PROPOSALS 38, 39, 40 & 41 5 AAC 99.015 Joint Board Nonsubsistence Areas

Prepared for
Alaska Joint Board of Fisheries & Game
October 2013 RC 6

### Proposals 38, 39, 40, and 41

Proposal 38: repeal current five nonsubsistence areas.

Proposal 39: reduce size of Fairbanks Nonsubsistence Area based on Fortymile caribou herd range.

Proposal 40: create a Kodiak nonsubsistence area.

Proposal 41: create a Bethel nonsubsistence area.

Department Recommendations: Neutral.

### **State Statute**

### AS 16.05.258(c):

- "The boards [of Fisheries and Game], acting jointly, shall identify by regulation the boundaries of nonsubsistence areas."
- "A nonsubsistence area is an area or community where dependence upon subsistence is not a principal characteristic of the economy, culture, and way of life of the area or community."
- "In determining whether dependence upon subsistence is a principal characteristic of the economy, culture, and way of life of an area or community under this subsection, the boards shall jointly consider the relative importance of subsistence in the context of the totality of the following [12] socio-economic characteristics of the area or community."

### Effect of Proposals

- Repeal or change areas:
  - Individual boards could then consider proposals for subsistence hunting and fishing in these areas, including making customary and traditional use (C&T) determinations and findings of amounts reasonably necessary for subsistence (ANS).
- Create areas:
  - Subsistence hunting and fishing would not be permitted within the nonsubsistence area.
  - Current subsistence fishing and hunting regulations would need to be repealed.
  - Hunting could continue under general seasons.
  - Board of Fisheries could consider personal use fisheries.

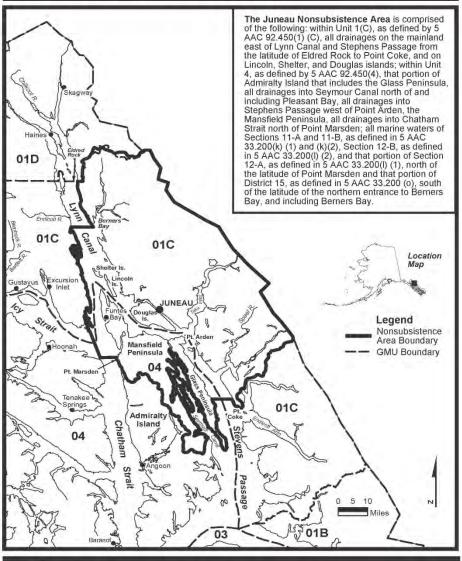
## Joint Board Steps

- Joint Board reviews department report (RC 3) and other information (such as public comments) to determine if relevant changes relative to 12 factors have occurred in areas addressed in proposals.
  - If yes, the Joint Board should evaluate the new information to determine if the determination of whether subsistence is a principal characteristic of the economy, culture, and way of life of area under review should be changed.
  - If no relevant changes have occurred, the Joint Board may take no action or vote to not adopt a proposal.

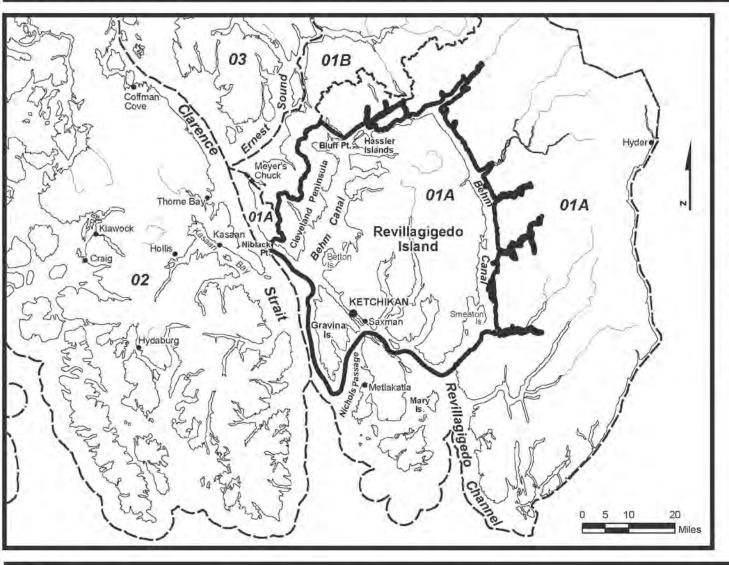
## Proposal 38

Eliminate all current nonsubsistence areas.

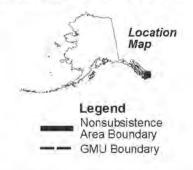
#### Juneau Nonsubsistence Area



### Ketchikan Nonsubsistence Area

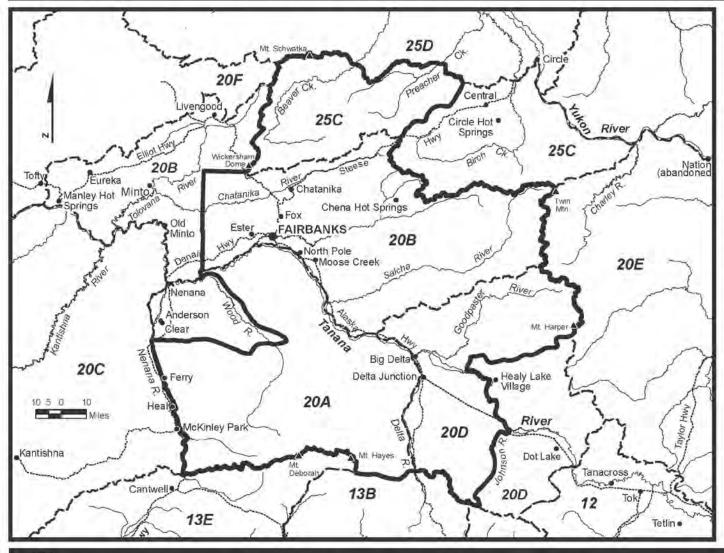


The Ketchikan Nonsubsistence Area is comprised of the following: within Unit 1(A), as defined in 5 AAC 92.450(1) (A), all drainages of the Cleveland Peninsula between Niblack Point and Bluff Point, Revillagigedo, Gravina, Pennock, Smeaton, Bold, Betton, and Hassler Islands: all marine waters of Sections 1-C. as defined by 5 AAC 33.200(a) (3), 1-D, as defined by 5 AAC 33.200(a) (4), 1-E, as defined by 5 AAC 33.200(a) (5), that portion of Section 1-F, as defined by 5 AAC 33.200(a) (6), north of the latitude of the southernmost tip of Mary Island and within one mile of the mainland and the Gravina and Revillagigedo Island shorelines; and that portion of District 2, as defined by 5 AAC 33.200(b), within one mile of the Cleveland Peninsula shoreline and east of the longitude of Niblack Point.





### Fairbanks Nonsubsistence Area



The Fairbanks Nonsubsistence Area is comprised of the following: within Unit 20(A), as defined by 5 AAC 92.450(20) (A), east of the Wood River drainage and south of the Rex Trail but including the upper Wood River drainage south of its confluence with Chicken Creek: within Unit 20(B), as defined by 5 AAC 92.450(20) (B), the North Star Borough and that portion of the Washington Creek drainage east of the Elliot Highway; within Unit 20(D) as defined by 5 AAC 92.450(20) (D), west of the Tanana River between its confluence with the Johnson and Delta Rivers, west of the east bank of the Johnson River, and north and west of the Volkmar drainage, including the Goodpaster River drainage; and within Unit 25(C), as defined by 5 AAC 92.450(25) (C), the Preacher and Beaver Creek drainages.

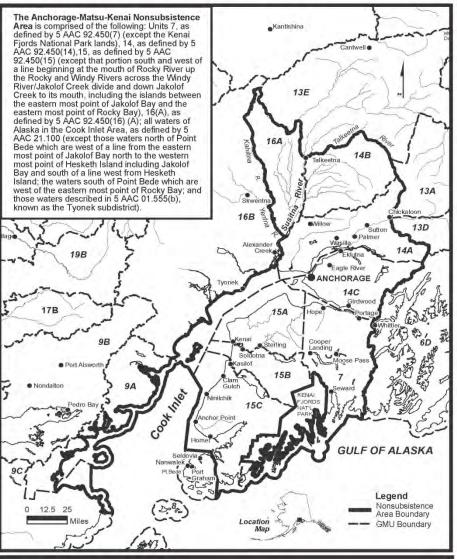




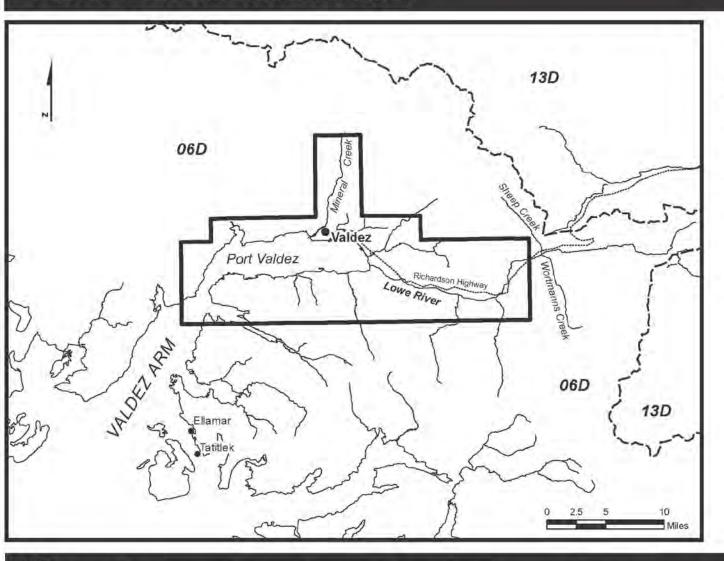
Alaska Department of Fish and Game - Division of Subsistence and Boards

September 2007

#### Anchorage Nonsubsistence Area

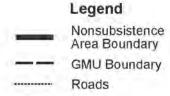


### Valdez Nonsubsistence Area



The Valdez Nonsubsistence Area is comprised of the following: within Unit 6(D), as defined by 5 AAC 92.450(6) (D), and all waters of Alaska in the Prince William Sound Area as defined by 5 AAC 24.100, within the March 1993 Valdez City limits.







Alaska Department of Fish and Game - Division of Subsistence and Boards

September 2007

Figure 2.2-1. Population of Nonsubsistence Areas and Other Alaska Areas, 1960 - 2010

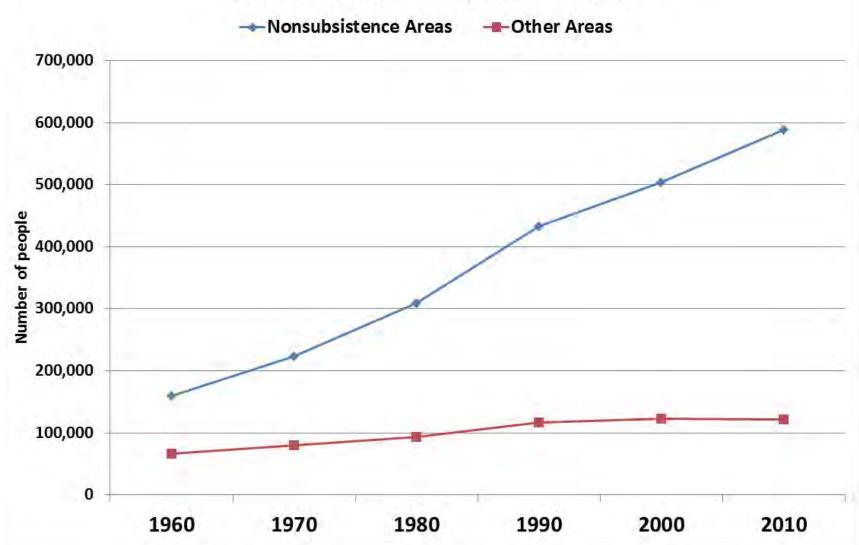


Figure 2.2-3. Change in Population, 2010 Compared to 1990

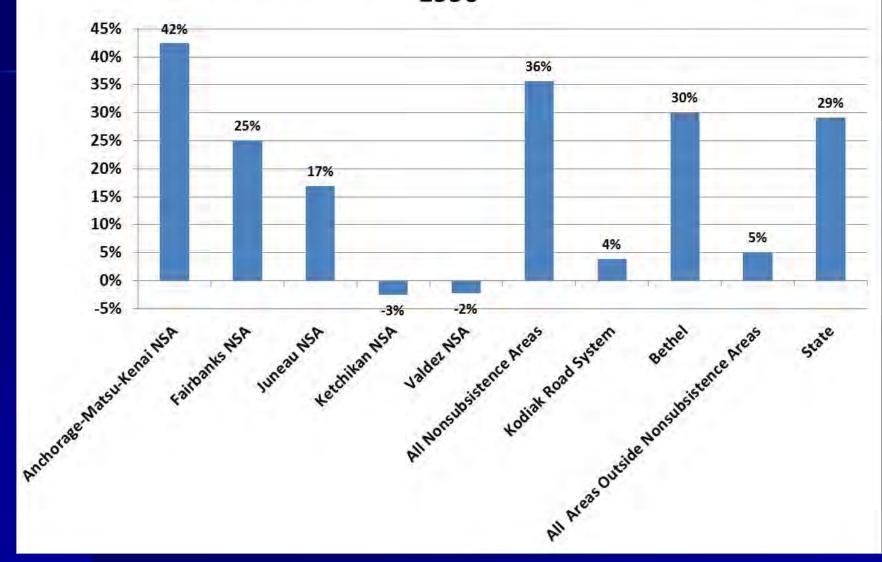


Figure 2.3-1. Per capita income by census area, 2007-2011 annual average

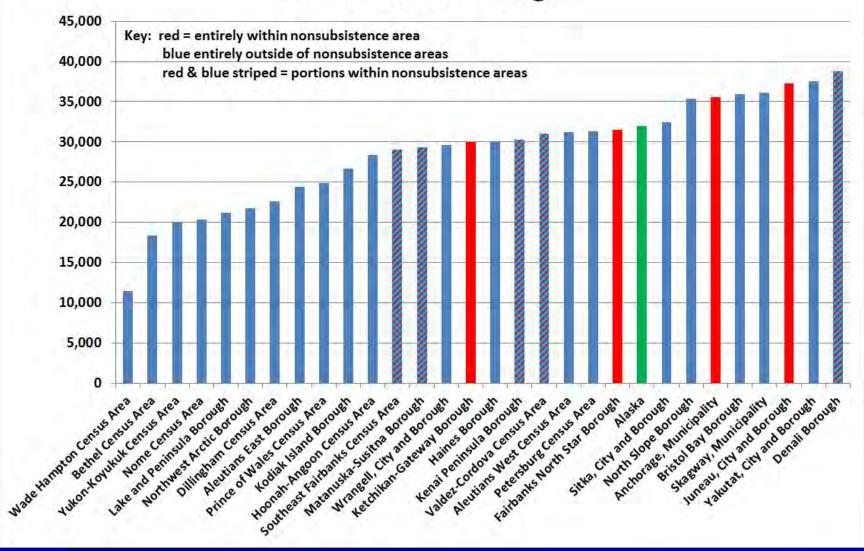


Figure 2.3-3. Percentage of population living below poverty threshold, 1989 and annual average 2007-2011

