SWAMC
Southwest Alaska Municipal Conference
3300 Arctic Boulevard, Suite 203 Anchorage, AK 99503 p: 907.562.7380 www.swamc.org
Alaska Peninsula
Aleutian Chain
Bristol Bay
Kodiak Island

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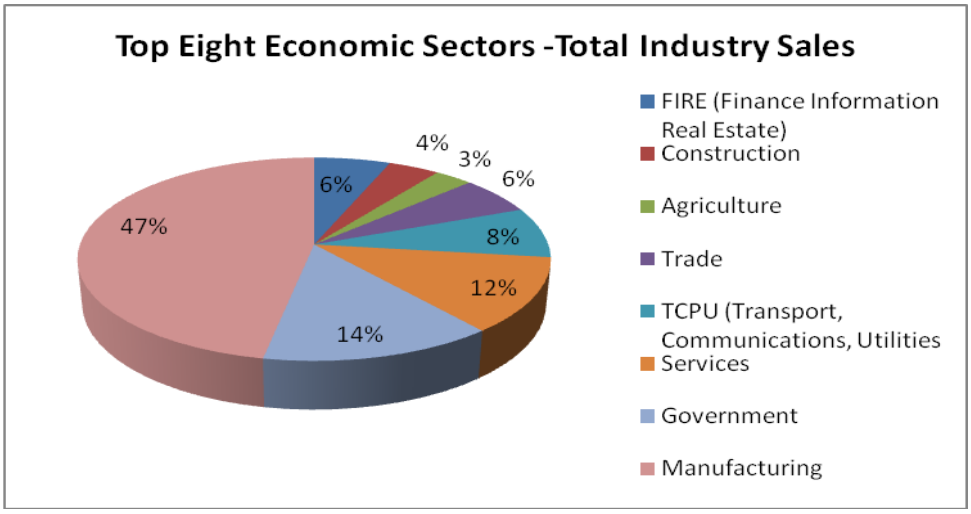
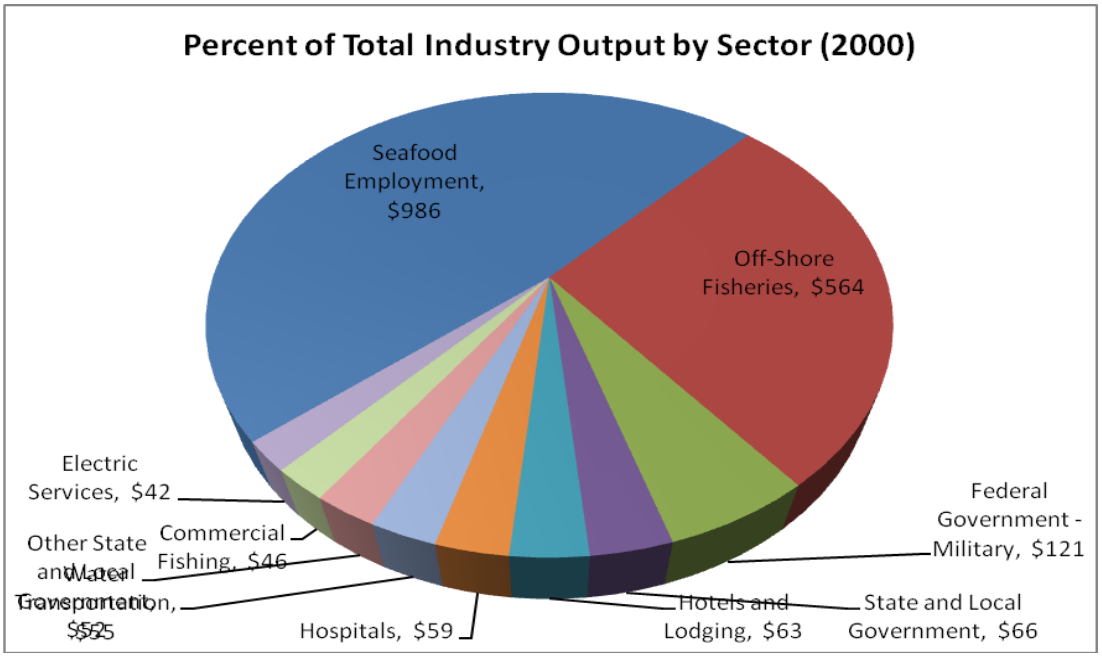
Appendix E: Other Economic Indicators

A. Southwest Contributions and Outputs

1. Southwest Top Eight Economic Sectors



2. Percent of Total Industry Output by Sector



B. 2002 Purchase of Goods and Services by SWAMC Households and Organizations

1. Total Goods and Services Purchase- Alaska Regions

Region of Purchase for Goods and Services	
Total from Southcentral Alaska	355
Goods	194
Services	161
Total from Other Alaska	86
Goods	39
Services	47
Total from Rest of U.S.	322
Goods	168
Services	155

2. Purchase of Goods from Southwest to Alaska

Southwest	677
to Southcentral	151.2
to other Alaska	1.26
to outside Alaska	524.54

Revenues to the State	$ Millions
Total	43.2
Fisheries Business Tax	25.2
Fisheries Resource Landing Tax	7.2
Salmon Enhancement Tax	3.7
Salmon Marketing Tax	2
Seafood Market Assessment Tax	2.7
Corporate Income Tax	2.3

[1]

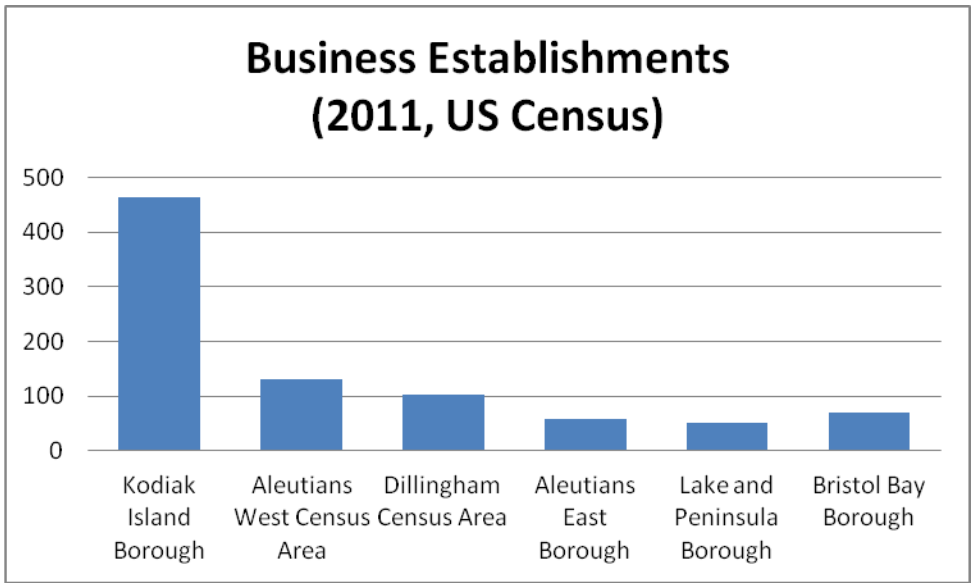
[1] Source: Economic Geography of Southwest Alaska. Northern Economics, http://www.swamc.org/files/stories/pdf/ecogeo.pdf

C. Business Licenses

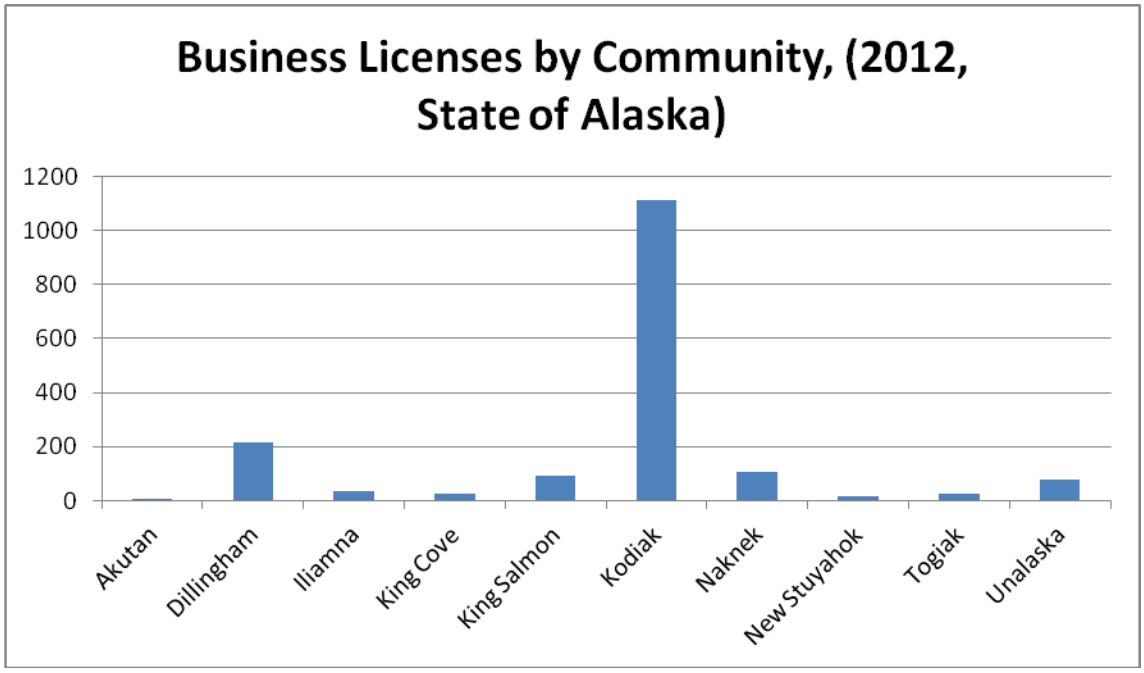
1. Total Active Business Licenses by Community

Community	Total Active Business Licenses	Total Active Business Licenses (not counting duplicates)
Akutan	5	5
Dillingham	258	217
Iliamna	39	33
King Cove	28	27
King Salmon	103	90
Kodiak	1207	1113
Naknek	122	107
New Stuyahok	15	15
Togiak	27	26
Unalaska	82	76

