

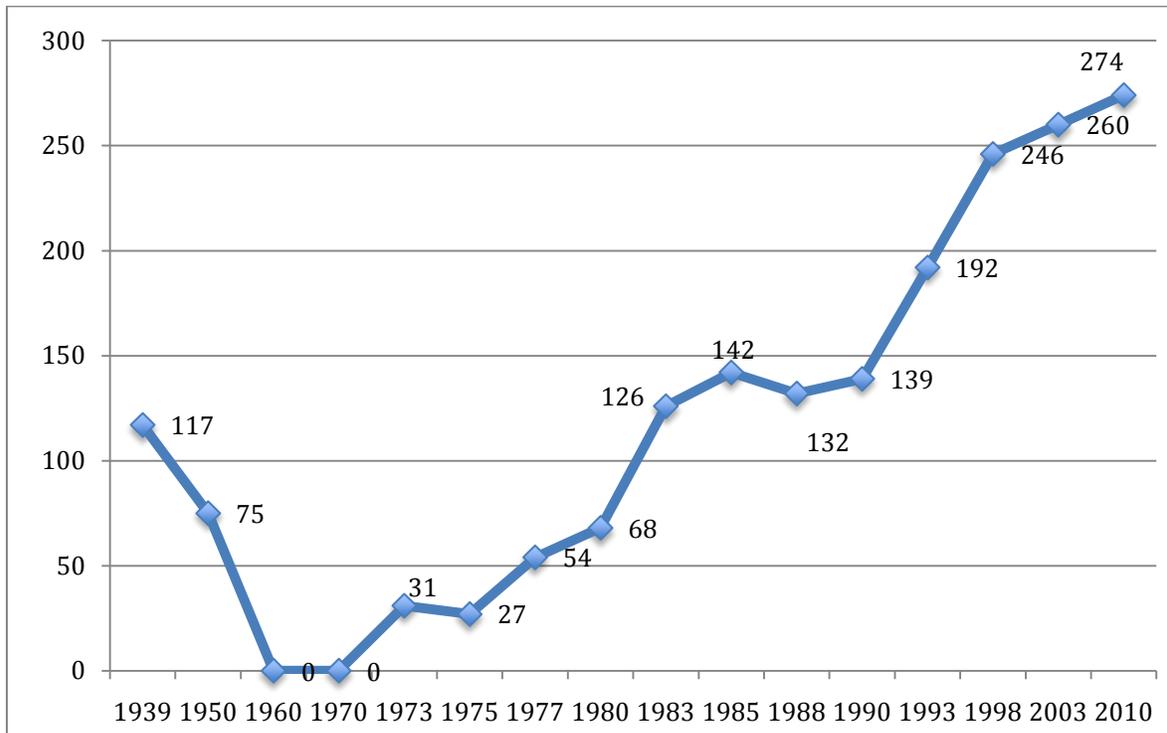
POINT LAY SNAPSHOT

	2003	2010
Total Population	260	274
Sample Population	239	185
Population Growth Since 1990	87.1%	97.1%
Population Growth Since 1980	282.4%	302.9%
Population Growth Since 1970	738.7%	
Percent Female	42.5%	42.5%
Percent Iñupiat	86.2%	89.2%
Percent Caucasian	12.6%	9.7%
Percent Other	1.3%	1.1%
Number and Percent of Population Fluent Iñupiaq Speakers	33 (18.3%)	16 (9.8%)
Number and % of Population ≤ 16 (dependency ratio)	112 (48.9%)	72 (38.9%)
Number and % of population 16-64 (Labor Force)	126 (50.0%)	111 (60.0%)
Number and % of population ≥ 65 (dependency indicator)	5 (2.2%)	6 (3.2%)
Median Age of Females	20	20
Median Age of Males	16	21
Median Age of Total Population	18	21
Size of Labor Force	98	92
Number of Individuals with permanent full-time employment	53	42
Number and percent of Labor Force unemployed	16 (16.3%)	21 (19/8%)
Number and Percent of Labor Force Underemployed*	26 (22.2%)	59 (64.1%)
Number and Percent of Labor Force Underemployed**	16 (13.7%)	15 (22.0%)
Total Number of dwelling units	67	73
Number of Vacant Units and Vacancy Rate	N/A	2 (2.6%)
Total Number of Occupied Households	N/A	73
Total Number of Households Surveyed	61	50
Average Number of People per Household	3.88	3.7
Percent of Households in Census	91.0%	68.5%
Percent of total Population in Sample	91.2%	67.5%
Percent of Iñupiat Households Using Subsistence Foods	92.7%	94.9%
Percent of Households Receiving Half or more of diet from Subsistence foods	69.0%	66.7%
*Individuals working less than 10 months per year ** Individuals who perceive themselves to be underemployed		

Population:

Pt. Lay experienced a precipitous decline in population from 117 people in 1939 to abandonment of the community in 1960. The community was resettled in the 1970's and the first census taken in 1973 revealed a population of 31 individuals. Since 1977, with a couple of exceptions, there has been a small but steady population gain reflected in every census<sup>1</sup> conducted. Survey research, conducted in 2010, indicates a slight gain in population of nine individuals over the 2003 estimate.

Figure 1: Point Lay Population 1939-2010



Demography:

In 2010 fifty households were interviewed, 68.5 percent of the 73 occupied households indicated to be in the community from enumeration of residential electrical hookup data and the independent occupied housing audit conducted for the borough. The fifty households interviewed in 2010 represent about an 18% decrease in sample size over the 61 households interviewed in 2003. Thus the 2010 sampling proportion of 68.5 percent is lower than the 2003 NSB Census when 61/67 households, or 91 percent of all available households were interviewed. As a consequence, when one calculates the standard error of

<sup>1</sup> For the Figure above, data are from the following sources: 1939-1970, 1980, 1990 U.S. Census Bureau; 1973 NSB/CIP Alaska International Academy; 1975, 1977 North Slope Borough Planning Department; 1985 Alaska Department of Labor; 1988, 1993, 1998, 2003 and 2010 North Slope Borough Economic Profile and Census Report.

the proportion for both surveys the 2003 Census provides tighter estimates of population proportions.

As Table 1 below indicates the 2003-population estimate was 260 (67 households times the average number of individuals per household, 3.88 [derived from the sample population]) whereas the 2010 low population estimate is 263 and the mid-point estimate is 269.. Our best estimate would indicate an increase of fourteen individuals in Point Lay between 2003 and 2010. Thus, although the average household size has decreased slightly between 2003 and 2010 this change has been counterbalanced by an increase of six additional occupied households within the community.

Table 1: Point Lay Community Population Estimates 2003 to 2010.

Community	Pt. Lay 2003	Pt. Lay 2010
HH Sample Size (n)	61	50
#HH's Estimate (N)	67	69
Standard Error of Proportion{+/-}**	+/- 3.9%	+/- 7.5%
Sample - Ave. Household Size	3.88	3.7
Low Pop. Estimate	250	263
Mid-Point Estimate	260	269
High Pop. Estimate	270	274

Ethnic Composition:

The ethnic composition of Point Lay for the sample population is detailed in Table 2 below. As can be seen from this table and the one following it, the Inupiat proportion of the total population has remained fairly constant at nearly nine out of every ten individuals. As one might expect, given this finding, the non-Inupiat proportion of the population has also remained fairly consistent with the slight fluctuations over time not statistically significant.

Table 2: Point Lay 2010 – Ethnicity of Sample Population in Percent

Ethnicity	Frequency	Percent	Cumulative Percent
Iñupiat	165	89.2%	89.2%
Caucasian	18	9.7%	98.9%
Other (specify)	2	1.1%	100%
Total	185	100%	

Table 3: Point Lay Ethnic Proportion of Population (Individuals) 1998-2010

ETHNICITY	1998	2003	2010
Percent Iñupiat	91.7%	86.2%	89.2%
Percent non-Iñupiat	8.2%	13.8%	10.8%

Chart 1: Point Lay 2010 All Individuals Population Pyramid.

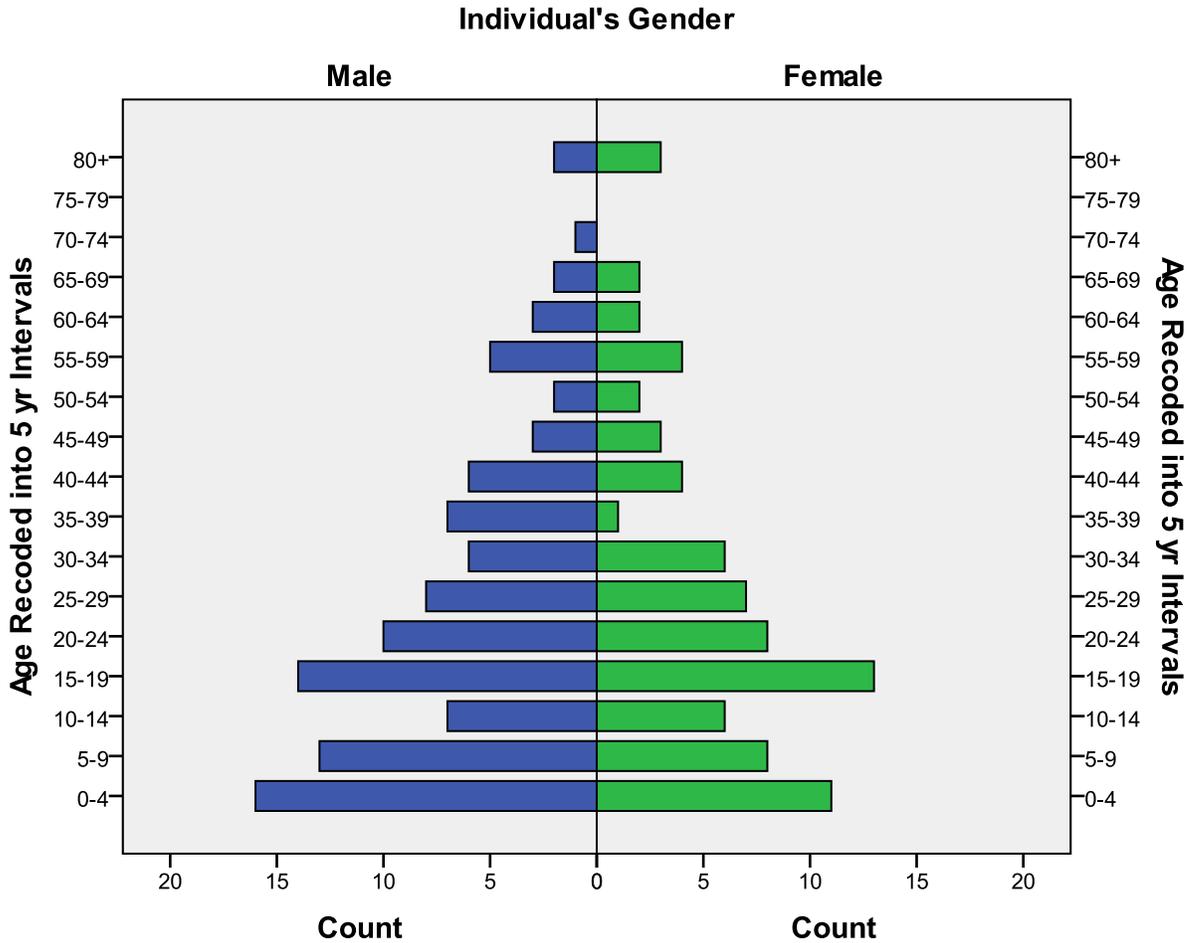
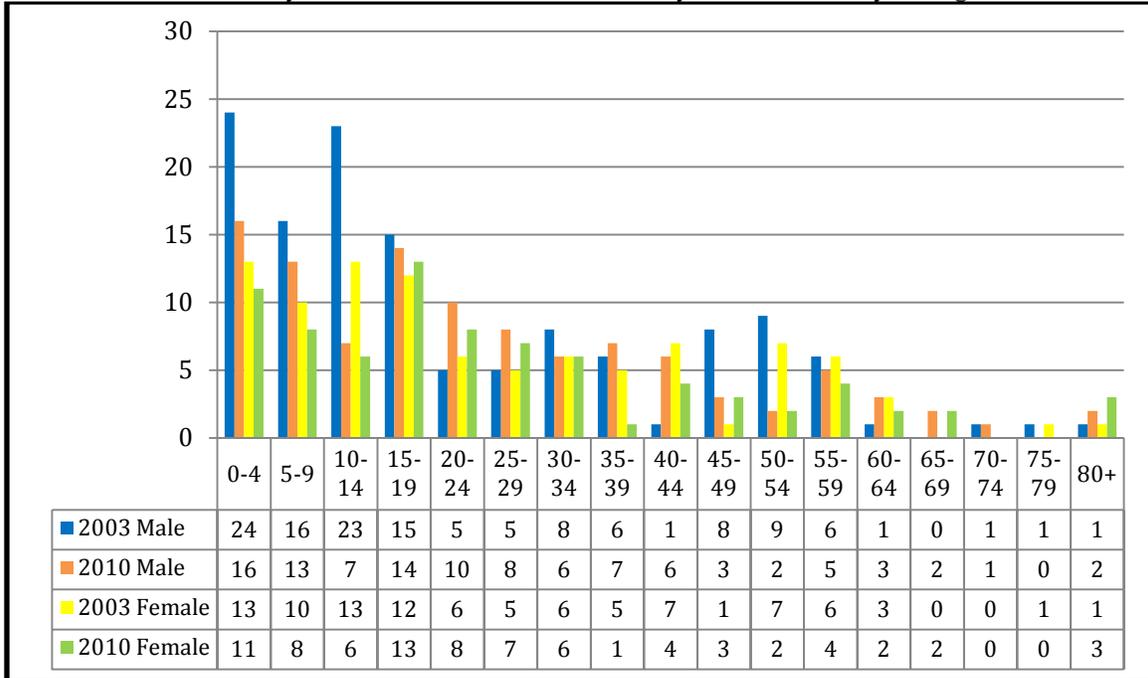


Chart 1, above, provides a population pyramid for Point Lay in 2010 in five year intervals for all ethnicities. Chart 2, below provides a comparison of the age intervals for all individuals, by gender, within the community between 2003 and 2010 for all ethnicities. Interestingly, for the whole population there are significant differences in 2010 in males under 20 years of age with a substantial drop in their number in only seven years while during this period the number of females has remained fairly consistent. In contrast, young women and men aged 24-34 during this period have experienced a modest increase. Both genders in the 40-60 year old category have evidenced significant declines during the seven-year period between 2003 and 2010. It must be reinforced that these findings are representative of all individuals of every ethnicity within Point Lay.

