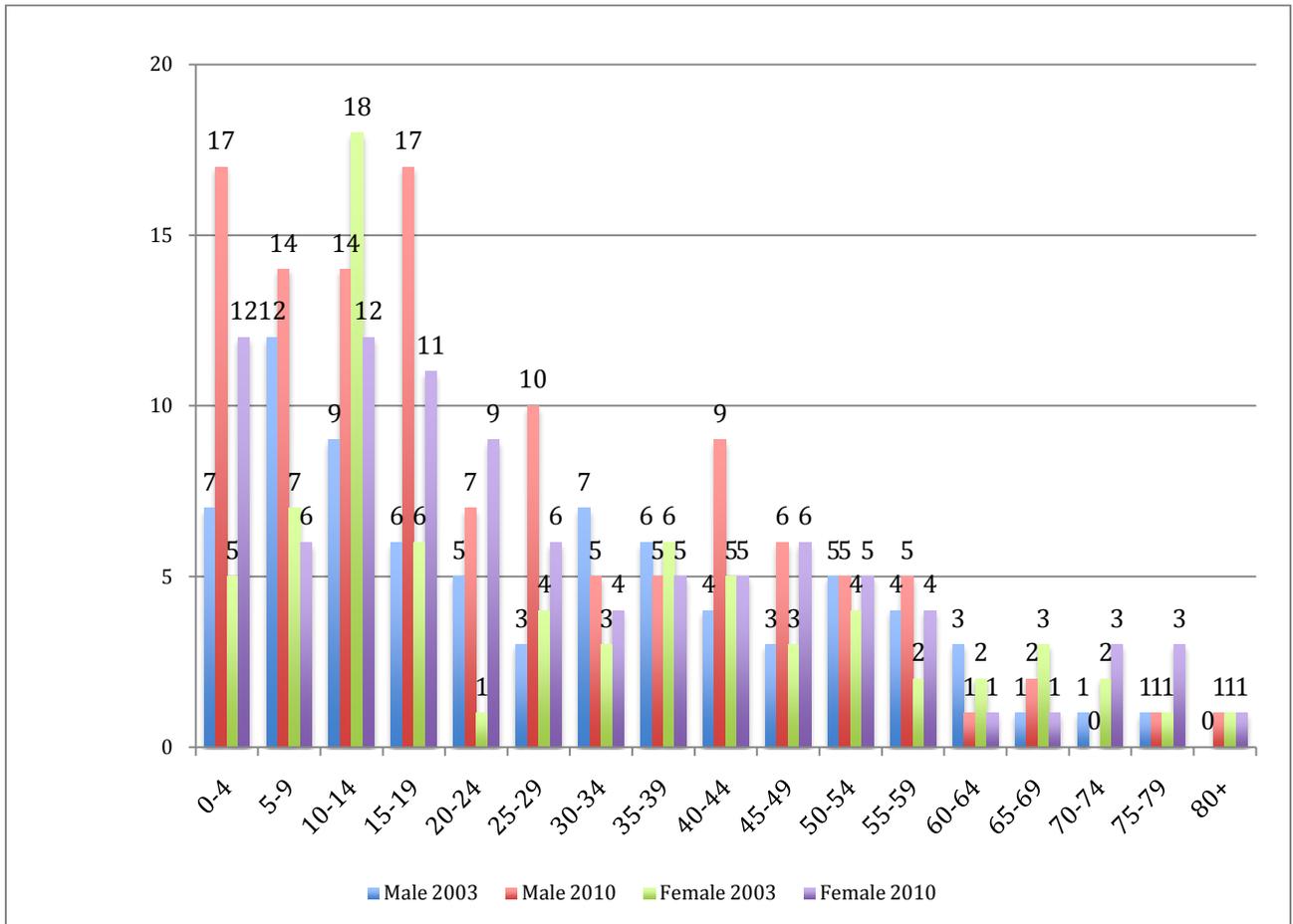


The male/female ratio in the population of Atqasuk essentially reversed itself between 1998 and 2010.. As Table 4 notes, the proportion of females in the population has declined from 55 percent in 1998 to 48.5 percent in 2003 to 43.7 percent in 2010.

Table 4: Atqasuk population percentages Male and Female 1998 to 2010

| | 1998 | 2003 | 2010 |
|------------------------|------|--------|-------|
| Male % of population | 45% | 51.5% | 56.3% |
| Female % of population | 55% | 48.50% | 43.7% |

Chart 2: Atqasuk Population by Gender, 2003 and 2010



The decline in the percentage of females in Atqasuk over the last 3 *Economic Profile and Census Reports* cannot be easily explained as several factors are in the mix. First, while both male and female numbers increased in the 0 to 19-age cohort between 2003 and 2010, the number of males increasing from 36 to 61 and the increase in the number of females only from 38 to 41. Only in the 45 to 64 age cohort did the number of females increase more during those periods than the number of males and then only by 3 individuals. Second, it might be argued that females have been more likely to attend college or move to other communities due to employment or marriage. However, the 20 to 34 cohort where this would most likely appear has actually increased in 2010. The most likely explanation is that an increase in the ratio of male to female births has occurred in Atqasuk, with the 59 percent gain in that cohort of males providing evidence.

Table 5 below shows the distribution of household size by ethnicity among the residents responding to the survey. All Caucasian and Other households are 4 persons or less, while 59 percent of the Iñupiat households are 4 persons or more. This is a substantial change from 2003, where Caucasian and Other households were composed of 6 persons or less and only 50.9 percent of Iñupiat households were made up of 4 persons or more.

Table 5: Atqasuk 2010 How many people live in this household by Ethnicity?*

| Household - how many people live in household? * | | | | |
|--|----------------------------|-----------|-------|-------|
| Count | | | | |
| How many people live in household? | Household Head's Ethnicity | | | Total |
| | Iñupiat | Caucasian | Other | |
| 1 | 7 | 6 | 1 | 14 |
| 2 | 7 | 2 | 0 | 9 |
| 3 | 6 | 1 | 0 | 7 |
| 4 | 6 | 1 | 0 | 7 |
| 5 | 8 | 0 | 0 | 8 |
| 6 | 7 | 0 | 0 | 7 |
| 7 | 4 | 0 | 0 | 4 |
| 8 | 2 | 0 | 0 | 2 |
| 9+ | 2 | 0 | 0 | 2 |
| Total | 49 | 10 | 1 | 60 |

* Table includes only the sample population and those answering the questions about ethnicity and the number of people living in the household.

As Table 6 demonstrates, the average household size among Iñupiat households in 2010 was 3.89 people while Caucasian and “Other” households averaged 1.7 people.

Table 6: Atqasuk Sample Average Household Size by Ethnicity

| Iñupiat Average Household | Caucasian Average | Atqasuk 2010 All Average |
|---------------------------|-------------------|--------------------------|
| Size | Household Size | Household Size |
| 3.89 People | 1.7 People | 3.44 People |
| n = 49 | n = 10 | n = 61 |

Average Length of Residency

Table 7: Atqasuk 2010 Average Length of Residency Household Head by Ethnicity*

| Iñupiat Household Head | Caucasian Household Head |
|---|-----------------------------|
| Average Length of Residency | Average Length of Residency |
| 27.5 years | 1.7 Years |
| n=49 | n=10 |
| *Includes only those individuals responding to the survey | |

Most of the Iñupiat Household Heads have lived in Atqasuk since the 1980s after its re-settlement while the average length of residence for the Caucasian and Other populations is only 1.7 years.

Employment

Dependency Ratios

Table 8: Atqasuk Age Cohorts and Dependency Ratios 2003 and 2010

| | 2003 | 2010 |
|------------------------|-------|-------|
| % 15 years and under | 36.1% | 35.1% |
| % 18 years and under | 42.9% | 42.6% |
| % 18-24 years of age | 4.7% | 12.9% |
| % 55-64 Years of age | 7.6% | 12.3% |
| % 62 years and older | -- | 7.4% |
| % 65 years and older | 5.9% | 6.1% |
| % 16-64years of age | 60.6% | 58.9% |
| % 18-64 years of age | 51.2% | 46.6% |
| Youth Dependency Ratio | 58.2% | 59.5% |
| Age Dependency Ratio | 9.2% | 10.3% |
| Total Dependency Ratio | 67.4% | 69.8% |

Table 8 compares the proportion of the total Atqasuk population that falls into various age cohorts. These age intervals are selected to create a total dependency ratio. The child dependency ratio is calculated by dividing the number of individuals 0-15 by the number of individuals 16-64. The age dependency ratio is calculated by dividing the number of individuals 65 and older by the number of individuals 16-64. The purpose of calculating these ratios is to try to understand how many labor force participants 16 to 64 are available to support the dependent part of the community's population-children and the elderly.

While problems do exist with this measure as noted earlier in this volume, it does conform to the North Slope Borough Planning Department's usage in earlier versions of the *Economic Profile and Census Report*.

The table also indicates a 1.3 percent and a 1.1 percent increase in the Youth Dependency Ratio and the Age Dependency Ratio respectively, resulting in a 2.4 percent increase in the Total Dependency Ratio in Atqasuk. These increases reflect the increase in the population 0-16 and 65 and up since 2003.

Table 9: Atqasuk 2010 Employment: Individual months of employment.*

| Months of employment | Frequency | Percent |
|----------------------|-----------|---------|
| 0 | 26 | 20.6 |
| 1 | 8 | 6.3 |
| 2 | 4 | 3.2 |
| 3 | 5 | 4 |
| 4 | 4 | 3.2 |
| 5 | 3 | 2.4 |
| 6 | 9 | 7.1 |
| 8 | 8 | 6.3 |
| 9 | 6 | 4.8 |
| 10 | 4 | 3.2 |
| 11 | 1 | 0.8 |
| 12 | 48 | 38.1 |
| Total | 126 | 100 |

*Includes only those individuals responding to the survey and the question about months of employment

The 2010 Atqasuk employment picture is detailed in Table 9 above. The size of the labor force increased significantly from 2003, from 72 to 126, including 26 community members, or 20.6 percent, who were unemployed in 2010 compared to 15.3 percent of the labor force unemployed in 2003. Excepting those who were unemployed, 37.3 percent of the labor force worked less than 10 months or were underemployed during 2010. Only 45 percent of the labor force indicated they were employed full-time during this period. In 2010 only 30 or 25.9 percent of the 116 individuals responding felt they were underemployed

Table 10 below compares employment measures for Atqasuk between 2003 and 2010. Numbers with an asterisk (*) indicate results from the sample population. If individuals with zero months of employment are included in our “average of months employed”, we arrive at an average of 8.67 months of employment in 2010, up from 7.7 months in 2003. When broken down by ethnicity, Caucasians in Atqasuk averaged 11.25 months of employment in 2010 while Iñupiat members of the labor force averaged 6.16 months of employment, again including those who were unemployed for the entire year. All the 26 individual who were unemployed in Atqasuk during 2010 were Iñupiat. If they are excluded from the total, the average months of employment among Iñupiat rises to 8.07. The average months unemployed among all residents has fallen between 2003 and 2010. However, the average time Caucasians in Atqasuk were unemployed among is only .25 months.

Table 10: Employment Characteristics of Atqasuk: 2003-2010
 *Sample population **Average includes unemployed individuals.

| Atqasuk | 1998 | 2003 | 2010 |
|---|------|-------|--------|
| Total Population | 224 | 250 | 268 |
| Persons 16-64* | 114 | 140 | 136 |
| Persons in Labor Force | 64 | 72 | 126* |
| Respondents reporting Unemployment | 39 | 13 | 26 |
| Respondents reporting Working < 10 Months | 19 | 21 | 47 |
| Ave. Months Employed | NA | 7.7** | 8.67** |
| Ave. Months Unemployed | NA | 8.79* | 8.1* |

Table 11: Atqasuk 2010- Employment Status Among Individuals in the Work Force.*

| Employment Status | 2003 | 2010 |
|---------------------|------|------|
| Permanent full-time | 51 | 60 |
| Temporary seasonal | 17 | 20 |
| Part-time | 4 | 12 |
| Unemployed | 13 | 38 |
| Retired | 12 | 13 |
| Total | 97 | 143 |

* Sample population answering question of Employment Status only.

Table 11 illustrates a comparison of the employment status of individuals in the labor force between 2003 and 2010. There has been an increase in all categories of status between 2003 and 2010, with an exceptional increase in the number of people who answered that they were unemployed at the time of the interview.