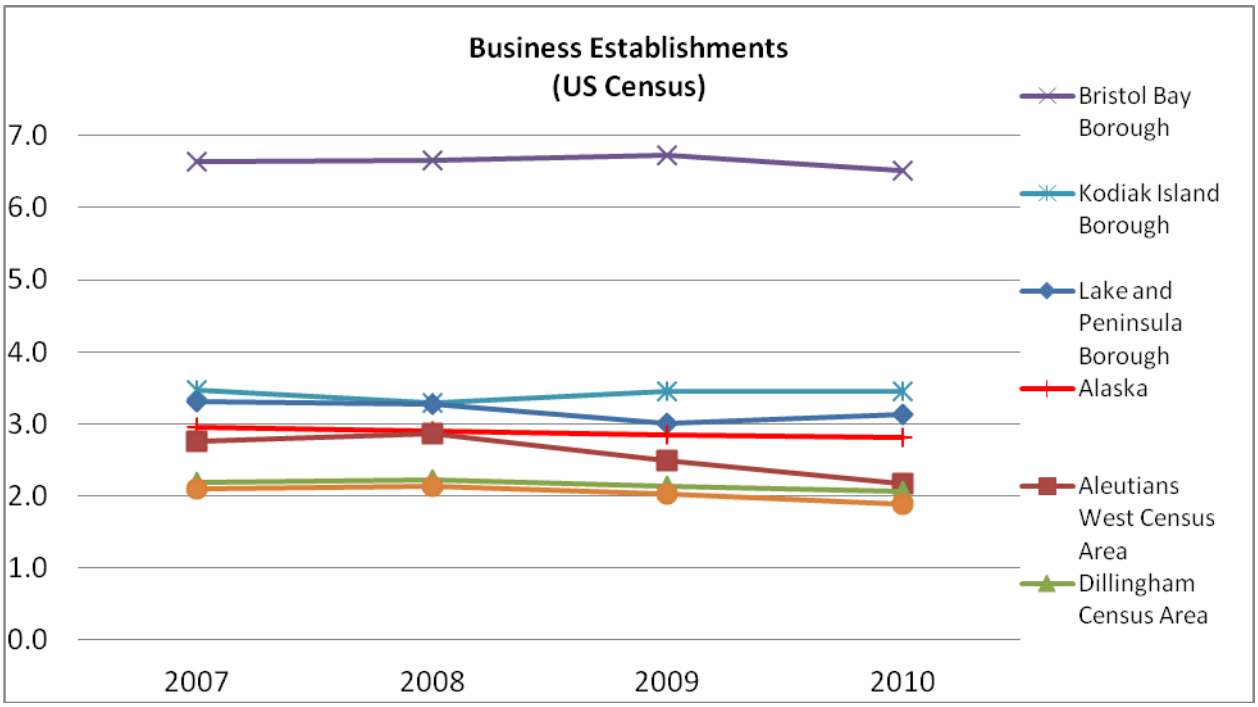
2. Number of Business Establishments by Borough



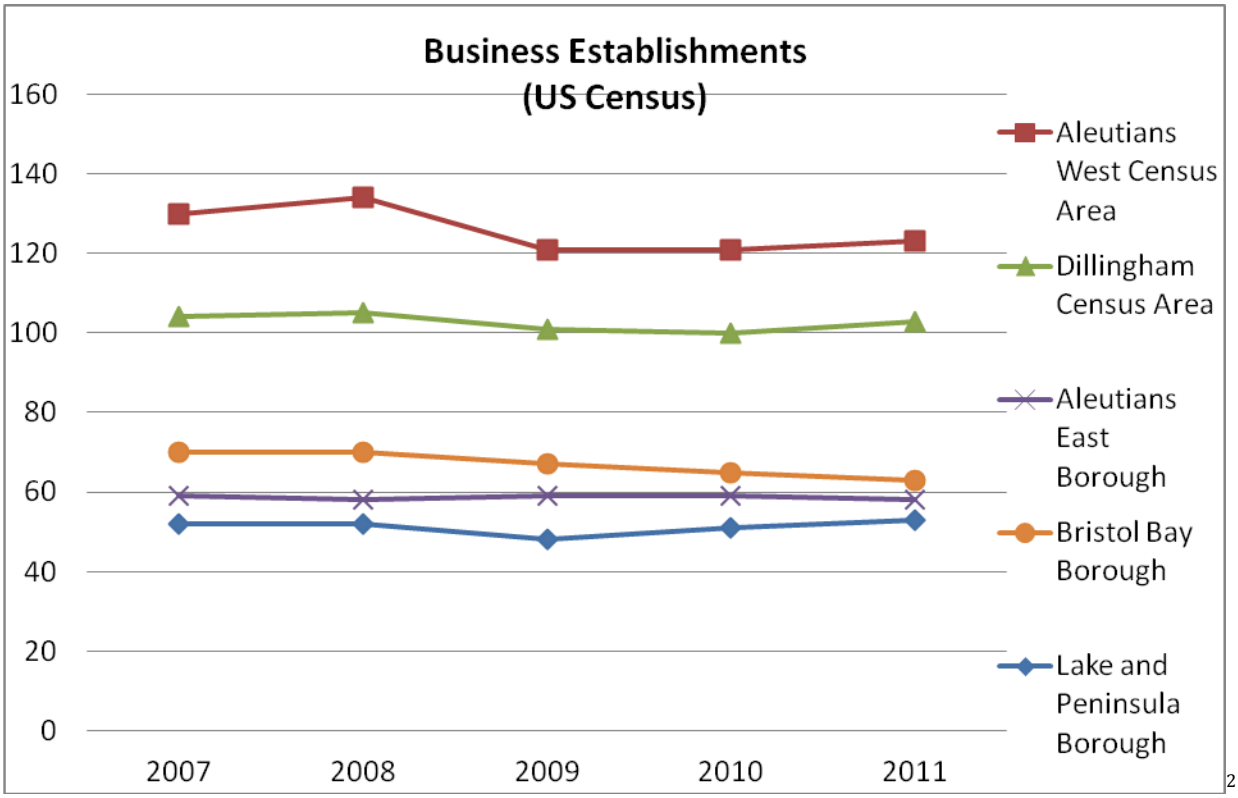
3. Business Licenses by Community



4. Business Establishment Trends 2007-2010



5. Business Establishments Trends (Excluding Kodiak Island Borough)

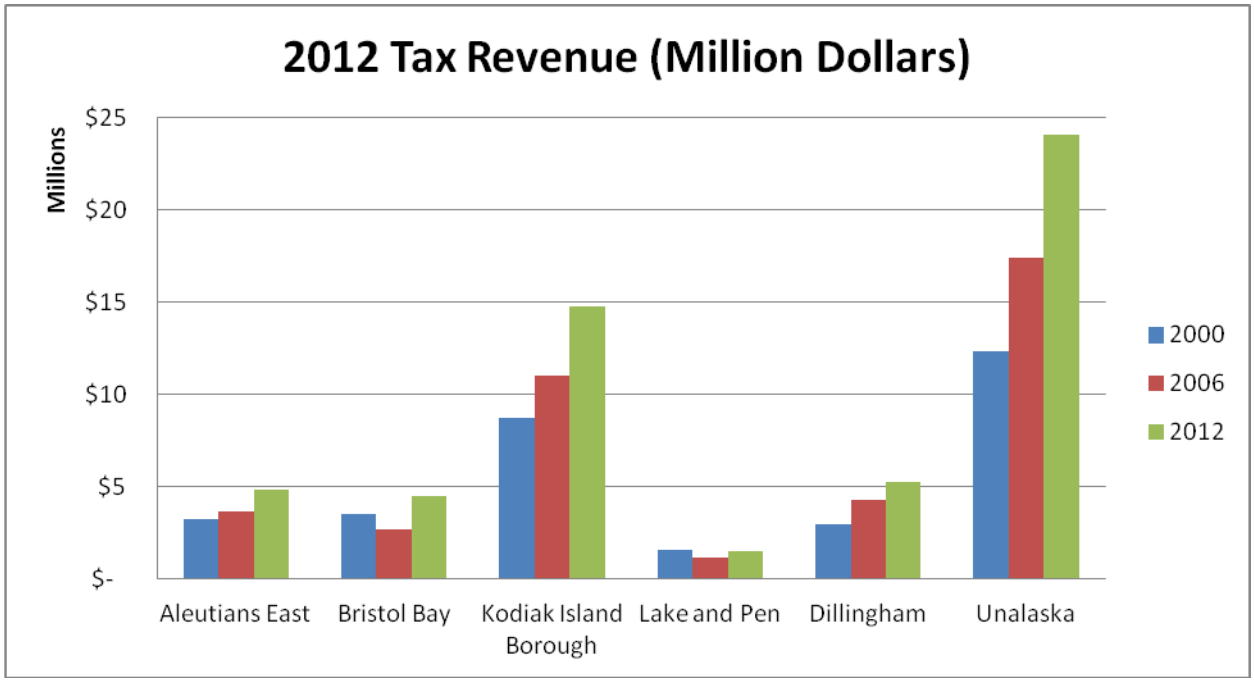


[2]

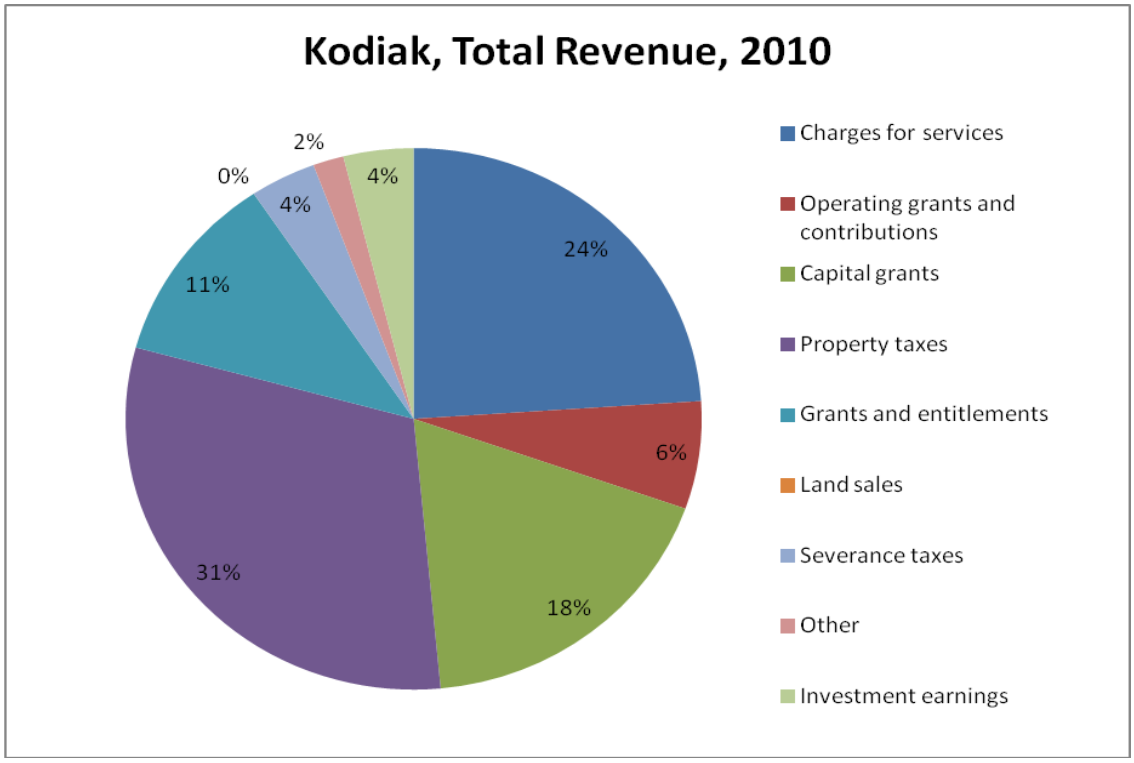
[2] US Census - 2011 County Business Patterns, http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none