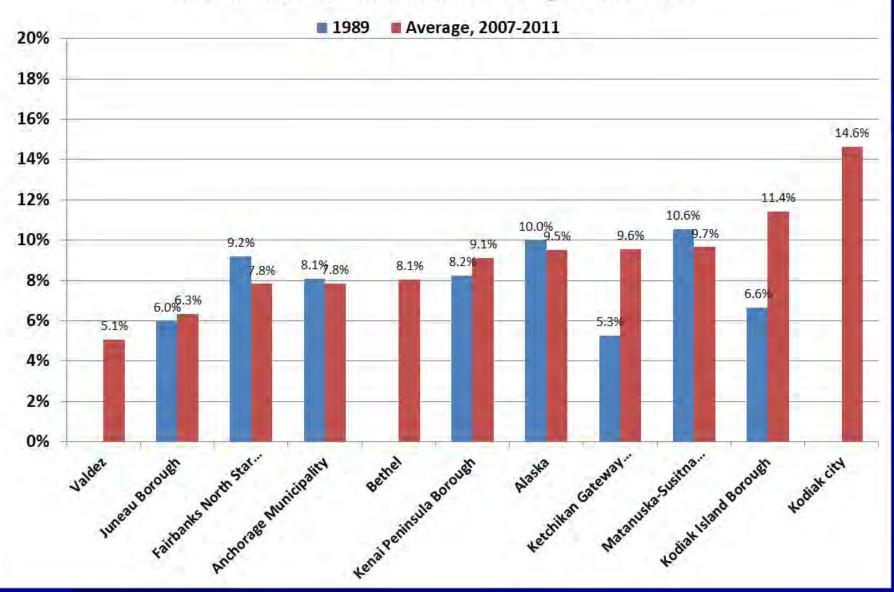
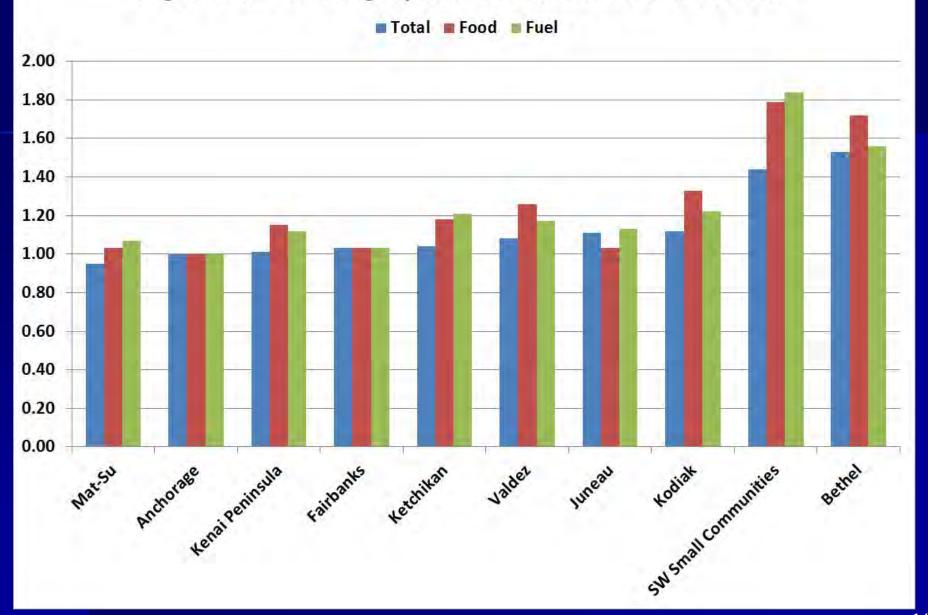
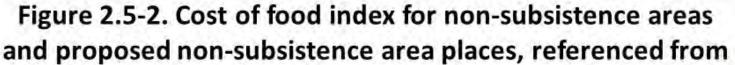


Figure 2.5-1. Geographic cost differentials in 2008





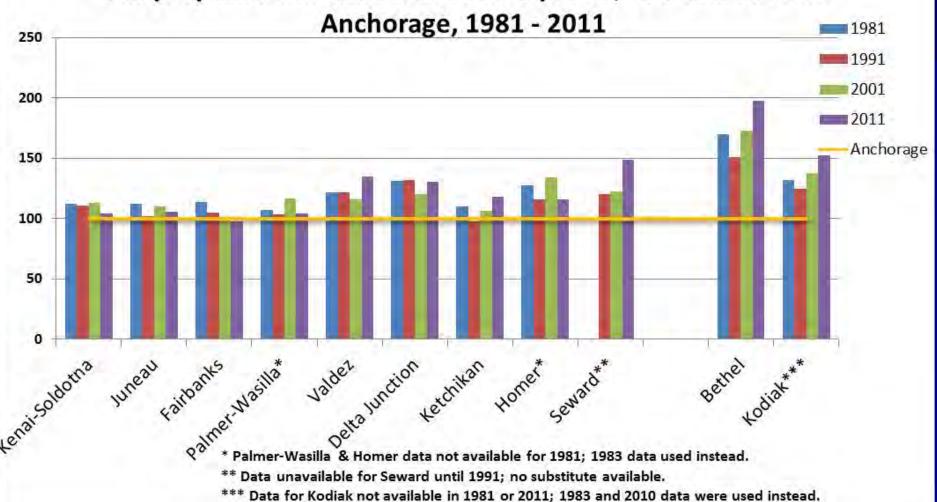
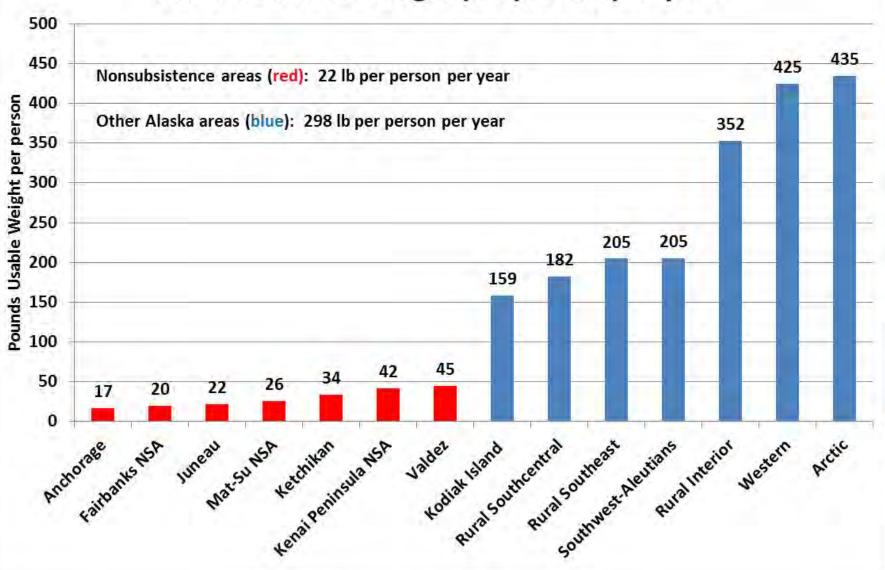
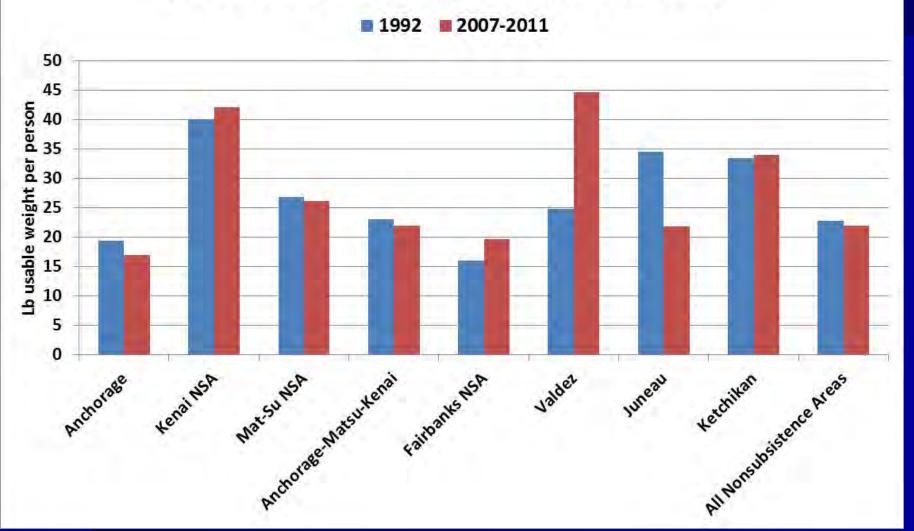


Figure 2.6-1. Wild food harvests in Alaska by area - 2011: Ib usable weight per person per year



# Estimated harvests of fish and wildlife resources, pounds usable weight per person, Alaska nonsubsistence areas, 1992 and 2007-2011



# Figure 2.6-2. Percentage of average American consumption of meat, fish, and poultry produced by fish and wildlife harvests

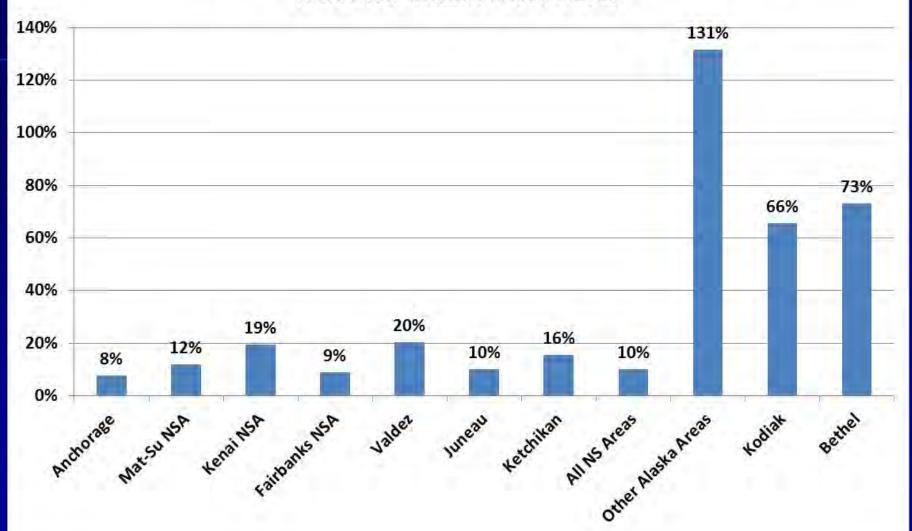


Figure 2.6-3. Percentage of protein requirements produced by fish and wildlife harvests

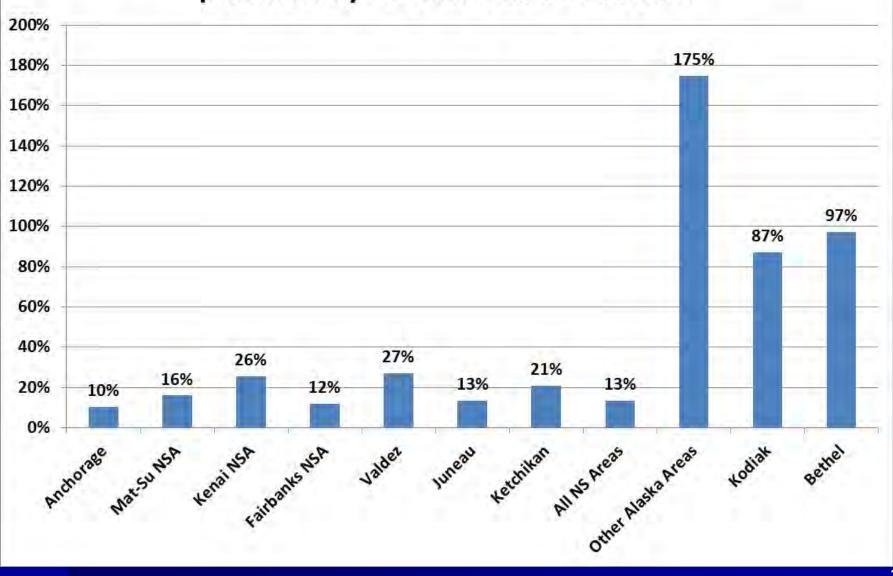
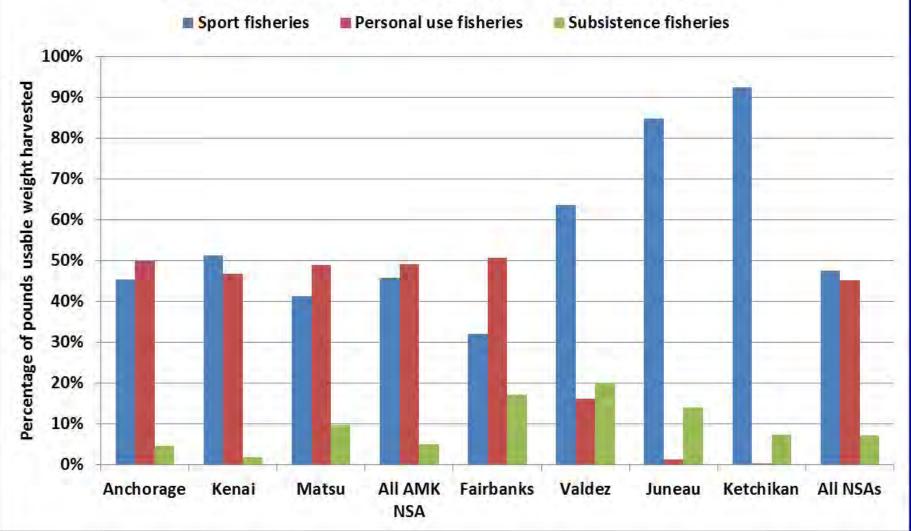
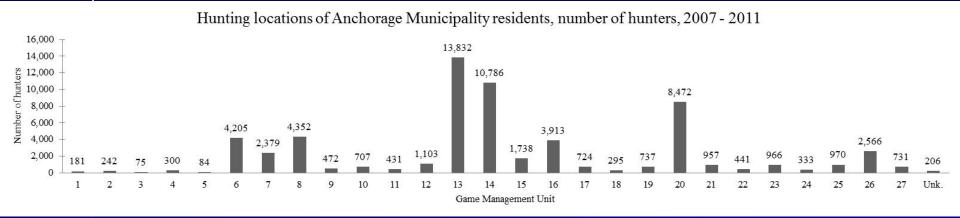


Figure 2.5-7. Salmon harvest for home use by type of fishery, residents of nonsubsistence areas, 5-year average 2007-2011, pounds usable weight



## Figure 3.1-16. Total hunters by GMU, Anchorage Municipality residents, 2007–2011



## Proposal 38 Summary

 Proposal 38: eliminate all current nonsubsistence areas.