Table 12 Atqasuk Comparison of Employment Status 2003 to 2010

| Individuals 16-64 Years of Age | 2003 | 2003% | 2010 | 2010% |
|--------------------------------|------|-------|------|-------|
| Permanent full time | 51 | 58.0% | 60 | 45.5% |
| Temporary seasonal | 17 | 19.3% | 19 | 14.4% |
| Part-time | 4 | 4.6% | 11 | 8.3% |
| Unemployed | 13 | 14.8% | 38 | 28.8% |
| Retired | 3 | 3.3% | 4 | 3.0% |
| Total | 88 | 100% | 132 | 100% |

As Table 12 above indicates, there has been an absolute increase in the size of the Labor Force (individuals in the 16 to 64 age group) employed in Permanent full-time, Temporary/Seasonal and Part-time position from 2003 to 2010. However, the percentage of individuals in those positions has fallen during that period. This can be explained by the precipitous increase in the number of individuals who indicated they were unemployed at

the time of the 2010 interviews. It is worth notice that unemployment numbers in 1998 (39) are virtually the same in 2010 (38), sandwiching those of 2003, which had fallen to 13.

Much of this roller coaster variation can be explained by the North Slope Borough's CIP projects in the intervening period between the highs in unemployment.

Table 13: Atqasuk Employment Status, Iñupiat Only, 2003-2010 Comparisons*

| | | 2003 | % | 2010 | % |
|--------|---------------------|------|--------|------|--------|
| Male | Permanent full time | 20 | 48.8% | 28 | 42.4% |
| | Temporary seasonal | 11 | 26.9% | 13 | 19.6% |
| | Part-time | 1 | 2.4% | 4 | 6.0% |
| | Unemployed | 5 | 12.2% | 16 | 24.3% |
| | Retired | 4 | 9.7% | 5 | 7.7% |
| Female | Permanent full time | 17 | 41.5% | 20 | 30.7% |
| | Temporary seasonal | 5 | 12.2% | 7 | 10.7% |
| | Part-time | 3 | 7.3% | 8 | 12.4% |
| | Unemployed | 8 | 19.5% | 22 | 33.8% |
| | Retired | 8 | 19.5% | 8 | 12.4% |
| Total | | | 100.0% | | 100.0% |

*Includes only those individuals responding to the survey and the question about employment

Table 14 below shows that the overall patterns of employment in Atqasuk have changed very little. The major employer remains the North Slope Borough, with a total of 36 Iñupiat employed, up from 19 in 2003. The Village Corporation and/or its subsidiaries employs 18 Iñupiat, down from 26 in 2003, a decline probably attributable in part to the completion of weatherization projects in the village. The School District is the second highest employer in Atqasuk with 26 employees, 12 Iñupiat and 14 non-Iñupiat personnel. The Arctic Slope Regional Corporation has added 4 Iñupiat employees in Atqasuk, representing a change from 2003. The ratio of male to female Iñupiat employed between 2003 and 2010 has improved in most employment areas; the North Slope Borough school district is a 1:1 male/female ratio for all ethnicities, the North Slope Borough government has improved from a 17:2 ratio in 2003 to 22:14 in 2010, and the Village corporation ratio of Iñupiat males to females remains essentially the same even though absolute numbers have decreased. The ratio of Iñupiat to non-Iñupiat employed in Atqasuk has increased from 4.1 to 1 in 2003 to 5.3 to 1 in 2010.

Table 14: Atqasuk All Individuals: Employer by Gender and Ethnicity*

| Employer | Gender | Iñupiat | Caucasian | Other |
|--------------------------------|--------|---------|-----------|-------|
| | | Count | Count | Count |
| Federal government | Male | 0 | 0 | 0 |
| | Female | 0 | 0 | 0 |
| State government | Male | 0 | 0 | 0 |
| | Female | 1 | 0 | 0 |
| City government | Male | 1 | 0 | 0 |
| | Female | 0 | 0 | 0 |
| NSB government | Male | 22 | 0 | 0 |
| | Female | 14 | 0 | 0 |
| NSB School district | Male | 6 | 6 | 1 |
| | Female | 6 | 6 | 1 |
| NSB CIP | Male | 1 | 0 | 0 |
| | Female | 0 | 0 | 0 |
| Oil industry | Male | 0 | 0 | 0 |
| | Female | 1 | 0 | 0 |
| Private construction firm | Male | 0 | 0 | 0 |
| | Female | 1 | 0 | 0 |
| ASRC or subsidiary | Male | 2 | 0 | 0 |
| | Female | 2 | 0 | 0 |
| Village corporation/subsidiary | Male | 8 | 0 | 0 |
| | Female | 10 | 0 | 0 |
| Finance/insurance | Male | 0 | 0 | 0 |
| | Female | 0 | 0 | 0 |
| Transportation | Male | 1 | 0 | 0 |
| | Female | 0 | 0 | 0 |
| Communications | Male | 0 | 0 | 0 |
| | Female | 0 | 0 | 0 |
| Trade | Male | 2 | 0 | 0 |
| | Female | 0 | 0 | 0 |
| Service | Male | 0 | 0 | 1 |
| | Female | 2 | 0 | 0 |
| Other | Male | 3 | 0 | 1 |
| | Female | 3 | 0 | 0 |
| Totals | | 86 | 12 | 4 |

*Includes only those individuals responding to the survey and the questions on employment.

Table 15 below shows Iñupiat household members' reasons for unemployment. These reasons have changed substantially since 2003 especially in the area of family responsibilities where there was a dramatic increase in the number of Iñupiat females from 5 in 2003 to 16 in 2010 citing this reason. There is also a substantial increase in the number of individuals citing their inability to find a job over 2003, as well as an increase in the number of individuals citing poor health or physical disability as the reason they are unemployed. Finally there was a significant decrease in the number of individuals stating that they did not want a job since 2003, from 10 to 1.

Table 15: Individual Household Member's Reason For Unemployment*

| Reason for Unemployment | | Count | % |
|--|--------|---------|--------|
| Did not want job | Male | 0 (5) | 0% |
| | Female | 1 (5) | 3.3% |
| Could not find job | Male | 12 (5) | 20.0% |
| | Female | 3 (5) | 5.0% |
| Physical disability/poor health | Male | 7 (4) | 11.7% |
| | Female | 5 (3) | 8.3% |
| Wage work with conflict with subsistence | Male | 0 (2) | 0% |
| | Female | 0 (0) | 0% |
| Family responsibilities (e.g. care of elder) | Male | 3 (2) | 5.0% |
| | Female | 16 (5) | 26.7% |
| College or technical training | Male | 1 (1) | 1.7% |
| | Female | 1 (0) | 1.7% |
| Other | Male | 5 (7) | 8.3% |
| | Female | 5 (8) | 8.3% |
| Total | | 59 (52) | 100.0% |

Income

Table 16: Atqasuk 2010 Average Estimated Income by Ethnicity

| | Iñupiat Mean | Caucasian Mean | Other Mean |
|---------------------------|-----------------|-------------------|---------------|
| Average Individual Income | \$23,541 | \$63,618 | \$59,000 |
| Average Household Income | \$83,496 | \$102,639 | \$72,000 |

*Includes only those individuals responding to the survey and the questions about unemployment

Table 17: Proportional Contribution to Total Household Income by Source

| Source of Income | Total \$ Amount | Percent |
|-----------------------------|-----------------|---------|
| Social Security | \$231,664 | 5.0% |
| Pensions | \$87,544 | 1.9% |
| Food Stamps | \$50,004 | 1.1% |
| Child Support | \$10,626 | 0.2% |
| Other Sources | \$53,530 | 1.2% |
| Wage Income | \$2,787,189 | 60.6% |
| Corporation Dividends | \$1,119,457 | 24.3% |
| PFD | \$262,305 | 5.7% |
| Total HH Income-All Sources | \$4,602,319 | 100.0% |

Chart 3: Atqasuk 2010 Proportional Contribution to Total Household Income by Source

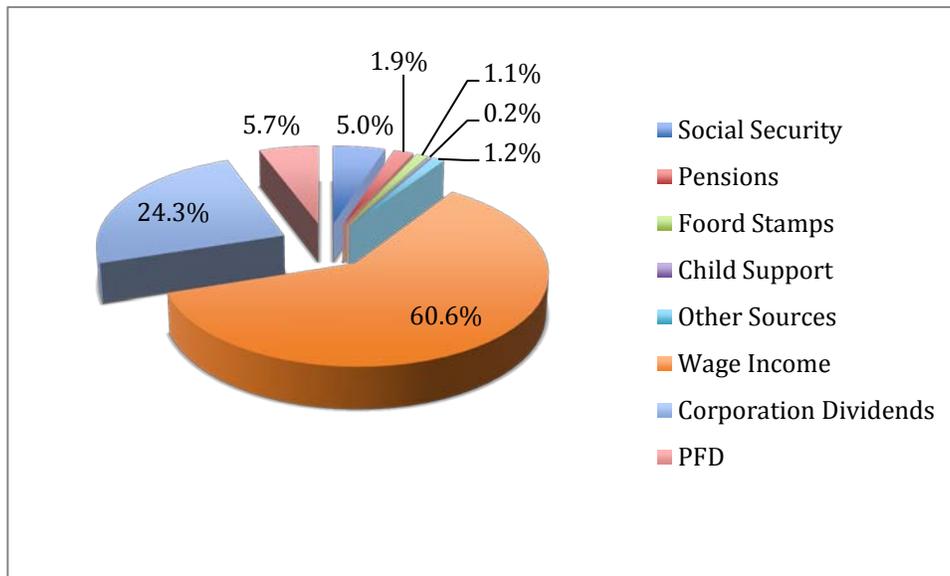


Table 17 and Chart 3 above illustrate that over 60 percent of household incomes in Atqasuk are derived from wages, and over 24 percent of household income is from Alaska Native corporation dividends (primarily from the Arctic Slope Regional Corporation). These dividends, combined with Permanent Fund dividends, constitute 30 percent of the income sources for Atqasuk households.

Table 18: Atqasuk 2010 Total Estimated Household Income by Ethnicity

| Estimated HH Income | Iñupiat | | Caucasian | | Other | |
|---------------------|---------|---------|-----------|---------|-------|---------|
| | Count | Percent | Count | Percent | Count | Percent |
| 0-\$15,000 | 1 | 2.4% | 0 | 0.0% | 0 | 0.0% |
| 15,001-29,999 | 1 | 2.4% | 0 | 0.0% | 0 | 0.0% |
| 30,000-39,999 | 5 | 12.2% | 0 | 0.0% | 0 | 0.0% |
| 40,000-49,999 | 4 | 9.7% | 0 | 0.0% | 0 | 0.0% |
| 50,000-59,999 | 1 | 2.4% | 1 | 12.5% | 0 | 0.0% |
| 60,000-69,999 | 7 | 17.1% | 0 | 0.0% | 0 | 0.0% |
| 70,000-79,999 | 4 | 9.7% | 3 | 37.5% | 1 | 100.0% |
| 80,000-89,999 | 3 | 7.4% | 1 | 12.5% | 0 | 0.0% |
| 90,000-99,999 | 3 | 7.4% | 0 | 0.0% | 0 | 0.0% |
| 100,000-124,999 | 5 | 12.2% | 2 | 25.0% | 0 | 0.0% |
| 125,000-149,999 | 2 | 4.9% | 1 | 12.5% | 0 | 0.0% |
| 150,000+ | 5 | 12.2% | 0 | 0.0% | 0 | 0.0% |
| Total | 41 | 100.0% | 8 | 100.0% | 1 | 100.0% |

Table 18 above shows that 26.8 percent of Iñupiat households in Atqasuk had estimated income of \$50,000 or less in 2010, while another 43.9 percent of Iñupiat households had incomes between \$50,000 and \$100,000 and 29.3 percent had incomes over \$100,000. All Caucasian households in Atqasuk had estimated incomes over \$50,000 with 37.5 percent of them earning \$100,000 and more.

Table 19 below indicates that Iñupiat households tended to overestimate household income when they earned below \$50,000 and underestimated incomes when they earned between \$50,000 and \$100,000. Those earning over \$100,000 were close to the total calculated household incomes for 2010. With the exception of one Caucasian household earning less than \$50,000 and one household earning more than \$150,000, the remaining households estimated income fairly accurately.

When total income is calculated, 36.7 percent of Iñupiat households had incomes of \$50,000 or less, 34.7 percent had incomes between \$50,000 and \$100,000 and 28.6 percent had incomes of over \$100,000. One (10 percent) Caucasian household had an income of less than \$50,000 while five or 50 percent of Caucasian households had incomes between \$50,000 and \$99,000 and four or 40 percent had incomes of \$100,000 or more.