D. Tax Revenue

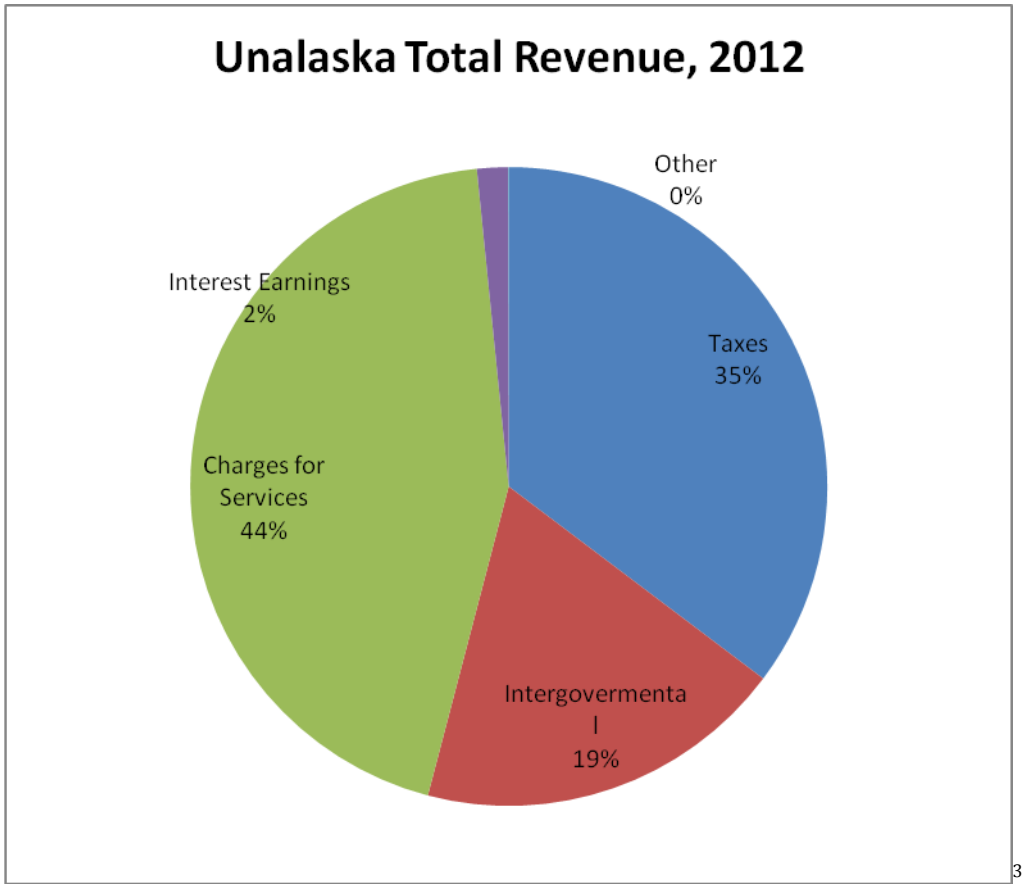
1. 2012 Tax Revenue



2. Total Tax Revenue- Kodiak



3. Total Tax Revenue- Unalaska



[3]

[3] Sources: Community Taxes, Source: http://commerce.alaska.gov/dca/osa/pub/12AKTax_Tab3a.pdf

Boroughs, http://commerce.alaska.gov/dcra/osa/osa_summary.cfm

Kodiak: http://www.kodiakak.us/index.aspx?NID=95

Unalaska: http://www.ci.unalaska.ak.us/citymanager/page/assessment-city-services

E. Shared Tax

1. 2012 Total Shared Taxes by Borough

For year 2012	Tax Type	Total Shared Taxes	Aviation Fuel	CPV Excise	Electric Cooperative	Fisheries Business	Fishery Landing	Liquor License	Telephone Cooperative
Borough									
Aleutians East		**$ 2,082,874.00**	$ -	$ -	$ -	$ 2,033,097.00	$ 49,777.00	$ -	$ -
Bristol Bay		**$ 2,217,182.00**	$ -	$ -	$ 9,211.00	$ 2,130,832.00	$ -	$ 12,375.00	$ 64,764.00
Kodiak Island		**$ 1,722,846.00**	$ -	$ 32,622.00	$ 26,387.00	$ 1,647,025.00	$ 16,812.00	$ -	$ -
Lake and Peninsula		**$ 386,805.00**	$ -	$ -	$ 1,046.00	$ 385,759.00	$ -	$ -	$ -

[4]

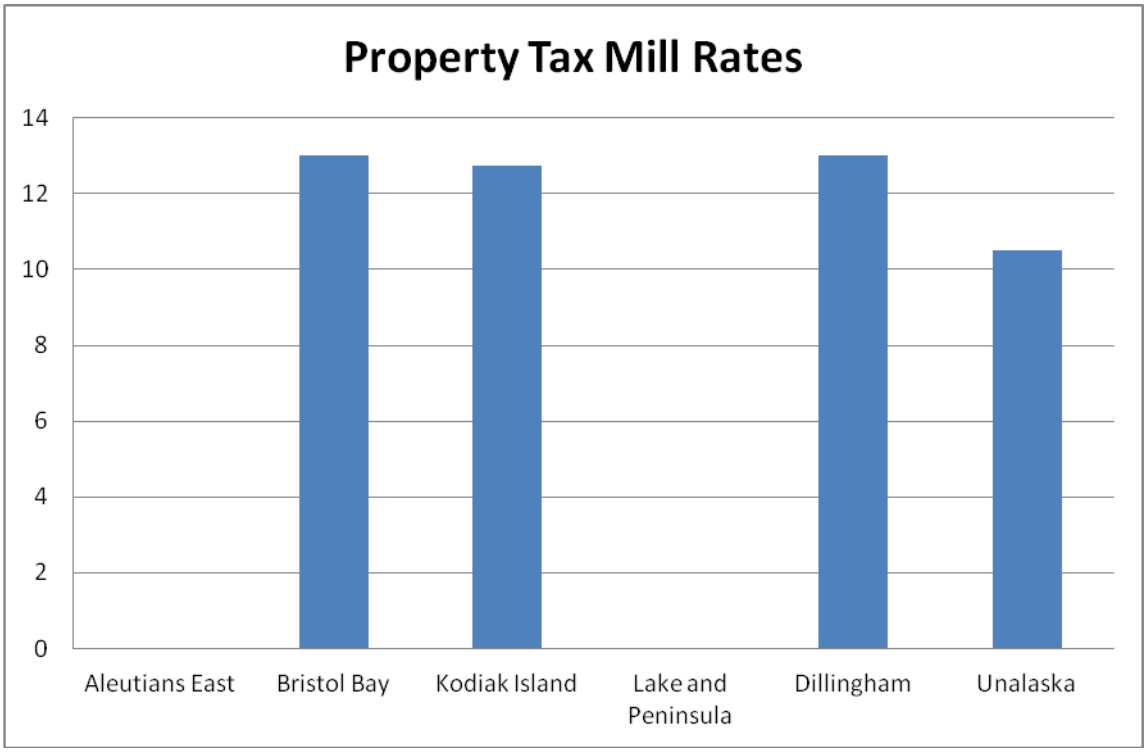
[4] Source: State of Alaska Department of Revenue, Tax Division: FY2012 Shared Taxes + Fees, Annual Report, http://www.tax.alaska.gov/programs/documentviewer/viewer.aspx?841r

F. Property Tax

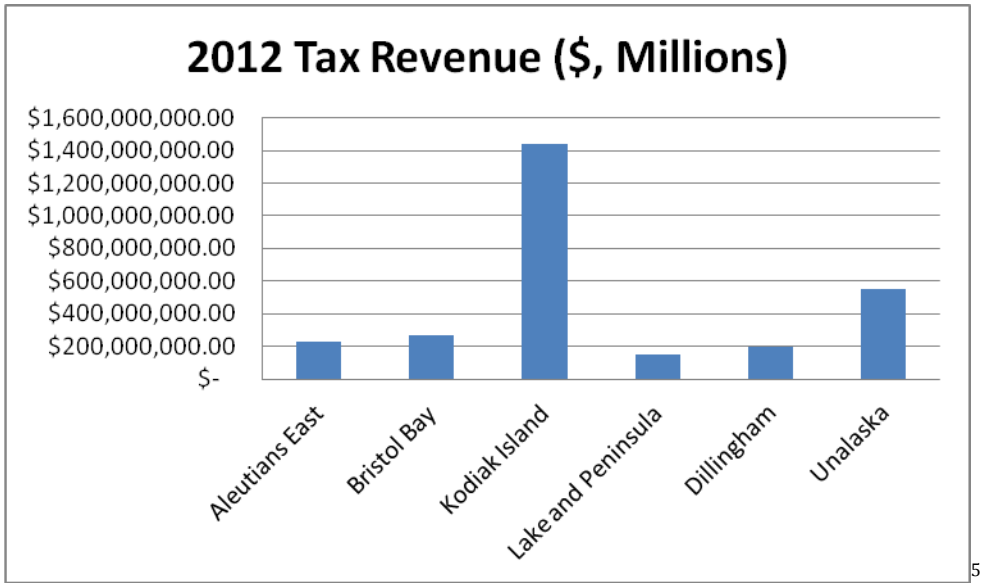
1. Property Tax Rates by Borough

	Property Tax Rates (In Mills)	Property Tax Revenues	Tax Base (Local Taxable Full Value)
Borough			
Aleutians East	0	$ -	$ 232,270,000.00
Bristol Bay	13	$ 490,048,162.00	$ 270,140,200.00
Kodiak Island	12.75	$ 12,713,977.00	$ 1,436,477,600.00
Lake and Peninsula	0	$ -	$ 147,896,700.00
Dillingham	13	$ 1,991,343.00	$ 198,818,700.00
Unalaska	10.5	$ 4,756,276.00	$ 551,883,700.00