Department Recommendation: Neutral.

# Have relevant changes relative to 12 factors occurred in area addressed in proposal?

Have these changes altered the determination of whether subsistence is a principal characteristic of the economy, culture, and way of life of the area addressed in the proposal?

Take no action or fail proposal.

Yes

Change the status of the area.

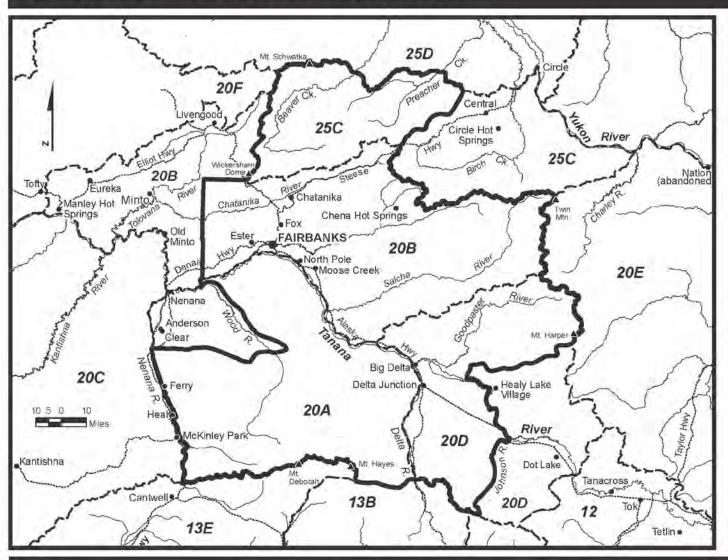
Take no action or fail proposal.

## Proposal 39

Reduce size of Fairbanks Nonsubsistence
 Area based on Fortymile caribou herd range.

Department Recommendation: Neutral.

#### Fairbanks Nonsubsistence Area



The Fairbanks Nonsubsistence Area is comprised of the following: within Unit 20(A), as defined by 5 AAC 92.450(20) (A), east of the Wood River drainage and south of the Rex Trail but including the upper Wood River drainage south of its confluence with Chicken Creek; within Unit 20(B), as defined by 5 AAC 92.450(20) (B), the North Star Borough and that portion of the Washington Creek drainage east of the Elliot Highway; within Unit 20(D) as defined by 5 AAC 92.450(20) (D). west of the Tanana River between its confluence with the Johnson and Delta Rivers, west of the east bank of the Johnson River, and north and west of the Volkmar drainage, including the Goodpaster River drainage; and within Unit 25(C), as defined by 5 AAC 92.450(25) (C), the Preacher and Beaver Creek drainages.



### Considerations

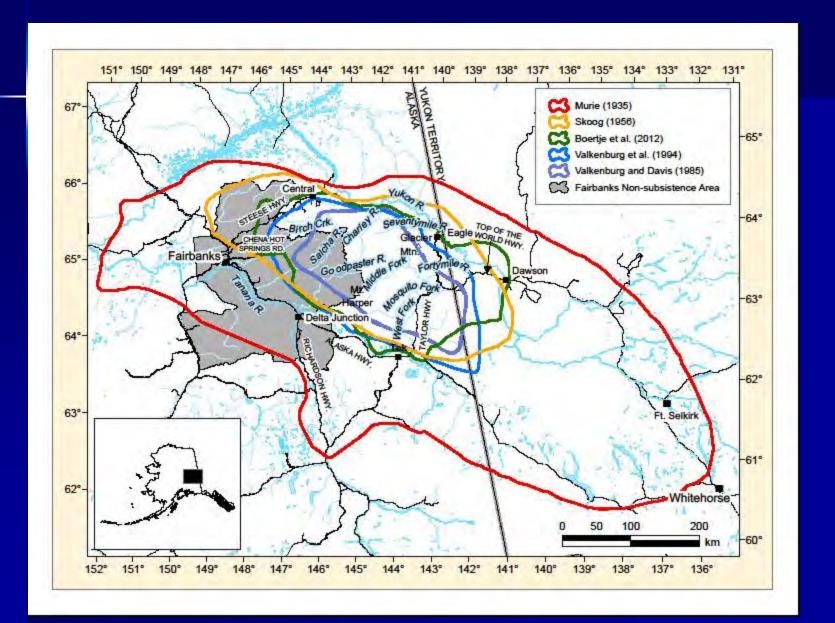
Details in department written report "Report on Proposed Changes to Nonsubsistence Areas" (RC 3).

- Provides background on Fortymile caribou herd population and ranges.
- Notes that range of wildlife populations and fish stocks with C&T uses is not one of the 12 factors.
- Notes that size and range of the herd are dynamic.
- Notes there is a positive C&T finding for this herd and ANS of 350–400 caribou.

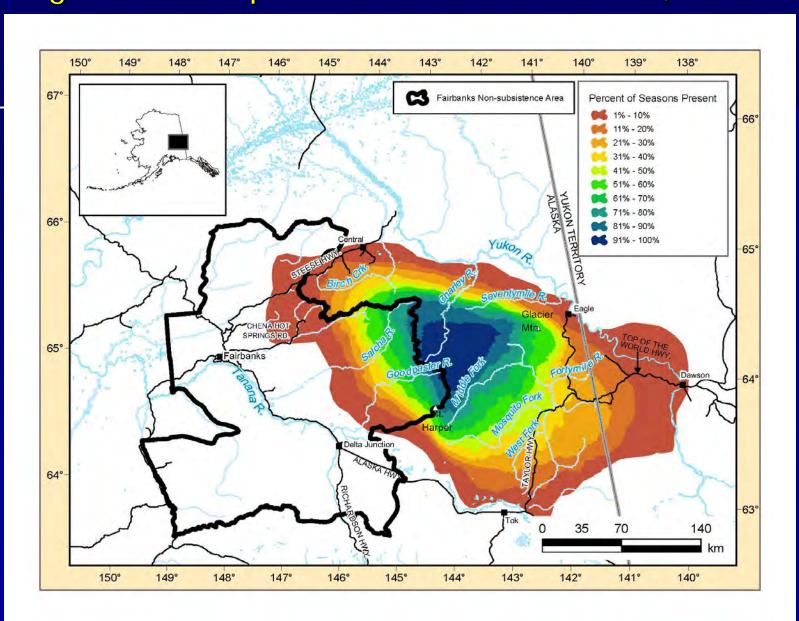
### Considerations, Continued

- Management goal = 50,000–100,000 caribou.
- Current (2010) minimum size = 51,675; population is growing.
- Goal = reoccupy historical range without compromising herd health.
- Hunting opportunities guided by collaborativelydeveloped harvest plan.
- Single registration permit program that includes both state and federal opportunities.

## Figure 4.1-1. Cumulative multi-year Fortymile caribou herd distribution delineated during five study periods



## Figure 4.1-2. Fortymile caribou herd distribution based on percentages of 99 independent seasonal boundaries, 1991–2008



## Figure 4.1-3. Average number of caribou harvested annually from 2006–2012 in UCUs within Fairbanks NSA

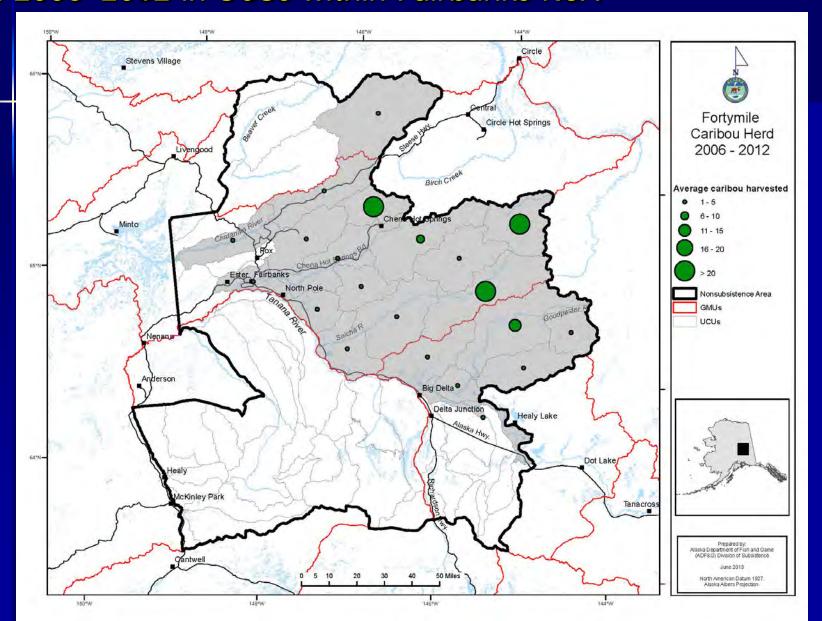


Figure 4.1-4. Number of Fortymile herd caribou harvested within and outside of Fairbanks Nonsubsistence Area, 2006 - 2012

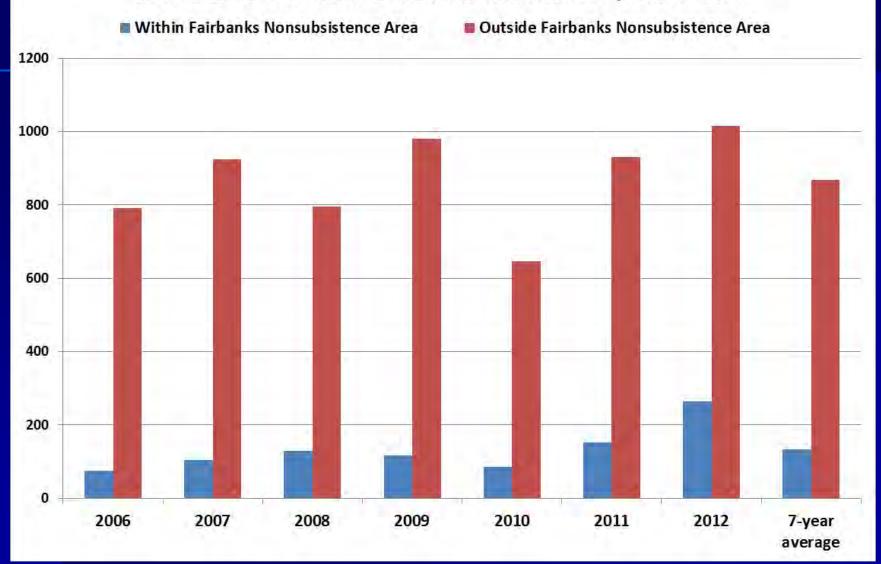
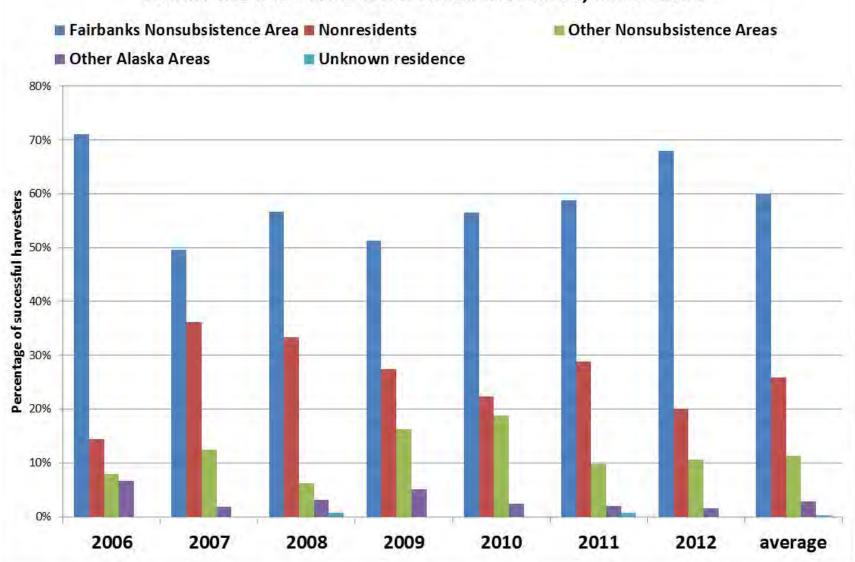


Figure 4.1-5. Area of residence of harvesters of Fortymile Caribou within the Fairbanks Nonsubsistence Area, 2006-2012