Chart 2: Point Lay 2003-2010 – All Individuals by Gender and 5-year Age Interval



For Iñupiat individuals the following chart and table indicates a statistically significant difference in the number of men and women with men contributing to 57 percent of the Iñupiat population in Point Lay. In the 20 year age cohorts (<20, 20-39, 40-59) men outnumber women in each cohort but especially in the under 20 cohort.

Chart 3: Point Lay 2010 – Iñupiat Individuals Population Pyramid.

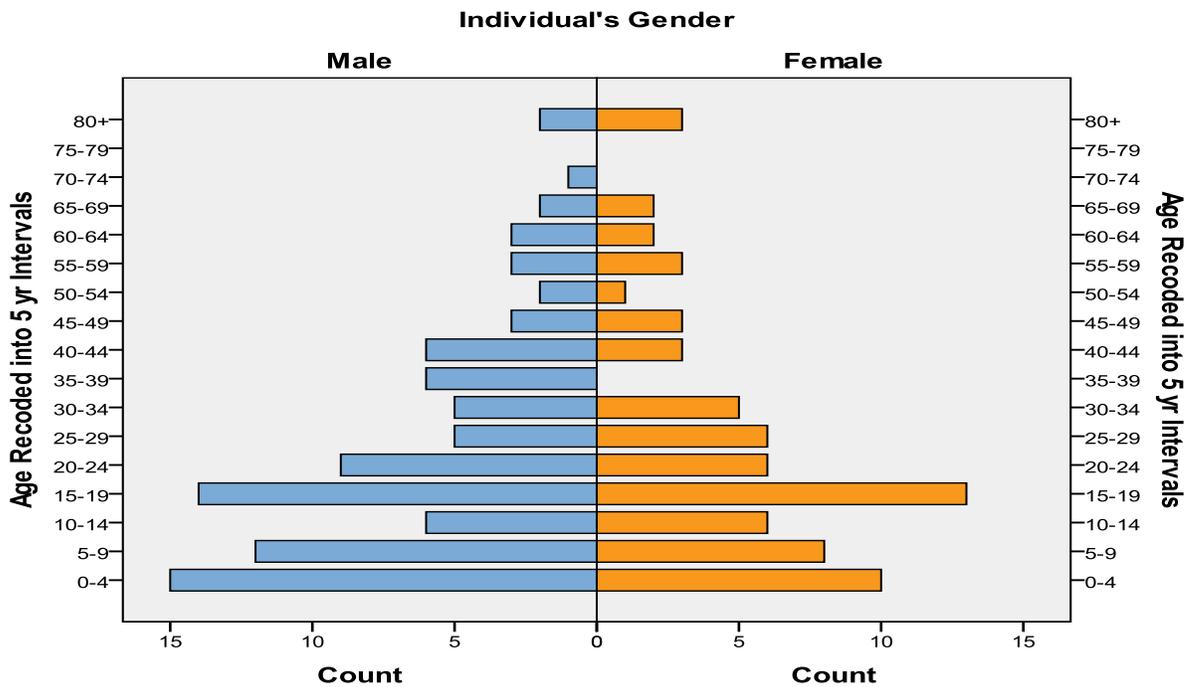


Table 4: Point Lay 2010 – Inupiat Individuals Cross Tabulation Age in 5-year Intervals by Gender.

Age Recoded into 5-yr. Intervals	Individual's Gender		Total
	Male	Female	
0-4	15	10	25
5-9	12	8	20
10-14	6	6	12
15-19	14	13	27
20-24	9	6	15
25-29	5	6	11
30-34	5	5	10
35-39	6	0	6
40-44	6	3	9
45-49	3	3	6
50-54	2	1	3
55-59	3	3	6
60-64	3	2	5
65-69	2	2	4
70-74	1	0	1
80+	2	3	5
Total	94	71	165

Gender differences for Iñupiat between 2003 and 2010 are significant. In 2003 Iñupiat males under 20 numbered 78 individuals, which drops to 47 individuals in 2010. All the other 20-year cohorts for Iñupiat males during this period remain fairly consistent. In contrast, each Iñupiat female 20-year cohort (<20, 20-39, 40-59) increases significantly in number between 2003 and 2010. Interestingly in the ages of 1 to 59 males compose about 59% of the population in both 2003 and 2010.

Table 5: Point Lay 2003 – 2010. - Iñupiat Population in 5-year ,Age Intervals by Gender.

Age 5-yr. Intervals	Iñupiat 2003		Iñupiat 2010	
	Male	Female	Male	Female
	Count	Count	Count	Count
0-4	24	13	16	11
5-9	16	10	13	8
10-14	23	13	7	6
15-19	15	12	14	13
20-24	5	6	10	8
25-29	5	5	8	7
30-34	8	6	6	6
35-39	6	5	7	1
40-44	1	7	6	4
45-49	8	1	3	3
50-54	9	7	2	2
55-59	6	6	5	4
60-64	1	3	3	2
65-69	0	0	2	2
70-74	1	0	1	0
75-79	1	1	0	0
80+	1	1	2	3
Total	130	96	105	80

Average Length of Residency:

Most Iñupiat household heads are lifetime residents of Point Lay and this is reflected in their average time of residence, nearly 29 years. In contrast, the average Caucasian household heads, drawn by employment and other reasons, have lived in Point Lay about two and a half years.

Table 6: Point Lay 2010 Average Length of Residency Household Head by Ethnicity.

Iñupiat Household Head Average Length of Residency	Caucasian Household Head – Average Length of Residency
28.81 years	2.44 years
n= 36	n=9

With respect to household size, Table 8 below indicates that slightly more than three fourths of all Caucasian households have 1 or 2 members whereas two thirds (67 percent) of Iñupiat households have three or more members. On average Iñupiat households have two more members than Caucasian households (see Table 8 below).

Table 7: Point Lay 2010 – Household Size by Ethnicity.

Household Size	Ethnicity					
	Iñupiat		Caucasian		Other	
	Count	Column N %	Count	Column N %	Count	Column N %
1	9	23.1%	3	33.3%	0	.0%
2	4	10.3%	4	44.4%	0	.0%
3	3	7.7%	1	11.1%	0	.0%
4	5	12.8%	0	.0%	0	.0%
5	5	12.8%	1	11.1%	1	100.0%
6	4	10.3%	0	.0%	0	.0%
7	4	10.3%	0	.0%	0	.0%
8	1	2.6%	0	.0%	0	.0%
9	1	2.6%	0	.0%	0	.0%
10	0	.0%	0	.0%	0	.0%
11	1	2.6%	0	.0%	0	.0%
12	0	.0%	0	.0%	0	.0%
13+	2	5.1%	0	.0%	0	.0%
Total	39	100.0%	9	100.0%	1	100.0%

Table 8: Point Lay 2010 - Average Household Size by Ethnicity.

Iñupiat Average Household Size	Caucasian – Average Household Size	Point Lay 2010 All HH’s Average Household Size
4.08 people	2.11 people	3.71 people
n= 37	n=9	n=48

Dependency Ratios:

Table 10 below compares the proportion (%) of the total Point Lay population that fall into various age intervals (cohorts). These age intervals are selected to create a total dependency ratio, in the case of our calculations this is represented by the equation:

$$\text{Individuals 0-15 years of age} + \text{individuals} \geq 65 / \text{individuals 16-64}.$$

The child dependency ratio is calculated by dividing the number of individuals 0-15 by the number of individuals 16-64. Similarly the age dependency ratio is calculated by dividing the number of individuals'  $\geq 65$  by the number of individuals 16-64. The interpretation of these ratios is to try and understand how many labor force participants (16-64) are available to support the supposedly dependent age cohorts of the community population, that is - children (0-15) and elderly ( $\geq 65$ ).

Table 9: Point Lay – Age Cohorts and Dependency Ratios 2003 and 2010.

	Pt. Lay 2003	Pt. Lay 2010
% 15 yrs. & under	46%	36.5%
% 18 yrs. & under	52.2%	43.1%
% 18-24 years of age	11.1%	15.5%
% 55-64 years of age	7%	7.2%
% 62 years and older	2.2%	3.3%
% 65 years and older.	1.8%	3.3%
%16-64 years of age	50%	56.9%
% 18-64 years of age	45.6%	53.6%
Youth Dependency Ratio	92	64.1
Age Dependency Ratio	4	5.8
Total Dependency Ratio	95.6	69.9

The important thing to note in this table is the sharp 26 percent drop in the total dependency ratio for Pt. Lay between 2003 and 2010. Most of the change can be attributed to a significant decrease in the number of individuals in the youth cohort 0-15 years of age between 2003 and 2010. What the implications of these changes mean will require further detailed analysis.

Employment:

Table 10 below details the distribution of months worked by Point Lay residents who are in, or potentially in, the labor force. Note that less than one-third (30.4 percent) of the valid respondents had worked full time or 12 months out of the year. In addition, slightly more than two-thirds (67.4 percent) of the workforce had worked 10 months or less – one definition of underemployment. Of some importance is the fact that about 12 percent of the work force had no employment whatsoever. The average individual in Point Lay was employed 6.9 months out of the last 12 months. This distribution is clearly indicative of a substantial underemployment situation for the community of Point Lay.

Table 10: Point Lay 2010 – Employment – Individual Household Member Months of Employment.

Number of Months	2010 Frequency	2010 Percent	2010 Cumulative Percent
0	11	12.0	12.0
1	5	5.4	17.4
2	6	6.5	23.9
3	7	7.6	31.5
4	3	3.3	34.8
5	5	5.4	40.2
6	5	5.4	45.7
7	4	4.3	50.0
8	2	2.2	52.2
9	11	12.0	64.1
10	3	3.3	67.4
11	2	2.2	69.6
12	28	30.4	100.0
Total	92	100.0	

In 2010 we note a slight decrease in the number of people who have self-identified as being within the labor force. More than likely this number is slightly lower because of the smaller sample size obtained in the 2010 census. Nevertheless this sample proportion is only about 80 percent of the sample proportion of individuals 16-64 years of age. Of note is the steady increase in the proportion of individuals who self-identify as underemployed; by 2010 this represents more than one in five Point Lay individuals within the labor force. This is reinforced by the empirical measure of nearly two-thirds of the labor force working less than 10 months and this figure represents more than doubling of this proportion since 2003. Finally when we note the doubling of the average months unemployed since 2003 the inescapable conclusion is that of significant unemployment and underemployment for the population of Point Lay.

Table 11: Employment Characteristics of Pt. Lay 1998 - 2010.

Point Lay	1998	2003	2010
Total Population	246	260 (237*)	274 (185*)
Persons 16-64*	115	126	137(113*)
Persons in Labor Force	100	98*	92*
Respondents Reporting Underemployment	12 (2%)	16* (16%)	15* (22%)
Respondents Reporting Working < 10 months*	39	26 (26%)*	59* (64.1%)
Ave. Months Employed	-	7.6^	6.9** (7.85) ^
Ave. Months Unemployed	-	3*	6*

\*Sample population \*\*Average includes unemployed individuals in the denominator. ^Persons with some employment.

Slightly less than 40 percent of the workforce of Point Lay considers itself permanent and full-time, about one third of the workforces consider themselves to be temporarily or seasonally employed. Finally nearly one in five respondents are unemployed, more than twice the national and state rates.

Table 12: Point Lay 2010 – Employment Status Individuals (plus retirees) in the Work Force.

Employment Status	2010 Frequency	2010 Percent	Cumulative Percent
Permanent full time	42	39.6	39.6
Temporary seasonal	28	26.4	66.0
Part-time	8	7.5	73.6
Unemployed	21	19.8	93.4
Retired	7	6.6	100.0
Total	106	100.0	

Comparing 2003 with 2010 on these same measures finds an 8 percent decrease in full time employment, an increase in seasonal employment of about the same proportion, and a slight increase in unemployment. It seems that in the seven-year period from 2003 to 2010 we have a significant decrease in full time employment that is partially offset by part-time employment but with a 4 percent increase overall in unemployment.

Table 13: Point Lay Comparison of Employment Status 2003 to 2010 (in %).

For Individuals 16-64 yrs. Of age.	Percent 2003	Percent 2010
Persons 16-64	106	96
Permanent Full Time	50%	41.7%
Seasonal Employment	19.8%	28.1%
Part-time Employment	7.5%	8.3%
Unemployed	15.1%	19.8%
Retired	7.5%	2.1%

Ethnicity and gender play a big role in employment in Point Lay in 2010. Iñupiat women are two and a half times more likely to be unemployed than are their male counterparts. In addition, Iñupiat females have 25 percent less of the total full time permanent employment positions than do Iñupiat males. Men seem much more likely to engage in seasonal employment while in contrast women are more likely to seek and find part time employment. It appears that less than four in ten Iñupiat individuals in the labor force in Point Lay have permanent full-time employment. While without full time employment if they are men, they seek seasonal work and if they are women they seek part-time employment. These figures indicate substantial distress for Iñupiat families with respect to employment with a very substantial proportion of Iñupiat women who are unemployed.

Table 14: Point Lay 2010 – Iñupiat Employment Status by Gender.

Employment - Iñupiat individual HH member's type of employment?	Individual's Gender			
	Male		Female	
	Count	Column N %	Count	Column N %
Permanent full time	20	38.5%	12	30.8%
Temporary seasonal	20	38.5%	5	12.8%
Part-time	1	1.9%	6	15.4%
Unemployed	7	13.5%	13	33.3%
Retired	4	7.7%	3	7.7%
Total	52	100.0%	39	100.0%

Employment for Iñupiat males in Point Lay is concentrated within two main employers – the North Slope Borough or the local Village Corporation – with more than 70 percent of Iñupiat males being employed by these two government sectors. Iñupiat females are also heavily employed by these two entities and in addition are also substantially employed by the North Slope Borough School District. Point Lay Iñupiat women are almost equally employed by these three employers and account for slightly less than 90 percent of all employed Iñupiat women in Point Lay. The North Slope Borough has been the one employer that has significantly increased, by nearly a third, the jobs for Point Lay males in the last seven years. The distribution of employers for Point Lay Iñupiat women has remained fairly consistent during the last seven years and whereas jobs for men have increased during this period, jobs for women have remained essentially flat. Caucasian employees have substantially decreased during the last seven years with big decreases in employment with the North Slope Borough School Districts and for males, a real drop in employment by the Arctic Slope Regional Corporation or a subsidiary. Keep in mind these are absolute numbers based on a smaller sample of respondents in the 2010 survey and may not completely represent the reductions (or additions) in employment between 2003-2010.