2. Property Tax Mill Rates



3. 2012 Tax Revenue



[5]

[5] Source: State of Alaska Department of Revenue, Tax Division: FY2012 Shared Taxes + Fees, Annual Report, http://www.commerce.state.ak.us/dcra/osa/pub/12Taxable.pdf

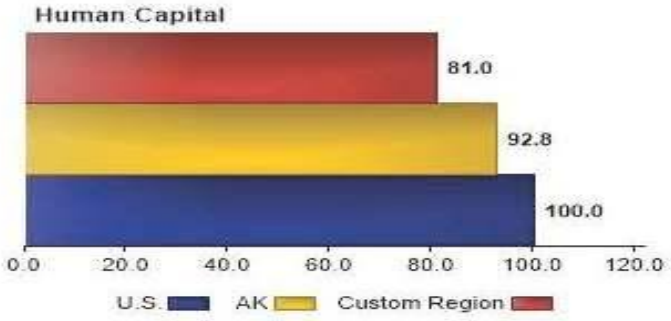
G. Innovation Index

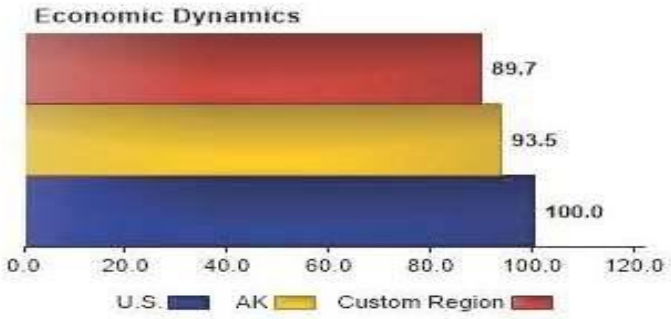
Overall Score:	INNOVATION INDEX		
Inputs + Capacity		**Outputs**	
Human Capital	Educational Attainment Technology-based Knowledge Applications Population Growth Rates	**Productivity and Employment**	Change in High-Tech Employment Job Growth Gross Domestic Product Per Worker Average Patents per 1,000 Workers
Economic Dynamics	Average Venture Capital Establishment Churn Broadband Density + Penetration Establishment Sizes	**Economic Well-being**	Average Poverty Rate Average Unemployment Rates Average Net Migration Average Growth in Per Capita Personal Income Compensation

1. Inputs and Capacity

Inputs and Capacity

The ability of the population and labor force to innovate is captured in 2 component indexes that include inputs into local economies.

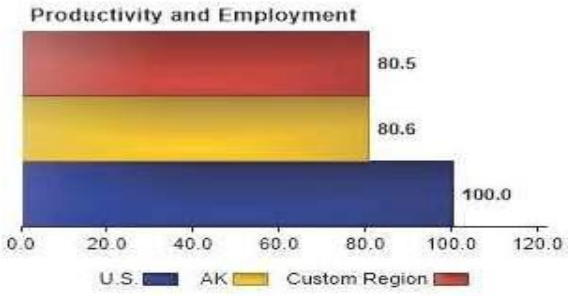


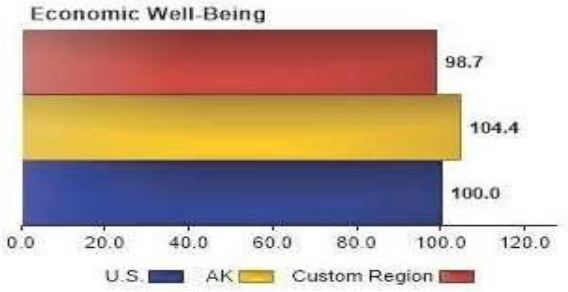


2. Outputs

Outputs

Direct outcomes and economic improvements of innovative activities are displayed in the output indexes.

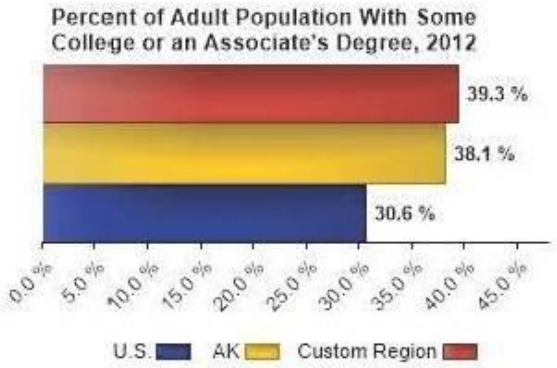


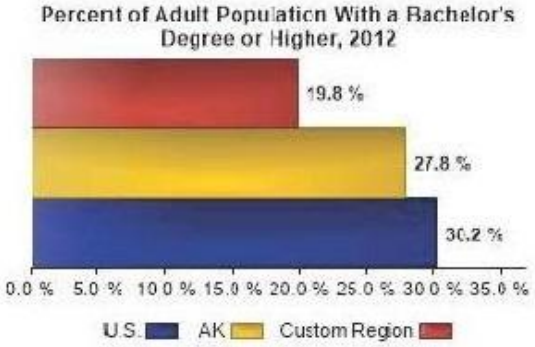


3. Educational Attainment

Educational Attainment

Educational attainment is a measure of the population's capacity to contribute to innovation with necessary skills and knowledge. 2 component indicators are presented for education to measure not only highly educated residents (ages 25 to 64) with a bachelor's degree or higher, but also residents with some college. Research shows that the some college/ associate's degree indicator has a significant effect on GDP per worker growth.

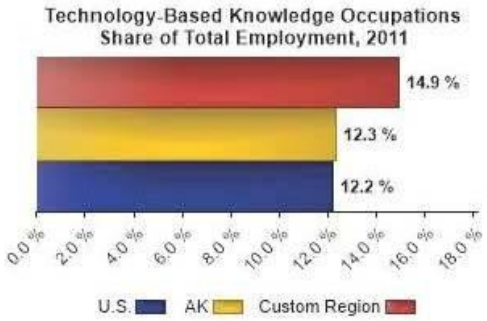




4. Technology-Based Knowledge Occupations

Technology-Based Knowledge Occupations

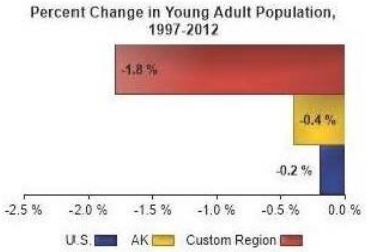
These 6 occupation clusters are often thought to be closely associated with the production of innovations. They include information technology; engineering; health care and medical science practitioners and scientists; mathematics, statistics, data and accounting; natural science and environmental management; and postsecondary education and knowledge creation.



5. Population Growth Rates and High-Tech Employment Share

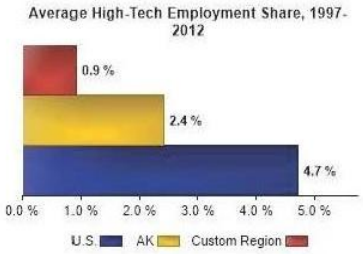
Population Growth Rates

High population growth rates for younger working age persons (ages 25 to 44) suggest new residents are attracted to an area, growing the workforce, adding to the innovative base and launching new businesses. Research shows this indicator has a significant effect on GDP per worker growth.



High-Tech Employment Share

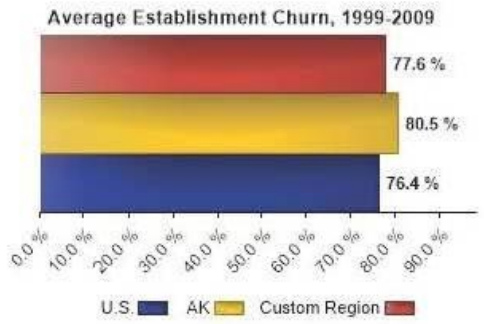
Firms requiring a highly skilled and specialized workforce contribute to innovation in a region by providing a resource for workers, other firms and other industries. (This metric measures the point in time innovative capacity of the region as opposed to the growth of innovative capacity in the productivity and employment index.)



6. Establishment Churn and Sizes

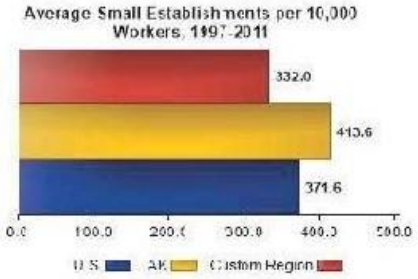
Establishment Churn

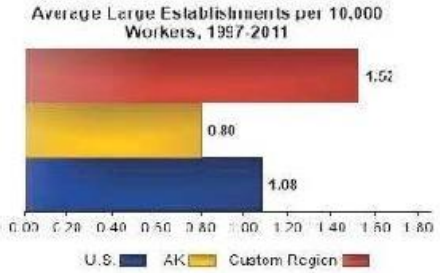
Innovative and efficient companies replace outdated establishments, or those firms unable to modernize techniques and processes. Average churn is a measure of total establishment births and deaths, and expansions and contractions, relative to the total number of firms in a region for all years available.



Establishment Sizes

The sizes of establishments provide an indication of a regional economy's structural composition. Small establishments with fewer than 20 employees are flexible and not overburdened by a bureaucratic organizational structure enabling rapid changes to implement new ideas and evolve with technology. On the other end of the spectrum, large establishments with more than 500 employees have both the capital and labor resources to fund research and other innovative activities.Research shows that the average share of small establishments has a significant effect on GDP per worker growth.