Table 19: Atqasuk 2010—Calculated Household Total Income By Ethnicity*

| Total Calculated Household Income | Iñupiat | | Caucasian | | Other | |
|-----------------------------------|-----------|---------------|-----------|---------------|----------|---------------|
| | No | % | No | % | No | % |
| 0-\$15,000 | 2 | 4.1% | 0 | 0.0% | 0 | 0.0% |
| 15,001-29,999 | 6 | 12.2% | 0 | 0.0% | 0 | 0.0% |
| 30,000-39,999 | 4 | 8.2% | 0 | 0.0% | 0 | 0.0% |
| 40,000-49,999 | 6 | 12.2% | 1 | 10.0% | 0 | 0.0% |
| 50,000-59,999 | 4 | 8.2% | 1 | 10.0% | 0 | 0.0% |
| 60,000-69,999 | 5 | 10.2% | 1 | 10.0% | 0 | 0.0% |
| 70,000-79,999 | 4 | 8.2% | 2 | 20.0% | 1 | 100.0% |
| 80,000-89,999 | 2 | 4.1% | 0 | 0.0% | 0 | 0.0% |
| 90,000-99,999 | 2 | 4.1% | 1 | 10.0% | 0 | 0.0% |
| 100,000-124,999 | 7 | 14.2% | 2 | 20.0% | 0 | 0.0% |
| 125,000-149,999 | 2 | 4.1% | 1 | 10.0% | 0 | 0.0% |
| 150,000+ | 5 | 10.2% | 1 | 10.0% | 0 | 0.0% |
| Total | 49 | 100.0% | 10 | 100.0% | 1 | 100.0% |

*Includes only those households responding to the survey and the questions of total household income.

Table 20: Atqasuk 2010 Average Estimated and Calculated Household Income by Ethnicity*

| | Iñupiat | Caucasian | Other |
|---------------------------|-------------|-------------|-------------|
| | Mean | Mean | Mean |
| Ave. Estimated HH Income | 83496 | 102639 | 72000 |
| Ave. Calculated HH Income | 76294 | 94254 | 72605 |

*Includes only those households providing estimated income and total household incomes

Poverty

While poverty levels in many North Slope Borough communities are quite high, when measured by household income and size 5 Atqasuk households or 8.2 percent fall below the poverty threshold levels located to the right or in the shaded area of Table 21 below. Four of those households are Iñupiat (the other is Caucasian). Therefore, 8.1 percent of Atqasuk Iñupiat households are at or below the poverty threshold levels, while 10 percent of Caucasian households are at or below those thresholds. The poverty level in Atqasuk is considerably below that of most communities on the North Slope.

Table 21: Atqasuk 2010 Household Size by Poverty Income Threshold*
 *Income levels are based on calculated household income.

| HH Income Level | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | No. |
| \$0-13,530 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$13,351-18,210 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$18,211-22,890 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$22,891-27,570 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$27,571-32,250 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$32,251-36,930 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| \$36,931-41,610 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$41,611-46,290 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| \$46,291-50,970 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$50,971-55,650 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$55,651-60,330 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$60,331-65,010 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| \$65,011-highest | 6 | 3 | 4 | 4 | 6 | 3 | 2 | 2 | 0 | 0 | 1 | 1 |
| Total | 15 | 9 | 7 | 7 | 8 | 7 | 4 | 2 | 0 | 0 | 1 | 1 |

Educational Attainment

There have been significant shifts in several levels of educational attainment among Atqasuk residents over the three periods contained in Table 22 below. First, the absolute number of children who have yet to start school has increased from 13 in 1998 to 34 in the 2010 census, a clear indication of increased birth rate in Atqasuk. Absolute numbers of children in elementary and middle school have remained essentially the same, while the number of students in high school has increased from 12 to 22. The number of individuals who have earned high school diplomas has increased from 8 to 39, and the number of those who have taken some college credits has increased from 10 to 31 between 1998 and 2010, an indication of increased interest in educational attainment, including college/university attendance, among residents of Atqasuk. Finally, the number of residents with advanced degrees has increased from 0 in 1998 (when the survey was conducted when teachers were not in the community) to 12 in both 2003 and 2010, indicating that the majority, if not all, those with advanced degrees are teachers or administrators.

This conclusion is supported by Table 23 below, which indicates that 18.3 percent of Iñupiat responding to the census survey have earned High School degrees and 13.5 percent have taken at least some college credits, while one Iñupiat reports earning a Masters degree.

Table 22: Atqasuk Educational Status of Household Members 1998 to 2010

| Educational Attainment | 1998 | % | 2003 | % | 2010 | % |
|-------------------------------|------|--------|------|--------|------|--------|
| Has not started school | 13 | 10.3% | 17 | 10.0% | 34 | 15.0% |
| Elementary school | 33 | 26.9% | 29 | 17.2% | 28 | 12.0% |
| Middle school | 12 | 9.5% | 19 | 11.5% | 15 | 7.0% |
| High school | 12 | 9.5% | 13 | 7.7% | 22 | 10.0% |
| Did not finish high school | 24 | 19.1% | 24 | 14.2% | 29 | 13.0% |
| High school diploma | 8 | 6.3% | 3 | 1.8% | 39 | 17.0% |
| GED | 14 | 11.1% | 31 | 18.4% | 15 | 7.0% |
| Some college | 10 | 7.9% | 19 | 11.3% | 31 | 14.0% |
| Vocational/Technical Graduate | 0 | 0.0% | 2 | 1.2% | 0 | 0.0% |
| B.A. degree | 0 | 0.0% | 8 | 4.8% | 6 | 3.0% |
| M.A. degree | 0 | 0.0% | 4 | 2.4% | 6 | 3.0% |
| Total | 126 | 100.0% | 169 | 100.0% | 225 | 100.0% |

Table 23: Atqasuk: 2010 Educational Attainment by Ethnicity

| Educational Attainment | Iñupiat | | Caucasian | | Other | |
|-------------------------------|---------|-------|-----------|-------|-------|-------|
| | No. | % | No, | % | No. | % |
| Has not started school | 34 | 16.3% | 0 | 0.0% | 0 | 0.0% |
| Elementary school | 27 | 12.9% | 1 | 7.7% | 0 | 0.0% |
| Middle school | 15 | 7.2% | 0 | 0.0% | 0 | 0.0% |
| Did not finish high school | 28 | 13.5% | 0 | 0.0% | 1 | 25.0% |
| High school diploma | 38 | 18.3% | 0 | 0.0% | 1 | 25.0% |
| GED | 15 | 7.2% | 0 | 0.0% | 0 | 0.0% |
| Vocational/technical graduate | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Some college | 28 | 13.5% | 2 | 15.4% | 1 | 25.0% |
| B.A. degree | 0 | 0.0% | 6 | 46.2% | 0 | 0.0% |
| M.A. degree | 1 | 0.4% | 4 | 30.8% | 1 | 25.0% |
| Professional degree | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Other (specify) | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |

However, the absolute number of individuals who have never enrolled in college has grown from 58 in 1998 to 46 in 2003 to 93 in 2010. Conversely, while the percentage of Iñupiat having completed college courses for credit has fluctuated from 16.9 percent to 31.6 percent to 26.3 percent in that same time period, the number of those completing courses has risen from 14 in 1998 to 24 in 2003 to 35 in 2010. This may be an indication in part of the success of Ilisagvik College. In addition, one Iñupiat in Atqasuk earned a college degree in 2010.

Table 24: Atqasuk-Enrollment in College Courses 1998 to 2010

| Status | 1998 Percent | 2003 Percent | 2010 Percent | 2010 Count |
|-----------------------------------|--------------|--------------|--------------|------------|
| Never enrolled | 69.9% | 60.6% | 69.9% | 93 |
| Enrolled no courses completed | 12.1% | 3.9% | 3.0% | 4 |
| Currently enrolled for first time | 1.1% | 3.9% | 0.0% | 0 |
| Completed courses | 16.9% | 31.6% | 26.3% | 35 |
| Graduated from college | 0.0% | 0.0% | .8% | 1 |
| Total | 100.0% | 100.0% | 100.0% | 133 |

Training

There has been a significant increase in both absolute numbers and percentage of those Iñupiat in Atqasuk who believe that education does not help one’s career, and at the same time an increase in the number of those who believe education can help one’s career, but an equally significant decrease in the percentage of that population maintaining that belief.

Table 25: Atqasuk: Can Additional Education Help Career? 2003-2010, Iñupiat Only

| | 2003 | Percent | 2010 | Percent |
|-------|------|---------|------|---------|
| Yes | 53 | 88.4% | 70 | 64.8% |
| No | 7 | 11.6% | 38 | 35.2% |
| Total | 60 | 100.0% | 118 | 100.0% |

In 2010, over twice the number of Iñupiat responded that they would leave home for additional training compared to 2003. Eighty percent indicated they would leave for training while only 19 percent stated they would not. These results may be attributed in part to the younger age cohorts than were present in 2003. They also may be attributed to the influence of improvements in the NSB School District during the interim between the *Economic Profile and Census Reports* as well as the influence of television.

Table 26: Atqasuk Would Iñupiat Respondents Leave Home for Additional Education/Training? 2003-2010

| | 2003 | | 2010 | |
|-------|-------|---------|-------|---------|
| | Count | Percent | Count | Percent |
| Yes | 32 | 55.20% | 76 | 80.9% |
| No | 26 | 44.80% | 18 | 19.1% |
| Total | 58 | 100% | 94 | 100% |

Table 27: Atqasuk 2003-2010 Iñupiat Respondents Preferred Length of Training

| Preferences | 2003 Count | Percent | 2010 Count | Percent |
|--------------------------|------------|---------|------------|---------|
| Short term on-the-job | 30 | 55.5% | 48 | 60.8% |
| Long term on-the-job | 14 | 26.0% | 12 | 15.2% |
| Two year program | 7 | 13.0% | 14 | 17.7% |
| Four year degree program | 3 | 5.5% | 5 | 6.3% |
| Total | 54 | 100.0% | 79 | 100.0% |

The preferred length of education or training for Iñupiat from Atqasuk has remained focused on the short-term, on-the-job variety. There has been an increase of almost 50 percent among those Iñupiat who indicate a preference for either two-year or four-year degree programs. In 2010 this represents 20 percent of those responding,

Table 28: Atqasuk: Iñupiat Respondents' Preferred Location for New Training

| | Frequency | Percent | Cumulative Percent |
|-----------------------------|-----------|---------|--------------------|
| Ilisagvik | 39 | 60.9% | 60.9% |
| UAF - Fairbanks | 3 | 4.7% | 65.6% |
| UAA - Anchorage | 3 | 4.7% | 70.3% |
| Vocational technical school | 3 | 4.7% | 75.0% |
| College outside AK | 1 | 1.6% | 76.6% |
| Other | 15 | 23.4% | 100% |
| Total | 64 | 100% | |

Atqasuk Iñupiat preferences for receiving advanced training have remained very much as they were in 2003, with the majority indicating a preference for courses at Ilisagvik College in Barrow. There was a decline in the number of those favoring Alaska Universities and a significant increase in those favoring options other than colleges or universities as a place to receive additional training or education.

There are discernible differences in the type of training for which Iñupiat individuals have expressed preference. On the one hand, there has been either a significant decrease in expressed preferences for training, or no change at all, in office occupations such as word processing and computer programming, and in vocational training such as carpentry, electronics, food service public administration and heavy equipment operation. On the other hand, there has been an increase in expressed preference for teacher training and accounting. There were preferences expressed in 2010 for education/training in the areas of wildlife management, health worker occupations and welding that were not expressed in 2003.

Table 29: Atqasuk 1998-2010 Iñupiat Respondents Preferred Occupation for Additional Training

| Training Area Preferred | 2010 Count | 2010 Percent | 2003 Percent | 1998 Percent |
|-------------------------|------------|--------------|--------------|--------------|
| English | 1 | 1.5% | 2.0% | 11.6% |
| Word processing | 2 | 3.1% | 13.5% | 2.3% |
| Accounting | 5 | 7.7% | 3.9% | 9.3% |
| Heavy equipment | 4 | 6.2% | 11.6% | 16.2% |
| Public administration | 2 | 3.1% | 3.9% | 7.0% |
| Wildlife Mgt. | 2 | 3.1% | 0.0% | 0.0% |
| Food service | 2 | 3.0% | 3.9% | 0.0% |
| Business Mgt. | 3 | 4.6% | 3.9% | 11.6% |
| Land Mgt. | 0 | 0.0% | 0.0% | 0.0% |
| Computer programmer | 4 | 6.2% | 13.5% | 0.0% |
| Oil field worker | 0 | 0.0% | 2.0% | 11.6% |
| Teacher | 5 | 7.7% | 9.7% | 0.0% |
| Health worker | 3 | 4.6% | 0.0% | 0.0% |
| Paralegal | 0 | 0.0% | 0.0% | 0.0% |
| Carpentry | 1 | 1.5% | 15.4% | 2.3% |
| Welding | 4 | 6.2% | 0.0% | 0.0% |
| Mechanic | 4 | 6.2% | 9.7% | 2.3% |
| Electronics | 1 | 1.5% | 2.0% | 0.0% |
| Surveyor | 0 | 0.0% | 0.0% | 0.0% |
| Pilot | 0 | 0.0% | 0.0% | 0.0% |
| Other | 22* | 33.8% | 5.8% | 25.8% |
| | 65 | 100.0% | 100.0% | 100.0% |

* 22 individuals responded with preferences not contained in the list.