Table 15: Point Lay 2010 All Individuals – Employer by Gender and Ethnicity.

Employment - Individual HH member's employer?	Ethnicity Recoded to Iñupiat/Caucasian.			
	Iñupiat		Caucasian	
	Male	Female	Male	Female
	Count	Count	Count	Count
Federal govt.	3	0 (2)	0	0
State government	0	0 (1)	0	0
City govt.	0 (1)	0 (1)	0	0
NSB govt.	24 (16)	7 (5)	0 (3)	1
NSB School district	4 (4)	7 (7)	5 (9)	5 (9)
NSB CIP	4(1)	0	1	0
Oil industry	0	0	0	0
Private construction firm	0 (4)	1	0	0
ASRC or subsidiary	1 (1)	1	0 (3)	0
Village corp./subsidiary	6 (4)	7 (5)	0	1
Finance/insurance	0 (1)	0	0	0
Transportation	0	1 (1)	0	0
Communications	0	0	0	0
Trade	0	0	0	0
Service	0	0	0	0 (1)
Ilisagvik College	0 (1)	0	0	0
Other	0 (1)	0 (3)	0	0 (1)
Total	42 (34)	24 (25)	6 (15)	7 (11)

As might be imagined, given gender expectations about caregiving, nearly half the female Iñupiat respondents cite family responsibilities as the major reason for their unemployment. Slightly over a third of both men and women cite the inability to find work as a major reason for their unemployment. Only about 10 percent of the men cited conflicts with subsistence activities as a reason for unemployment.

Table 16: Point Lay 2010 – Iñupiat Individuals – Reason for Unemployment by Gender.

Employment - Individual HH member's reason for unemployment?	Individual's Gender			
	Male		Female	
	Count	Column N %	Count	Column N %
Did not want job	3	9.7%	0	.0%
Could not find job	11	35.5%	8	34.8%
Physical disability/poor health	4	12.9%	1	4.3%
Wage work with conflict with subsistence	3	9.7%	0	.0%
Family responsibilities (e.g. care of elder)	5	16.1%	11	47.8%
College or technical training	0	.0%	1	4.3%
Other	5	16.1%	2	8.7%
Total	31	100.0%	23	100.0%

Income:

Analysis of income for individuals and households in Point Lay is going to be much more complicated than analysis contained in previous surveys. These complications arise from two features of the 2010 data set. In 2010, for the first time an attempt was made to ascertain all the major income inputs to each household. To accomplish this goal questions were asked of social security income, pension income, food stamp monies, child support, dividend income from regional and village corporations, permanent fund dividends and of course wage income. These income amounts were ascertained for all members of the household and aggregated into a total household income through a compute statement in the SPSS program (“calculated total household income”). In addition, in 2010, each household head (respondent) was asked to estimate their total household income from all sources (“estimated household income”).

In contrast the 2003 questionnaire only asked for wage income from all household members, regional and village dividend income for the household head only and finally an estimate of total household income from all sources was asked of the household head.

The second factor confounding the results for 2010 for Point Lay was a high proportion of missing information for the variable “estimated total household income” in the research. In 2010 about 24 percent (12/50) of the households did not provide information to the question – “What was the total household income that you and all other members of your household received in 2009?” About 83 percent of this non-response was due to missing information (another 2 households refused to answer). By missing information we mean that the coding boxes for this variable were empty – why they were empty is difficult to discern. It could be the case the respondent could not come up with an answer or it might be that after getting no response the interviewer didn’t push the question and it might be a case of a polite or tacit “refused to answer”.

In contrast to the 2010 results (24 percent of households missing information) we find that in 2003 about 31 percent (19/61) of the interviews contained missing information on the variable “estimated total household income”. In 2010 of the 50 households in the sample 38 (76 percent) contained “estimated” household income. In 2003 and 2010 “estimated average household income” was calculated by dividing the sum of reported income by the number of households reporting income. This means that in 2010, for example, the aggregate community income of \$2,019,123 was divided by the 38 households who estimated their total household income - yielding an average “estimated” household income of \$53,135. Calculating per capita income is trickier. In 2010 we took the 38 households whose estimated total household income (\$2,019,123) and divided this number by the number by proportion (76 percent) of the total number of individuals residing in all of the 50 sample households. Thus of the 185 people residing in the 50 sample we multiplied by 76 percent (the proportion of valid household responses to entire sample) for a denominator of 141 yielding a per capita income of \$14,320. To yield valid comparisons we recalculated the 2003 amounts into 2010 “constant” dollars. We note that after these calculations there is a substantial decrease of nearly 20 percent in purchasing power both in household and per capita incomes for the sample populations of Point Lay between 2003 and 2010.

Table 17: Point Lay - Comparison of Average Estimated Household Income and Per Capita Income (weighted for non-response) 2003 vs. 2010.

Income	2003 in constant \$'s	2010 (% change)
Average “Estimated” Household Income	\$66,717 (\$56,297)*	\$53,135 (-20%)
“Estimated” Per Capita Income	\$17,191 (\$14,506)*	\$14,320 (-17%)

\*Numbers in parenthesis for these measures are in 2003 dollars.

In Table 18 below we compare “estimated” versus “calculated” average incomes. It is important to note that the sample of “estimated” income was 38 households (that is households that gave valid responses” whereas the sample of “calculated” incomes was around 100 percent of the sample. Given the differences between the averages we might surmise for Point Lay (other communities have different dynamics) that household heads that “estimate” their income fairly consistently fail to take into account all their sources of income leading to an under-guesstimate. For the most part in our analysis we use the calculated household income because of higher sample size and also because it appears to be more representative of Point Lay’s entire income distribution.

Table 18: Point Lay 2010 - Comparison of Estimated versus Calculated Household Income.

Income	Calculated	Estimated
Average Household Income	\$56,515	\$53,135 (-6%)
Per Capita Income	\$15,274	\$14,320 (-6%)

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

In Chart 4, below, we note that 58 percent of Point Lay’s total income comes from wage work. This is fairly comparable with the other communities in the North Slope Borough. Analysis in a separate chapter will compare these proportions for all NSB communities. It is important to note that over a quarter of total income inputs to Point Lay is derived from corporate dividends (by this we mean from Alaska Native Corporations),

and when these dividends are combined with the State Permanent Fund Dividends they produce nearly a third of all household income in Point Lay.

Chart 4: Point Lay 2010 - Proportional Contribution to Total (Calculated) Household Income by Source.

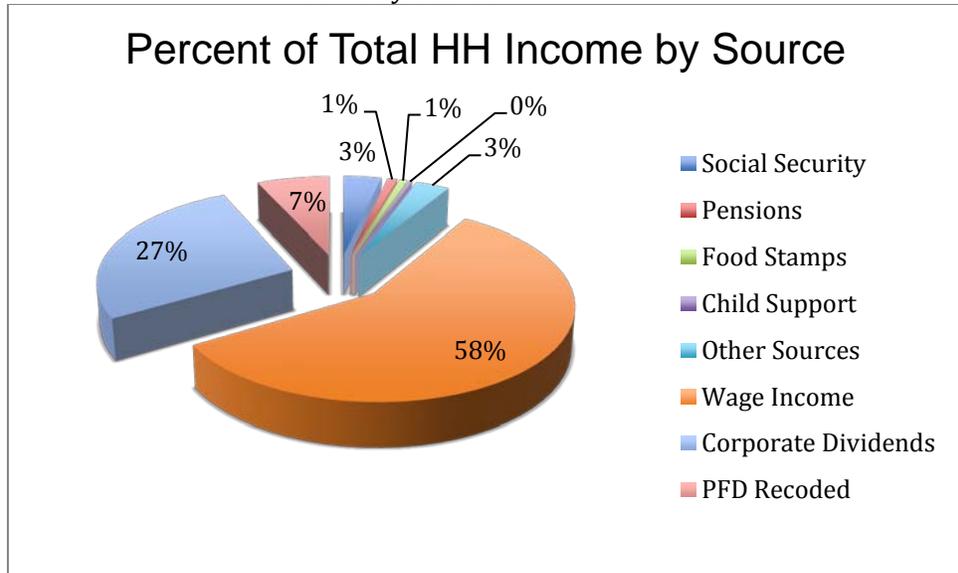


Table 19: Point Lay 2010 Data Table for Chart 4 (above) Proportional Contribution to Total (Calculated) Household Income by Source.

Source of Income	Total \$ Amount	% of Total HH Income
Social Security	\$101,484.00	4%
Pensions	\$26,400.00	1%
Food Stamps	\$21,136.00	1%
Child Support	\$9,080.00	0%
Other Sources	\$89,864.00	3%
Wage Income	\$1,631,157.00	58%
Corporate Dividends	\$753,489.00	27%
PFD Recoded	\$193,140.00	7%
Calculated Total HH Income	\$2,825,750.00	100%

When we break down “estimated” total household income by ethnicity we see that 61 percent of Iñupiat households earn less than \$50,000 while 75 percent of Caucasian households earn more than \$50,000 per year.

Table 20: Point Lay 2010 – Estimated Total Household Income by Ethnicity.

Recode Estimated Total Household Income into 12 Categories	Recode Ethnicity into Three Categories			
	Iñupiat		Caucasian	
	Count	Column N %	Count	Column N %
0-\$15,000	5	17.9%	0	.0%
15,001-29,999	5	17.9%	0	.0%
30,000-39,999	4	14.3%	0	.0%
40,000-49,999	3	10.7%	2	25.0%
50,000-59,999	2	7.1%	3	37.5%
60,000-69,999	0	.0%	1	12.5%
70,000-79,999	1	3.6%	0	.0%
80,000-89,999	4	14.3%	1	12.5%
90,000-99,999	2	7.1%	0	.0%
100,000-124999	2	7.1%	1	12.5%
125,000-149,999	0	.0%	0	.0%
150,000+	0	.0%	0	.0%
Total	28	100.0%	8	100.0%

Table 21: Point Lay 2010 – Calculated Total Household Income by Ethnicity.

Recode of Calculated Total Household Income into 12 Categories	Recode Ethnicity into Three Categories			
	Iñupiat		Caucasian	
	Count	Column N %	Count	Column N %
0-\$15,000	7	17.9%	1	11.1%
15,001-29,999	7	17.9%	0	.0%
30,000-39,999	4	10.3%	0	.0%
40,000-49,999	3	7.7%	2	22.2%
50,000-59,999	3	7.7%	3	33.3%
60,000-69,999	1	2.6%	1	11.1%
70,000-79,999	2	5.1%	0	.0%
80,000-89,999	4	10.3%	1	11.1%
90,000-99,999	2	5.1%	0	.0%
100,000-124999	4	10.3%	1	11.1%
125,000-149,999	1	2.6%	0	.0%
150,000+	1	2.6%	0	.0%
Total	39	100.0%	9	100.0%

When one uses “calculated” total household income (rather than “estimated”) these proportions are somewhat reduced with 54 percent of Iñupiat households earning less than \$50,000 while over 75 percent of Caucasian households earn more than the \$50,000 threshold (see Table 22 above).

In contrast to a number of other villages, the difference between Iñupiat and Caucasian total calculated household income is not dramatically different; somewhat less than 5 percent . Interestingly Iñupiat households underestimate their total household income by about \$6,000 on average, whereas Caucasian households overestimate their total household income by about \$7,000 on average.

Table 22: Point Lay 2010 – Average Estimated & Calculated Total Household Income by Ethnicity.

	Iñupiat	Caucasian
Ave. Estimated Total Household Income.	\$48,543 (28)	\$64,425 (8)
Ave. Calculated Total Household Income	\$54,708 (39)	\$57,423 (9)

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

Using 2009 poverty level thresholds 10 out of 50 households (20 percent) are below the poverty threshold. If only Iñupiat families are considered then nine out of ten households below the poverty threshold are Iñupiat. In terms of proportion nine out of thirty-nine (23 percent) of Iñupiat households are below the poverty threshold. In comparison in 2007 12.5 percent of U.S. households (of all ethnicities) were below the poverty threshold. The poverty rate for all U.S. Caucasian households in 2007 was 10.5 percent. Thus, Inupiat households in Point Lay have about twice the rate of poverty when compared with the U.S. average.

Table 23: Point Lay 2010 Household Size by Poverty Level Income Threshold.

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

Educational Attainment:

Educational attainment over time indicates some positive trends for Point Lay. Failure to finish high school has decreased by more than a half since 1998. In addition, high school graduation rates have improved by nearly 50 percent in the last several years since 2003. However, the 2003 proportion (when compared to 1998) seemed abnormally low and all we can interpolate for sure is a positive trend in graduation rates. In contrast, proportions of Point Lay residents with higher education and/or Vocational/Technical certificates are lower however; smaller sample sizes in 2010 (both in absolute numbers and proportionally) may confound the situation.

Table 24: Point Lay Educational Attainment of Household Members 1998 - 2010

	1998	2003	2010
Has Not Started School	10.8%	13.8%	12.6%
Still in Elementary School	24.5%	19.2%	16.9%
Still in Middle School	8.5%	6.2%	6.6%
Still in High School	9.4%	12.9%	10.4%
Did Not Finish High School	16.9%	13.3%	7.1%
GED	.9%	4.4%	4.9%
High School Diploma	17.8%	12.9%	23.5%
Some College	5.2%	8.4%	12%
Vo/Tech. Graduate	2.3%	2.7%	1.1%
B.A. Degree	1.4%	4.4%	2.7%
Master's Degree	2.3%	1.8%	1.1%
Professional Degree/ Ph.D.	0%	0%	<1%
Other	0%	0%	<1%
Total	100%	100%	100%
Sample Size	213	225	183

With respect to perceptions about the relationship between education and employment we are not very confident about the results. The differences in the comparison between 2010 and 2003 are so dramatic that one suspects a change in coding procedures. The omission of the “retired” and other combined attributes from the 2010 questionnaire really has very little impact on the current distribution as it accounted for only 6 percent of the responses in 2003. If taken at face value, we notice a substantial three fold reduction in the “primarily a student” category. Other responses, however, have less dramatic differences with the 2003 responses. We see a doubling of proportions in an “unsettled” job situation, a 13 percent increase in permanence and a doubling of pessimism in the proportion of individuals who see no connection between employment and educational attainment.