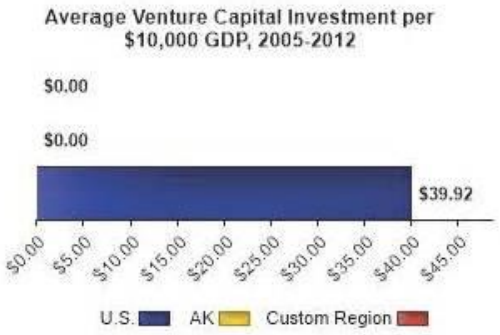




7. Average Venture Capital

Average Venture Capital

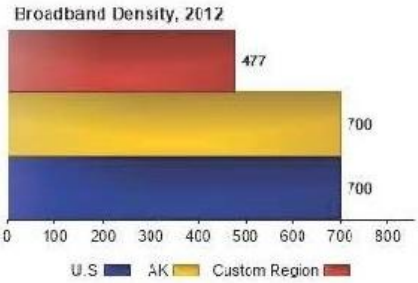
Venture capital provides a source of funds to launch new ideas or expand innovative companies.

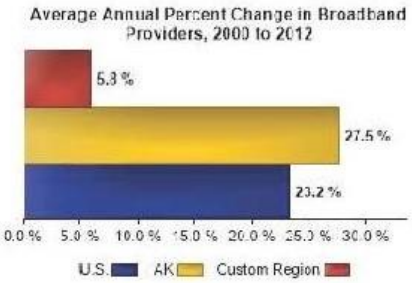


8. Broadband Density and Penetration

Broadband Density and Penetration

Innovation and knowledge are linked to widespread Internet usage for individuals and businesses. There are two measures, both from the Federal Communication Commission (FCC), to gauge Internet usage. One measure is the level of Internet penetration, or broadband density. This measure is residential broadband fixed connections per 1,000 households in 2009, a new data series the FCC first released in early 2010. The FCC reports these data in ranges, not as a specific number of connections per 1000 households in a particular county. The midpoint in the range is graphically presented here. For a custom region—an aggregation of two or more counties—the midpoint for the region is calculated as the weighted average of the midpoints of all the counties in the region. The second measure is a proxy for the rate of Internet adoption. This indicator is defined as the change in the number of broadband providers available to residents in a given county from 2000 to 2009. (The FCC did not collect data on broadband connections before 2009. The change in broadband connections would have been the preferred measure for the rate of internet adoption.)

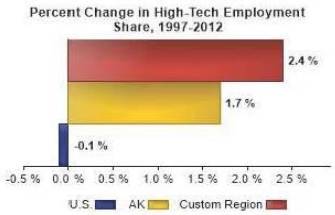




9. Change in High-Tech Employment

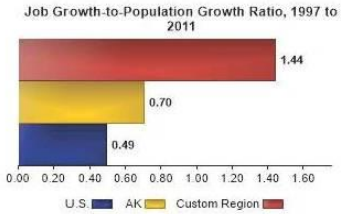
Change in High-Tech Employment

Firms requiring a highly skilled and specialized workforce are drawn to innovative areas. Growth in this sector suggests the increasing presence of innovation. High-tech employment, derived from a NAICS-based definition by Moody's Analytics, measures an aggregation of employment in key sectors (e.g., telecommunications, Internet providers, scientific laboratories) as an average annual rate of change in the share of high-tech employment. Research shows this indicator has a significant effect on GDP per worker growth.



Job Growth

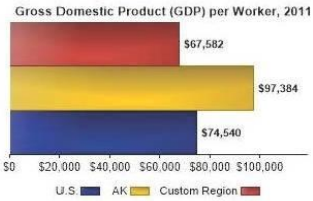
High employment growth relative to population growth suggests jobs are being created faster than people are moving to a region. A high ratio between these 2 variables indicates strong economic growth.

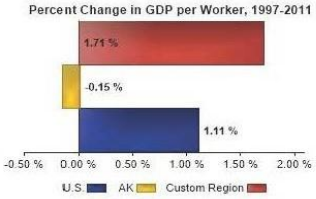


10. Gross Domestic Product per Worker

Gross Domestic Product per Worker

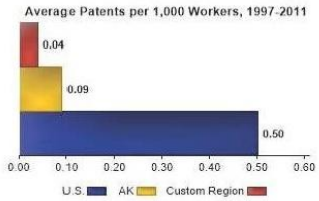
GDP serves as a measure of county-level economic output, while increases in GDP per worker measures increases in worker productivity.





Average Patents per 1,000 Workers

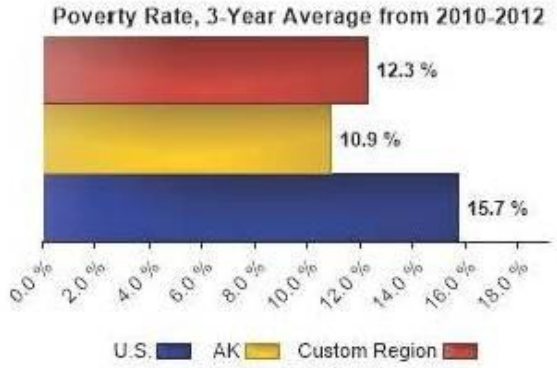
New patented technologies provide an indicator of individuals' and firms' abilities to develop new technologies and remain competitive in the economy. Patents are presented as total number per 1,000 workers.



11. Average Poverty Rate

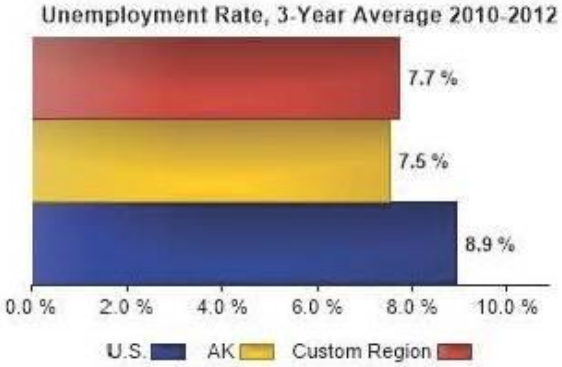
Average Poverty Rate

Innovative economies are thought to be less poverty stricken as a result of elevated employment opportunities and a more highly educated workforce with diverse skills that open the doors to an increased number of employers. As poverty rates decrease, presumably innovation has increased.



Average Unemployment Rates

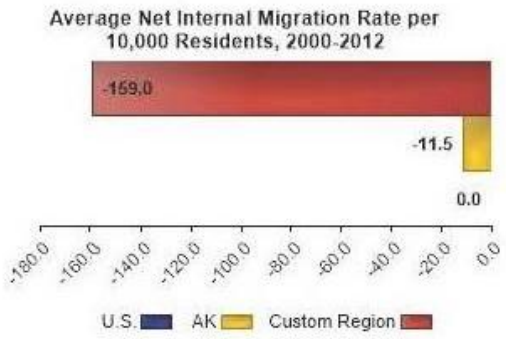
Innovative economies have greater employment opportunities and lower unemployment rates.



12. Average Net Migration

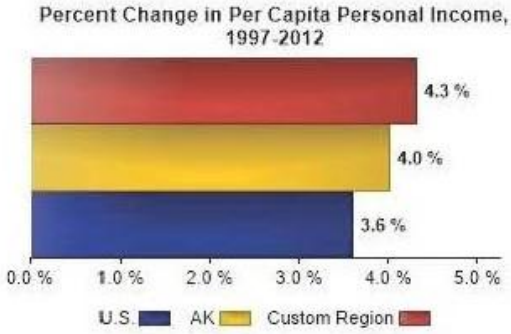
Average Net Migration

Total migration of all persons into a region serves as an indicator of whether a region is attractive to job seekers and families.



Average Growth in Per Capita Personal Income

Personal Income is the broadest measure of a person's income because it includes rental income, dividends and interest payments, in addition to salary, wages and benefits. As a result, it is probably the best measure of well-being.



H. Tourism

1. Regions Visited in Alaska

Regions Visited in Alaska (% of visitors)				
	Overall		Overnight	
	2006	2011	2006	2011
Southeast	71%	68%	11%	10%
Southcentral	56%	56%	49%	79%
Interior	33%	33%	32%	32%
Southwest	3%	4%	3%	2%
Far North	3%	2%	2%	1%

2. Trip Purpose and Packages by Region

Trip Purpose and Packages by Region (%)		
	All visitors	Southwest
Vacation/pleasure	77	66
Visiting friends/relatives	14	16
business only	5	12
business/pleasure	4	6

3. Southwest Alaska: Package Type

Southwest Alaska: Package type (%) - excludes cruise packages	
Fishing Lodge	59%
Wilderness lodge	19%
Adventure tour	13%
Motorcoach tour	2%
Rail package	4%
Rental car/RV package	1%
Other	1%

4. Previous Alaska Travel by Region

Previous Alaska travel by region	Been to AK before (%)	If yes, average # of vacation trips
Southeast	29%	5.2
Southcentral	42%	4.3
Interior	32%	2.9
Southwest	60%	6
Far North	43%	3.4

5. Economic Impact of Visitor Industry

Visitor Industry Economic Impacts: 2011-2012, 2012-2013; 2013-2014

	2011-12 Impacts	2012-13 Impacts	2013-14 Impacts
Total Visitor Industry Spending	**$3.72 billion**	**$3.93 billion**	**$3.92 billion**
Southcentral	$1.97 billion	$2.05 billion	$2.06 billion
Southeast	$1.00 billion	$1.10 billion	$1.09 billion
Interior	$605 million	$631 million	$626 million
Southwest	$116 million	$120 million	$121 million
Far North	$29 million	$30 million	$30 million
Total Employment Impacts	**37,800 jobs**	**39,000 jobs**	**38,700 jobs**
Southcentral	18,900 jobs	19,200 jobs	19,200 jobs
Southeast	10,200 jobs	10,900 jobs	10,800 jobs
Interior	7,000 jobs	7,100 jobs	6,900 jobs
Southwest	1,400 jobs	1,500 jobs	1,500 jobs
Far North	300 jobs	300 jobs	300 jobs
Total Labor Income Impacts	**$1.24 billion**	**$1.32 billion**	**$1.31 billion**
Southcentral	$580 million	$601 million	$604 million
Southeast	$370 million	$407 million	$405 million
Interior	$240 million	$251 million	$246 million
Southwest	$42 million	$44 million	$44 million
Far North	$11 million	$12 million	$12 million