Housing

There has been a small increase in all types of living structures in Atqasuk, including one mobile home/trailer and buildings containing 3 or more housing units. While single-family housing increased numerically, it decreased in relation to the various kinds of housing available in Atqasuk in 2010 relative to 2003

Table 30: Atqasuk 2003-2010 Households by Type of Living Structure*

| Type of Living Structure | 2003 Count | Percent | 2010 Count | Percent |
|---------------------------------------|------------|---------|------------|---------|
| Mobile Home/Trailer | 0 | 0.0% | 1 | 1.6% |
| Single Family House | 45 | 86.5% | 50 | 82.0% |
| Building with 3 or 4 Housing Units | 4 | 7.7% | 6 | 9.8% |
| Building with 5 or More Housing Units | 3 | 5.8% | 4 | 6.6% |
| Total | 52 | 100.0% | 61 | 100.0% |

*Includes only those Households responding to the survey and the question about type of housing

Table 31: Atqasuk 2010 Housing- Home Ownership by Ethnicity

| Home Ownership | Iñupiat | Caucasian | Other |
|-----------------------------------|---------|-----------|-------|
| TNHA Rental | 15 (3) | 0 | 0 |
| NSB Rental | 2 (7) | 8 (7) | 1 (1) |
| UIC Rental | 0 | 0 | 0 |
| Privately Owned Rental | 6 (2) | 1 | 0 |
| TNHA (Mutual help home ownership) | 0 | 0 | 0 |
| Owned With a Mortgage | 9 (20) | 1 | 0 (1) |
| Owned Through LIPP | 0 (1) | 0 | 0 |
| Owned Free and Clear | 16 (6) | 0 (1) | 0 |
| Totals | 48 | 10 | 1 |

2003 data in parenthesis

The number of Iñupiat in Atqasuk living in rental housing has increased between 2003 and 2010 by almost 50 percent while the number of Iñupiat living in homes with a mortgage has decreased from 21 to 9. At the same time, the number living in homes owned free and clear has increased from 6 to 16. Other housing in Atqasuk has remained essentially the same.

Table 32: Atqasuk Number of Rooms in Home (Excluding Bathrooms) 2003 and 2010

| Rooms | 2003 Count | 2003 Percent | 2010 Count | 2010 Percent |
|-------|------------|--------------|------------|--------------|
| 1 | 1 | 1.9% | 0 | 0.0% |
| 2 | 1 | 1.9% | 2 | 3.3% |
| 3 | 4 | 7.7% | 5 | 8.3% |
| 4 | 10 | 19.2% | 4 | 6.7% |
| 5 | 19 | 36.6% | 20 | 33.3% |
| 6 | 11 | 21.2% | 10 | 16.7% |
| 7 | 5 | 9.6% | 9 | 15.0% |
| 8 | 1 | 1.9% | 10 | 16.7% |
| Total | 52 | 100.0% | 60 | 100.0% |

While the average number of rooms in Atqasuk homes rose from 5 to 5.6 between 2003 and 2010, what is more interesting is the increase in homes with 7 and 8 rooms over that same period, an increase from 6 to 19 or from 11.5 percent of the homes in 2003 to 31.7 percent in 2010. Eleven point 6 percent of the households had 3 bedrooms or less while 88.4 percent had 4 bedrooms or more in 2010.

The average size of dwellings in Atqasuk is 1,312 square feet with one-half 1,200 square feet or less and 8 being 1,500 square feet or above. The four largest housing units are 2,100 ft² to 2,500 ft².

Utilities Heating and Water Systems

Table 33: Atqasuk 2003-2010 Main Heating System in Home

| System Type | 2003 Count | 2003 Percent | 2010 Count | 2010 Percent |
|-------------------------|---------------|-----------------|---------------|-----------------|
| Stand-alone stove | 9 | 17.3% | 7 | 11.7% |
| Stand-alone heater | 0 | 0.0% | 2 | 3.3% |
| Forced air furnace | 10 | 19.2% | 6 | 10.0% |
| Baseboard boiler system | 33 | 63.5% | 45 | 75.0% |
| Total | 52 | 100.0% | 60 | 100.0% |

There has been a movement among Atqasuk residents toward use of baseboard boiler systems as the main source of heat in their homes since 2003. All households rely on diesel as their main source of fuel save one household, which is connected to a natural gas pipeline.

Table 34: Atqasuk 1998-2010 Does House Have Running Water?

| | Percent | Percent | Percent | Count |
|-------|---------|---------|---------|-------|
| Yes | 86.8% | 96.3% | 95.1% | 58 |
| No | 13.2% | 3.7% | 4.9% | 3 |
| Total | 100.0% | 100.0% | 100.0% | 61 |

Over 95 percent of the households in Atqasuk have running water, approximately the same percentage as in 2003 with 9 households added in 2010. In 44, or 72.1 percent, of those households the water is piped into the house. The other 17 (27.9 percent) of the households have water delivered by a water truck.

Fifty-seven, or 93.4 percent of the households have flush toilets while only 4 or 6.6 percent are still using honey buckets. Forty-three, or 74.1%, of those with flush toilets are hooked up to sewer lines in Atqasuk, while the other 15 are connected to holding tanks.

Housing and Utility Costs

Average utility costs in Atqasuk have dropped by \$72.43 between 2003 and 2010. This is attributable to the \$76.72 decrease in the average heating costs. The decrease may ultimately be attributable to the point in 2004 when the North Slope Borough took over from the village corporation distribution of heating oil to residents.

Table 35: Atqasuk Cost of Utilities- 1998 to 2010

| Average Monthly Utility Costs | 1998 | 2003 | 2010 |
|-------------------------------|-------|-------|----------|
| Heating | \$221 | \$253 | \$176.28 |
| Electricity | \$132 | \$157 | \$161.02 |
| Water | \$57 | \$89 | \$89.27 |
| Total Average Cost | \$410 | \$499 | \$426.57 |

Table 36: Atqasuk: Rental and Mortgage Costs 1998 to 2010

| Category | 1998 | 2003 | 2010 |
|--------------------------|-------|-------|-------|
| Average Mortgage Payment | \$257 | \$339 | \$927 |
| Average Rental Payment | \$99 | \$513 | \$469 |

Mortgage costs in Atqasuk have increased almost three-fold between 2003 and 2010, from \$339 to \$927 on average, while rental costs during the same period have decreased.

Table 37: Atqasuk 2010 - Planning or Use of AHFC Energy Assistance Program

| Did your household receive benefits From AHFC Energy Assistance in 2009? | Frequency | | |
|--|-----------|---------|---------------|
| | Frequency | Percent | Valid Percent |
| We applied waiting to be audited | 3 | 4.9% | 6.5% |
| Planning to apply to program | 3 | 4.9% | 6.5% |
| Haven't heard about the program | 30 | 49.2% | 65.2% |
| No plan to utilize program | 10 | 16.4% | 21.7% |
| Total | 46 | 75.4% | 100% |
| Not Applicable | 15 | 24.6% | |
| Total Responses | 61 | 100% | |

On the one hand, only six eligible households (13%) have applied or are planning to apply to the AHFC Energy Assistance program. Sixty-five point two percent of the eligible households have never heard of the program and the remaining 21.7 percent do not intend to apply.

Table 38: Atqasuk 2010—Planning or Use of Weatherization Program in 2009?

| Did your household receive any Weatherization benefits in 2009? | Frequency | Percent | Valid Percent |
|---|-----------|-------------|---------------|
| Yes we received new ... | 3 | 4.9% | 6.4% |
| Public housing on waiting list | 5 | 8.2% | 10.6% |
| Low income awaiting energy audit | 2 | 3.3% | 4.3% |
| Planning to apply to program | 5 | 8.2% | 10.6% |
| Haven't heard of program | 18 | 29.5% | 38.3% |
| Don't plan to utilize program | 14 | 23% | 29.8% |
| Total | 47 | 77% | 100% |
| Not Applicable | 14 | 23% | |
| Total | 61 | 100% | |

On the other hand, 35.9 percent of Atqasuk households received services from the weatherization program, are on the waiting list, are waiting for an energy audit or are planning to apply to the program. 68.1 percent of the households either have not heard of the program or are not planning to apply for it.

Subsistence

Table 39: Atqasuk 2010—Portion of Household Diet From Subsistence Foods*

| Amount of Diet From Subsistence | Percentage | Percentage | Percentage | Number |
|---------------------------------|---------------|---------------|---------------|-----------|
| | 1998 | 2003 | 2010 | 2010 |
| None | 0.0% | 19.0% | 0.0% | 0 |
| Very Little | 18.2% | 12.5% | 13.3% | 8 |
| Less Than Half | 12.1% | 15.0% | 28.3% | 17 |
| Half | 18.2% | 31.0% | 26.7% | 16 |
| More Than Half | 21.2% | 8.0% | 20.0% | 12 |
| Nearly All | 30.3% | 12.5% | 11.7% | 7 |
| All | 0.0% | 2.0% | 0.0% | 0 |
| Total | 100.0% | 100.0% | 100.0% | 60 |

*Includes only those households responding to the survey and the questions about subsistence

Table 39 above suggests there have been significant changes in the amount of subsistence foods used by households in Atqasuk between 1998 and 2010, with 2003 appearing to be an anomaly with almost 20 percent of the households reporting no subsistence use. However as noted in the *2003 NSB Economic Profile and Census Report*, the majority of those households were non-Iñupiat households that did not participate in any form of subsistence. The average of the households using subsistence foods in less than half their diet is 36.1 percent over the 12-year span, while an average of 59.9 percent of households in Atqasuk reported that their household diets were comprised of half or over half subsistence foods.

Table 40 below indicates that 82 percent of the non-Iñupiat in Atqasuk in 2010 reported subsistence foods comprising less than one-half their household diets, while only one-third of the Iñupiat households so reported, with 66.7 percent indicating that subsistence foods made up one-half or more of their household diet in 2010. Like 1998 and unlike 2003, no Atqasuk household reported that subsistence foods did not make up a portion of their household diet in 2010.

Table 40: Atqasuk 2010—Portion of Household Diet From Subsistence Foods by Ethnicity*

| Portion of HH Diet From Subsistence | Iñupiat Count | Column N % | Caucasian Count | Column N % | Other Count | Column N % |
|-------------------------------------|---------------|------------|-----------------|------------|-------------|------------|
| 1. None | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| 2. Very little | 1 | 2.0% | 6 | 60.0% | 1 | 100.0% |
| 3. Less than half | 15 | 31.3% | 2 | 20.0% | 0 | 0.0% |
| 4. Half | 16 | 33.3% | 0 | 0.0% | 0 | 0.0% |
| 5. More than half | 9 | 18.8% | 2 | 20.0% | 0 | 0.0% |
| 6. Nearly all | 7 | 14.6% | 0 | 0.0% | 0 | 0.0% |
| Total | 48 | 100.0% | 10 | 100.0% | 1 | 100.0% |

Table 41: Atqasuk 1998 to 2010—Changes in Subsistence Activities Last Five Years

| Degree of Use | Hunting 2010 Percent | Fishing 2010 Percent | Gathering 2010 Percent | All Activities 2003 Percent | All Activities 1998 Percent |
|-----------------------|----------------------|----------------------|------------------------|-----------------------------|-----------------------------|
| 1. Decreased a lot | 10.2% | 1.9% | 6.0% | 18.0% | 3.0% |
| 2. Decreased somewhat | 18.3% | 30.2% | 28.0% | 18.0% | 10.0% |
| 3. Stayed the same | 49.0% | 37.7% | 40.0% | 43.6% | 58.0% |
| 4. Increased somewhat | 14.3% | 13.2% | 8.0% | 12.4% | 26.0% |
| 5. Increased a lot | 8.2% | 17.0% | 18.0% | 8.0% | 3.0% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Table 41 above examines respondents impressions of changes in three subsistence resources in and around Atqasuk over the past 5 years in each of the census reports: hunting, fishing and gathering. The question has been asked in the past of all resources but this year it was asked about the three specific resources. In general, approximately one-third of the respondents in 2010 perceived subsistence resources to decline compared to 36 percent in 2003 and only 13 percent in 1998 while between 22 percent and 30 percent saw an increase in those same resources. This represents a rise in perceptions of increase compared to 2003 and approximates the perceptions of increase among Atqasuk residents in 1998. The percentage of 2010 respondents seeing no change is similar to 2003 perceptions, but a decrease from those of 1998.