Table 25: Point Lay 2003-2010 Training and Educational Background for Inupiat Household Members.

BACKGROUND/INTEREST	2003 Number	2003 Percent	2010 Percent	2010 Number
1. Primarily a student	77	57%	17%	14 (15)
2. Job situation unsettled	20	15%	32%	27 (29)
3. Job is permanent	29	22%	35%	29 (39)
4. See no connection	8	6 %	17%	14 (15)
Total	134	100.0%	100.0%	84 (98)

Numbers in parenthesis are sample totals for all ethnicities.

As in past surveys there continues to be a considerable contrast in educational achievement by ethnicity, see Table 26 below. Slightly more than 10 percent of the Iñupiat individuals within the community have some college experience, however, no Iñupiat possess a B.A. and/or advanced degrees. This contrasts with 56 percent of the Caucasian population with some level of college experience and/or a B.A. or graduate degree. Thus, like many other North Slope Borough communities the non-Iñupiat labor force is mostly college educated and disproportionately drawn to the Point Lay by the employment opportunities that require these skills. Of course these proportions are highly skewed. For example, about 40 percent of all 18-24 year olds in the U.S. are enrolled in college and this is certainly not the case for Iñupiat of northern Alaska.

Table 26: Point Lay 2010 – Educational Attainment by Ethnicity.

Iñupiat			Caucasian	
Count	Column N	%	Count	Column N
		%		%
Has not started school	21	12.9%	2	11.1%
Elementary school	29	17.8%	2	11.1%
Middle school	11	6.7%	1	5.6%
High school	19	11.7%	0	.0%
Did not finish high school	13	8.0%	0	.0%
High school diploma	42	25.8%	1	5.6%
GED	8	4.9%	1	5.6%
Voc./Tech. graduate	2	1.2%	0	.0%
Some college	18	11.0%	2	11.1%
B.A. degree	0	.0%	5	27.8%
M.A. degree	0	.0%	2	11.1%
Professional degree	0	.0%	1	5.6%
Other (specify)	0	.0%	1	5.6%
Total	163	100.0%	18	100.0%

The low enrollment of Iñupiat in college in 2010 is of some concern. This concern is heightened with a perusal of Table 27 below which indicates a fairly consistent proportion, of around 60 percent; of Point Lay individuals have never attended college. All other measures including “completing courses for credit” have remained steady. One slight change is that two Iñupiat from Point Lay who had graduated from college are no long residing in the community. There are no Iñupiat in the current survey sample who have graduated from college.

Table 27: Point Lay 2003 – 2010 Inupiat Individuals’ College Experience.

STATUS	2003 Number	2003 Percent	2010 Number	2010 Percent
Never enrolled	48	58%	52	60%
Enrolled, no courses completed	3	4%	10	12%
Currently enrolled for first time	4	5%	0	0%
Completed courses for credit	26	31%	24	28%
Graduated from college	2	2%	0	0%
Total	83	100%	86	100%

Training:

Since 2003 eight out of ten Point Lay respondents have consistently been of the opinion that additional education can help their career.

Table 28: Point Lay 2003 -2010 Inupiat Individuals’ “Can Additional Education Help Career?”

	2003 Count	2003 Percent	2010 Percent	2010 Count
Yes	73	79.3%	82.4%	70
No	19	20.7%	17.6%	15
Total	92	100%	100%	85

Of this sizeable proportion who believe in the benefits of additional education more than eight out of ten would be willing to leave home for additional training, although as we shall see below, the majority would prefer to stay on the North Slope and attend Ilisagvik.

Table 29: Point Lay 2003- 2010 Inupiat Individuals’ “Would Individual Leave Home for Additional Training?”

	2003 Count	2003 Percent	2010 Percent	2010 Count
Yes	59	76.6%	84.8%	56
No	18	23.4%	15.2%	10
Total	77	100%	100%	66

In 1998 nearly two-thirds of Point Lay respondents stated a preference for Ilisagvik (64 percent) as a location for new training – by 2003 this preference had dropped to less than half. However, in the most recent census (2010) we note a gradual return to Ilisagvik as the preference for the majority of respondents (56.7 percent). As of 2010 no Point Lay respondents indicated any preference for attending college outside of Alaska. With respect to within Alaska preferences, UAA has a steady increase with nearly one in five stating a preference for this institution. Finally, there has been a gradual, but steady, interest in Vocational/Technical training with one in ten respondents now stating this as their preferred option.

Table 30: Point Lay 1998 – 2010 Iñupiat Individuals’ Preferred Location for New Training.

LOCATION	1998 Percent	2003 Count	2003 Percent	2010 Count	2010 Percent
Ilisagvik	64.3%	33	45.8%	34	56.7%
UAF	7.1%	3	4.2%	3	5.0%
UAA	9.5%	9	12.5%	10	16.7%
Vocational/technical school	0%	1	1.4%	6	10%
College outside Alaska	2.4%	7	9.7%	0	0%
Other	16.7%	19	26.4%	7	11.6%
Total	100%	72	100%	60	100%

Proportionally there has been a reduction in preference for short-term on-the-job training with a slight increase for the preference of long-term on-the-job training. The sharpest increase has been in a preference for two-year training/college programs. Over the last decade consistently about one in ten respondents prefer a four-year degree program.

Table 31: Point Lay 2003 -2010 – Iñupiat Individuals’ Preferred Length of Training to Obtain New Skills.

Preferred Length	2003 Count	2003 Percent	2010 Percent	2010 Count
Short term on-the-job	29	46.8%	36.5%	23
Long term on-the-job	17	27.4%	31.7%	20
Two-year program	5	8.1%	20.6%	13
Four-year degree program	11	11%	11.1%	7
Total	62	100%	100%	63

Point Lay presents an idiosyncratic response to preferred occupations (see Table 32 below). English, beginning at low levels, encounters even further declines by 2010. Heavy equipment operator has a roller coaster profile being the modal response in 1998 dropping to next to nothing in 2003 and rebounding in 2010 to be the preference of one out of ten respondents. Land manager and oil field worker in 1998, crash in 2003 and remain low in 2010. Mechanic, electronics and health care worker have all increased steadily as a preference by 2010.

Table 32: Point Lay 1998 – 2010 Iñupiat Individuals – Preferred Occupations for Additional Training.

Occupation	1998 Percent	2003 Percent	2010 Percent	2010 Count
English	3.3	4.4	1.7	1
Word processing	3.3	0	6.9	4
Accounting	5.0	5.9	5.2	3
Heavy equipment	20.0	1.5	10.3	6
Wildlife Mgt.	3.3	0	5.2	3
Food service	5.0	1.5	1.7	1
Business Mgt.	6.6	10.3	8.6	5
Land Mgt.	15.0	0	1.7	1
Computer programmer	1.7	2.9	5.2	3
Oil field worker	11.7	1.5	3.4	2
Teacher	1.7	4.4	3.4	2
Health worker	1.7	7.4	8.6	5
Carpentry	0	7.4	1.7	1
Mechanic	1.7	4.4	8.6	5
Electronics	5.0	1.5	8.6	5
Pilot	-	-	1.7	1
Other	15	46.9	17.2	10
Total	100%	100% (68)	100%	58

Housing:

Type of residence has changed substantially in Point Lay since the first survey conducted in 1998. Since that time there has been a steady increase in the number of mobile home/trailer residences to the point that by 2010 they account for nearly 30 percent of the housing in the community. In contrast, there has been a steady erosion of single-family residences, dropping by more than a third from a high of 86 percent in 1998 to 49 percent in 2010. In addition, there has been a slow gradual increase in multiple family dwellings since 1998.

Table 34: Point Lay 2003 – 2010 Households by Type of Living Structure

TYPE	1998 Count	1998 Percent	2003 Count	2003 Percent	2010 Percent	2010 Count
Mobile home/trailer	2	3.9%	12	19.7%	28.6%	14
One-family house	44	86.3%	38	63.3%	49.0%	24
Building for two families	0	0	4	6.6%	8.2%	4
Building for 3 or 4 families	1	1.9%	4	6.6%	12.2%	6
Other	4	7.9%	3	4.8%	2.0%	1
Total	51	100%	61	100%	100%	49

Slightly over one third of Point Lay respondents rent their current residence with the majority renting from the Borough. Somewhat less than half of all families in Point Lay own their own home free and clear.

Table 34: Point Lay 2010 – Who Owns Respondent’s House?

	Frequency	Percent	Cumulative Percent
TNHA (rental)	4	9.1	9.1
North Slope Borough (rental)	7	15.9	25.0
UIC (rental)	1	2.3	27.3
Privately owned rental	4	9.1	36.4
TNHA (Mutual help home ownership)	7	15.9	52.3
Owned by you (or someone in HH) with mortgage/loan	2	4.5	56.8
Owned by you (or someone in HH) through LIPP	1	2.3	59.1
Owned by you or someone in household free and clear	18	40.9	100.0
Total	44	100.0	

Average Household Area (ft<sup>2</sup>):

The average size of a Pt. Lay dwelling was 854 ft<sup>2</sup> but this average may be skewed by a high non-response rate with only 37 out of 50 respondents reporting the square footage of their dwelling. Of the 37 reporting households, 75 percent reported houses of 1,000 square feet or less.

Average Number of Rooms Per Dwelling:

In 2010 70 percent of all the sample households reported living in 4 rooms or more. This proportion has been steadily increasing from the baseline measure of 54 percent in 1998, when in 2003 58 percent of the dwellings had four or more rooms. The average number of rooms per dwelling was 4.2 in 2010.

Table 35: Point Lay 2003 – 2010 Total Rooms in Dwelling (excluding bathrooms).

ROOMS	1998 Percent	2003 Percent	2010 Percent	2010 Count
1	14%	3.8%	4%	2
2	12%	9.5%	12%	6
3	20%	28.3%	14%	7
4	14%	22.6%	24%	12
5	22%	22.6%	24%	12
6	12%	8.5%	16%	8
7	6%	3.8%	6%	3
8	0%	1.9%	0%	0%
9	0%	0%	0%	0%
Total	n = 50	n = 53	100%	n = 50

Utilities – Heating and Water Systems:

Point Lay’s heating systems have undergone substantial change since 1998. In 1998 three- quarters of the dwellings in Pt. Lay heated their house with a stand-alone space heater. By 2010 this proportion had dropped to 6 percent. Since 2003 stand-alone stoves have been used by slightly over half of all households. Baseboard/boiler systems have, since 1998, been consistently used by about one fourth of all households. During this same period there has been a doubling of forced-air furnaces at each new survey.

Table 36: Point Lay Heating Systems 1998 – 2010

SYSTEM TYPE	1998 Percent	2003 Percent	2010 Percent	2010 Count
Stand-Alone Stove	-	52.6%	54.0%	27
Stand-Alone Heater	73.5%	14%	6.0%	3
Forced-Air Furnace	3.8%	7%	14.0%	7
Baseboard/ Boiler System	22.7%	22.8%	24.0%	12
Portable Heater/Other	0%	3.6%	2.0%	1
Total	100% (53)	100% (59)	100%	n = 50

2010 represents a dramatic set back in running water availability to Point Lay residences. In 2003 eight out of ten households had access to running water but by 2010 this proportion reverses and falls to the proportion in 1998 where only six in ten households have access to running water. Note that in 2010 an additional 12 percent of households had water delivered by truck to a house cistern.

Table 37: Point Lay 1998 – 2010 Does the Dwelling Have Running Water?

Running Water?	1998 Percent	2003 Percent	2010 Percent	2010 Count
Yes	61.5%	78.9%	62%	31
No	38.5%	21.1%	38%	19
Total	100% (53)	100% (57)	100%	50

As Table 38 below indicates, all utilities now cost more in absolute dollars in Point Lay as compared to 2003. Electricity has gone up 20 percent in this seven-year period and on average the cost of all utilities has increased by 14 percent. However, when one applies a “constant dollar calculator” and compares the purchasing power of a 2003-dollar compared to a 2010 dollar, i.e., eliminating the inflation and decrease in purchasing power of the 2003 dollar one finds that the cost of utilities has remained fairly constant given our current diminished purchasing power.

Table 38: Point Lay 1998 – 2010 - Utility Costs.

Average Monthly Utility Costs	1998	2003	2003 Constant \$'s	2010	Percent Change
Heating	\$157	\$187	\$222	\$210	+11%
Electricity	\$77	\$152	\$180	\$190	+20%
Water	\$65	\$59	\$70	\$65	+9%
Total Average Utility Costs	\$299	\$398	\$472	\$465	+14%

The sample size (5) for the 2010 mortgage estimate is much too small to yield a reliable estimate. On the other hand the 14 households reporting monthly rent expense seems reasonable. In both absolute and constant dollars Point Lay has seen a significant increase in the cost of rentals in their community since the 2003 survey.

Table 39: Point Lay Rental and Mortgage Costs 1998 – 2010

CATEGORY	1998	2003	2003 Constant \$'s	2010	Percent Change
Average monthly mortgage payment	\$154	\$492	\$583	\$252	(-49%)
Average monthly rental payment	\$213	\$384	\$455	\$608	+37%

Nearly two-thirds of the households in the Point Lay sample had not heard about the AHFC energy program. Only about 5 percent of the households were waiting to be audited and none had received any AHFC reimbursement

Table 40: Point Lay 2010 – “Did your household receive any AHFC Energy Assistance in 2009?”

Did your household receive any benefits from AHFC Energy Assistance during 2009?	Frequency	Percent	Cumulative Percent
Planning to apply to program	2	4.4	4.4
Haven't heard about the program	28	62.2	66.7
No plan to utilize program	15	33.3	100.0
Total	45	100.0	
Missing - Not Applicable	5		
Total	50		

Only one household in Point Lay received weatherization benefits in 2009. Half the households in Point Lay have either not heard of the program or do not plan to use the program.

Table 41: Point Lay 2010 – “Did household receive benefits from Weatherization Program during 2009?”