### **Fairbanks North Star Borough**



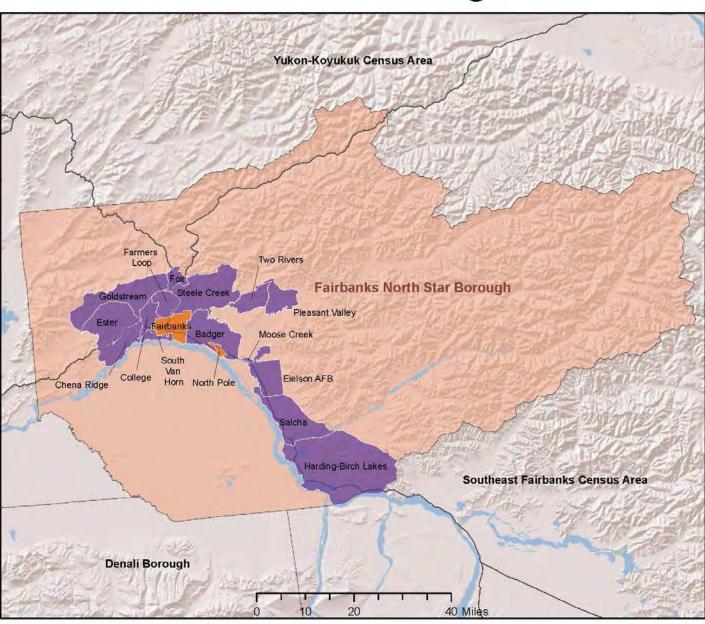




Prepared by: Alaska Department of Labor & Workforce Development

September 2011

Source: US Census 2010 TIGERline



### Southeast Fairbanks Census Area



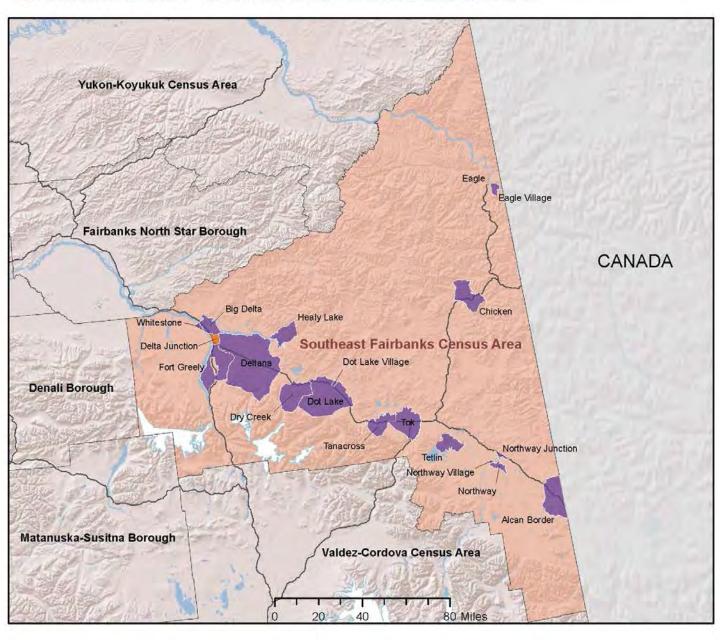




Prepared by: Alaska Department of Labor & Workforce Development

September 2011

Source: US Census 2010 TIGERline



### Proposal 39 Summary

 Proposal 39: reduce size of Fairbanks Nonsubsistence Area based on Fortymile caribou herd range.

Department Recommendation: Neutral.

#### What is the range of the Fortymile caribou herd?

Are there sufficient data to support consideration of changing the boundary of the Fairbanks NSA based solely on the range of the herd?

Yes

Have relevant changes relative to 12 factors occurred in area addressed in proposal?



Take no action or fail proposal.

Yes

Have the changes altered the determination of whether subsistence is a principal characteristic of the economy, culture, and way of life of the area addressed in the proposal?

Take no action or fail proposal.

Yes

Adjust boundary of nonsubsistence area.

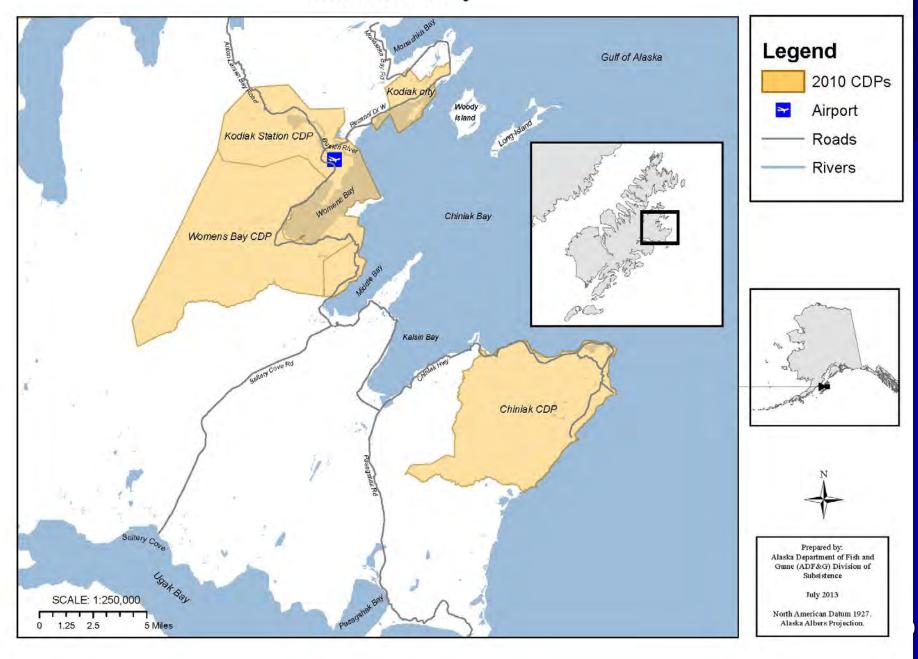
Take no action or fail proposal.

## Proposal 40

Create a Kodiak Nonsubsistence Area.

Department Recommendation: Neutral.

#### Kodiak vicinity



#### **Kodiak Island Borough**



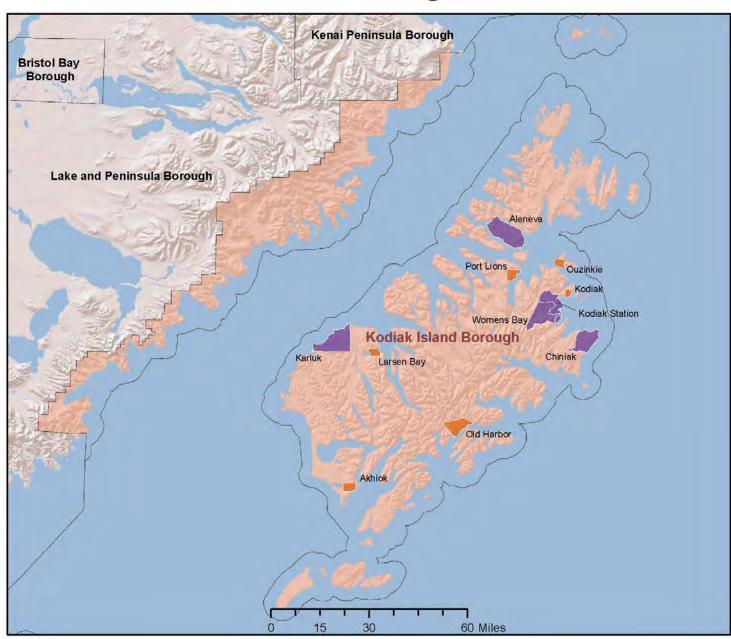




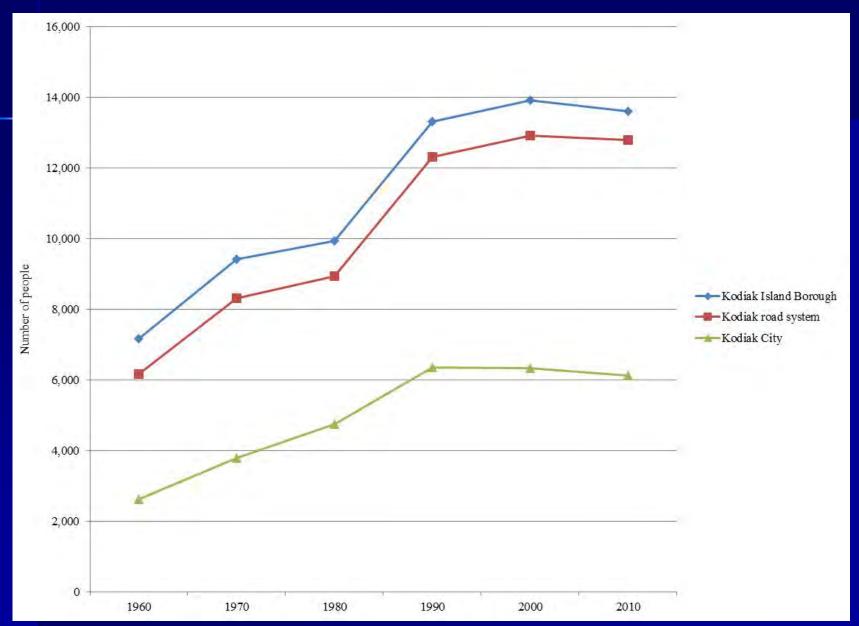
Prepared by: Alaska Department of Labor & Workforce Development

September 2011

Source: US Census 2010 TIGERline



### Figure 5.4-1. Kodiak Population, 1960–2010



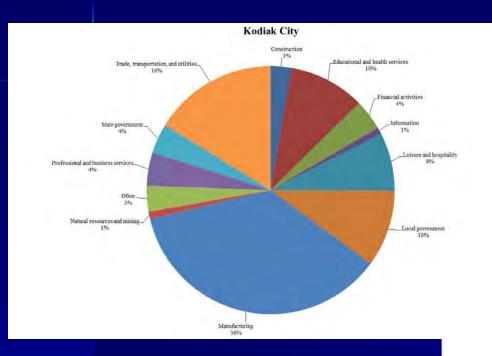
# Factor 1: Social and Economic Structure

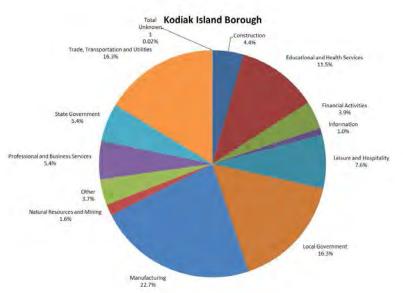
- "Commercial fishing and seafood processing are the primary drivers of the Borough's economy, including support services."
- "The United States Coast Guard station also spurs important economic activity."
- Other notable sectors: retail services, government, tourism, health care.
- Hub community role.
- Subsistence sector: high harvests and participation rates.

### Factor 2: Stability of Economy

- Heavily dependent on commercial fishing and processing.
- Lack of economic diversification.
- Vulnerable to changes to stock statuses, markets, and management policies.
- Subsistence sector provides some stability.

## Factor 3: Employment for Wages





- Commercial fishing permits.
- Crewmember licenses.
- US Coast Guard Support Center.
- Guiding and outfitting services.

# Factor 4: Cash Income of Those Domiciled in Area

- Cash incomes are below state averages.
- Percentage of population living in poverty is above state average, and has increased.

Figure 2.3-2. Average annual per capita income, 2007-2011: Alaska, nonsubsistence areas, and proposed nonsubsistence areas

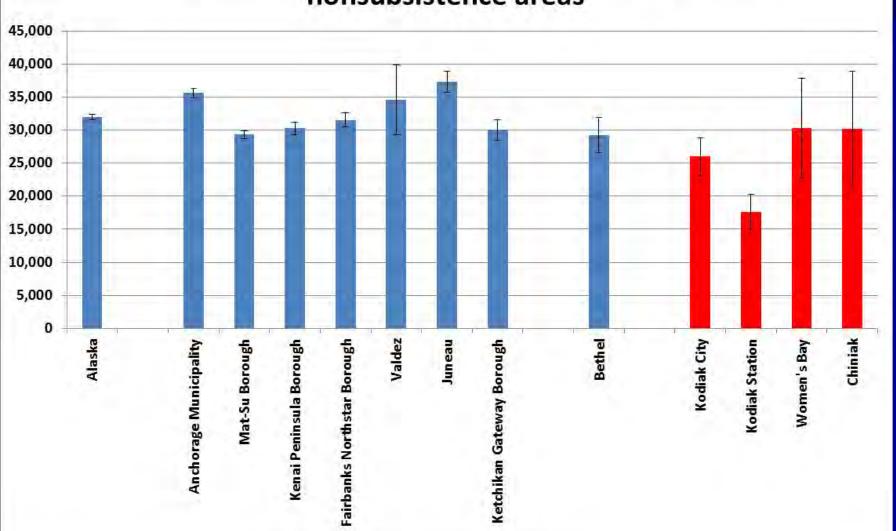
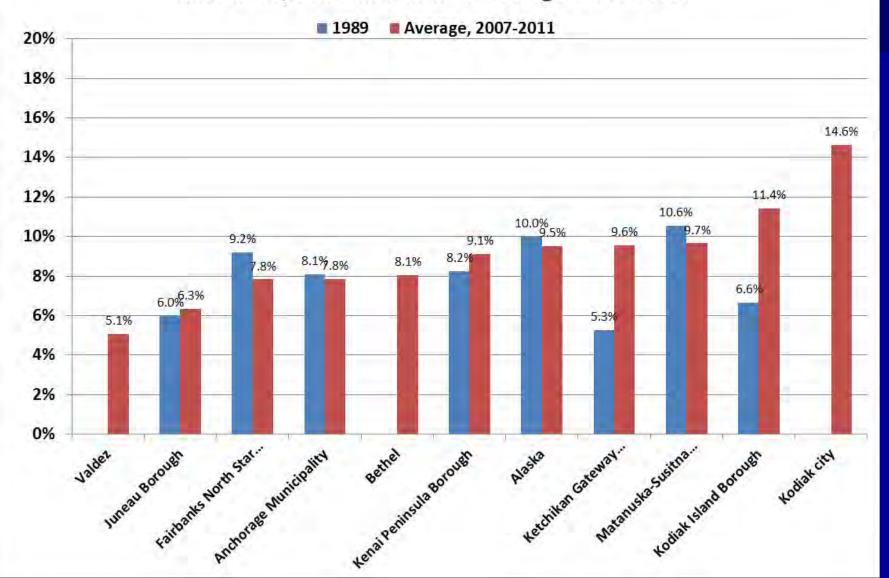


Figure 2.3-3. Percentage of population living below poverty threshold, 1989 and annual average 2007-2011



# Factor 5: Cost and Availability of Goods and Services to Those Domiciled in Area

- Overall, costs of living are higher than road-connected communities.
- Costs of food are higher than roadconnected communities, and have increased relative to Anchorage.