Chart 4: Atqasuk 1998 to 2010, Changes in Subsistence Activities Last Five Years

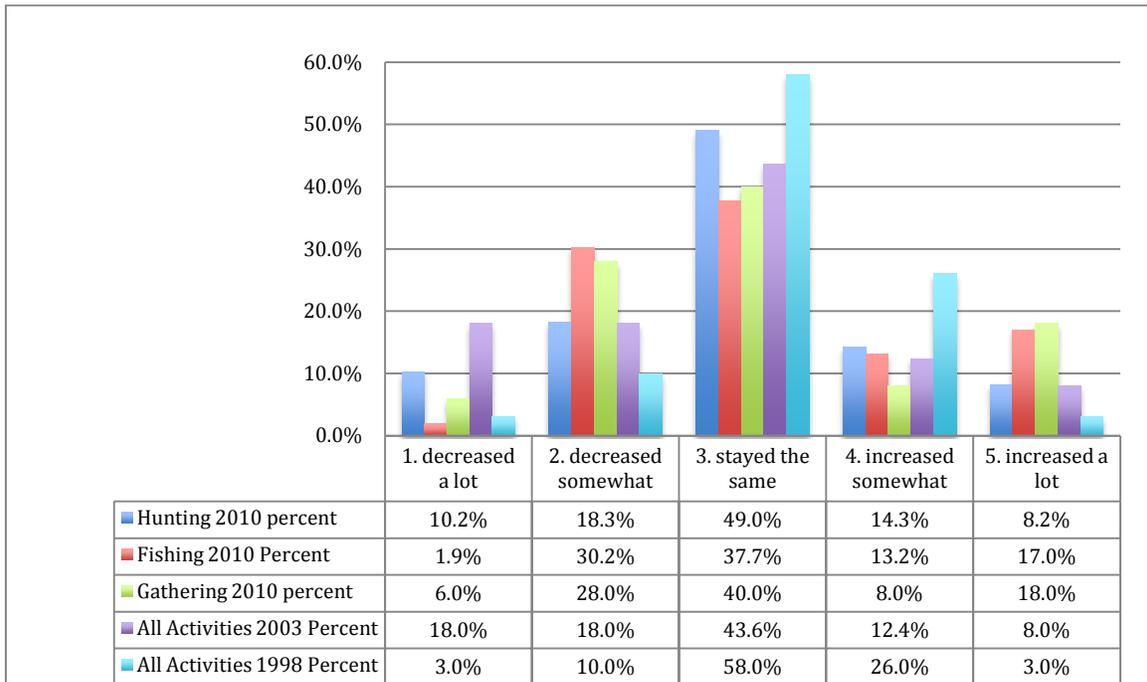


Chart 4 above provides a graphic representation of Atqasuk residents' assessment of subsistence resources over the past 5 years

Table 42: Atqasuk 1998 to 2010 Percent of Subsistence Diet Received From Other Households

| Changes in Amount Shared by Others | 2010 Number | 2010 Percent | 2003 Percent | 1998 Percent |
|------------------------------------|-------------|--------------|--------------|--------------|
| 1. None | 5 | 8.3% | 16.0% | 6.0% |
| 2. Very little | 19 | 31.7% | 18.0% | 37.0% |
| 3. Less than half | 10 | 16.7% | 18.0% | 28.0% |
| 4. Half | 3 | 5.0% | 8.0% | 19.0% |
| 5. More than half | 3 | 5.0% | 16.0% | 1.0% |
| 6. Nearly all | 4 | 6.7% | 3.0% | 6.0% |
| 7. All | 16 | 26.7% | 21.0% | 3.0% |
| Total | 60 | 100.0% | 100.0% | 100.0% |

Table 42 above and Chart 5 below show that there are positive comparisons between 1998 and 2010 regarding the percentage of subsistence foods shared with households in Atqasuk by others, but a significant difference in the numbers of households. There were a total of 32 households surveyed in 1998, 38 in 2003 and 60 responding to the question of sharing subsistence foods in 2010. There is a large increase in the number of households receiving very little and/or less than half their subsistence foods from other households in 2010 over both 1998 and 2003, less households receiving one-half or more than one half

than in 2003 and twice as many households receiving almost or all their subsistence foods from other households than in either 1998 or 2003.

Chart 5: Subsistence Foods Shared by Other Households

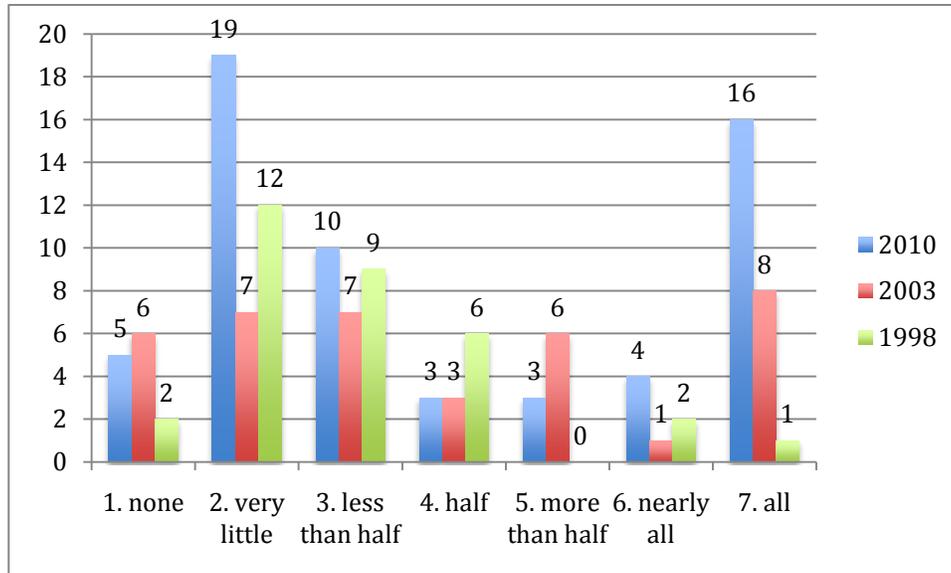
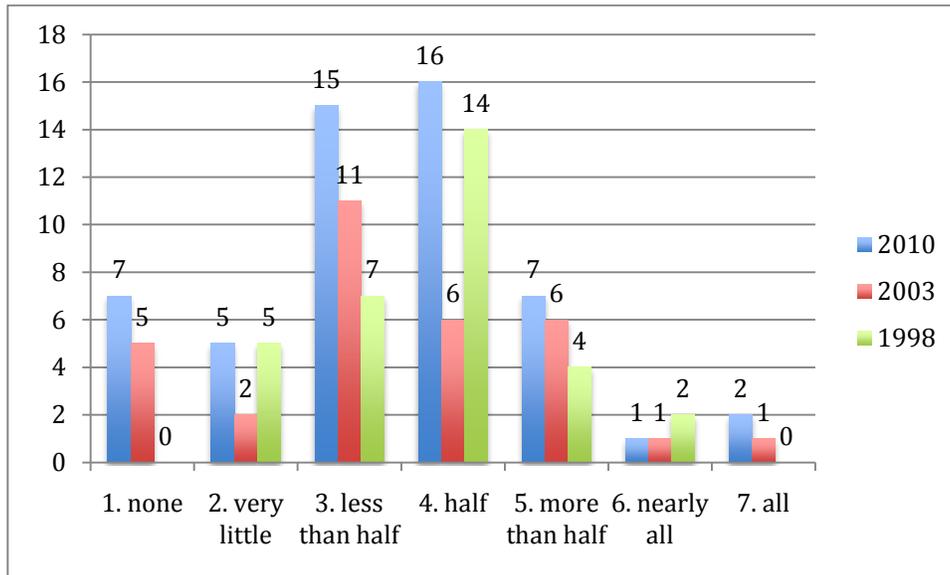


Table 43: Atqasuk 1998-2010 Subsistence Food Given to Other Households

| Subsistence Food Given Away | 2010 Frequency | 2010 Percent | 2003 Percent | 1998 Percent |
|-----------------------------|----------------|--------------|--------------|--------------|
| 1. None | 7 | 13.2% | 15.60% | 0.0% |
| 2. Very little | 5 | 9.4% | 6.30% | 16.0% |
| 3. Less than half | 15 | 28.3% | 34.40% | 22.0% |
| 4. Half | 16 | 30.2% | 18.75% | 44.0% |
| 5. More than half | 7 | 13.2% | 18.75% | 12.0% |
| 6. Nearly all | 1 | 1.9% | 3.10% | 6.0% |
| 7. All | 2 | 3.8% | 3.10% | 0.0% |
| Total | 53 | 100.0% | 100.00% | 100.0% |

Chart 6: Atqasuk: 1998 to 2010 Subsistence Foods Shared with Other Households



The above tables and charts indicate a shift in sharing of subsistence foods in Atqasuk that was first noticed in the 2003 census. In 1998 every household in Atqasuk participated in sharing subsistence foods with other households, while in 2003 15.6 percent of the households indicated that they did not share any subsistence resources at all, and in 2010 13.2 percent of those households indicated they did not share. What is more troubling is that there are more households not sharing in 2010 than in 2003. Further, 38 percent of households in 1998 shared less than half their subsistence foods with other households, while in 2003 56.3 percent shared less than half their subsistence resources with other households, and 50.9 percent indicated they shared less than half in 2010. In addition, 62 percent of Atqasuk households shared one half or more of their subsistence resources in 1998 with others, while only 43.7 percent did so in 2003 and 49.1 did so in 2010.

Table 44: Atqasuk 2010—Subsistence Sharing With Communities

| | | |
|--|-----|----|
| Own Community | Yes | 54 |
| Other NSB Community | Yes | 42 |
| A NANA Community | Yes | 3 |
| Anchorage Households | Yes | 17 |
| Fairbanks Households | Yes | 4 |
| Households in other Alaska Communities | Yes | 2 |
| Households Outside Alaska | Yes | 5 |

The people of Atqasuk share subsistence foods with households in many other communities, particularly other North Slope Borough communities. They also share with to a lesser degree with households in Anchorage, and minimally with households in Fairbanks,

in the North West Arctic Borough as well as other Alaska Communities and households outside Alaska.

Table 45: Atqasuk 2010: Money Spent on Subsistence Activities

| | 2010 | | 2003 | |
|--------------------|-------|---------|-------|---------|
| | Count | Percent | Count | Percent |
| \$0-\$100 | 4 | 9.0% | 7 | 24.0% |
| \$200-\$400 | 9 | 20.5% | 6 | 21.0% |
| \$500-\$700 | 6 | 13.6% | 3 | 10.0% |
| \$800-\$1.200 | 3 | 6.8% | 0 | 0.0% |
| \$1.300-\$3.000 | 5 | 11.4% | 9 | 31.0% |
| \$3.100-\$9.500 | 9 | 20.5% | 2 | 7.0% |
| \$9.600-\$20.000 | 8 | 18.2% | 1 | 3.0% |
| \$20.100 and Above | 0 | 0.0% | 1 | 3.0% |
| Total | 44 | 100.0% | 29 | 99.0% |

As Table 45 above illustrates, the number of Atqasuk residents indicating they spent money on subsistence increased by 15, or 51.7 percent, between 2003 and 2010. In addition, the total amount spent in 2010 was substantially higher than was the case in 2003.

Participation and Recruitment for Subsistence Activities:

Individuals in Atqasuk generally do not participate in either Fall or Spring whaling given their inland location. However, two individuals participated in Fall Whaling in 2009 and 3 participated in Spring Whaling in 2010, indicating that there are connections with whaling crews from other communities but that whaling is not one of the traditional subsistence activities of Atqasuk Iñupiat.