Did your household receive any benefits from the Weatherization Program during 2009?	Frequency	Percent	Cumulative Percent
Yes we received new ...	1	2.0	2.0
Public housing on waiting list	13	26.5	28.6
Low income awaiting energy audit	4	8.2	36.7
Planning to apply to program	5	10.2	46.9
Haven't heard of program	16	32.7	79.6
Don't plan to utilize program	10	20.4	100.0
Total	49	100.0	
Missing -Not Applicable	1		
Total	50		

Subsistence:

There are some clear-cut trends in the use of subsistence harvests in Point Lay. Since 1998 the proportion of households that get less than half their diet from subsistence resources has increased dramatically – from around 25 percent in 1998 to 40 percent in 2010. This indicates a clearly decreasing dependence on wildlife resources and an increasing dependence on store bought foods. The intensity of use of subsistence resources has also decreased significantly in the last 12 years. For example, over one third of all households in 2003 depended on subsistence for “Nearly All” or “All” of their nutritional needs. This dependency drops by more than 2/3<sup>rds</sup> over the last seven years. This table clearly indicates a decreasing reliance on subsistence foods.

Table 42: Point Lay – Subsistence Use Amounts of Local Resources 1998-2010 (All Households).

AMOUNT	1998 Percent	2003 Percent	2010 Percent	2010 Count
None	4.5%	0%	4.5%	2
Very little	9.1%	15.9%	13.6%	6
Less than half	11.4%	4.5%	20.5%	9
Half	20.5%	25%	25%	11
More than half	31.8%	13.6%	25%	11
Nearly all	9.1%	18.2%	9.1%	4
All	13.6%	18.2%	2.3%	1
Total	100%	100%	100%	
n of respondents	44	44		44

When we look at dietary dependency on subsistence resources by ethnicity for 2010 we find that non-Iñupiat have very little dependence while 2/3<sup>rds.</sup> of Iñupiat households in Point Lay depend on subsistence for half or more of their diet (see Table 43 below).

Table 43: Point Lay 2010 – Amount of Diet from Subsistence Foods by Ethnicity.

Household - Subsistence - how much of your household diet came from subsistence foods in 2009?	Recode Ethnicity into Three Categories					
	Iñupiat		Caucasian		Other	
	Count	Column N %	Count	Column N %	Count	Column N %
1. None	2	5.1%	0	.0%	0	.0%
2. Very little	3	7.7%	2	66.7%	1	100.0%
3. Less than half	8	20.5%	1	33.3%	0	.0%
4. Half	11	28.2%	0	.0%	0	.0%
5. More than half	10	25.6%	0	.0%	0	.0%
6. Nearly all	4	10.3%	0	.0%	0	.0%
7. All	1	2.6%	0	.0%	0	.0%
Total	39	100.0%	3	100.0%	1	100.0%

The 2010 North Slope Borough Census asked more finely grained questions about subsistence change, moving from a general perception (in 1998 and 2003) of change to a specific judgment for each resource type. Clearly the modal response was “stayed the same” with more than half of all respondents (with the exception of 1998 general perception) seeing no change in the level of their subsistence activities. In 1998 about a third of household heads reported a decrease in the use of subsistence resources, this dropped to about a quarter of all respondents in 2003 and this proportion is generally supported across a variety of activities in 2010.

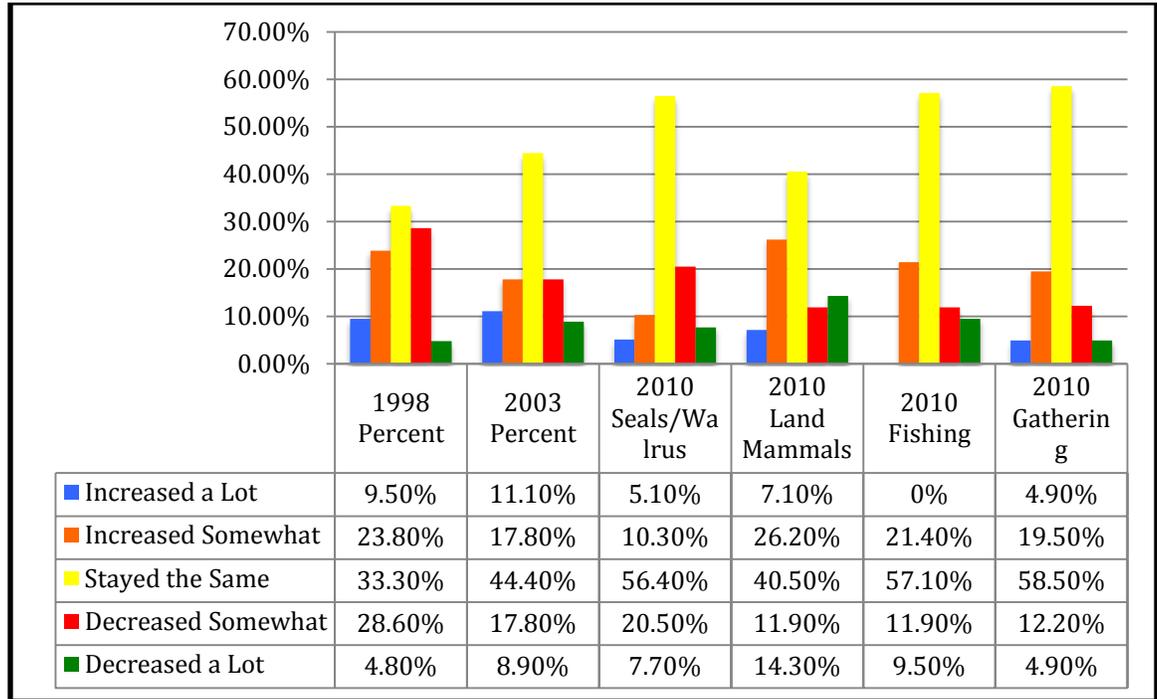
Table 44: Point Lay Changes in Subsistence Activities Last Five Years 1998 -2010

DEGREE OF USE	1998 Percent	2003 Percent	2010 Seals/Walrus	2010 Land Mammals	2010 Fishing	2010 Gathering
Increased a Lot	9.5%	11.1%	5.1%	7.1%	0%	4.9%
Increased Somewhat	23.8%	17.8%	10.3%	26.2%	21.4%	19.5%
Stayed the Same	33.3%	44.4%	56.4%	40.5%	57.1%	58.5%
Decreased Somewhat	28.6%	17.8%	20.5%	11.9%	11.9%	12.2%
Decreased a Lot	4.8%	8.9%	7.7%	14.3%	9.5%	4.9%
Total	100% (42)	100% (45)	100%(39)	100% (42)	100%(42)	100% (41)

Chart 5 below graphically presents the change in perception over time. In 1998 we can see a more dynamic evaluation of subsistence activities, for example, responses seem equally divided with similar proportions asserting increase, decrease and status quo. In

contrast by 2010, with the exception of land mammals, a majority of respondents perceive a steady status of availability of subsistence resources while about three fourths of land mammal hunters seeing either an increase in harvest or at least a consistent amount. Interestingly Marine Mammals seem as stable in their availability as do fish and plants.

Chart 5: Point Lay 1998-2010 – Changes in Subsistence Activities During the Last Five Years.



Although Table 45 below at first glance seems to present an irregular pattern of sharing with other households, the pattern has actually been fairly consistent over the last 12 years. A majority of all households during this period share less than half of their resources with other households. There is a slight trend to share less over time with 59 percent of households in 1998 sharing half or more while in 2010 this proportion drops to 48 percent.

Table 45: Point Lay 1998 – 2010: Percent of Subsistence Given to Other Households.

	1998	2003	2010
None	5%	20%	11%
Very Little	19%	13%	11%
Less than half	19%	15%	30%
Half	40%	35%	34%
More than half	7%	11%	7%
Nearly all	12%	4%	7%
All	0%	2%	0%
Total	100%	100%	100%

Table 46 below shows the distribution of Point Lay residents who engage in Spring Whaling. As might be expected more men than women engage in this activity, although one might anticipate a division of labor in that mostly men man the whaling boats whereas women help prepare the skins for the boats, help prepare appropriate garments and help in the processing and distribution of whale products. Over 40 percent of the males and one third of the females in Point Lay are engaged in Spring Whaling. With respect to recruitment to membership in whaling crews, a difficult and dangerous undertaking, a majority (54 percent) of those males involved in Spring Whaling are under the age of 30. This proportion provides a substantial membership pool to sustain this subsistence activity.

Table 46: Point Lay 2010 – Iñupiat Individuals Who Participate in Spring Whaling by Age and Gender.

Age Recoded into 5 yr. Intervals	Subsistence participation - does individual HH member participate in Spring Whaling?			
	Yes		No	
	Male	Female	Male	Female
	Count	Count	Count	Count
0-4	0	0	15	10
5-9	0	0	12	8
10-14	3	2	3	4
15-19	13	5	1	8
20-24	6	4	3	2
25-29	2	3	3	3
30-34	3	3	1	2
35-39	1	0	5	0
40-44	5	1	1	2
45-49	1	0	2	3
50-54	1	1	1	0
55-59	1	1	2	2
60-64	1	0	2	2
65-69	1	1	1	1
70-74	0	0	1	0
75-79	0	0	0	0
80+	1	2	1	1
Total	39	23	54	48

Table 47 below is very similar in distribution to the Spring Whaling table, although a substantially lower proportion of females engage in the hunting and processing of walrus and seals. In addition to a slightly higher number of males engaged in this subsistence activity we also note a slightly higher proportion (58 percent) under the age of 30 who will provide a substantial pool of recruitment to sustain this subsistence activity.

Table 47: Point Lay 2010 – Iñupiat Individuals Who Participate in Hunting Marine Mammals by Age and Gender.

Age Recoded into 5 yr. Intervals	Subsistence participation - does individual HH member hunt sea mammals?			
	Yes		No	
	Individual's Gender		Individual's Gender	
	Male	Female	Male	Female
	Count	Count	Count	Count
0-4	0	1	15	9
5-9	1	2	11	6
10-14	3	0	3	6
15-19	13	3	1	10
20-24	6	1	3	5
25-29	2	2	3	4
30-34	3	2	1	3
35-39	3	0	3	0
40-44	4	0	2	3
45-49	2	2	1	1
50-54	0	0	2	1
55-59	3	1	0	2
60-64	1	0	2	2
65-69	2	0	0	2
70-74	0	0	1	0
75-79	0	0	0	0
80+	0	0	2	3
Total	43	14	50	57

Recruitment for subsistence harvests of land mammals appears to be as solid as all the other subsistence activities mentioned previously, in fact it seems that apprenticeship for land mammal hunting occurs at an earlier age than does the more dangerous activities of whaling and marine mammal hunting. Nearly 60 percent of the males who engage in hunting land mammals are under the age of 30.

Table 48: Point Lay 2010 – Iñupiat Individuals Who Participate in Hunting Land Mammals by Age and Gender.

Age Recoded into 5 yr. Intervals	Subsistence participation - does individual HH member hunt land mammals?			
	Yes		No	
	Male	Female	Male	Female
	Count	Count	Count	Count
0-4	1	1	14	9
5-9	4	2	8	6
10-14	3	1	3	5
15-19	10	0	4	13
20-24	4	2	5	4
25-29	4	3	1	3
30-34	3	2	1	3
35-39	3	0	3	0
40-44	4	1	2	2
45-49	2	2	1	1
50-54	1	0	1	1
55-59	1	0	2	3
60-64	1	0	2	2
65-69	2	0	0	2
70-74	0	0	1	0
75-79	0	0	0	0
80+	1	0	1	3
Total	44	14	49	57

To this point fishing is clearly the subsistence activity with the greatest participation (and second only to gathering plants and berries), in addition more than half the participants are under thirty years of age. Fishing is an ongoing and well supported activity and might be one of the subsistence pursuits to actually benefit from climate change.

Table 49: Point Lay 2010 – Iñupiat Individuals Who Participate in Fishing by Age and Gender.

Age Recoded into 5 yr. Intervals	Subsistence participation - does individual HH member fish?			
	Yes		No	
	Male	Female	Male	Female
	Count	Count	Count	Count
0-4	0	1	15	9
5-9	2	3	10	5
10-14	2	1	4	5
15-19	13	4	1	9
20-24	5	3	4	3
25-29	4	3	1	3
30-34	3	3	1	2
35-39	5	0	1	0
40-44	4	1	2	2
45-49	1	2	2	1
50-54	0	1	2	0
55-59	2	1	1	2
60-64	1	2	2	0
65-69	2	0	0	2
70-74	0	0	1	0
75-79	0	0	0	0
80+	1	1	1	2
Total	45	26	48	45

Gathering plants and berries by the nature of the activity encourage the greatest participation, including the involvement of young children. Table 50 below clearly demonstrates the accuracy of these assumptions – gathering is the only subsistence practice where a majority of all Iñupiat, men and women, young and old, participate. In addition, even very young children under the age of four participate, usually in family groups that include parents and grandparents.

Table 50: Point Lay 2010 – Iñupiat Individuals Who Gather Plants & Berries by Age and Gender.

Age Recoded into 5 yr. Intervals	Subsistence participation - does individual HH member pick berries and plants?			
	Yes		No	
	Male	Female	Male	Female
	Count	Count	Count	Count
0-4	6	3	9	7
5-9	10	7	2	1
10-14	6	2	0	4
15-19	10	7	4	6
20-24	4	3	5	3
25-29	2	5	3	1
30-34	3	5	1	0
35-39	3	0	3	0
40-44	5	2	1	1
45-49	2	2	1	1
50-54	1	1	1	0
55-59	3	2	0	1
60-64	2	1	1	1
65-69	2	2	0	0
70-74	0	0	1	0
75-79	0	0	0	0
80+	0	1	2	2
Total	59	43	34	28

While the same core of about 45 male individuals who engage in a wide variety of subsistence pursuits also hunt birds, much fewer females engage in this activity.

Table 51: Point Lay 2010 – Iñupiat Individuals Who Hunt Birds by Age and Gender.