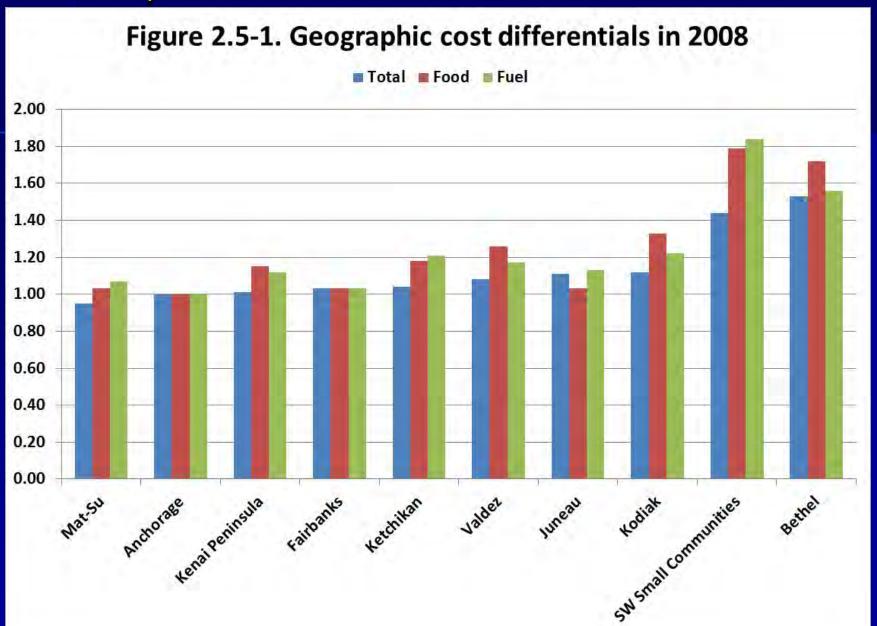
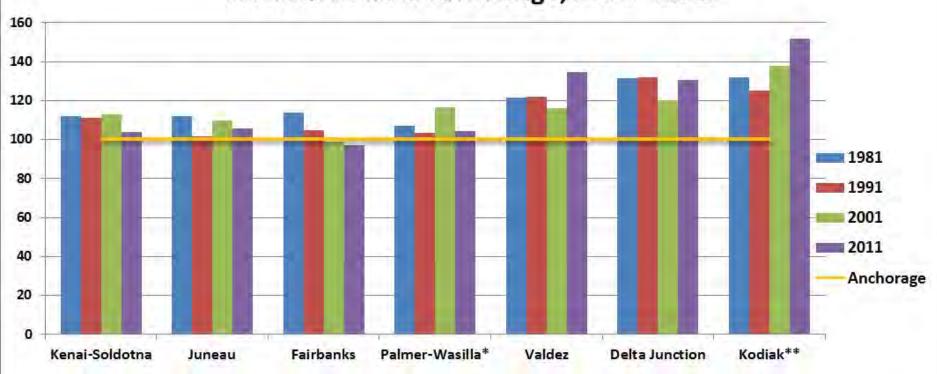


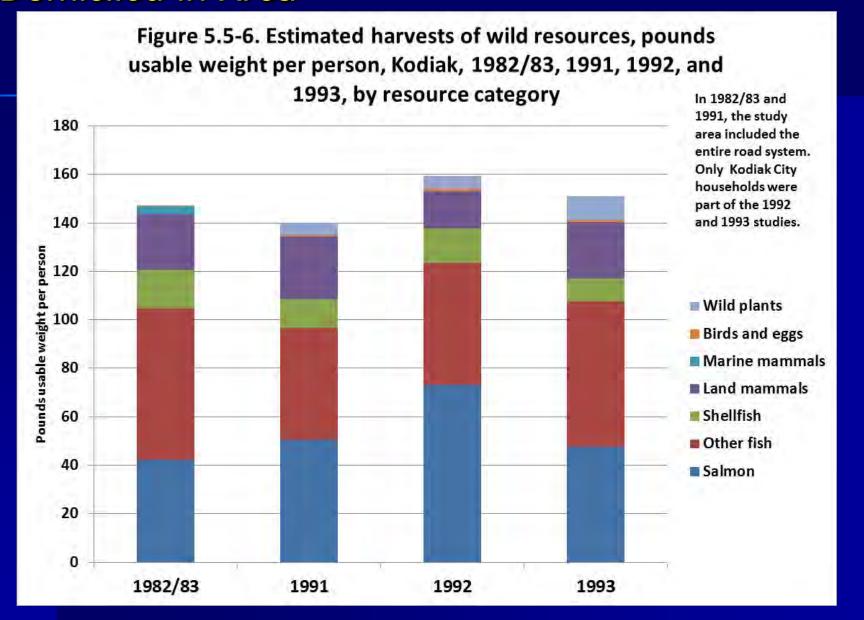
Figure 5.5-4. Cost of food index for selected communities, referenced from Anchorage, 1981 - 2011

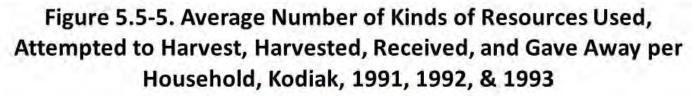


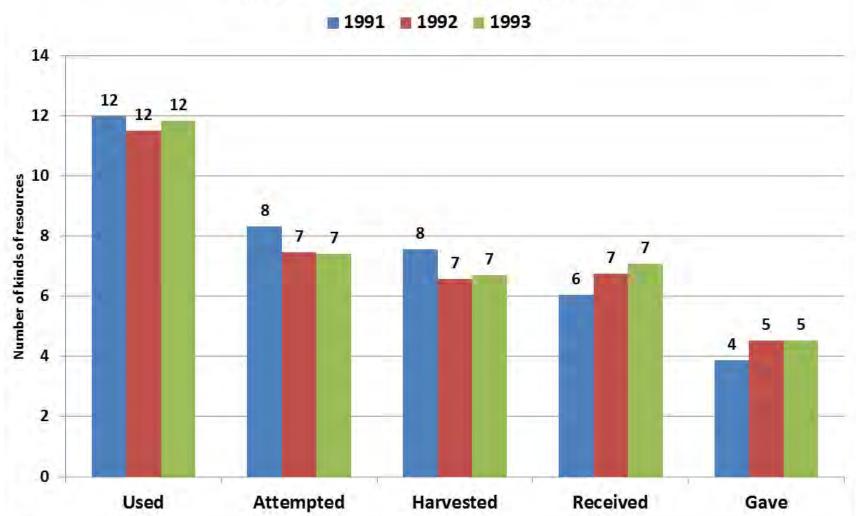
<sup>\*</sup> Palmer-Wasilla data not available for 1981; 1983 data used instead.

<sup>\*\*</sup> Data for Kodiak not available in 1981 or 2011; 1983 and 2010 data were used instead.

# Factor 6: Variety of Species Used by Those Domiciled in Area







# Factor 7: Seasonal Cycle of Economic Activity

- Marked seasonality to cash sector.
- The unemployment rate for the Kodiak Island Borough fluctuates significantly . . . largely due to commercial and fish processing and other seasonal employment such as construction and tourism jobs."
- 51%–56% worked year round (1991–93).
- Subsistence sector seasonal based on availability of fish and wildlife.

## Factor 8: Percentage of Those Domiciled in Area Participating in Hunting and Fishing or Using Wild Fish and Game

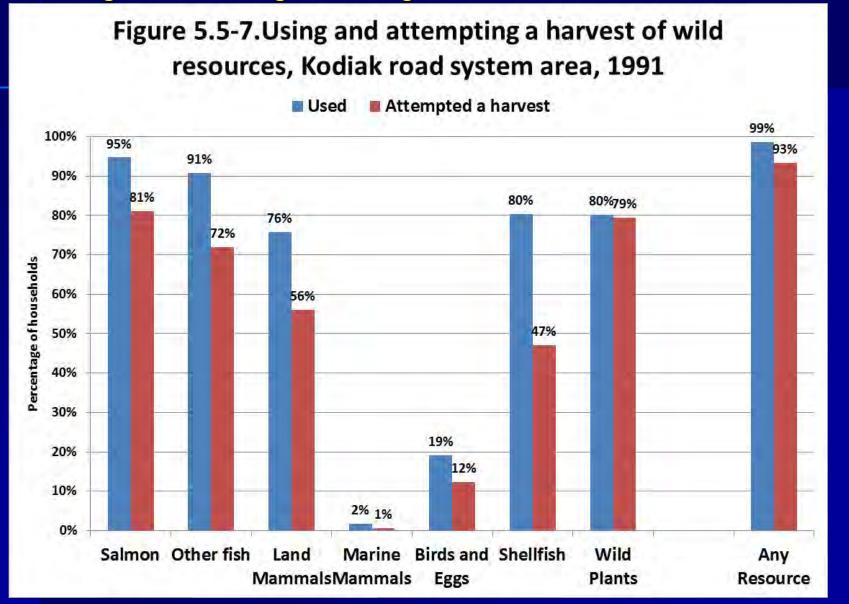
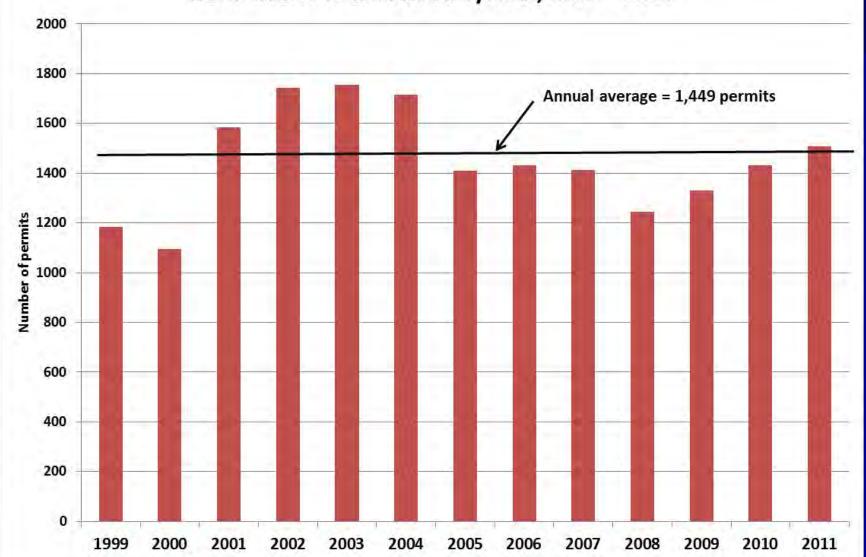


Figure 5.5.9. Number of subsistence salmon permits returned, Residents of Kodiak Road System, 1999 - 2011



#### Factor 9: Harvest Levels by Those Domiciled in Area

Figure 5.5-11. Kodiak: Estimated Harvests of Wild Resources, Pounds Usable Weight per Person, 1982, 1991, 1992, and 1993

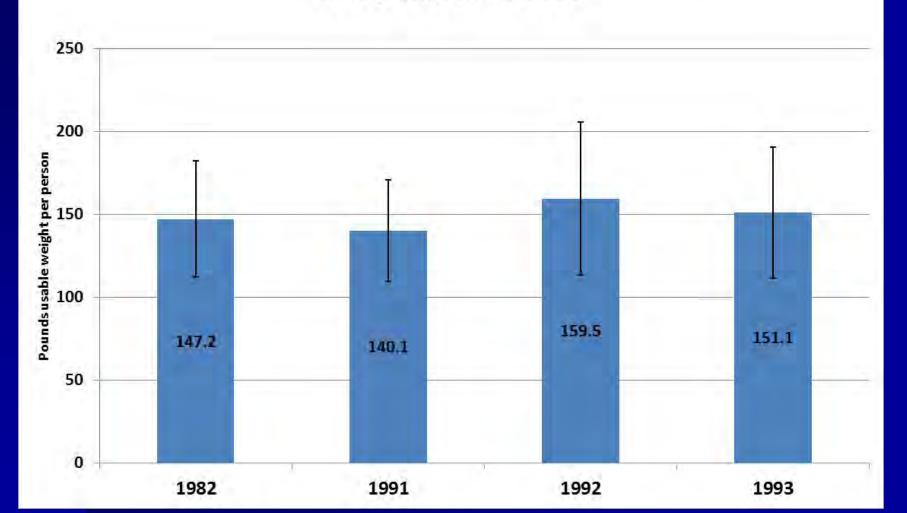
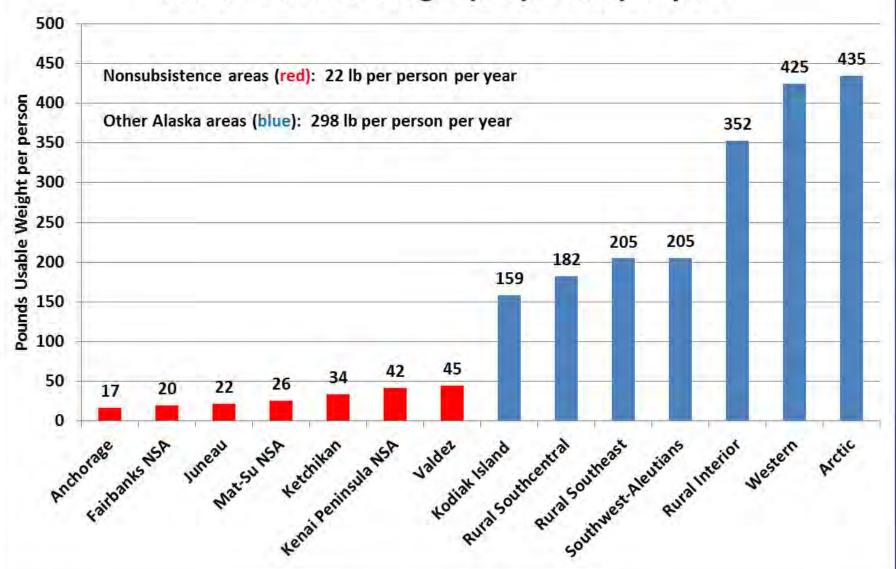