Unlike some of the other communities, there is only one Iñupiat male in Atqasuk who engages in sewing skins and clothing. There are only 2 Iñupiat females of 28 ages 14

Table 46: Atqasuk 2010 Iñupiat Individuals Participation in Sewing Skins and Clothing

| Individual's Age in 5-Year Intervals | Yes | | No | |
|--------------------------------------|---------------------|--------|---------------------|--------|
| | Individual's Gender | | Individual's Gender | |
| | Male | Female | Male | Female |
| | Count | Count | Count | Count |
| 0-4 | 0 | 0 | 17 | 12 |
| 5-9 | 0 | 0 | 14 | 6 |
| 10-14 | 0 | 2 | 14 | 10 |
| 15-19 | 0 | 0 | 17 | 11 |
| 20-24 | 0 | 1 | 7 | 8 |
| 25-29 | 0 | 1 | 10 | 5 |
| 30-34 | 0 | 0 | 5 | 4 |
| 35-39 | 0 | 0 | 5 | 5 |
| 40-44 | 0 | 0 | 9 | 5 |
| 45-49 | 1 | 1 | 5 | 5 |
| 50-54 | 0 | 2 | 5 | 3 |
| 55-59 | 0 | 1 | 5 | 3 |
| 60-64 | 0 | 0 | 1 | 1 |
| 65-69 | 0 | 1 | 2 | 0 |
| 70-74 | 0 | 2 | 0 | 1 |
| 75-79 | 0 | 1 | 1 | 2 |
| 80+ | 0 | 1 | 1 | 0 |

and below who are engaged in sewing skins or clothing, and an additional 2 of 24 between 15 and 29 who participate. The remaining 9 individuals participating in the activity are age 45 and older. It would appear that sewing skins and clothing is one traditional subsistence activity with minimal recruitment of younger individuals, perhaps due to the availability of store bought clothing in the village.

As Table 47 below demonstrates, 9 Iñupiat males participate in making sleds or boats in Atqasuk, all between the ages of 20 and 54. A 9th Iñupiat male aged between 75 and 79 also participates. No females are involved in making sleds or boats. With the number of participants between 20 and 35, it would appear that recruitment is sufficient to maintain the traditional subsistence practice.

Table 47: Atqasuk 2010 Does Individual Participate in Making Sleds and Boats?

| Individual's Age in 5-Year Intervals | Yes | | No | |
|--|---------------------|--------|---------------------|--------|
| | Individual's Gender | | Individual's Gender | |
| | Male | Female | Male | Female |
| | Count | Count | Count | Count |
| 0-4 | 0 | 0 | 17 | 12 |
| 4-9 | 0 | 0 | 14 | 6 |
| 10-14 | 0 | 0 | 14 | 12 |
| 15-19 | 0 | 0 | 17 | 11 |
| 20-24 | 1 | 0 | 6 | 9 |
| 25-29 | 2 | 0 | 8 | 6 |
| 30-34 | 1 | 0 | 4 | 4 |
| 35-39 | 0 | 0 | 5 | 5 |
| 40-44 | 1 | 0 | 8 | 5 |
| 45-49 | 2 | 0 | 4 | 6 |
| 50-54 | 1 | 0 | 4 | 5 |
| 55-59 | 0 | 0 | 5 | 4 |
| 60-64 | 0 | 0 | 1 | 1 |
| 65-69 | 0 | 0 | 2 | 1 |
| 70-74 | 0 | 0 | 0 | 3 |
| 75-79 | 1 | 0 | 0 | 3 |
| 80+ | 0 | 0 | 1 | 1 |

Table 48 below indicates that participation in the sharing, cooking and processing of subsistence foods is very high, especially among Iñupiat youth in Atqasuk. 42 of 62, or about 68 percent, of males between 0 and 19 and 22 or 41, or about 54 percent, of females participated at some level in these activities, while the remainder of those surveyed participated at one hundred percent. The high rate of participation among younger household members is a positive sign of significant recruitment into these subsistence activities and it is clear that the entire Iñupiat community of Atqasuk maintains these traditional cultural values.

Table 48: Atqasuk 2010 Does Household Member Share, Cook and Process Wild Foods?

| Individual's Age in 5-Year Intervals | Yes | | No | |
|--|---------------------|--------|---------------------|--------|
| | Individual's Gender | | Individual's Gender | |
| | Male | Female | Male | Female |
| | Count | Count | Count | Count |
| 0-4 | 13 | 2 | 4 | 10 |
| 5-9 | 7 | 3 | 7 | 3 |
| 10-14 | 8 | 8 | 6 | 4 |
| 15-19 | 14 | 9 | 3 | 2 |
| 20-24 | 7 | 9 | 0 | 0 |
| 25-29 | 10 | 6 | 0 | 0 |
| 30-34 | 5 | 4 | 0 | 0 |
| 35-39 | 5 | 5 | 0 | 0 |
| 40-44 | 9 | 5 | 0 | 0 |
| 45-49 | 6 | 6 | 0 | 0 |
| 50-54 | 5 | 5 | 0 | 0 |
| 55-59 | 5 | 4 | 0 | 0 |
| 60-64 | 1 | 1 | 0 | 0 |
| 65-69 | 2 | 1 | 0 | 0 |
| 70-74 | 0 | 3 | 0 | 0 |
| 75-79 | 1 | 3 | 0 | 0 |
| 80+ | 1 | 1 | 0 | 0 |

Participation in subsistence hunting of land mammals among both Iñupiat males and females begins around age 5 and continues into the 65 to 69 age range, with one male individual over 80 years of age continuing to hunt. As Table 49 below indicates, males participate at a much higher rate and for longer periods of time, than do females. The male rate of participation is 44.5 percent, with 59 percent of those males not participating falling in the 0 to 14 age range. Female participation is equal to that of males between 5 and 14, but remains steady at the lower rate from age 15 to about age 59 when it stops. Male participation increases until the 15-19 year old age range, then remains steady until beginning to decline in the 55-59 year age range, but continuing for another 10 years. Female participation overall is 21.3 percent, with the majority of female non-participants falling in the 0 to 29 age range.

It is clear that hunting land mammals is an important aspect of Iñupiat subsistence practice in Atqasuk, and there is a healthy recruitment of new individuals into the activity.

Table 49: Atqasuk 2010 Does Household Member Hunt Land Mammals?

| Individual's Age in 5-Year Intervals | Yes | | No | |
|--------------------------------------|---------------------|--------|---------------------|--------|
| | Individual's Gender | | Individual's Gender | |
| | Male | Female | Male | Female |
| | Count | Count | Count | Count |
| 0-4 | 0 | 0 | 17 | 12 |
| 5-9 | 2 | 2 | 12 | 4 |
| 10-14 | 4 | 3 | 10 | 9 |
| 15-19 | 8 | 2 | 9 | 9 |
| 20-24 | 6 | 2 | 1 | 7 |
| 25-29 | 6 | 0 | 4 | 6 |
| 30-34 | 3 | 2 | 2 | 2 |
| 35-39 | 5 | 2 | 0 | 3 |
| 40-44 | 5 | 2 | 4 | 3 |
| 45-49 | 6 | 2 | 0 | 4 |
| 50-54 | 3 | 1 | 2 | 4 |
| 55-59 | 2 | 2 | 3 | 2 |
| 60-64 | 1 | 0 | 0 | 1 |
| 65-69 | 1 | 0 | 1 | 1 |
| 70-74 | 0 | 0 | 0 | 3 |
| 75-79 | 0 | 0 | 1 | 3 |

Similar to Fall and Spring Whaling, individual Iñupiat household members in Atqasuk do not normally engage in hunting sea mammals, although a total of 4 individual males surveyed did indicate that they were able to participate in that activity during the preceding year.

Nor were there more than 3 individual males who indicated they participated in trapping fur-bearing animals. All three males were between the ages of 25 and 34, an indication that either this activity is too strenuous for anyone but younger individuals or that the price of furs and the availability of manufactured clothing in the village store has reduced the demand.

Table 50: Atqasuk 2010 Does Individual Household Member Fish?

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

Table 50 above indicates that 62.9 percent of the surveyed population of Atqasuk participated in subsistence fishing over the past year and that Iñupiat males and females of all age intervals participated. Especially significant for recruitment, over 55 percent of the children ages 0to4 participated, as did 70 percent of those ages 5-9. With the exception of the 10 to 14 age group, every age group had at least a 50 percent participation rate until the 70 to 74 interval.

Clearly participation in the subsistence activity of fishing is an integral component of life in Atqasuk and recruitment into that activity begins at a very early age, with majorities of the household members in the community involved and engaged.

Table 51: Atqasuk 2010 Does the Individual Household Member Hunt Birds?

| Individual's Age in 5-Year Intervals | Yes | | No | |
|--|---------------------|--------|---------------------|--------|
| | Individual's Gender | | Individual's Gender | |
| | Male | Female | Male | Female |
| | Count | Count | Count | Count |
| 0-4 | 0 | 1 | 17 | 11 |
| 5-9 | 5 | 2 | 9 | 4 |
| 10-14 | 6 | 2 | 8 | 10 |
| 15-19 | 9 | 3 | 8 | 8 |
| 20-24 | 6 | 1 | 1 | 8 |
| 25-29 | 5 | 1 | 5 | 5 |
| 30-34 | 2 | 2 | 3 | 2 |
| 35-39 | 4 | 1 | 1 | 4 |
| 40-44 | 8 | 2 | 1 | 3 |
| 45-49 | 5 | 0 | 1 | 6 |
| 50-54 | 2 | 1 | 3 | 4 |
| 55-59 | 2 | 1 | 3 | 3 |
| 60-64 | 1 | 0 | 0 | 1 |
| 65-69 | 0 | 0 | 2 | 1 |
| 70-74 | 0 | 0 | 0 | 3 |
| 75-79 | 0 | 0 | 1 | 3 |
| 80+ | 0 | 0 | 1 | 1 |

Table 51 above illustrates that hunting birds is also an important subsistence activity among Iñupiat residents of Atqasuk, although participation levels fall below those of household members engaged in fishing activities. Individuals are involved in bird hunting in all age groups until age 65, when participation among those surveyed fell to no activity. With the exception of the 40 to 44 age cohort, 50 percent or less of each cohort from 0 to 64 years of age participated in subsistence bird hunting.

Given the number of Iñupiat youth between 0 and 19 who are participating, recruitment into subsistence hunting birds is assured.

Only 10 of the 213 individual household members surveyed indicated they participated in gathering bird eggs, 7 Iñupiat males and 3 Iñupiat females. Only 2 of those individuals were between the ages of 5 and 14 and 6 were between the ages of 25 and 39. The remaining 2 individuals were a male between the ages of 65 and 69 and a female over the age of 80. If gathering bird eggs were ever a major subsistence activity in Atqasuk, it obviously has declined in importance and, given the low participation among all Iñupiat in Atqasuk, it recruitment into the activity is minimal at best.

Table 52: Atqasuk 2010 Does Individual Household Member Pick Berries and Plants?

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

Table 52 above indicates that picking berries and plants is also an important subsistence activity in Atqasuk. Over 57 percent of Iñupiat males and 71.2 percent of Iñupiat females responding to the survey participated in this activity in 2009. More importantly in terms of recruitment, 64 of 103 (62.1 percent) Iñupiat youth between the ages of 0 and 19 participated in gathering plants and berries during 2009, providing a strong basis for continued recruitment into this subsistence activity.

The health profile which follows was prepared by Jana McAninch, MD, MPH for the North Slope Borough Health Department. Any questions regarding the profile should be addressed to the Borough Health Department rather than to any of the authors.