Age Recoded into 5 yr. Intervals	Subsistence participation - does individual HH member hunt birds?			
	Yes		No	
	Individual's Gender		Individual's Gender	
	Male	Female	Male	Female
	Count	Count	Count	Count
0-4	0	1	15	9
5-9	2	2	10	6
10-14	3	1	3	5
15-19	12	1	2	12
20-24	4	2	5	4
25-29	2	2	3	4
30-34	3	2	1	3
35-39	4	0	2	0
40-44	5	1	1	2
45-49	3	2	0	1
50-54	1	0	1	1
55-59	2	1	1	2
60-64	1	0	2	2
65-69	2	0	0	2
70-74	0	0	1	0
75-79	0	0	0	0
80+	1	0	1	3
Total	45	15	48	56

Substantially more Iñupiat females gather bird eggs than do those who hunt birds. For males, the gathering of bird eggs has modest participation rates. However, both genders have majority participation by individuals under the age of thirty.

Table 52: Point Lay 2010 – Iñupiat Individuals Who Gather Bird Eggs by Age and Gender.

Age Recoded into 5 yr. Intervals	Subsistence participation - does individual HH member gather bird eggs?			
	Yes		No	
	Male	Female	Male	Female
	Count	Count	Count	Count
0-4	0	1	15	9
5-9	2	3	10	5
10-14	1	1	5	5
15-19	10	3	4	10
20-24	4	3	5	3
25-29	2	5	3	1
30-34	3	3	1	2
35-39	2	0	4	0
40-44	4	0	2	3
45-49	2	2	1	1
50-54	0	1	2	0
55-59	2	1	1	2
60-64	1	0	2	2
65-69	2	0	0	2
70-74	0	0	1	0
75-79	0	0	0	0
80+	0	0	2	3
Total	35	23	58	48

Given a long history of traditional Iñupiat division of labor, one might anticipate only a small number of men would sew skins or clothes. However, the low female participation rates would seem to be a reason for concern, especially since only one female under the age of 30 sews skins. This subsistence activity would surely be one that elders and others would give a careful scrutiny.

Table 53: Point Lay 2010 – Iñupiat Individuals Who Sew Skins & Clothes by Age and Gender.

Age Recoded into 5 yr. Intervals	Subsistence participation - does individual HH member sew skins and clothes?			
	Yes		No	
	Male	Female	Male	Female
	Count	Count	Count	Count
0-4	0	0	15	10
5-9	0	0	12	8
10-14	1	0	5	6
15-19	0	0	14	13
20-24	0	1	9	5
25-29	0	0	5	6
30-34	0	2	4	3
35-39	0	0	6	0
40-44	0	0	6	3
45-49	1	3	2	0
50-54	0	0	2	1
55-59	0	0	3	3
60-64	0	2	3	0
65-69	1	1	1	1
70-74	0	0	1	0
75-79	0	0	0	0
80+	0	0	2	3
Total	3	9	90	62

In Point Lay only males build sleds and boats. The number of men who engage in sled and boat building is, as one might anticipate, modest when compared to the number of individuals who hunt and fish. However, about half of the men who have the skills (or are learning them) to build these items are under the age of 30. This is certainly a sufficient

pool of recruitment to perpetuate these subsistence skills far into the future. This contrasts dramatically with the activity of sewing skins, whereas both manufacturing skills have low numbers of participants, the sewing of skins seems not to be have taken up by younger members of the community.

Table 54: Point Lay 2010 – Iñupiat Individuals Who Make Sleds & Boats by Age and Gender.

Age Recoded into 5 yr. Intervals	Subsistence participation - does individual hh member make sleds and boats?			
	Yes		No	
	Male	Female	Male	Female
	Count	Count	Count	Count
0-4	0	0	15	10
5-9	1	0	11	8
10-14	1	0	5	6
15-19	6	0	8	13
20-24	1	0	8	6
25-29	1	0	4	6
30-34	1	0	3	5
35-39	2	0	4	0
40-44	2	0	4	3
45-49	1	0	2	3
50-54	0	0	2	1
55-59	1	0	2	3
60-64	1	0	2	2
65-69	2	0	0	2
70-74	0	0	1	0
75-79	0	0	0	0
80+	0	0	2	3
Total	20	0	73	71

Similar to the gathering of plants and berries a majority, over 60 percent, of Iñupiat in Point Lay of almost any age or gender engages in the cooking, processing and sharing of wild foods. The representation of participation at all age levels is a strong demonstration of the continuing vitality of subsistence as an integral and ongoing part of Inupiaq culture.

Table 55: Point Lay 2010 – Iñupiat Individuals Who Share, Cook & Process Wild Foods by Age and Gender.

Age Recoded into 5 yr. Intervals	Subsistence participation - does individual HH member share, cook and process wild foods?			
	Yes		No	
	Individual's Gender		Individual's Gender	
	Male	Female	Male	Female
	Count	Count	Count	Count
0-4	2	2	13	8
5-9	3	1	9	7
10-14	4	1	2	5
15-19	14	8	0	5
20-24	6	5	3	1
25-29	5	5	0	1
30-34	3	4	1	1
35-39	6	0	0	0
40-44	5	1	1	2
45-49	3	3	0	0
50-54	2	1	0	0
55-59	3	2	0	1
60-64	3	2	0	0
65-69	2	1	0	1
70-74	0	0	1	0
75-79	0	0	0	0
80+	2	2	0	1
Total	63	38	30	33

Trapping is an extremely difficult, arduous and potentially dangerous subsistence undertaking. In addition, economic incentives are few with the low price of furs. Finally, the availability of manufactured and commercially available goods and materials that easily substitute for traditional materials provides some explanation at the low participation rates for fur trapping in Point Lay. However, while there are only five male individuals who trap furs three of those are under 30 years of age and potentially provide for the continuity of this occupation for the community.

Table 56: Point Lay 2010 – Iñupiat Individuals Who Trap Furbearers by Age and Gender.

Age Recoded into 5 yr. Intervals	Subsistence participation - does individual HH member trap furbearers?			
	Yes		No	
	Male	Female	Male	Female
	Count	Count	Count	Count
0-4	0	0	15	10
5-9	0	0	12	8
10-14	0	0	6	6
15-19	2	0	12	13
20-24	1	0	8	6
25-29	0	0	5	6
30-34	1	0	3	5
35-39	0	0	6	0
40-44	0	0	6	3
45-49	0	0	3	3
50-54	0	0	2	1
55-59	0	0	3	3
60-64	0	0	3	2
65-69	1	0	1	2
70-74	0	0	1	0
75-79	0	0	0	0
80+	0	0	2	3
Total	5	0	88	71

Clearly there has been a dramatic increase in sharing subsistence foods both within and between communities since 1998. The difference is so dramatic that one wonders if a systematic misinterpretation of the question occurred in 1998. Nevertheless in 2010 almost nine out of ten households shared subsistence foods with other households within the community. This figure represents nearly a 20 percent gain in intra-community sharing within the last seven years. However, the biggest jump during the time interval occurred in sharing with NANA communities where the proportion of sharing has increased nearly four fold since 1998 and more than doubled in the last seven years. Sharing with other North Slope Borough communities has nearly tripled since 1998 and doubled in the last seven years.

Currently 70 percent of the households in Point Lay reciprocate the sharing of subsistence resources with other North Slope communities. This jump in sharing has

occurred despite decreasing travel options and increasing costs of transportation by any means. During the interval between the 2003 and 2010 North Slope Borough Censuses, a number of local airlines retired from flying and this coupled with much higher fuel costs seems to be solid evidence that these increases in sharing have not been facilitated by increased transportation access. Further detailed analysis of this topic is needed but the results certainly indicate expanded inter-community social networks despite (or perhaps because of) difficult economic times.

In addition, perhaps reflective of emigration of North Slope households and/or increased travel, sharing with Anchorage has more than doubled since 2003. Finally, increased sharing has occurred with Fairbanks and other areas within the state. Overall the 2010 Census reveals substantial increases in sharing of subsistence resources both within Point Lay and with other communities all over northern Alaska.

Table 57: Pt. Lay 1998 – 2010 Communities Where Households Say They Share Subsistence Foods.

LOCATION	1998 Yes (64 respondents)	2003 Yes (60 respondents)	2010 YES (42 respondents)
Pt. Lay	22%	65%	85%
Other NSB community	28%	38%	70%
NANA	16%	27%	62%
Anchorage	25%	22%	53%
Fairbanks	6%	3%	12%
Other areas	3%	8%	15%

Along with a substantial increase of sharing both within and between communities is the added effort subsistence activities now require. Slightly over 40 percent of respondents indicated that they had increased the distance they travelled to gain access to subsistence resources. In addition nearly half of the respondents indicated an increase in the number of trips they engaged in to obtain subsistence products. More trips and travelling longer distances have important implications for the finances of Point Lay Iñupiat households. With prices approaching \$8/9 per gallon Point Lay households are now spending a higher proportion of the household’s disposable income in obtaining subsistence resources.

More detailed analysis of these cost of living increases is difficult since we lack a measure of subsistence expenditures from the 2003 NBS survey. Nonetheless, subsequent analysis of the 2010 data set that might involve the presence or absence of marine mammal hunters, cost of subsistence activities, household income and age of household head will all have to be considered in analyzing the factors that contributed to this outcome of increased trips and distance travelled. In addition, a detailed analysis of household income, harvest activities and subsistence costs may prove helpful in anticipating future constraints on disposable household income.

Table 58: Point Lay 2010 Subsistence Use - “During the last five years has number of trips for subsistence activities changed?” & “Has distance for subsistence activities changed?”

	Number of Trips	Distance Traveled
1. Decreased a lot	-	-
2. Decreased somewhat	8%	5%
3. Stayed the same	45%	54%
4. Increased somewhat	29%	15%
5. Increased a lot	19%	26%
Total	100% (38)	100% (39)

In contrast to some other North Slope Borough communities, only 18 percent of Point Lay respondents indicated that they had abandoned former areas of subsistence use. Further research would be recommended into finding those attributes that have led Point Lay hunters to increase the number of trips and distance travelled as the abandonment of traditional use areas appears to play only a minor role.

Table 59: Point Lay 2010 - Subsistence – “Are there areas you used to hunt/fish 5 years ago that you do not use now?”

	2010 Count	2010 Percent
Yes	6	18%
No	28	82%
Total	34	100

Twenty-nine households reported subsistence expenses during the last twelve months. Iñupiat households spend an average of \$8,195 each on subsistence activities, although two households reported no expenses and if one excludes those households from the denominator, the average subsistence costs rises to \$8,802. Over half of the Point Lay households reporting subsistence expenditures spent more than \$4,000. Total cost of subsistence activities for reporting sample Iñupiat households in Point Lay is \$237, 650. Per capita costs run about \$1,400 per Iñupiat person.

Expenditures among Iñupiat households were clearly not normally distributed with about 75 percent of the households spending a sum total of about \$46,000, the other 25 percent (n=8) of the households accounted for \$191,600 of the expenditures. That is, eight Iñupiat households in Point Lay accounted for 80 percent of the total community expenditures on subsistence activities.

Table 60: Point Lay 2010 – Best Estimate of Inupiat Household Income Spent on Subsistence Activities Last 12 Months.

Subsistence Costs in \$'s	Frequency	Valid Percent	Cumulative Percent
0	2	6.9	6.9
200	2	6.9	13.8
250	1	3.4	17.2
300	1	3.4	20.7
500	2	6.9	27.6
1200	1	3.4	31.0
1500	2	6.9	37.9
2000	2	6.9	44.8
2500	1	3.4	48.3
4000	3	10.3	58.6
4400	1	3.4	62.1
5000	1	3.4	65.5
5500	1	3.4	69.0
6500	1	3.4	72.4
9000	1	3.4	75.9
9600	1	3.4	79.3
10000	1	3.4	82.8
12000	1	3.4	86.2
15000	1	3.4	89.7
16000	1	3.4	93.1
60000	2	6.9	100.0
Total	29	100.0	

The health profile for Point Lay below was prepared by Jana McAninch for the Borough Department of Health. One can read more in-depth analysis of her finding in the *North Slope Borough Community Health Analysis* report. Any further questions should be directed to the North Slope Borough Department of Health rather than to any of the authors of this report directly.

#### Point Lay Health Profile

This village health profile provides a brief summary of the results of the 2010 NSB Census. The intent of this profile is to provide individual communities with information on some basic health measures at the village-level in order to guide community health promotion and planning efforts.

At the village-level, some of the small percentages are based on very small numbers of responses, making the estimates less reliable: cells based on fewer than 5 responses are marked. NSB and Alaska estimates are provided for general reference only, and comparisons should be made with caution, as results are not adjusted for differences in the age composition of the populations. In addition, state and national survey methods may vary considerably from that used in the 2010 NSB Census.