Figure 2.6-1. Wild food harvests in Alaska by area - 2011: Ib usable weight per person per year



# Figure 2.6-2. Percentage of average American consumption of meat, fish, and poultry produced by fish and wildlife harvests

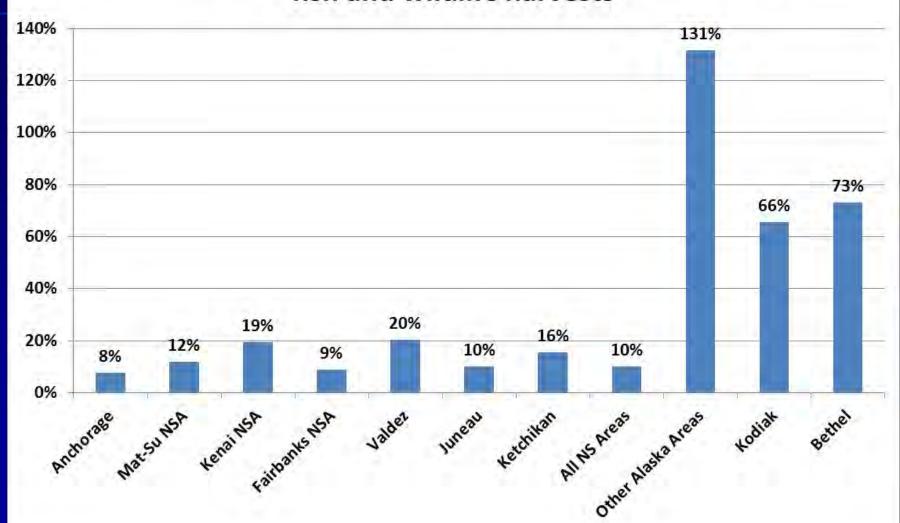


Figure 2.6-3. Percentage of protein requirements produced by fish and wildlife harvests

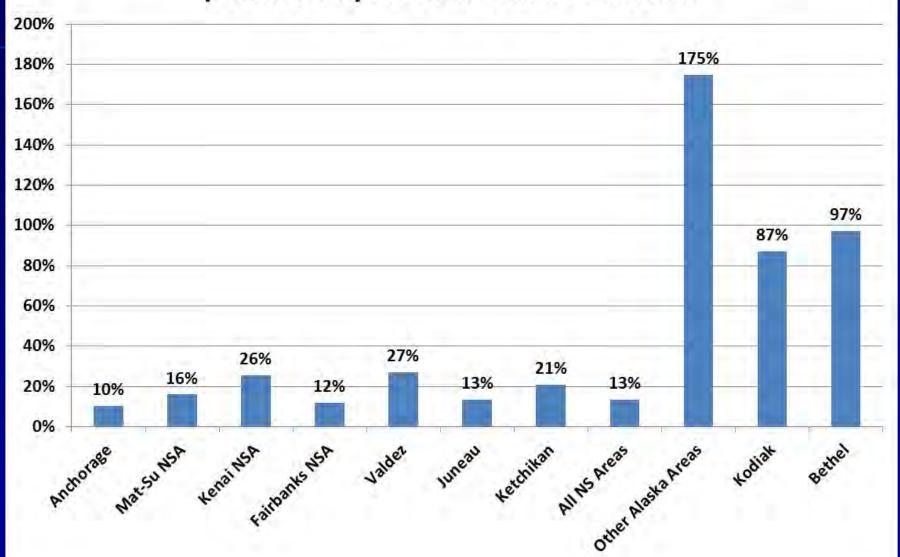
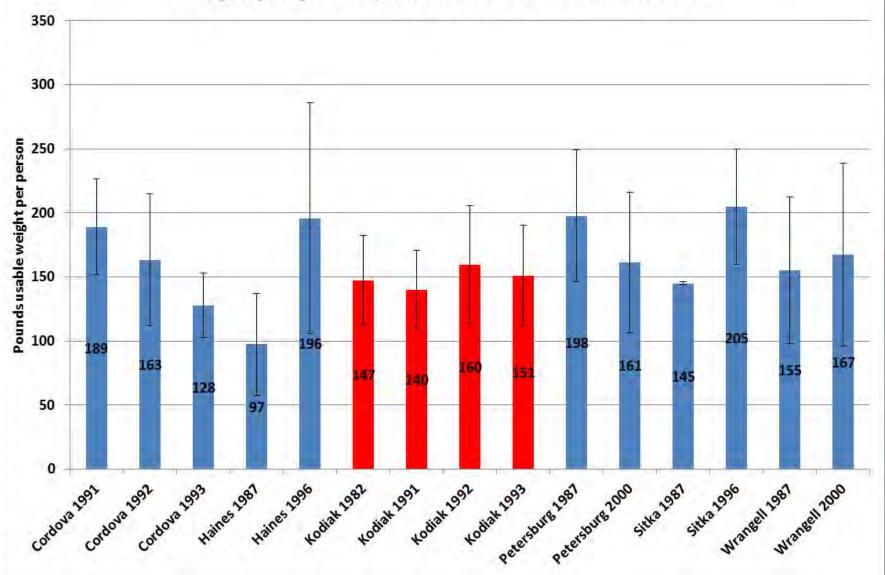
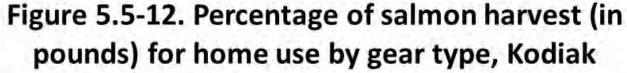
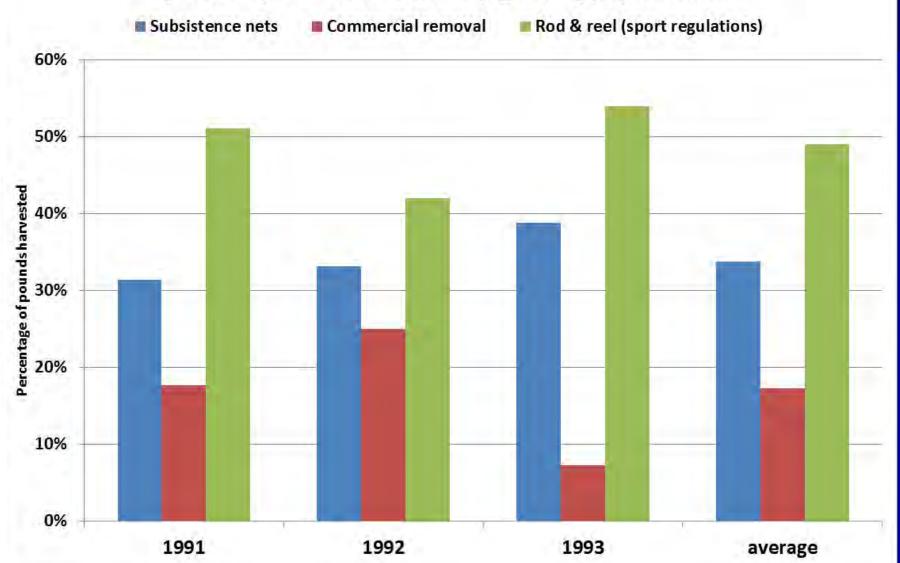


Figure 5.5-16. Estimated harvests of wild resources, lb usable weight per person, selected Alaska communities



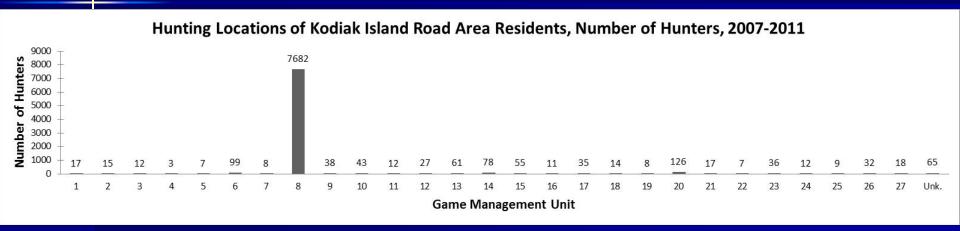




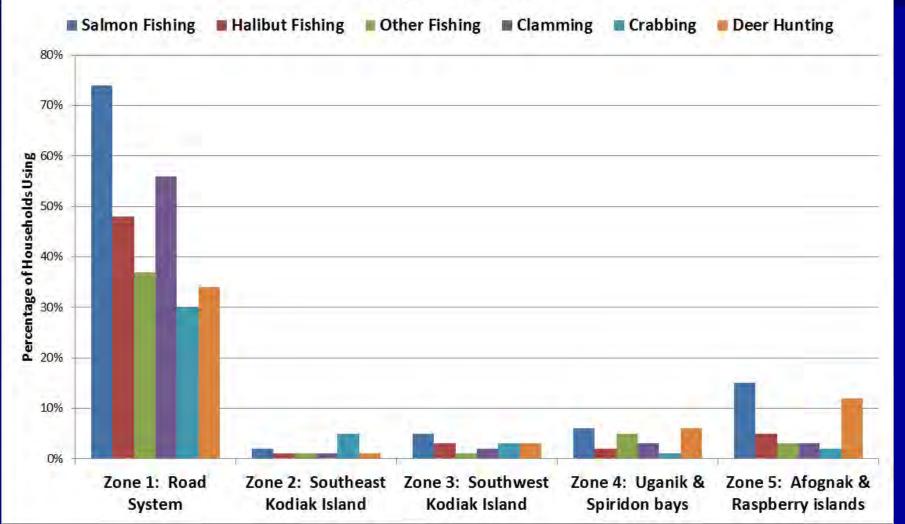
## Factor 10: Cultural, Social, and Economic Values Associated with Taking and Use of Fish and Game

- Sun'aq Tribe's statement on "who we are": "Some Sun'aq practice subsistence for spiritual and cultural reasons; other tribal members rely on our island's resources for material wellbeing."
- Borough plan's goal and policy related to subsistence: "Support KIB residents' use of fish, game, and plant resources to meet nutritional, traditional, cultural, and spiritual needs."

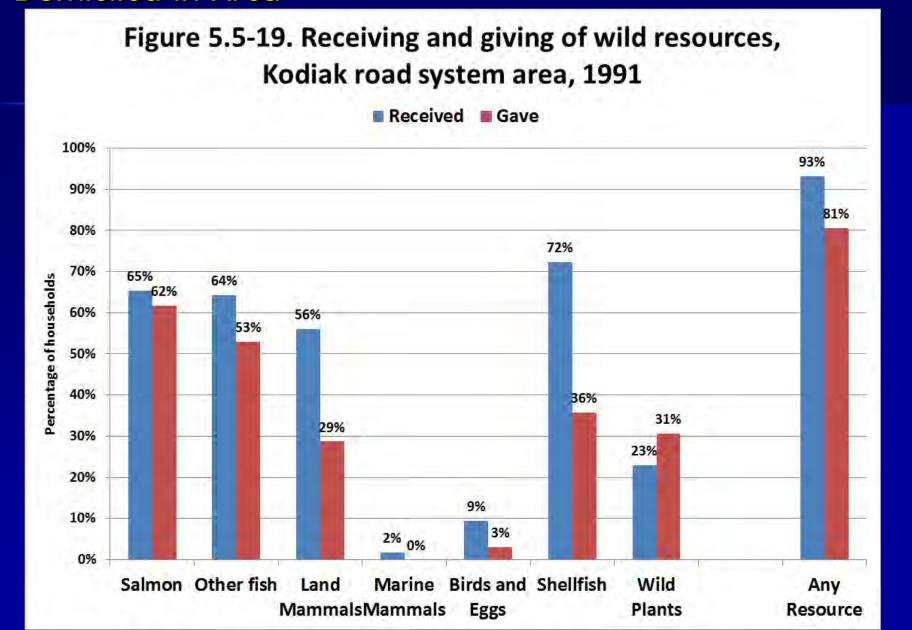
## Factor 11: Geographic Locations Where Those Domiciled in Area Hunt and Fish



# Figure 5.5-17. Areas Used for Resource Harvest Activities, Residents of Kodiak Island Road System Area, 1982-1983



## Factor 12: Extent of Sharing and Exchange by Those Domiciled in Area



### Proposal 40 Summary

 Proposal 40: create a Kodiak Nonsubsistence Area.

Department Recommendation: Neutral.

# Have relevant changes relative to 12 factors occurred in area addressed in proposal?

Have these changes altered the determination of whether subsistence is a principal characteristic of the economy, culture, and way of life of the area addressed in the proposal?

Take no action or fail proposal.

Yes

Create nonsubsistence area.

Take no action or fail proposal.

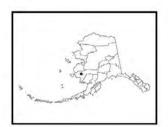
## Proposal 41

Create a Bethel Nonsubsistence Area.

Department Recommendation: Neutral.