Table 53: Health Profile: Atqasuk 2010

Adults:

| | | Atqasuk Household Heads | NSB Household Heads | All Atqasuk adults* | All NSB adults* | Alaska adults |
|--------------------------------|---|-------------------------|---------------------|---------------------|-----------------|------------------------|
| General Health | “Very good” or “excellent” general health | 22% | 44% | 21% | 46% | 56% ¹ |
| | “Fair” to “Poor” general health | 41% | 20% | 34% | 16% | 13% ² |
| Chronic Health Problems | Ever told by a health professional have: | | | | | |
| | Thyroid problems | 10% | 6% | 7% | 4% | 9% (US) ³ |
| | Diabetes | 7%** | 7% | 4% | 6% | 6% ¹ |
| | High Blood Pressure | 36% | 28% | 23% | 20% | 25% ⁴ |
| | High cholesterol | 22% | 19% | 17% | 13% | 38% ⁴ |
| | Heart disease | 5%** | 7% | 4% | 5% | 12% (US) ¹¹ |
| | In the past 12 months, experienced: | | | | | |
| | Daily pain or arthritis that limits activities or requires prescription pain medicine | 24% | 29% | 20% | 21% | (ref) ⁵ |
| | Frequent (3 or more) or chronic ear infections | 5%** | 5% | 2%** | 4% | |
| | Chronic breathing problems (such as asthma, emphysema, or a cough that won't go away) | 10% | 13% | 5% | 8% | (ref) ⁶ |
| Health Insurance | Have health insurance, including IHS eligibility | 100% | 97% | | | 83% ⁷ |
| | Have health insurance, other than IHS eligibility | 70% | 64% | | | |
| Smoking | Smoke tobacco (in any form) | 61% | 50% | 61% | 49% | 22% ¹ |
| | Of those who smoke: | | | | | |
| | Smoke one or more packs per day | 26% | 25% | | | |
| | Are interested in quitting | 89% | 71% | | | |
| | Have tried to quit in the last 12 months | 54% | 62% | | | |
| | Permit smoking in the house | 42% | 33% | | | |
| | Support a tobacco tax to fund tobacco prevention or cessation programs | 70% | 53% | | | |
| Overweight and Obesity | Overweight (BMI 25-29.9 kg/m ² , based on self-reported height and weight) | 26% | 33% | | | 37% ¹ |

| | | | | | | |
|----------------------------------|--|------|-----|--|--|-----------------------|
| | Obese (BMI 30 kg/m ² or higher, based on self-reported height and weight) | 38% | 39% | | | 28% ¹ |
| Physical Activity | Never get 30 minutes of moderate exercise in a day | 24% | 16% | | | 9% ⁴ |
| | Get at least 30 minutes of moderate exercise 5 days per week or more | 29% | 44% | | | 47% ⁴ |
| Sugar-sweetened beverages | On average, drink no soda or other sugar-sweetened beverage per day | 29% | 26% | | | 53% ⁸ |
| | On average, drink two or more sodas or other sugar-sweetened beverage per day | 39% | 45% | | | 30% ⁸ |
| Food security | Times last year when household found it difficult to get the foods they needed to eat healthy meals | 59% | 35% | | | |
| | If yes, because not able to get enough subsistence foods to eat healthy meals | 34% | 43% | | | |
| | If yes, because not able to get enough store foods to eat healthy meals | 100% | 90% | | | |
| | Percent with household members who at times did not have enough to eat | 20% | 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) | 2%** | 18% | | | (57%) ⁹ |
| Drugs and alcohol | In the past 12 months, felt a household member had been hurt by drugs or alcohol | 27% | 24% | | | |
| | In the past 12 months, felt the health of their community had been hurt by drugs or alcohol | | | | | |
| | Often | 42% | 57% | | | |
| | Sometimes | 35% | 35% | | | |

Notable Findings:

- Adults in Atqasuk were half as likely to report “very good” to “excellent” health and twice as likely to report “fair” or “poor” health as were adults in the NSB overall. These differences persisted when looking at Inupiat adults only. Reported general health among Atqasuk adults was also considerably lower than for Alaskan adults overall.
- No single chronic health problem seemed to account for this lower-than average reported general health among adults. There were no statistically significant differences between Atqasuk and the other North Slope communities overall for any of the chronic health problems examined.

- Household heads in Atqasuk reported significantly lower levels of physical activity than their counterparts in other North Slope communities. It is possible that this finding reflects an inability to exercise due to poor overall health status of some of the residents. Lower levels of physical activity could also be contributing to poorer overall health status. Comparing Inupiat household heads only, differences in reported physical activity were no longer statistically significant.
- Tobacco smoking rates among Atqasuk adults were high, similar to other North Slope communities overall. Almost 9 in 10 household heads who smoked reported wanting to quit, but only slightly more than half had tried to quit in the last year. A large majority supported a tobacco tax to support tobacco prevention and cessations programs.
- Like in other NSB communities, Atqasuk households reported high levels of food insecurity. Household heads (Inupiat only and all) were significantly more likely than in other North Slope communities overall to report difficulty getting foods for healthy meals. About one third of these couldn't get enough subsistence foods and all of these reported not being able to get enough store foods. Atqasuk household heads were not significantly more likely than in other North Slope communities overall to report household members who did not have enough to eat, however.
- Reported helmet use was very low among Atqasuk household heads.
- Inupiat household heads in Atqasuk were less likely than Inupiat household

Table 54: Atqasuk Health Profile

Children

| | | Atqasuk Children | NSB Children | Alaska children |
|--|---|------------------|--------------|------------------------|
| General Health | “Very good” or “excellent” general health | 38% | 63% | 89% ¹¹ |
| Chronic Health Problems | In the past 12 months, experienced: | | | |
| | Frequent (3 or more) or chronic ear infections | 14% | 19% | 5% ¹¹ |
| | Chronic breathing problems (such as asthma, emphysema, or a cough that won't go away) | 7% | 5% | (5-6%) ^{6,11} |
| Teen tobacco Smoking (ages 14-18)** | Smoke tobacco (in any form) | 15% | 16% | Not comparable |

- Heads in other North Slope communities to report feeling that their community had been hurt by alcohol or drugs in the last year. The percent reporting household members hurt by alcohol or drugs was similar, however.

Children (under age 18):

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 NSB surveys, likely significantly underestimates the prevalence of smoking among children and teens as is not comparable to anonymous self-administered surveys used to estimate teen smoking rates statewide and nationally

Notable Findings:

- Children in Atqasuk (both Inupiat and all) had reported general health status that was significantly worse than children in other North Slope communities and in Alaska overall.
- No single health problem examined in the census seemed to account for this observation among Atqasuk children, and the prevalence of chronic ear infections and respiratory problems was similar to children in other villages slope-wide.

Language

Table 48 below indicates changes in the primary language spoken in Iñupiat households in Atqasuk from 1998 to 2010. Two trends stand out in this table. First, Atqasuk households where Iñupiaq was the primary or preferred language jumped from 5% in 1998 to 15.6% in 2003 and declined back to 5% in 2010. This may be attributed to a strong push by the NSB School District for Iñupiaq language and culture in the early years of the first decade of the 21st century, followed by a decline in the number of Iñupiaq language

Table 55: Atqasuk 2010 Primary Language Spoken in Iñupiat Homes: 1998 to 2010

| Language Used in Home | 1998 | 1998 | 2003 | 2003 | 2010 | 2010 |
|------------------------------|-------|-------|-------|-------|-------|-------|
| | Count | % | Count | % | Count | % |
| Mostly Iñupiaq | 2 | 5% | 10 | 18.9% | 3 | 8.3% |
| Both Iñupiaq and English | 23 | 57.5% | 14 | 26.4% | 22 | 36.7% |
| Mostly English | 15 | 37.5% | 29 | 54.7% | 34 | 56.7% |
| English and another language | 0 | 0% | 0 | 0% | 1 | 1.6% |
| Total | 40 | 100% | 53 | 100% | 60 | 100 |

I instructors and emphasis on Iñupiaq culture in the schools due in part to the “No Child Left Behind” policies of the Bush Administration. The second trend is the increase in the number of Iñupiat households in Atqasuk where English is the primary language spoken in the home.

As Table 56 below indicates, there has been a decline in the number of fluent Iñupiaq speakers in Atqasuk between 2003 and 2010 from 30 percent of the population to almost 20 percent of the population. During the same period, the number of Iñupiat who either speak with difficulty or can understand Iñupiaq but only speak a little has increased from 28 percent to 37.1 percent and those who can understand only a few words or simple questions but hardly speak or do not speak at all has remained at approximately 42 percent of the Iñupiat population.

Table 56: Atqasuk 2003 & 2010 Iñupiat Household Members' Fluency in Iñupiaq

| Iñupiaq Fluency | 2003 Number | 2003 Percent | 2010 Number | 2010 Percent |
|--|----------------|-----------------|----------------|-----------------|
| Speaks fluently & prefers Iñupiaq | 46 | 25.2% | 34 | 16.0% |
| Speaks fluently & prefers English | 8 | 4.3% | 6 | 2.8% |
| Speaks fluently with no preference | 1 | 0.5% | 4 | 1.8% |
| Speaks with difficulty | 7 | 3.7% | 6 | 2.8% |
| Understand well & speaks enough | 4 | 2.2% | 15 | 7.0% |
| Understands well but hardly speaks | 12 | 6.5% | 24 | 11.3% |
| Understand some & speaks enough | 6 | 3.2% | 0 | 0.0% |
| Understands simple questions & speaks a little | 22 | 12.0% | 34 | 16.0% |
| Understands simple questions & hardly speaks | 23 | 12.5% | 24 | 11.3% |
| Understands two dozen words | 18 | 9.8% | 30 | 14.1% |
| Understands 5 or 6 words | 22 | 12.0% | 26 | 12.2% |
| Understands only a few words. | 13 | 8.1% | 10 | 4.7% |
| Total | 182 | 100.0% | 213 | 100.0% |

Table 57 below shows a comparison between 2003 and 2010 on Iñupiat household members' Iñupiaq competency. As the table demonstrates, 38 of 39 household members in 2010 who spoke Iñupiaq fluently, or 97.4 percent, were in the 36 years or older category, compared to 43 of 49 or 87.8 percent who were in that category in 2003. With one exception in the 3 to 15 year old category, fluent Iñupiaq speakers in Atqasuk appear to be becoming older and younger Iñupiat individuals in Atqasuk appear to either understand Iñupiaq when it is directed at them but cannot speak it or can only speak a few words of the language.

Table 57: Atqasuk 2003-2010 Iñupiaq Competency Among Iñupiat Household Members by Age Category

| Iñupiaq fluency | 0-2 | 3-15 | 16-35 | 36-60 | 61+ | Total |
|--|-------|--------|--------|--------|--------|----------|
| | No. | No. | No. | No. | No. | |
| Speaks fluently & prefers Inupiaq | 0 | 1 | 0(4) | 19(24) | 13(12) | 33(40) |
| Speaks fluently & prefers English | 0 | 0 | 0(2) | 6(6) | 0(1) | 6(9) |
| Speaks with difficulty or minor flaws | 0 | 1 | 3(3) | 0(1) | 0 | 4(4) |
| Understands well & speaks enough | 0 | 0 | 2(1) | 4(3) | 0 | 0(4) |
| Understands well & hardly speaks | 0 | 1(7) | 7(3) | 7(0) | 0(1) | 15(11) |
| Understands some conversations, speaks enough | 0 | 6(5) | 16(0) | 2(1) | 0 | 24(6) |
| Understands simple questions & directions, speaks a little | 1 | 12(9) | 12(11) | 9(2) | 0 | 34(22) |
| Understands simple questions & directions, hardly speaks | 0(1) | 13(11) | 9(7) | 2(1) | 0 | 24(20) |
| Understands at least a dozen words | 2(1) | 16(12) | 9(2) | 3(3) | 0 | 30(18) |
| Understands at least 5 or 6 words | 5(4) | 12(9) | 7(3) | 2(6) | 0 | 26(22) |
| Understands only a few words | 8(1) | 2(3) | 0(5) | 0(4) | 0 | 10(13) |
| Total | 16(7) | 64(56) | 65(41) | 54(51) | 13(14) | 212(169) |

2003 numbers are in parentheses for comparison

Schools

Household heads in Atqasuk were satisfied or very satisfied with the five school attributes about which they were queried, with responses in those two categories ranging from 66 percent for students' preparedness for new technology to 84 percent for the use of assigned computers to students in the school. While real comparisons are not possible given the differences between the questions in the two time periods, these are below the levels of satisfaction demonstrated in similar questions involving textbooks, the curriculum in the school and the quality of instruction offered by teachers in 2003, where levels of satisfaction ranged from 82 percent for textbooks in the school to 91 percent satisfied with the school curriculum to 84 percent satisfied with the quality of instruction

Table 58: Atqasuk 2010—Household Head Satisfaction with School Attributes

| Household Head Opinions on School Attributes | Texts | Technology Preparedness | Classes & Subjects | Quality of Instruction | Assigned Computers |
|--|--------|-------------------------|--------------------|------------------------|--------------------|
| 1. Very dissatisfied | 7.5% | 0.0% | 4.3% | 4.2% | 2.0% |
| 2. Dissatisfied | 2.5% | 6.4% | 12.8% | 2.1% | 0.0% |
| 3. Neither dissatisfied nor satisfied | 22.5% | 21.3% | 17.0% | 22.9% | 14.0% |
| 4. Satisfied | 57.5% | 59.6% | 59.6% | 62.5% | 64.0% |
| 5. Very satisfied | 10.0% | 12.8% | 6.4% | 8.3% | 20.0% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Table 59: Atqasuk 2010—Household Head Opinions about the Amount of Homework

| Opinions About Amount of Homework | Elementary School | Middle School | High School |
|-----------------------------------|-------------------|---------------|-------------|
| 1. No homework | 4.3% | 4.9% | 0.0% |
| 2. Less homework | 6.4% | 0.0% | 13.6% |
| 3. About the same amount | 55.3% | 48.8% | 36.4% |
| 4. More homework | 29.8% | 41.5% | 34.1% |
| 5. A lot more homework | 4.3% | 4.9% | 15.9% |
| Total | 100% | 100% | 100% |

Eleven percent of Atqasuk household heads felt there should be less or no homework at all three levels of school, while approximately one-third of respondents indicated there should be more or a lot more homework for elementary school children and approximately 45 percent agreed that should apply to middle and high school students as well.