Adults:

		Point Lay Household Heads	NSB Household Heads	All Point Lay adults*	All NSB adults*	Alaska adults
General Health	“Very good” or “excellent” general health	48%	44%	52%	46%	56% <sup>1</sup>
	“Fair” to “Poor” general health	12%	20%	10%	16%	13% <sup>2</sup>
Chronic Health Problems	Ever told by a health professional have:					
	Thyroid problems	2%*	6%	2%*	4%	9% (US) <sup>3</sup>
	Diabetes	2%*	7%	2%*	6%	6% <sup>1</sup>
	High Blood Pressure	16%	28%	12%	20%	25% <sup>4</sup>
	High cholesterol	6%*	19%	6%	13%	38% <sup>4</sup>
	Heart disease	4%*	7%	6%	5%	12% (US) <sup>11</sup>
	In the past 12 months, experienced:					
	Daily pain or arthritis that limits activities or requires prescription pain medicine	22%	29%	16%	21%	(ref) <sup>5</sup>
	Frequent (3 or more) or chronic ear infections	12%	5%	8%	4%	
	Chronic breathing problems (such as asthma, emphysema, or a cough that won't go away)	10%	13%	8%	8%	(ref) <sup>6</sup>
Health Insurance	Have health insurance, including IHS eligibility	100%	97%			83% <sup>7</sup>
	Have health insurance, other than IHS eligibility	45%	64%			
Smoking	Smoke tobacco (in any form)	58%	50%	60%	49%	22% <sup>1</sup>
	Of those who smoke:					
	Smoke one or more packs per day	25%	25%			
	Are interested in quitting	82%	71%			
	Have tried to quit in the last 12 months	67%	62%			
	Permit smoking in the house	35%	33%			

	Support a tobacco tax to fund tobacco prevention or cessation programs	34%	53%			
Overweight and Obesity	Overweight (BMI 25-29.9 kg/m <sup>2</sup> , based on self-reported height and weight)	17%	33%			37% <sup>1</sup>
	Obese (BMI 30 kg/m <sup>2</sup> or higher, based on self-reported height and weight)	46%	39%			28% <sup>1</sup>
Physical Activity	Never get 30 minutes of moderate exercise in a day	8%	16%			9% <sup>4</sup>
	Get at least 30 minutes of moderate exercise 5 days per week or more	59%	44%			47% <sup>4</sup>
Sugar-sweetened beverages	On average, drink no soda or other sugar-sweetened beverage per day	25%	26%			53% <sup>8</sup>
	On average, drink two or more sodas or other sugar-sweetened beverage per day	53%	45%			30% <sup>8</sup>
Food security	Times last year when household found it difficult to get the foods they needed to eat healthy meals	51%	35%			
	If yes, because not able to get enough subsistence foods to eat healthy meals	48%	43%			
	If yes, because not able to get enough store foods to eat healthy meals	96%	90%			
	Percent with household members who at times did not have enough to eat	22%	19%			(4-11%) <sup>10</sup>
Safety: Helmet use	Wear a helmet when riding a snowmachine or 4-wheeler (of household heads who ride on snowmachines or 4-wheelers)	3%*	18%			(57%) <sup>9</sup>
Drugs and alcohol	In the past 12 months, felt a household member had been hurt by drugs or alcohol	13%	24%			
	In the past 12 months, felt the health of their community had been hurt by drugs or alcohol					
	Often	44%	57%			
	Sometimes	48%	35%			

\*Includes both household head (survey respondent) and all other household members, as reported by the household head

\*\*Based on cell counts less than five (fewer than five responses)

- 90% of Point Lay adults reported or were reported to be in at least “good” general health. General reported health status among Point Lay adults was the highest among North Slope communities with the exception of Barrow. The difference in

health status among Point Lay adults and that of adults in other North Slope communities overall was not statistically significant, however.

- The prevalence of reported chronic health problems was relatively low in Point Lay, although estimates are based on a very small number of respondents due to the small size of the village, making the estimates less reliable.
- Adults in Point Lay were significantly less likely than adults in other North Slope communities overall to report or be reported to have high blood pressure or high cholesterol but more likely to have frequent or chronic ear infections. Inupiat adults in Point Lay were significantly less likely to report high cholesterol than were Inupiat adults in other North Slope communities overall.
- Smoking rates were high in Point Lay. Looking at all adults and at Inupiat adults only, those living in Point Lay were significantly more likely to smoke than were their counterparts in the other North Slope communities overall. More than 4 out of 5 smokers were interested in quitting.
- Obesity was common among Point Lay household heads, similar to other North Slope villages, but higher than statewide estimates.
- Point Lay household heads were fairly physically active as a group, however. Almost 60% of Point Lay household heads reported getting 30 minutes of moderate physical activity at least 5 days per week on average, and fewer than 1 in 10 reported no days with 30 minutes of moderate physical activity.
- Consumption of sodas and other sugared beverages was high among Point Lay household heads, similar to other North Slope communities, but higher than statewide estimates.
- Food insecurity was not uncommon in Point Lay, similar to other North Slope communities. Half of Point Lay household heads reported difficulty, at times, getting the food needed for healthy meals. Of these, half reported not being able to get enough subsistence foods and almost all reported difficulty getting enough store foods. One in five household heads reported that at times in the last year, a household member did not have enough to eat.
- Helmet use was very low in Point Lay, similar to other North Slope villages.
- A large majority of Point Hope household heads did NOT feel that alcohol or drugs had hurt a member of their own household in the last year. Over 90% felt that the health of their community had been hurt by alcohol or drugs in the past year, however.

Children (under age 18):

		Point Lay Children	NSB Children	Alaska children
General Health	“Very good” or “excellent” general health	70%	63%	89% <sup>11</sup>
Chronic Health Problems	In the past 12 months, experienced:			

	Frequent (3 or more) or chronic ear infections	15%	19%	5% <sup>11</sup>
	Chronic breathing problems (such as asthma, emphysema, or a cough that won't go away)	1%*	5%	(5-6%) <sup>6,11</sup>
Teen tobacco Smoking (ages 14-18)**	Smoke tobacco (in any form)	15%	16%	Not comparable

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 and is not comparable to anonymous self-administered surveys used to estimate teen smoking rates statewide and nationally

- Almost all children in Point Lay were reported to be in at least “good” general health. The percent of children reported to have “very good” to “excellent” health was similar to other North Slope communities overall but still lower than the statewide estimate.
- The reported prevalence of breathing problems such as asthma or chronic cough was very low among Point Lay children.
- Reported teen smoking prevalence in Point Lay was similar to that in the NSB overall.

#### Iñupiaq Language Use:

Table 62 below indicates, by proportion, changes in the primary language spoken in Iñupiat homes from 1998 until 2010. It is unclear whether the 1998 sample frequencies included Iñupiat and non-Iñupiat households so the comparisons in this analysis on the next three tables will focus on changes between 2003 and 2010.<sup>2</sup> Although the numbers are small there seems to be a slight increase in homes that speak mostly Iñupiaq between 2003 (2.4 percent) and 2010 (5.1 percent). In addition, the proportion of households that speak both English and Iñupiaq has remained constant during the seven-year interval between Censuses. Given these findings, and in contrast to some other North Slope communities, it appears that Point Lay is sustaining its proportion of Iñupiaq speakers among household head respondents. However, as we shall see, overall fluency within the entire population is on the decline.

<sup>2</sup> The 2003 NSB Economic Report and Census Profile tables on this variable reported for all the households (i.e., all ethnicities) in the community. Additional analysis was completed on the 2003 SPSS file to select only Inupiat households for a comparison with the 2010 results.

Table 61: Point Lay 1998 -2010 Primary Language Spoken In Iñupiat Households.

LANGUAGE USED	1998 Number	1998 Percent	2003 Number	2003 Percent	2010 Count	2010 Percent
Iñupiaq mostly	2	3.8%	1	2.4%	2	5.1%
Both English & Iñupiaq	15	28.8%	17	41.5%	16	41%
English mostly	35	67.4%	23	56.1%	21	53.8%
Total	52	100%	41	100%	39	100%

The conclusions reached in the preceding paragraph are reinforced by the results in Table 62 below. Monolingual English speakers have remained fairly constant (within error terms) and the number of households with fluent Iñupiaq speakers has also remained fairly constant.

Table 62: Point Lay 2003 – 2010 – “How Many Household Members Speak Iñupiaq Fluently?”

MEMBERS OF HOUSEHOLD	2003 Count	2003 Percent	2010 Count	2010 Percent
0	18	43.9%	20	43%
1	7	17.1%	14	36%
2	10	24.4%	3	17%
3	1	2.4%	1	2%
4	3	7.3%	1	2%
5	1	2.4%	-	-
6	1	2.4%	-	-
Total	41	100%	39	100%

There seems to be a substantial decrease in the number of individuals fluent in Iñupiaq (regardless of speaking preference) between 2003 and 2010. The aggregated proportion of the first three rows show an erosion from about 18.2 percent in 2003 to 9.8 percent in 2010. In support of this gradual loss of fluency in Iñupiaq, the percentage aggregations of the last six rows, which indicate minimal fluency, also indicates a substantial increase from two-thirds (65 percent) in 2003 to three-fourths (74 percent) in 2010 of Iñupiat speaking with minimal fluency.

Table 63: Point Lay 2003 – 2010 Inupiat Household Members Competency in Iñupiaq.

COMPETENCY	2003 Number	2003 Percent	2010 Number	2010 Percent
Speaks Fluently & prefers Iñupiaq	20	11%	8	4.9%
Speaks Fluently & prefers English	9	5%	8	4.9%
Speaks Fluently but doesn't prefer	4	2.2%	-	
Speaks with difficulty	4	2.2%	9	5.5%
Understands well & speaks enough	14	7.7%	10	6.1%
Understand well but hardly speaks	12	6.6%	7	4.3%
Understands some & speaks enough	16	8.8%	9	5.5%
Understands simple questions & speaks a little	20	11%	30	18.4%
Understands simple questions but hardly speaks	28	15.5%	22	13.5%
Understands two dozen words	14	7.7%	9	5.5%
Understands 5 or 6 words	18	9.9%	30	18.4%
Understands only a few words	22	12.2%	21	12.9%
Total	181	100.0%	163	100%

Table 64 below reveals dramatic changes in the number of the fluent Iñupiaq speakers in Point Lay. In 2003 there were 33 fluent speakers 36 years of age and older. In 2010 this number drops to 24, proportionally a decrease of more than a quarter. Regardless, the number of fluent Iñupiaq speakers is virtually non-existent both in 2003 (1 speaker) and 2010 (2). All these tables paint a very pessimistic picture of the sustainability of traditional language in Point Lay without some considerable intervention (such as having grandparents who are fluent Iñupiaq as the sole staff at day care centers and early grades of school).

Table 64: Point Lay 2010 - Iñupiat Individuals' Inupiaq Competency by Age Category.

Iñupiaq fluency - how fluently does individual HH member speak Iñupiaq?	Recode of Individual's Age into Groups for Language Competency Comparison					
	0-2	3-15	16-35	36-60	61+	Total
	Count	Count	Count	Count	Count	Count
Speaks Iñupiaq fluently & prefers this language	0	0	1	4	2	7
Speaks Iñupiaq fluently but prefers another language	0	0	3	3	2	8
Speaks Iñupiaq but with difficulty or with minor flaws	0	2	4	3	0	9
Understands Iñupiaq well & speaks enough	0	1	1	5	2	9
Understands Iñupiaq well but hardly speaks it	1	1	4	1	0	7
Understands some Iñupiaq conversations & speaks enough	0	2	3	2	0	7
Understands simple questions and directions, speaks a little	1	13	12	4	0	30
Understands simple questions and directions but hardly speaks any	0	11	7	2	1	21
Understands at least two-dozen Iñupiaq words.	2	1	4	2	0	9
Understands at least five or six Iñupiaq words	6	7	13	4	0	30
Does not understand more than a few Iñupiaq words.	3	9	8	0	1	21
Total	13	47	60	30	8	158

Schools:

A series of questions regarding the effectiveness of the North Slope Borough schools in each community were asked of heads of households to ascertain their perception of the job being done. The questions addressed the level of satisfaction (or dissatisfaction) individual household heads felt toward major areas that the North Borough School District has emphasized recently. The areas included the textbooks currently being used in the schools, the effectiveness of computers that have been assigned to each student for use in school work, the extent to which students are being prepared to use technology in the schools, whether the subjects and classes taught prepare students for life after school, and an assessment of the quality of instruction provided by the teachers. Chart 6 and Table 65 below reflect household heads in Point Lay assessment of the effectiveness of the schools in the community in these areas.

Chart 6: Point Lay 2010 – Household Head’s Satisfaction with Attributes of Point Lay Schools.

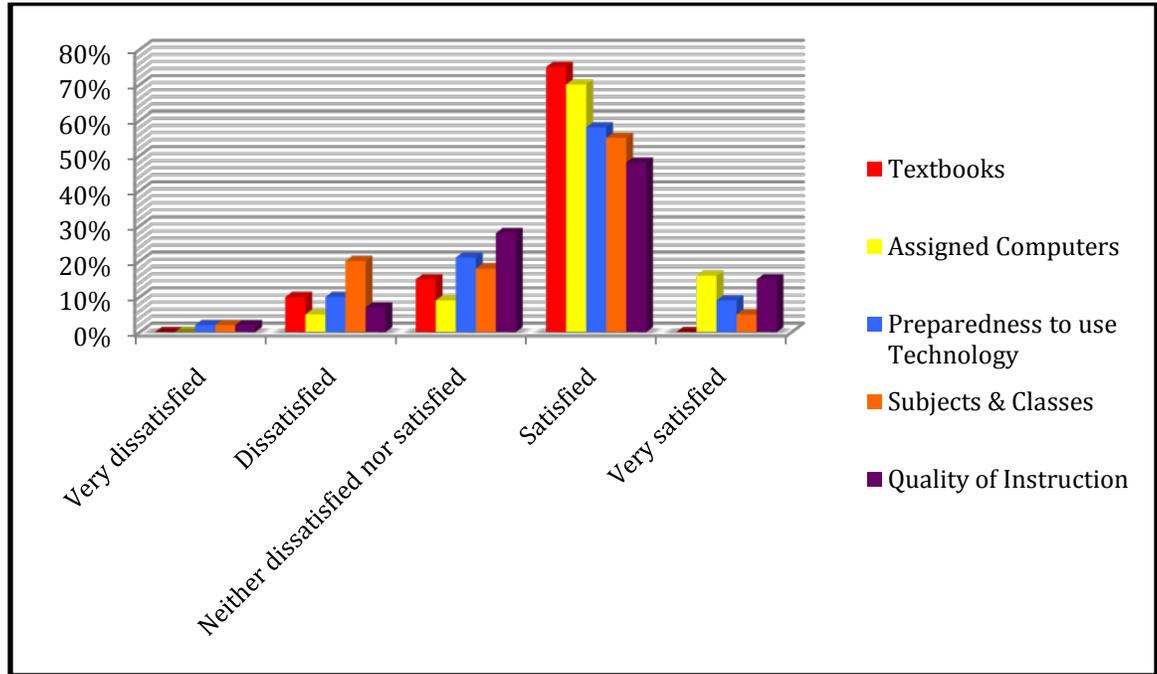


Table 65: Point Lay 2010 – Household Head’s Satisfaction with Attributes of Point Lay Schools.

Household Head Opinions about School Attributes.	Textbooks	Assigned Computers	Preparedness to use Technology	Subjects & Classes	Quality of Instruction
Very dissatisfied	0%	0%	2%	2%	2%
Dissatisfied	10%	5%	10%	20%	7%
Neither dissatisfied nor satisfied	15%	9%	21%	18%	28%
Satisfied	75%	70%	58%	55%	48%
Very satisfied	0%	16%	9%	5%	15%
Total	100%	100%	100%	100%	100%

In general, parents in Point Lay thought that students needed to have more homework. The proportion of this opinion increased as one moved from Elementary (23 percent) to High School (42 percent). Only very small proportions of parents, at any level, advocated less homework.

Table 66: Point Lay 2010 Household Head’s Opinions about the Amount of Homework.