[6]

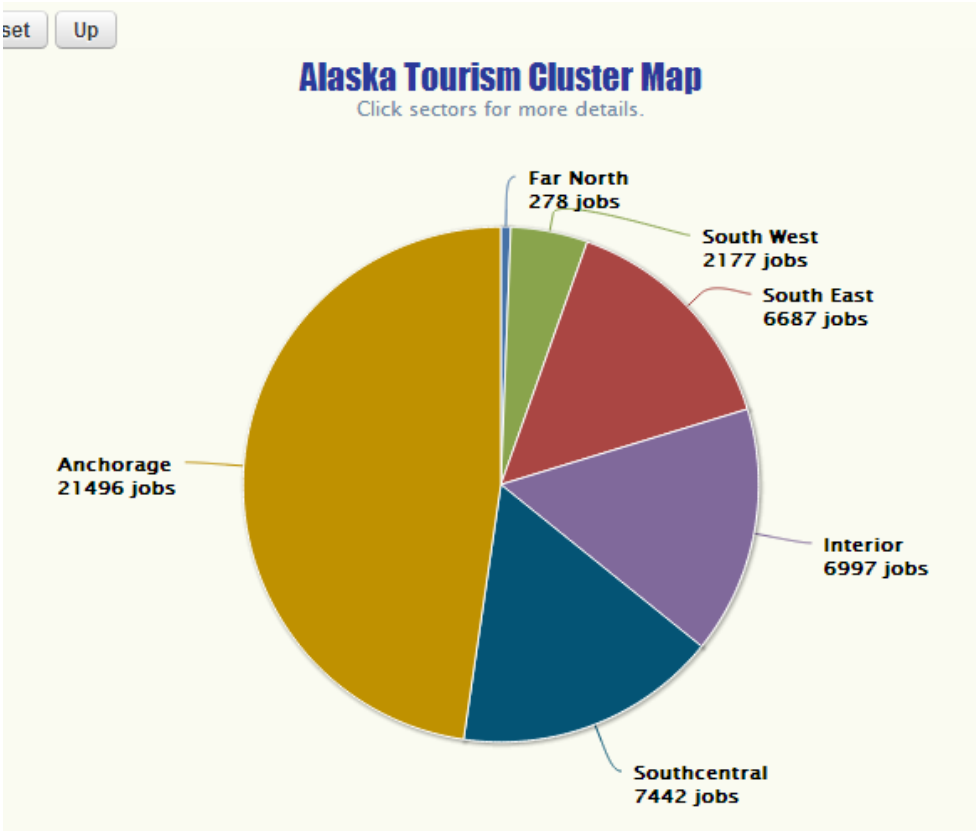
[6] Source: Economic Impact of Alaska's Visitor Industry, 2012-2013

I. Tourism Clusters

1. Number of Tourism related Jobs

Business Type	# of jobs	
	Core Businesses	**Linked Businesses**
Lodging	324	0
Attractions	44	0
Transportation	10	710
Retail	0	722
Dining	0	367
Info and Booking	0	0
TOTAL	378	1799

2. Alaska Tourism Cluster Map



[7]

[7] Source: Alaska Partnership for Economic Development

J. Top 10 Ports (US)

1. Volume in Pounds and Dollars

Volume, Million Pounds			
	Port	**2011**	**2012**
1	Dutch Harbor, AK	706	752
2	Empire-Venice, LA	532	500
3	Aleutian Islands (Other), AK	431	456
4	Kodiak, AK	372	393
5	Reedville, VA	414	389
6	Intracoastal City, LA	327	345
7	Pascagoula-Moss Point, MS	267	250
8	Cameron, LA	227	228
9	Alaska Peninsula (Other), AK	211	191
10	Astoria, OR	144	170

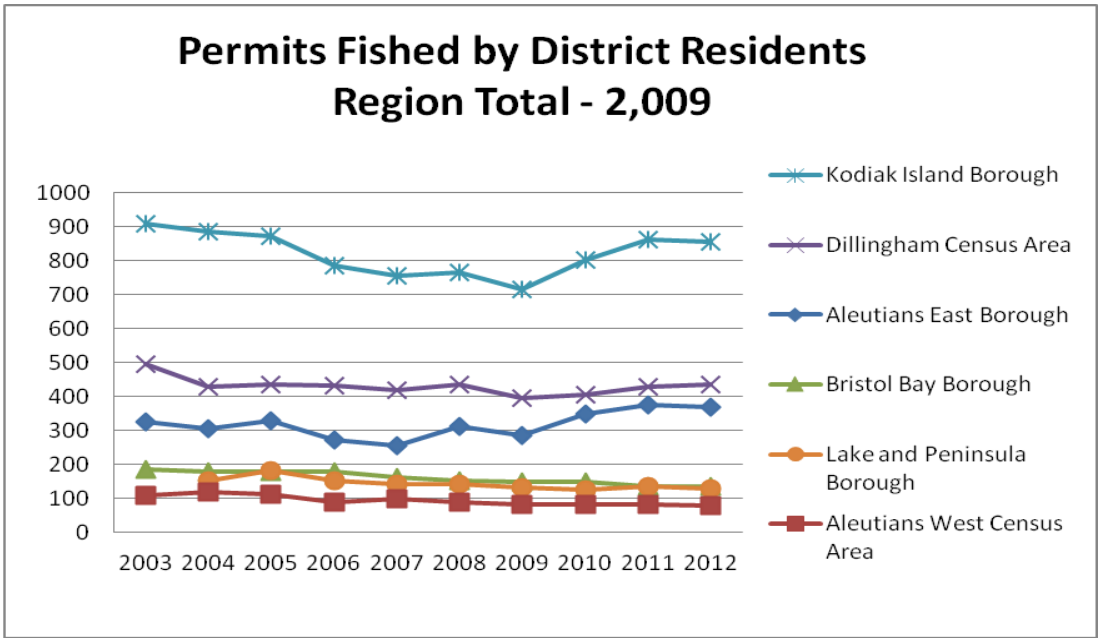
Value, Million Dollars			
	Port	**2011**	**2012**
1	New Bedford, MA	$ 369	$ 411
2	Dutch Harbor, AK	$ 247	$ 214
3	Kodiak, AK	$ 182	$ 170
4	Aleutian Islands (Other), AK	$ 129	$ 119
5	Honolulu, HI	$ 83	$ 100
6	Alaska Peninsula (Other), AK	$ 138	$ 99
7	Empire-Venice, LA	$ 99	$ 80
8	Bristol Bay (Other), AK	$ 86	$ 79
9	Naknek, AK	$ 100	$ 78
10	Galveston, TX	$ 47	$ 74

[8]

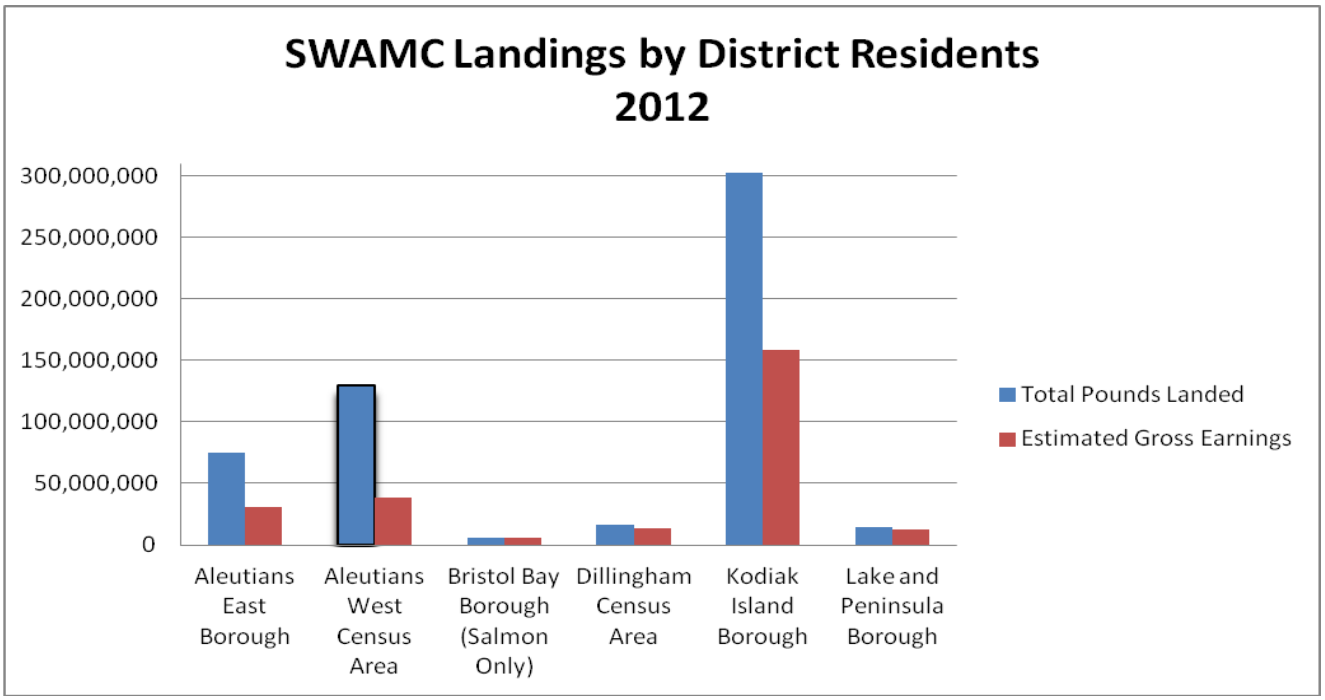
[8] NOAA Office of Science & Technology, http://www.st.nmfs.noaa.gov/commercial-fisheries/commercial-landings/annual-landings/index