#### **Bethel City**



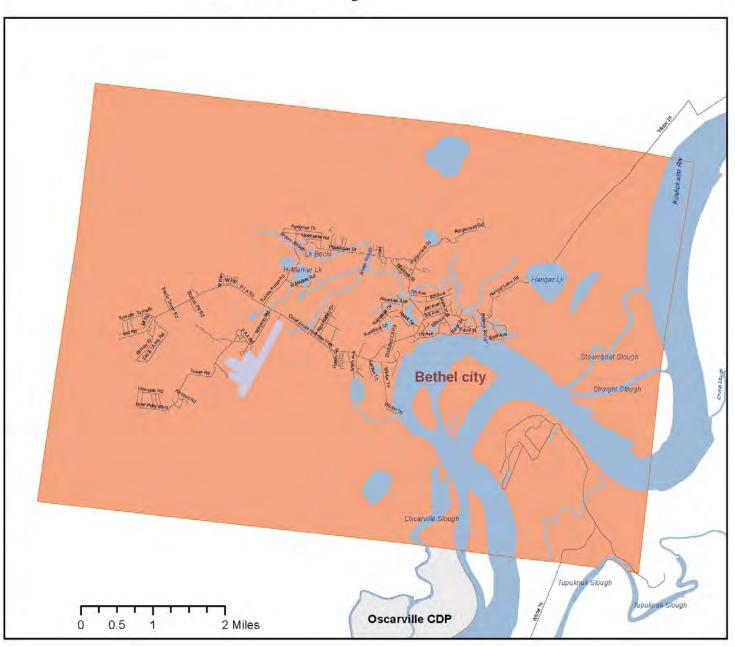




Prepared by: Alaska Department of Labor & Workforce Development

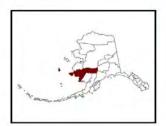
October 2011

Source: US Census 2010 TIGERline



#### **Bethel Census Area**







Prepared by: Alaska Department of Labor & Workforce Development

September 2011

Source: US Census 2010 TIGERline

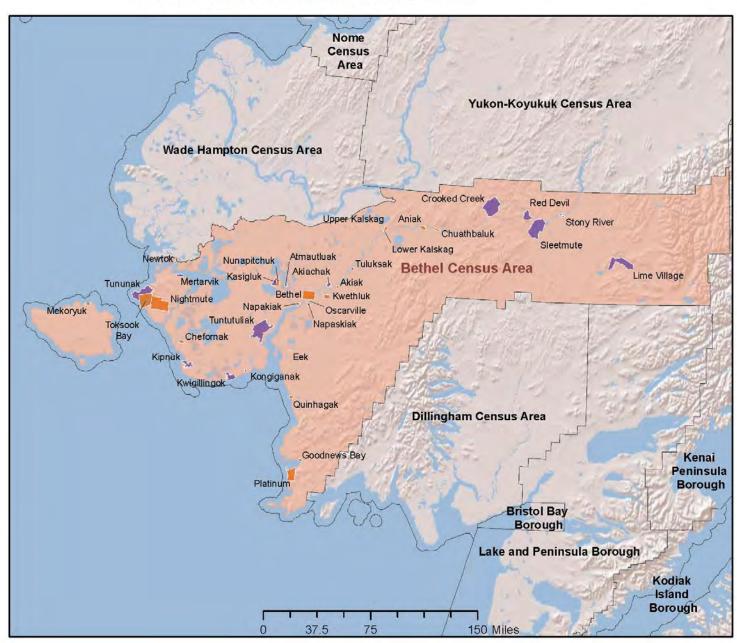
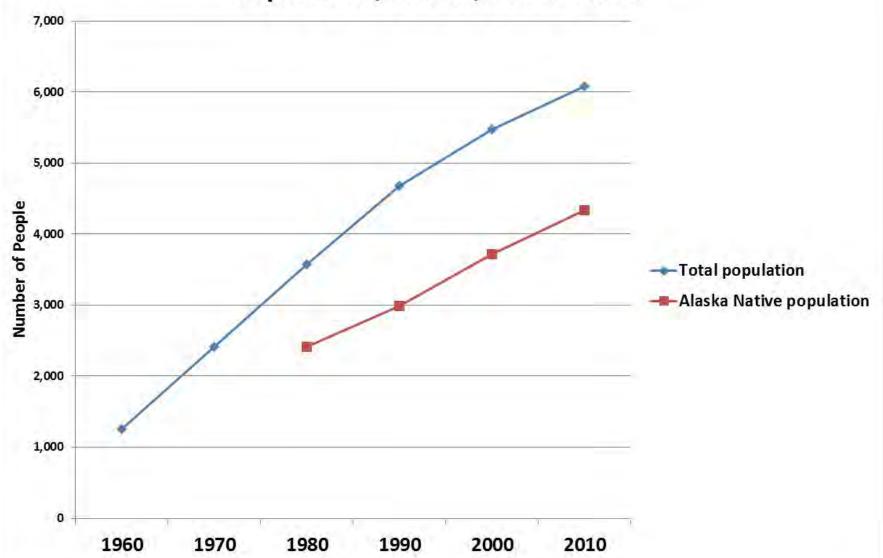


Figure 6.3-1. Total Population and Alaska Native Population, Bethel, 1960 - 2010



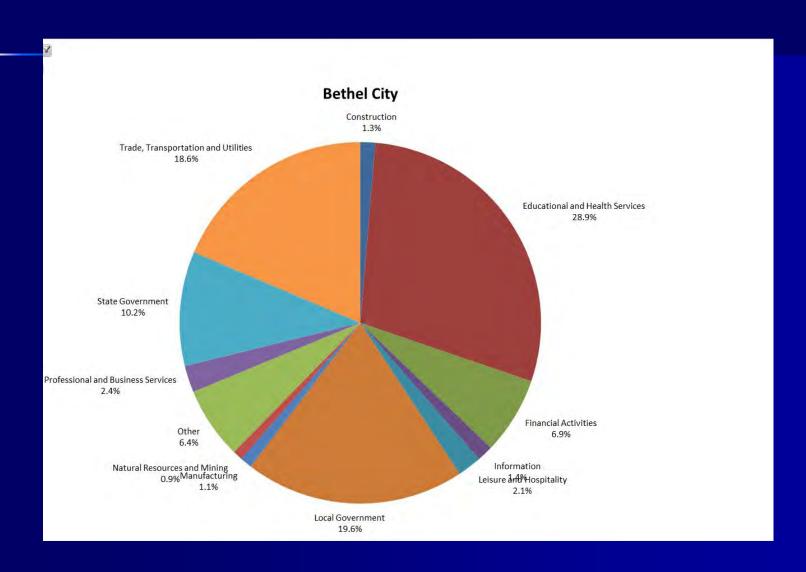
### Factor 1: Social and Economic Structure

- Regional center or "hub" community.
- Moderately-sized population.
- Center for services, government, commerce, and transportation.
- Mixed economy with cash and subsistence sector.
- Diverse population with subgroups.

#### Factor 2: Stability of Economy

- Relatively stable cash economy due to role as a regional center.
- Less seasonal variation than in surrounding villages.
- In 2012:
  - 71% of adults employed;
  - Worked 11 months (on average);
  - 69% employed year-round.

#### Factor 3: Employment for Wages



### Factor 4: Cash Income of Those Domiciled in Area

- Cash incomes slightly below state average.
- Cash income of Alaska Native households (71% of population) are substantially lower.
- Percentage of population living below poverty level is lower than state average.

Figure 2.3-2. Average annual per capita income, 2007-2011: Alaska, nonsubsistence areas, and proposed nonsubsistence areas

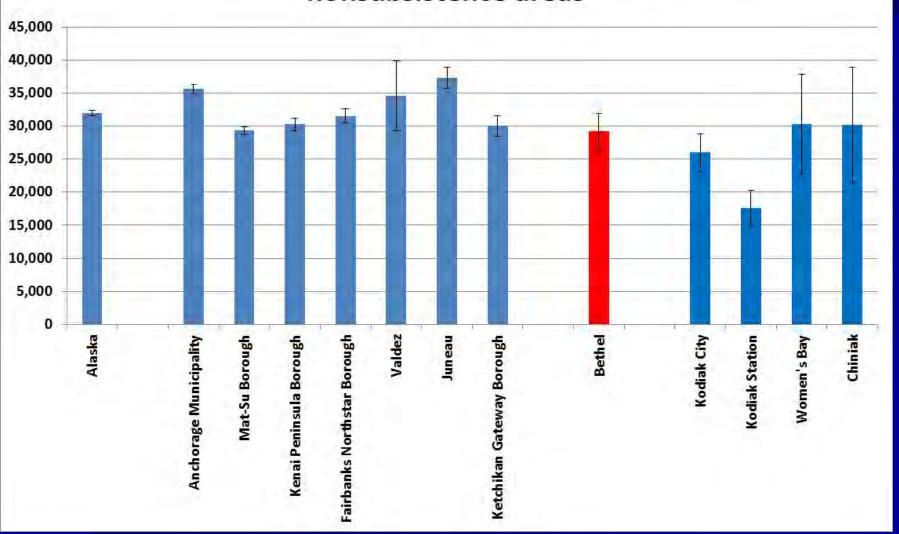
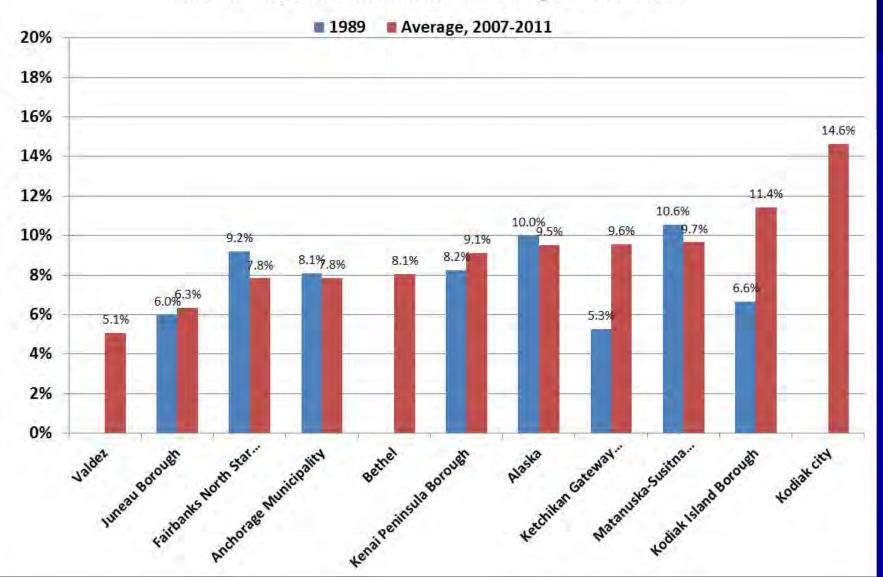


Figure 2.3-3. Percentage of population living below poverty threshold, 1989 and annual average 2007-2011



### Factor 5: Cost and Availability of Goods and Services to Those Domiciled in Area

- Costs of living substantially higher than road-connected communities.
- Costs of food much higher than road connected communities.
- Cost of food relative to Anchorage has increased.

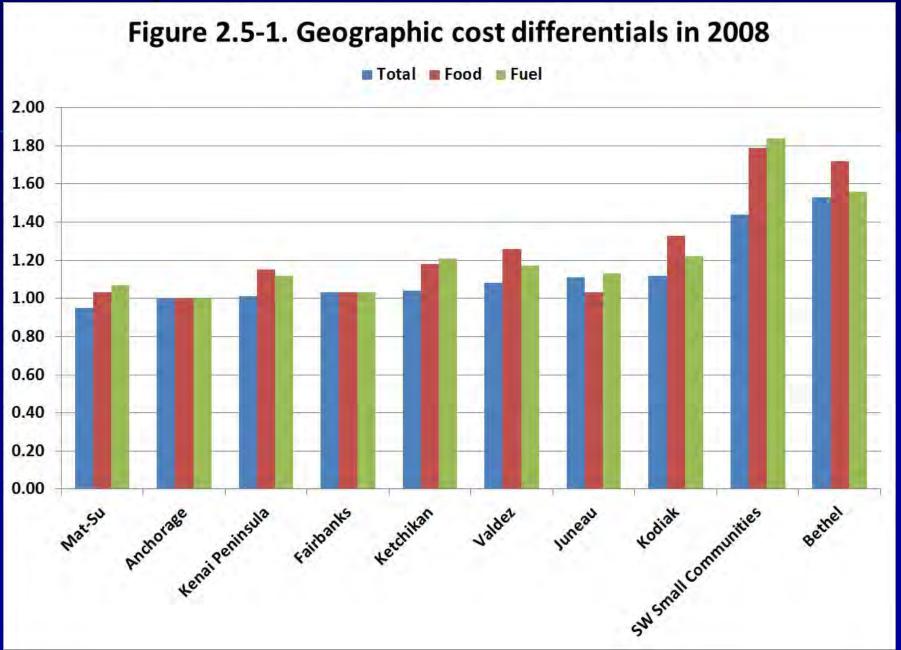
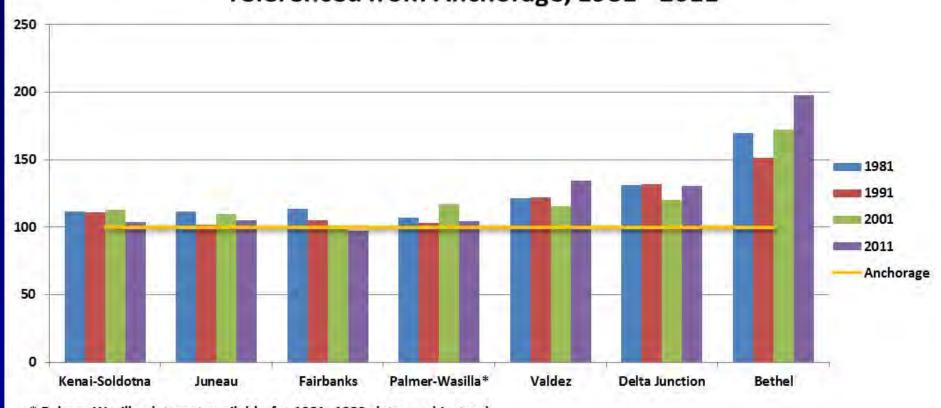


Figure 6.4-3. Cost of food index for selected communities, referenced from Anchorage, 1981 - 2011



<sup>\*</sup> Palmer-Wasilla data not available for 1981; 1983 data used instead.