Opinions About Amount of Homework	Elementary School	Middle School	High School
1. No homework	0%	0%	0%
2. Less homework	5%	3%	8%
3. About the same amount	72%	56%	50%
4. More homework	21%	38%	32%
5. A lot more homework	2%	3%	10%
Total	100% (42)	100% (39)	100% (40)

Numbers in Parenthesis represent sample size.

In Point Lay despite small sample sizes, parental opinions were dramatically positive at all levels about their child’s involvement in school. With the exception of Elementary School (at 64 percent) more than nine out of ten parents felt there was a positive connection between their children and the school they attended.

Table 67: Point Lay 2010 - Household Head’s Opinions about Child’s Involvement in School.

Child’s Connectedness & Involvement in School.	Elementary School	Middle School	High School
1. Very disconnected	0%	0%	0%
2. Somewhat disconnected	10%	0%	0%
3. Equally disconnected/connected	26%	0%	8%
4. Somewhat connected	32%	63%	42%
5. Very connected	32%	37%	50%
Total	100% (19)	100% (8)	100% (12)

Numbers in Parenthesis represent sample size.

Nearly every household head in Point Lay thought that the authority of elders was respected to some extent (94 percent). A smaller proportion (42percent), less than a majority, thought the authority of principals was at least somewhat respected. Note, however, that nearly eight of ten respondents felt that elders were “highly respected”; in contrast not one respondent felt the same level of respect obtained for principals.

Table 68: Point Lay 2010 - Household Head’s Rating of Authority and Respect of Principal and Elders in the Community.

Rating of Authority & Respect of Principal and Elders.	Authority of Principal	Authority of Elders
1. Substantially disrespected	16%	0%
2. Somewhat disrespected	20%	4%
3. Tolerated	22%	2%
4. Somewhat respectful	42%	19%
5. Highly respected	0%	75%
Total	100% (45)	100% (65)

Numbers in Parenthesis represent sample size.

In Point Lay there seem to be four major reasons accounting for the majority of school dropouts. Having a baby had the highest proportional response, closely followed by

drug and alcohol problems. Both these causes were cited by a majority of respondents. Two other reasons, “Bored with School” and “Behind in Credits” had response rates over 40 percent.

Table 69: Point Lay 2010 – “Why during the last two years, did NSB students that you knew leave school without graduating?”

Reasons for students leaving school.	Yes	No	Sample Size
Illness	3%	97%	33
Bored with School	43.8%	56.2%	32
Behind in Credits	46.9%	53.1%	32
Drug/alcohol Problems	54.8%	45.2%	31
Needed to work	25%	75%	32
Had a baby	56.3%	43.7%	32
Kicked out of School	15.6%	84.4%	32

Reflecting earlier opinions, see Chart 6 above, where more than one in five Point Lay respondents were dissatisfied with the quality and range of subjects offered in their schools, three quarters of Point Lay respondents felt that offering different courses and/or more activities, was the best solution to the dropout rate. Significantly about a third of respondents also advocated providing attendance incentives

Table 70: Point Lay 2010 – “What do you think would be the best two strategies to improve student attendance?”

Strategies to Improve Student Attendance	Strategy 1	Strategy 2	Total Percent
Stronger penalties for truancy citations	10.4%	6.3%	16.9%
Offer different courses	20.8%	22.9%	41.7%
Anti-bullying programs	6.3%	6.3%	12.6%
Provide attendance incentives	16.7%	18.8%	35.5%
More activities	39.6%	35.4%	75%
Other (specify)	6.3%	10%	16.3%
Total	100% (48)	100%(48)	

More than seven out of ten Point Lay respondents felt that their community schools, at a minimum, have “somewhat prepared” students for life after High School and more than a quarter of respondents felt that students were well prepared to lead productive lives after High School.

Table 71: Point Lay 2010 – “Do you think the NSB schools prepare students for life after high school?”

Do NSB Schools Prepare Students for Life After High School?	Frequency	Percent	Valid Percent	Cumulative Percent
1. Not at all prepared	5	10.0	10.4	10.4
2. Somewhat unprepared	9	18.0	18.8	29.2
3. Somewhat prepared	21	42.0	43.8	72.9
4. Prepared	10	20.0	20.8	93.8
5. Exceptionally prepared	3	6.0	6.3	100.0
Total Valid Responses	48	96.0	100.0	
Not Applicable	1	2.0		
Missing Information	1	2.0		
Total Missing	2	4.0		
Total Responses	50	100.0		

Perceptions about Changes in the Community:

Table 72: Point Lay 2010 – Perceptions of Change in the Community and Environment.

	Decrease d a lot	Decreased somewhat	Stayed the same	Increase d somewh at	Increase d a lot
Amount of Fish/Game (44)	7%	36%	48%	9%	0%
Number of things buy (48)	21%	40%	31%	8%	0%
Number of Good Jobs (46)	0%	17%	65%	17%	0%
Amount drinking & violence (45)	4%	20%	47%	24%	4%
Number of non-Inupiat (48)	0%	2%	75%	23%	0%
Quality of Teachers (44)	7%	14%	57%	23%	0%
Support from Others (49)	2%	8%	51%	35%	4%
Opportunity to go Whaling (42)	0%	0%	10%	31%	60%
Opportunity to Hunt Marine Mammals (40)	0%	5%	65%	25%	5%
Opportunity to Hunt Land Mammals (41)	5%	22%	49%	20%	5%

Number in parenthesis is sample response size.

In 2010 (see Table74 below) the most striking attitude about change in Point Lay was the enormous increase in the opportunity to go whaling. In addition, respondents are optimistic in their assessment of the increase in community support that they receive.

Pessimism and optimism balance out on assessments of the increase or decrease in drinking and violence within the community. Among at least one segment of the population there was some negative sentiment about their ability to buy a variety of goods within their community. Several topics, including number of good jobs, opportunity to hunt marine and land mammals and the number of non-Iñupiat within the community, all indicate substantial stability of opinion as high proportions of respondents indicate these topics have “stayed the same”.

Chart 7: Point Lay 2010 – Perceptions of Change in the Community and Environment.

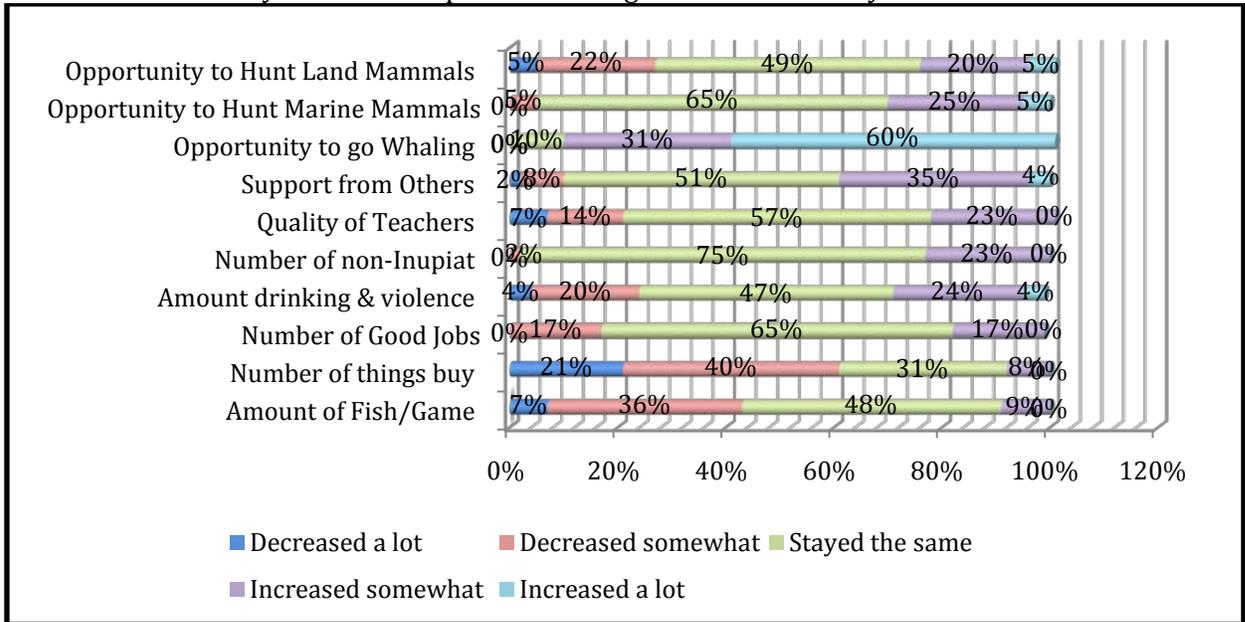
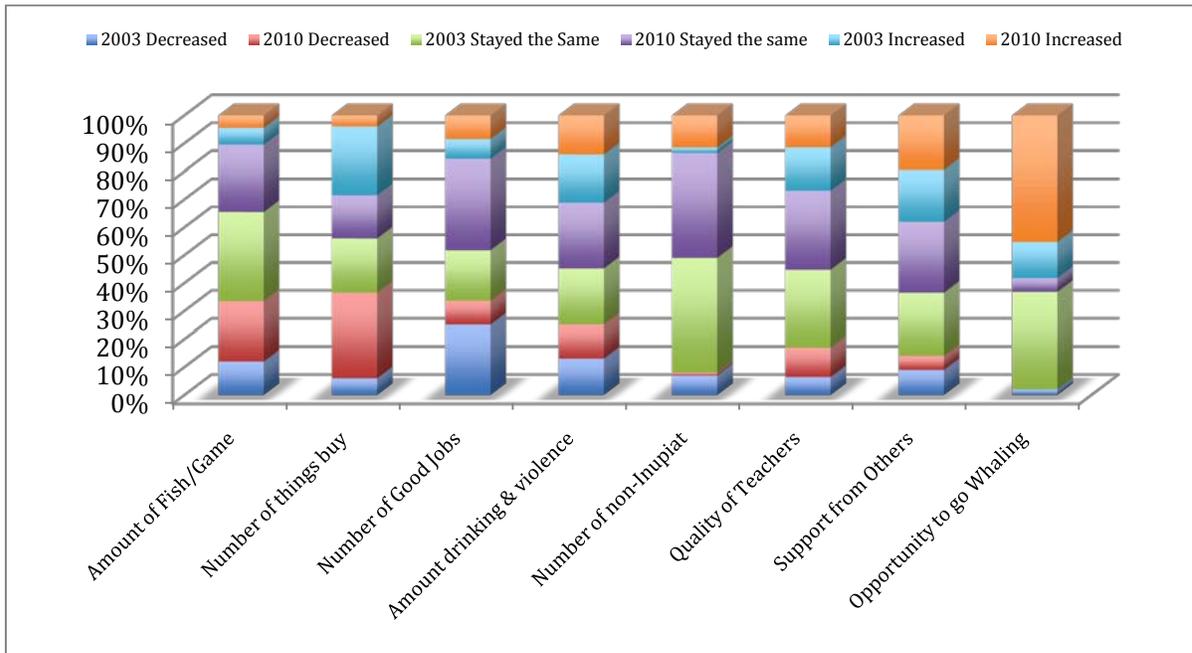


Table 73: Point Lay Community Perception of Change 2003 and 2010.

Perception of Change	2003 Decreased	2010 Decreased	2003 Stayed the Same	2010 Stayed the same	2003 Increased	2010 Increased
Amount of Fish/Game	24%	43%	64%	48%	12%	9%
Number of things buy	12%	61%	39%	31%	49%	8%
Number of Good Jobs	50%	17%	36%	65%	14%	17%
Amount drinking & violence	26%	24%	40%	47%	34%	28%
Number of non-Iñupiat	14%	2%	82%	75%	4%	23%
Quality of Teachers	13%	21%	56%	57%	31%	23%
Support from Others	18%	10%	45%	51%	37%	39%
Opportunity to go Whaling	4%	0%	70%	10%	26%	91%

Comparisons with attitudes between 2003 and 2010 indicate some significant contrasts. Respondents in 2010 were very much more pessimistic in their ability to hunt fish and game and in the variety of goods available to purchase within their community. In addition, in 2010 respondents were of the opinion that there had been a significant increase in non-Iñupiat in the seven years since the last NSB survey. Finally, as noted above, there has been a tremendous resurgence in optimism about one’s opportunity to go whaling.

Chart 8: Point Lay Community Perception of Change 2003 and 2010.



Voting:

In 2010 the number questions on voting behavior was substantially increased. Clearly there has been a proportional decrease in registration and voting behavior in Point Lay between 2003 and 2010. Nevertheless the 2010 results seem to indicate high levels of participation, in the 70-80 percent range, for adults within the community. For 2010 there does seem to be a slight, but noticeable, increased turnout for State and National elections in contrast to local and regional elections.

Table 74: Point Lay 2010 – Voting Behavior & Selective Comparisons with 2003.

Voting Behavior	Yes 2003	Yes 2010
Are you a registered voter in the North Slope Borough?	94%	86%
Did you vote in the last Borough election?	-	60%
Did you vote in the last City election?	-	44%
Did you vote in the last State election?	86%	67%
Did you vote in the last National election?	-	70%

Iñupiat registration to vote in the NSB seems comparable by gender, however, Caucasian females, by raw count, are significantly less likely to register when compared to Caucasian males. Iñupiat voters, even when controlling for the smaller sample of non-Iñupiat, vote at much higher proportions across all levels of government than do other ethnicities in Point Lay. In addition, Iñupiat voters although they register at rates higher than their actual voting behavior, tend to vote in the same proportion across all elections.

Table 75: Point Lay 2010: Household Head's Voting Behavior by Gender and Ethnicity.

		Iñupiat		Caucasian		Other	
		Male	Female	Male	Female	Male	Female
		Count	Count	Count	Count	Count	Count
Voting - Are you a registered voter in the NSB?	Yes	21	17	2	1	1	0
	No	1	0	1	5	0	0
Voting - Did you vote in the last Borough election?	Yes	15	13	1	0	0	0
	No	7	4	2	6	1	0
Voting - Did you vote in the last City election?	Yes	12	8	1	0	0	0
	No	10	9	2	6	1	0
Voting - Did you vote in the last State election?	Yes	14	14	2	0	1	0
	No	7	2	1	6	0	0
Voting - Did you vote in the last National election?	Yes	16	12	2	3	1	0
	No	6	5	1	3	0	0