Table 60 below illustrates some interesting results. On the one hand, parents of children in the Meade River Elementary and High Schools demonstrate similar perceptions of their children’s involvement in those schools. Both see approximately 23 percent of their children either disconnected or very disconnected to their respective school and, at the same time, other parents feel approximately 60 percent of their children are either somewhat connected or very connected to their school. On the other hand, parents of children in the Middle School see 83.4 percent of their children either somewhat or very connected to their school. Obviously the Middle School is addressing community needs while the other schools may not be doing so.

Table 60: Atqasuk 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 | 3.8% | 0% | 11.8% |
| 2. Somewhat disconnected | 19.2% | 8.3% | 11.8% |
| 3. Equally disconnected/connected | 15.4% | 8.3% | 17.6% |
| 4. Somewhat connected | 26.9% | 41.7% | 35.3% |
| 5. Very connected | 34.6% | 41.7% | 23.5% |
| Total | 100% | 100% | 100% |

Table 61 below demonstrates that Atqasuk household heads tend to view the school principal as being slightly more respected than elders in the community. Comparing these results with similar questions in 2003, perceptions of high respect for both elders and the principal have decreased significantly over the 7-year period. Inupiat household heads account for the perceptions of disrespect among some in the community, perhaps referencing younger residents’ behaviors and attitudes.

Table 61: Atqasuk 2010—Household Head Opinion of Respect for School Principal and Elders

| How would you rate the Authority of: | The Principal | The Elders |
|--------------------------------------|---------------|-------------|
| 2. Somewhat disrespected | 2.1% (0%) | 7.1% (2%) |
| 3. Tolerated | 0.0% | 1.8% (0%) |
| 4. Somewhat respected | 31.9% (16%) | 32.1% (16%) |
| 5. Highly respected | 66% (84%) | 58.9% (82%) |
| Total | 100% | 100% |

ntly over the 7-year period

Table 62: Atqasuk 2010 Reasons Students Left School Without Graduating

| Reason for Leaving School | Yes | No |
|---------------------------|-------|--------|
| Illness | 0.0% | 100.0% |
| Behind in Credits | 55.6% | 44.4% |
| Bored with School | 40.0% | 60.0% |
| Drug/alcohol Problems | 50.0% | 50.0% |
| Had a Baby | 52.8% | 47.2% |
| Needed to Work | 2.8% | 97.2% |
| Kicked out of School | 22.2% | 77.8% |

Table 62 above illustrates household heads’ responses to the question “Why during the last two years, did students that you knew leave school without graduating?” Only 36

household heads responded to the question, undoubtedly only those with children in the schools. It is difficult to interpret the results without more background information.

Respondents were asked to choose from a list of potential strategies the two they believed would best improve school attendance. The two strategies that stand out appear to be to “provide more activities” and to “provide attendance incentives”, followed closely by to “offer different courses” and the “Other” category was a close fourth.

Table 63: Atqasuk 2010—What Strategies Might Improve Student Attendance?

| Strategies to improve Attendance | Strategy 1 | Strategy 2 | Total |
|--|------------|------------|-------|
| Stronger penalties for truancy citations | 19.6% | 9.10% | 28.7% |
| Offer different courses | 5.9% | 29.5% | 35.4% |
| Anti-bullying programs | 11.8% | 11.4% | 23.2% |
| Provide attendance incentives | 21.6% | 15.9% | 37.5% |
| More activities | 23.5% | 18.2% | 41.7% |
| Other (specify) | 17.6% | 15.9% | 33.5% |
| Total | 100.0% | 100.0% | |

Table 64: Atqasuk 2010: Do NSB Schools Prepare Students for Life After High School?

| Do NSB Schools Prepare Students for Life after HS | Number | Percent | Valid Percent | Cumulative Percent |
|---|--------|---------|---------------|--------------------|
| 1. Not at all prepared | 2 | 3.3% | 3.8% | 3.8% |
| 2. Somewhat unprepared | 7 | 11.5% | 13.5% | 17.3% |
| 3. Somewhat prepared | 32 | 52.5% | 61.5% | 78.8% |
| 4. Prepared | 7 | 11.5% | 13.5% | 92.3% |
| 5. Exceptionally prepared | 4 | 6.6% | 7.7% | 100.0% |
| Total Valid Responses | 52 | 85.3% | 100.0% | |
| Missing Information | 9 | 14.7% | | |
| Total Responses | 61 | 185.4% | | |

When asked whether they felt that the North Slope Borough School District prepared students in Atqasuk for life after High School, 17.3 percent of the household heads responding said students were either not at all prepared or were somewhat unprepared for life after high school. However, 22.2 percent said that they believed students were either prepared or exceptionally prepared for life after finishing high school in Atqasuk. The majority of respondents (62.5 percent) believe that students are being “Somewhat prepared for life after high school by the Meade River school.

Perceptions About Changes in Atqasuk:

Table 65 below illustrates perceptions of change among household heads in Atqasuk regarding important aspects of life in a small inland community on the North Slope. Respondents perceived a decrease in the amount of fish and game available to residents of

Atqasuk, and a substantial decrease in the number of things available to purchase at the store. The availability of fish and game may be at least partially attributed to climate change and its affect on both the abundance and the ease of hunting/fishing due to physical change to the environment.

The unavailability of goods to purchase at the store is caused in part by the restrictions on federal by-pass mail and the fact that commercial flights no longer carry foodstuffs for resale in North Slope stores. There are two aspects in which perceptions of the status quo have fallen below 52 percent, things available at the store and the number of good jobs available in Atqasuk. Otherwise there appears to be a great deal of stability among the remaining aspects.

Even the amount of drinking and violence perceived to occur in Atqasuk is relatively balanced: 25 percent of the respondents perceive a decrease in drinking an violence while 21.2 percent perceive an increase and 53.8 percent perceive no change in those activities. On the positive side, there are perceived increases in the quality of the teachers in Atqasuk, in the support people receive from others, in opportunities to go whaling, to hunt marine mammals and to hunt land mammals.

Table 65: Atqasuk 2010: Household Head Perception of Changes in Atqasuk and the Environment

| Perception of Change | Decreased A Lot | Decreased Somewhat | Stayed Same | Increased Somewhat | Increased A lot |
|------------------------------------|--------------------|-----------------------|----------------|-----------------------|--------------------|
| Amount of Fish and Game | 5.6% | 29.6% | 51.9% | 13.0% | 0.0% |
| Number of things at the store | 37.5% | 17.9% | 26.8% | 14.3% | 3.6% |
| Number of good jobs | 10.4% | 25.0% | 47.9% | 14.6% | 2.1% |
| Amount of drinking and violence | 7.7% | 17.3% | 53.8% | 13.5% | 7.7% |
| Number of Non-Iñupiat | 1.9% | 9.4% | 86.8% | 1.9% | 0.0% |
| Quality of Teachers | 8.3% | 0.0% | 58.3% | 29.2% | 4.2% |
| Support from Others | 3.6% | 3.6% | 74.5% | 16.4% | 1.8% |
| Opportunity to go Whaling | 0.0% | 12.5% | 68.8% | 18.7% | 0.0% |
| Opportunity to hunt Marine mammals | 0.0% | 0.0% | 70.6% | 29.4% | 0.0% |
| Opportunity to hunt land mammals | 1.9% | 3.7% | 57.4% | 33.3% | 3.7% |

Comparing responses between 2003 and 2010 on the same questions, several differences are noteworthy. Respondents in 2003 were less likely to see decreases in the amount of fish and game available around Atqasuk than were those in 2010. 2003 perceptions of drinking and violence in Atqasuk were much less positive than in 2010, 58 percent of the respondents in 2003 saw an increase in drinking and violence while only 21.2 percent saw an increase in 2010. Even though Atqasuk is not a whaling village, in 2003 26 percent of the respondents perceived an increase in the opportunity to go whaling while only 18 percent did so in 2010 and while only 4 percent saw a decrease in such opportunities in 2003, almost 19 percent did so in 2010.

The availability of goods for purchase at the store moved from the perception of a 35 percent increase in 2003 to an 18 percent increase in 2010 and from a perception of a decrease in available goods by 13 percent of respondents in 2003 to 56.4 percent of respondents perceiving a decrease in such goods in 2010. This last shift in perceptions between 2003 and 2010 can be attributed to the change in Postal Service rules/policies based on the removal of by-pass mail subsidies by Congress, resulting in the necessity of transporting commercial groceries and goods by the road system to Deadhorse and subsequently by small plane from that point to the village.

Political Participation

Table 66: Atqasuk 2010 Household Head Registered to Vote

| Is Individual Registered to Vote in Atqasuk | | | | | |
|---|-----|---------|-----------|-------|-------|
| Registered Voter In Atqasuk? | | Iñupiat | Caucasian | Other | Total |
| | Yes | 43 | 8 | 1 | 52 |
| | No | 6 | 2 | 0 | 8 |
| Total | | 49 | 10 | 1 | 60 |

Table 67: Atqasuk 2010 Did Household Head Vote in Last Borough Election?

| Borough Election | | | | | |
|--|-----|---------|-----------|-------|-------|
| Did HH Head Vote in the Last Borough Election? | | Iñupiat | Caucasian | Other | Total |
| | Yes | 36 | 5 | 0 | 41 |
| | No | 12 | 5 | 1 | 18 |
| Total | | 48 | 10 | 1 | 59 |

Table 68: Atqasuk 2010 Did Household Head Vote in Last City Election?

| City Election | | | | | |
|---|-----|---------|-----------|-------|-------|
| Did HH Head Vote in Last City Election? | | Iñupiat | Caucasian | Other | Total |
| | Yes | 33 | 5 | 0 | 38 |
| | No | 14 | 4 | 1 | 19 |
| Total | | 47 | 9 | 1 | 57 |

Table 69: Atqasuk 2010 Did Household Head Vote in Last State Election?

| State Election | | | | | |
|--|-----|---------|-----------|-------|-------|
| | | Iñupiat | Caucasian | Other | Total |
| Did HH Head Vote in last State Election? | Yes | 33 | 5 | 0 | 38 |
| | No | 16 | 5 | 1 | 22 |
| Total | | 49 | 10 | 1 | 60 |

Table 70: Atqasuk 2010 Did Household Head Vote in Last National Election?

| National Election | | | | | |
|---|-----|---------|-----------|-------|-------|
| | | Iñupiat | Caucasian | Other | Total |
| Did HH Head Vote in Last National Election? | Yes | 25 | 7 | 0 | 32 |
| | No | 24 | 3 | 1 | 28 |
| Total | | 49 | 10 | 1 | 60 |

Tables 66 to 70 address basic levels of political participation by heads of households in Atqasuk in 2009. Heads of Iñupiat households are registered to vote on the North Slope at an 87.7 percent level, while Caucasian household heads are registered at an 80 percent level. The lone “Other” household head is also registered to vote on the North Slope.

Participating by voting in elections is the most accessible means of participation for most people. Residents of Atqasuk appear to participate most in North Slope Borough elections, the last one occurring in 2008. Iñupiat household heads participated in that election at a 75 percent rate, Caucasian household heads at a 70 percent rate, and the “Other” household head did not participate.

Participation in state and city elections is similar by Iñupiat heads of Iñupiat households, where 33 individuals voted in both elections and one-half (5) of the Caucasian heads of household voted. The “Other” household head did not vote in any election.

One interesting tendency appearing in the tables is that on the one hand voting by Iñupiat heads of household decreased as the level of election moved from local to national, a pattern that is in direct opposition to national voting studies. On the other hand, voting by Caucasian heads of household followed national patterns and increased as elections moved from the local to the national level. In other words, Iñupiat voting patterns moved from 75 percent for a borough election to 67 percent for the last state election, to 51 percent for a national election, while Caucasian voting patterns went from 50 percent at the borough, city, and state levels to 70 percent in the last national election. These patterns are obviously a reflection of what level of government individuals perceive to be most important to them and have the greatest ability to affect their lives.