K. Fish Permits and Earnings

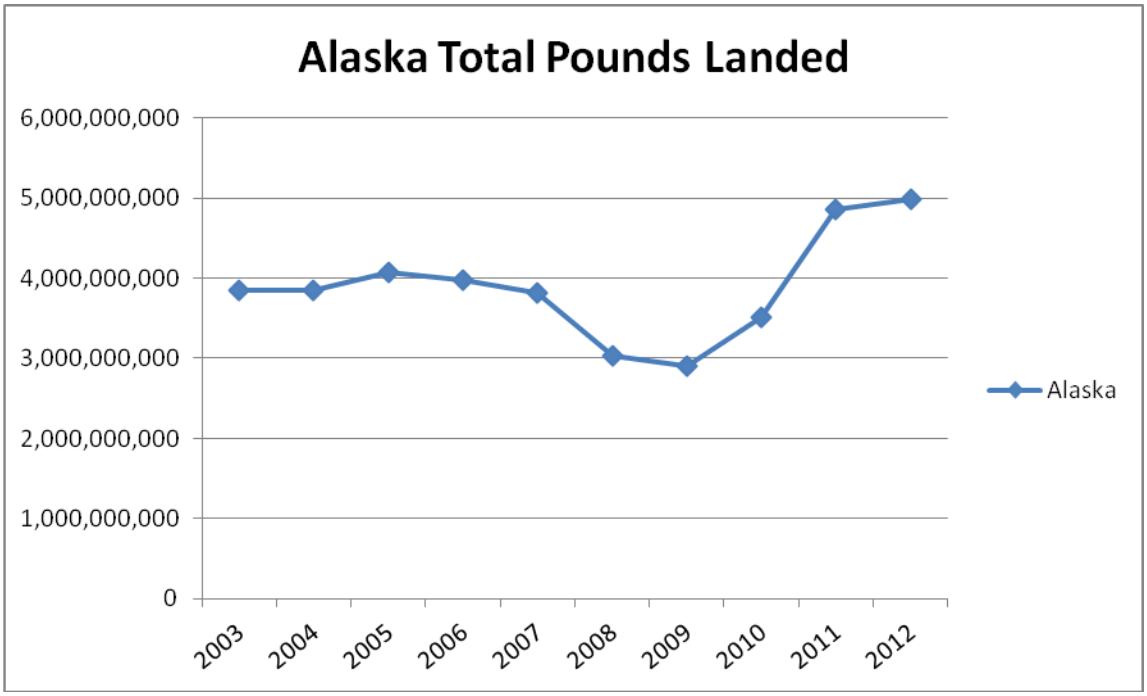
1. Permits Fished by District Residents



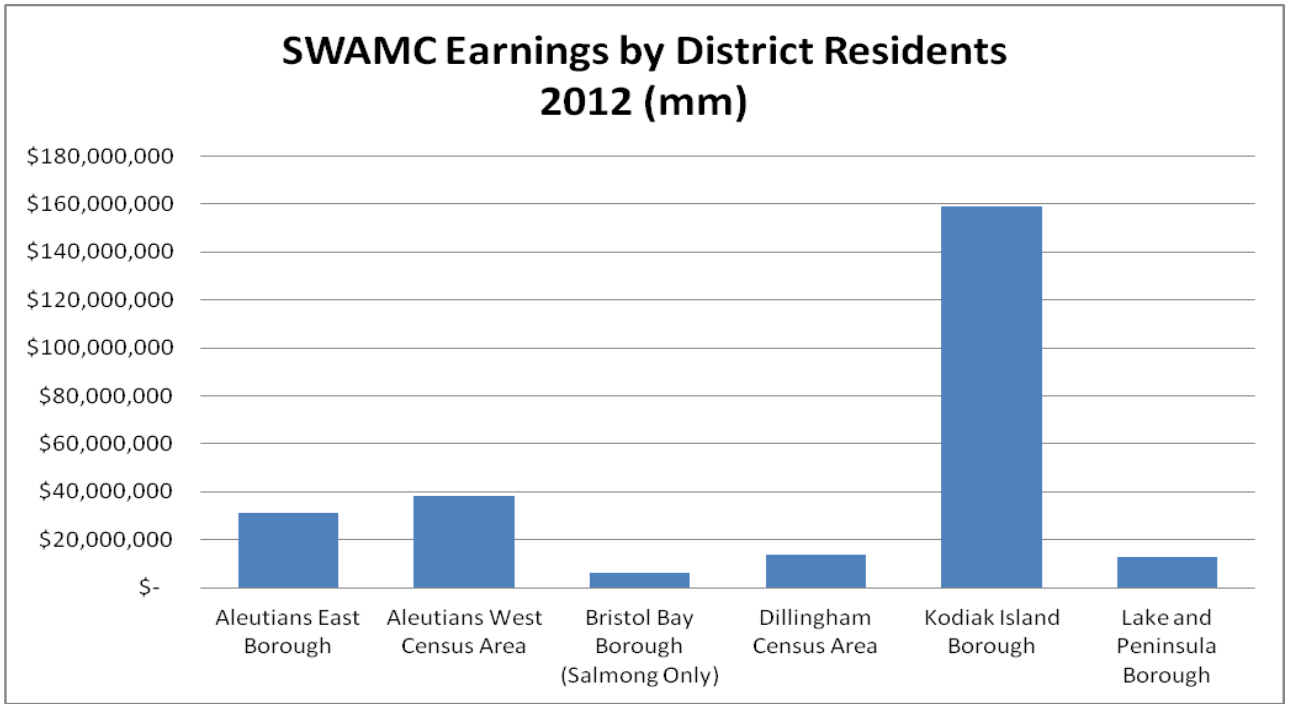
2. SWAMC Landings by Borough Residents



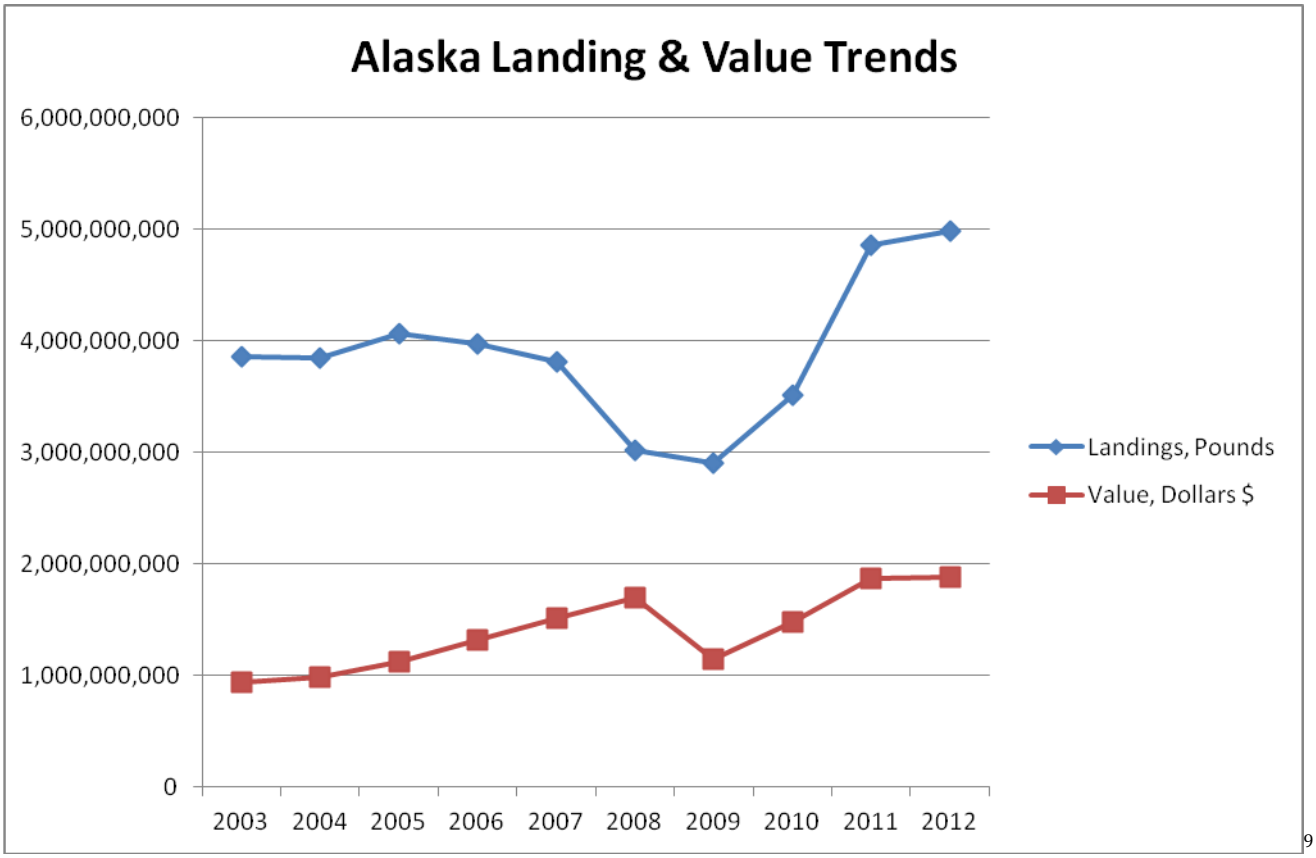
3. Alaska Total Pounds Landed



4. SWAMC Earnings by Borough Residents



5. Alaska Landing & Value Trends



[9]

[9] Source: Commercial Fisheries Entry Commission, http://www.cfec.state.ak.us/gpbycen/2012/mnu.htm

*Includes both residents and non residents.