#### Factor 6: Variety of Species Used by Those Domiciled in Area

Figure 6.4-5. Estimated harvests of wild resources, pounds usable weight per person by resource category, Bethel, 2012

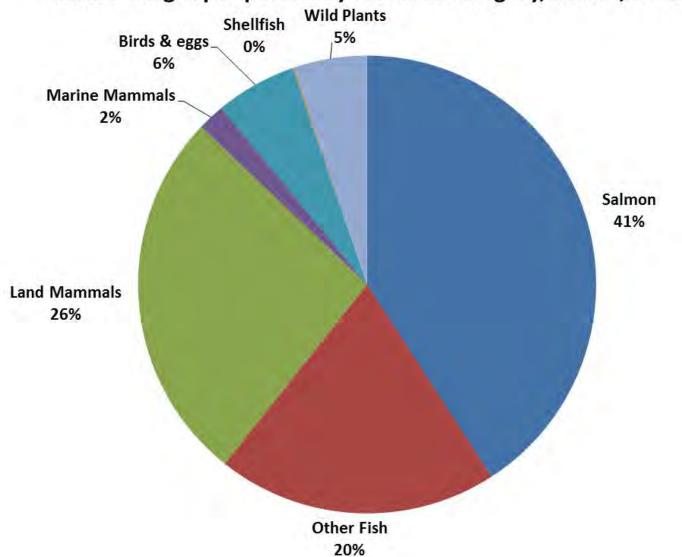
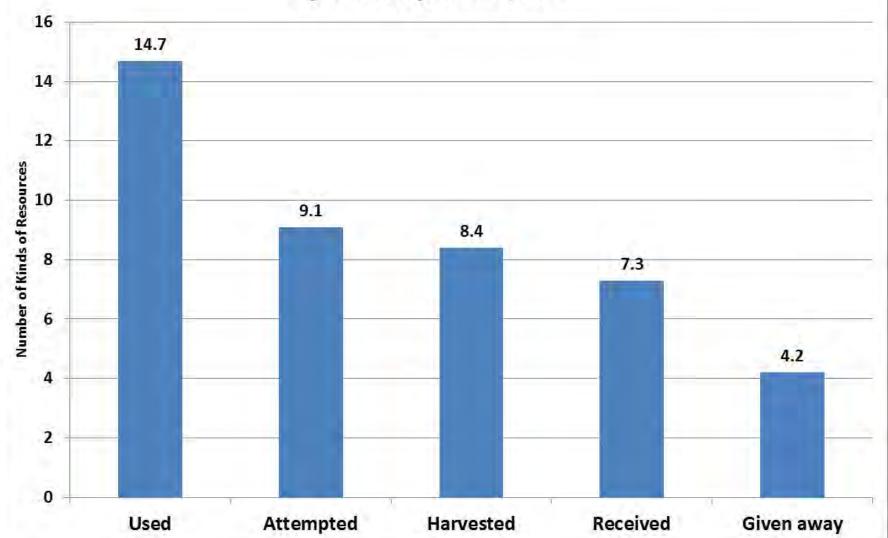


Figure 6.4-4. Average number of kinds of resources per household used, attempted to harvest, harvested, received, and given away, Bethel, 2012

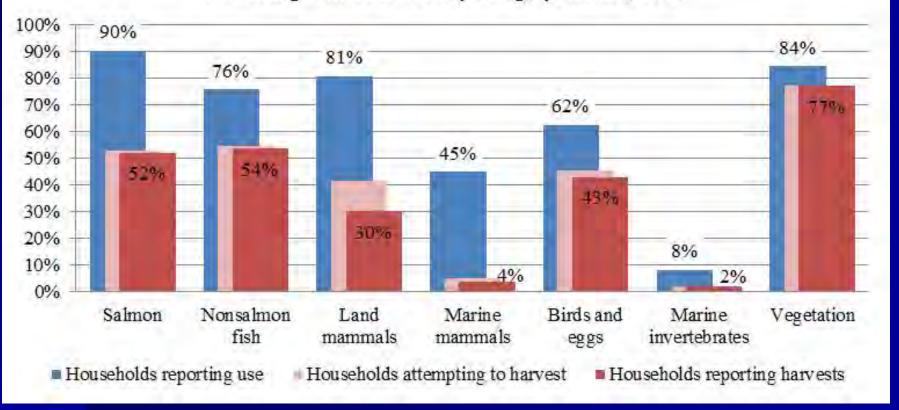


# Factor 7: Seasonal Cycle of Economic Activity

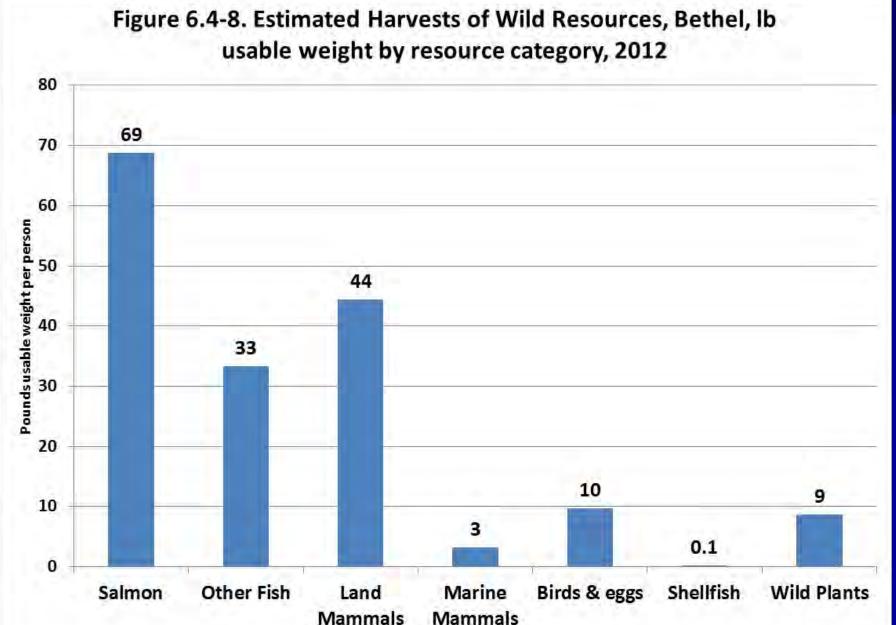
- Less seasonal variation than in surrounding villages.
- In 2012:
  - 71% of adults employed;
  - Worked 11 months (on average);
  - 69% employed year-round.
- Subsistence sector shaped by seasonal availability of key resources.

# Factor 8: Percentage of Those Domiciled in Area Participating in Hunting and Fishing or Using Wild Fish and Game

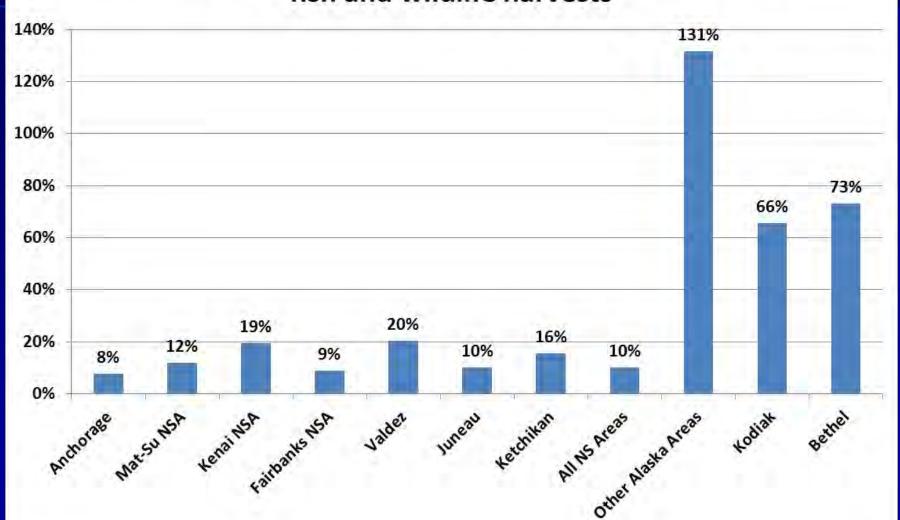
Figure 6.4-6. Percentage of households using, attempting to harvest, or harvesting wild resources by category, Bethel, 2012

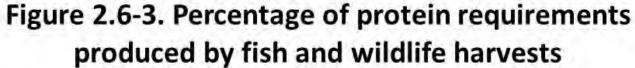


#### Factor 9: Harvest Levels by Those Domiciled in Area



## Figure 2.6-2. Percentage of average American consumption of meat, fish, and poultry produced by fish and wildlife harvests





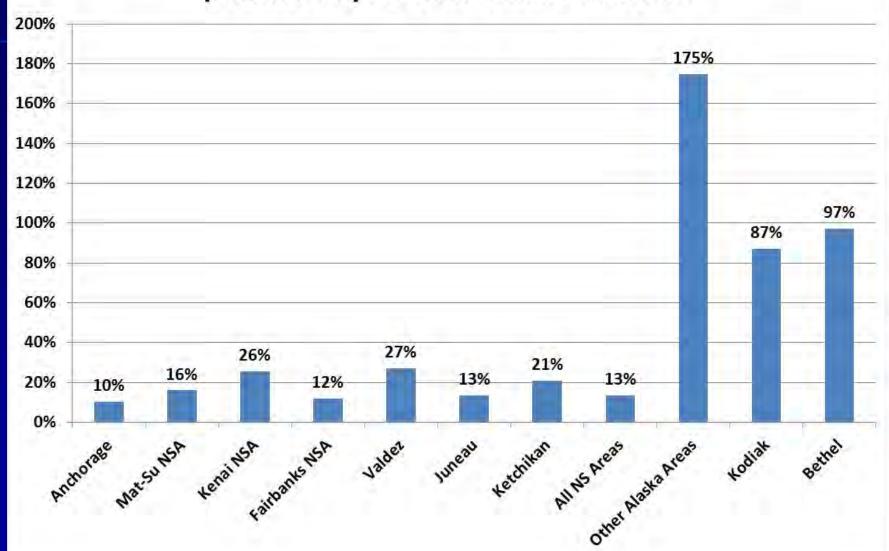
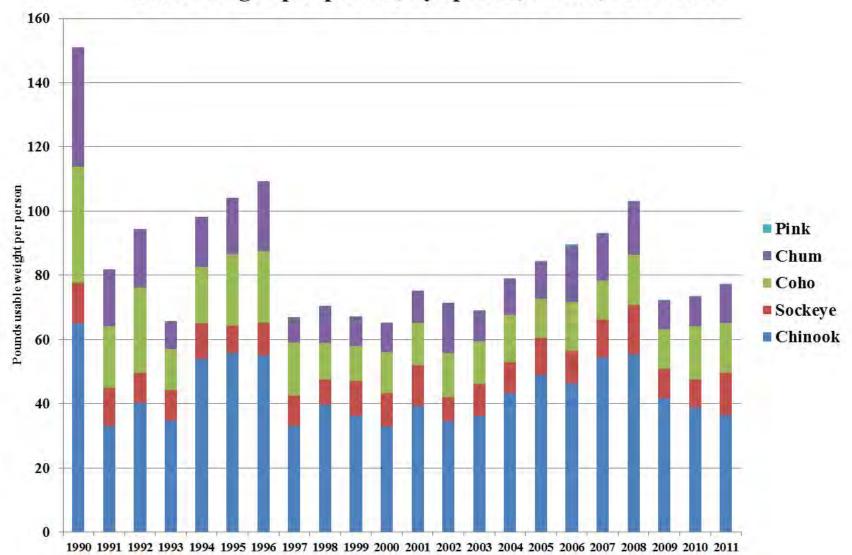
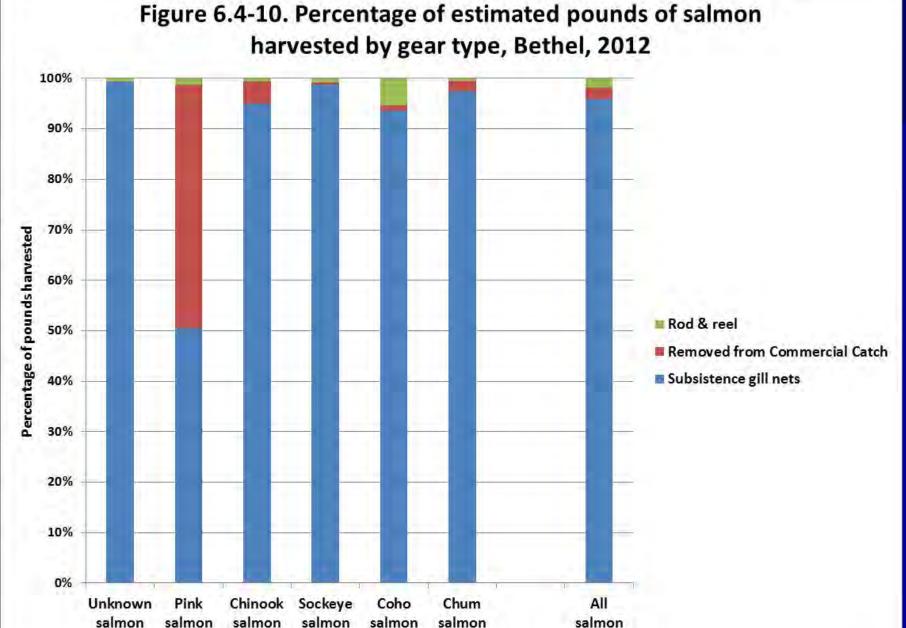


Figure 6.4-9. Estimated subsistence salmon harvests, pounds usable weight per person, by species, Bethel, 1990-2011

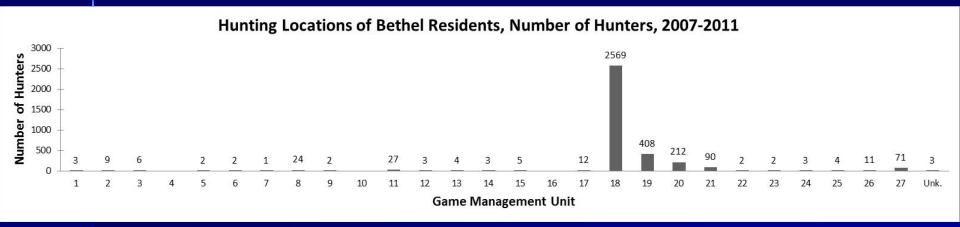




# Factor 10: Cultural, Social, and Economic Values Associated with Taking and Use of Fish and Game

- Predominantly Yup'ik population, connected culturally and socially to surrounding villages.
- Bethel Comprehensive Plan: "We envision a future in which the quality of our natural environment is protected for subsistence and recreation, and the land managed for the sustained prosperity of Bethel's people."
- Statements from key respondent interviews.

### Factor 11: Geographic Locations Where Those Domiciled in Area Hunt and Fish



### Factor 12: Extent of Sharing and Exchange by Those Domiciled in Area

#### ■ In 2012:

- 92% of Bethel's households received gifts of wild foods.
- 70% shared harvests with others.
- Average household received 7 kinds of wild foods and gave away 4 kinds.
- Linked through sharing networks with other communities in region.

#### Proposal 41 Summary

Proposal 41: create a Bethel Nonsubsistence Area.

Department Recommendation: Neutral.

## Have relevant changes relative to 12 factors occurred in area addressed in proposal?

Have these changes altered the determination of whether subsistence is a principal characteristic of the economy, culture, and way of life of the area addressed in the proposal?

Take no action or fail proposal.

Yes

Create nonsubsistence area.

Take no action or fail proposal.