L. Tourism Clusters

1. Number of Tourism related Jobs

Business Type	# of jobs	
	Core Businesses	**Linked Businesses**
Lodging	324	0
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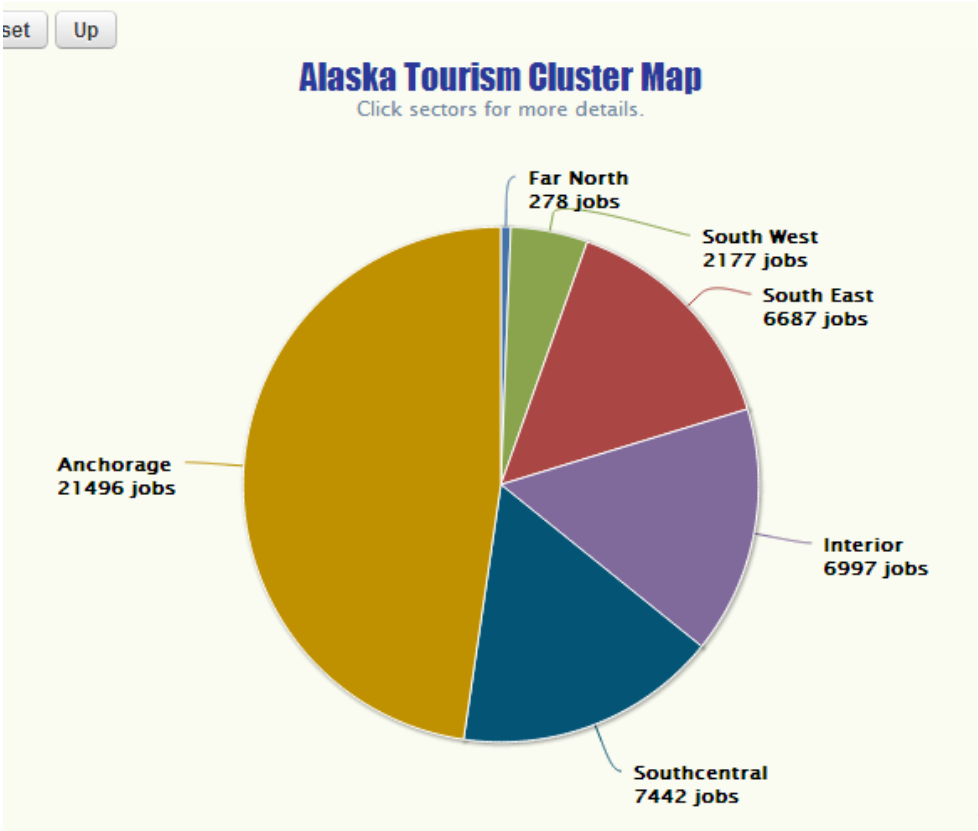
TOTAL	378	1799

2. Alaska Tourism Cluster Map

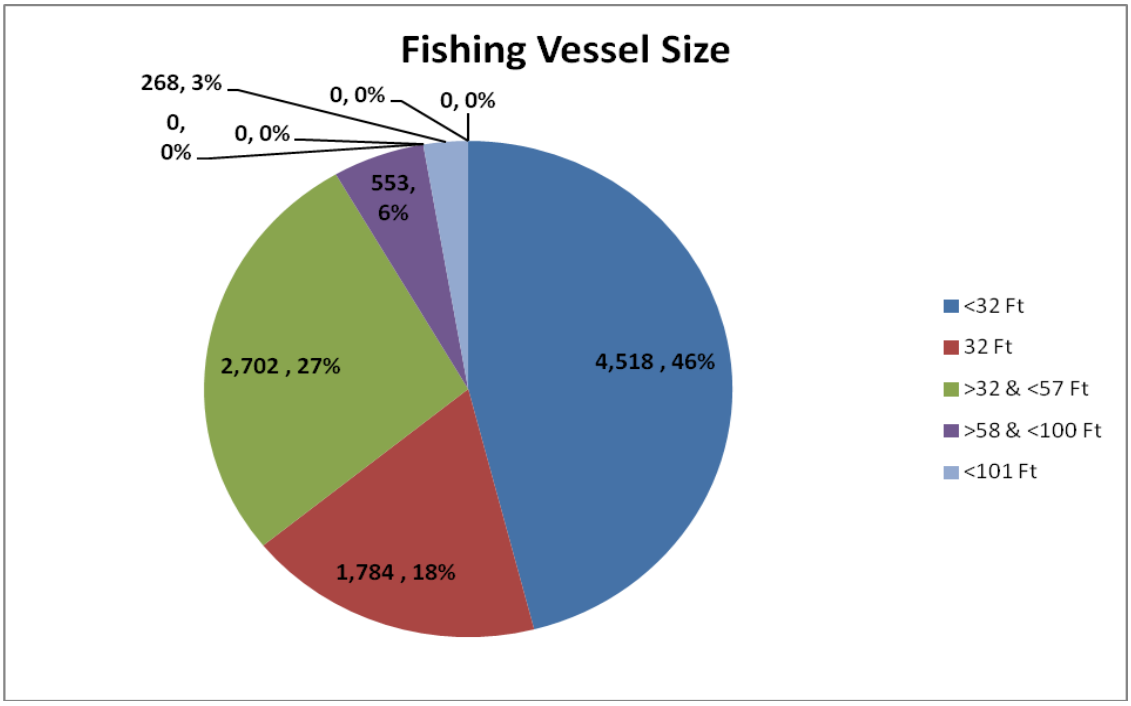


[10]

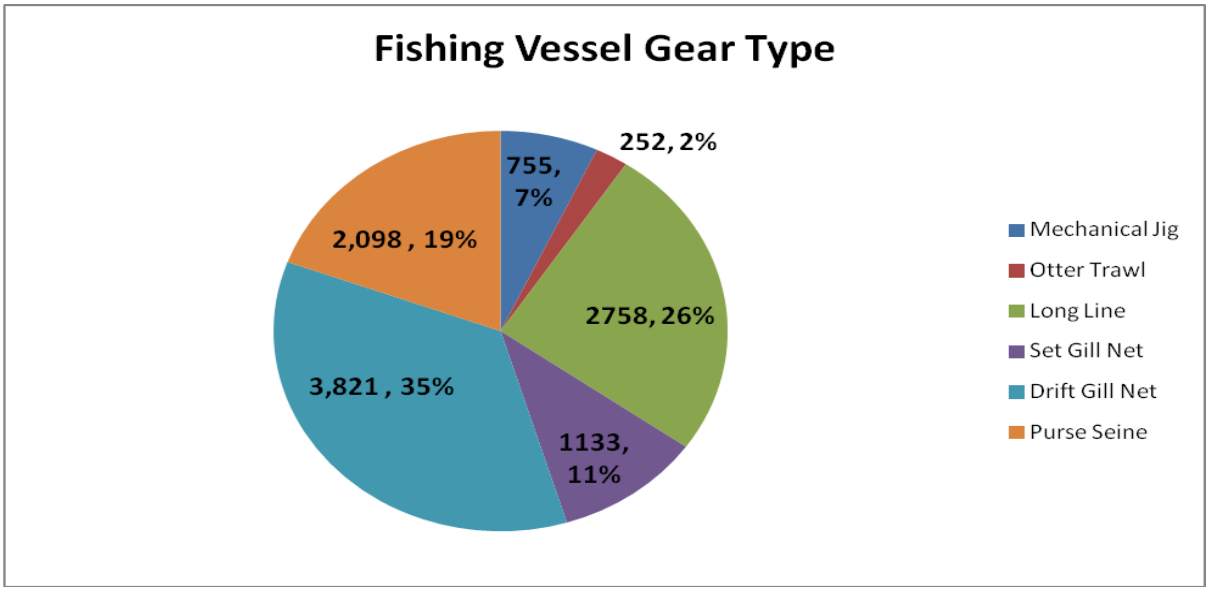
[10] Source: Alaska Partnership for Economic Development

M.Vessel Summary

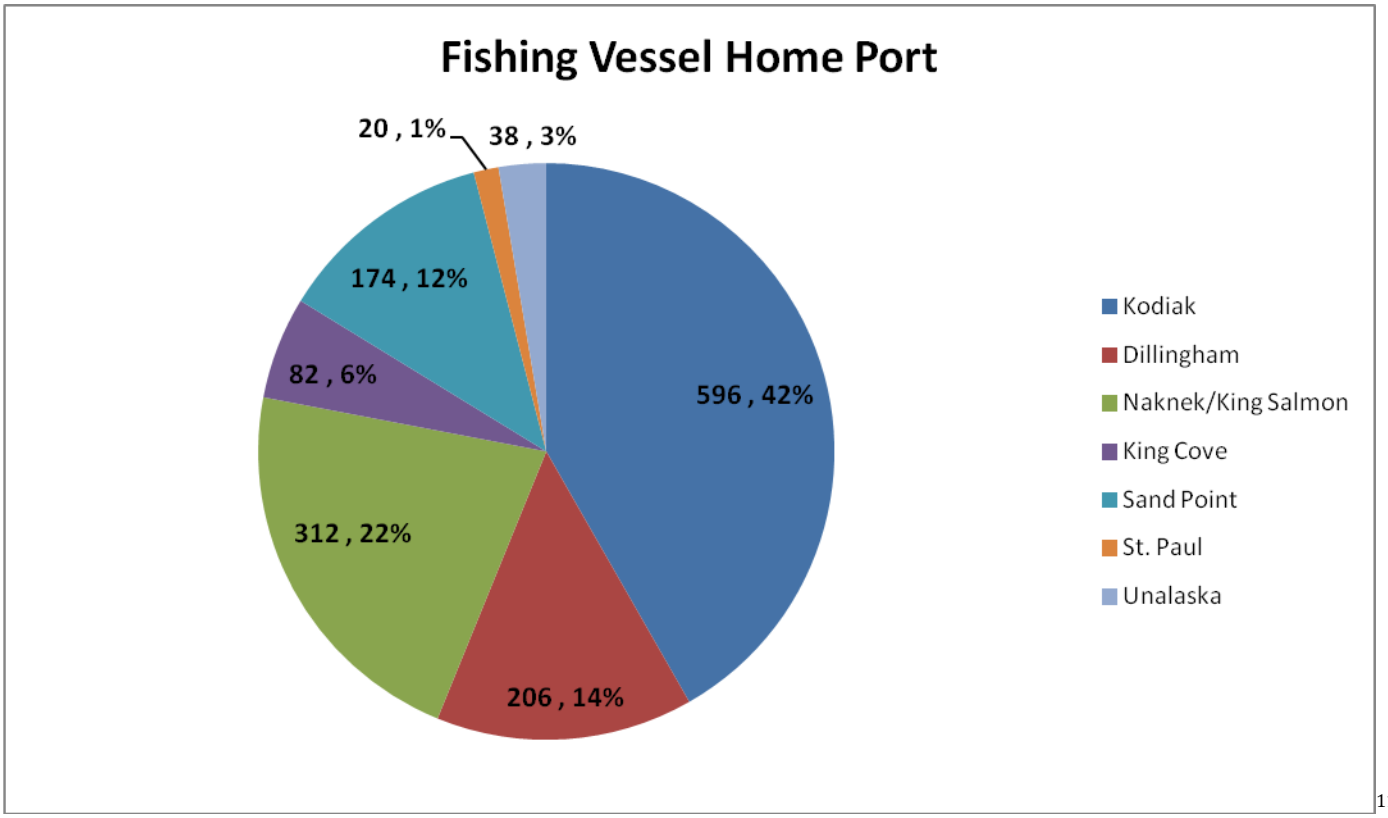
1. Fishing Vessel Size



2. Fishing Vessel Gear Type



3. Fishing Vessel Home Port



[11]

[11] Source: Alaska Commercial Fisheries Entry Commission, Public Lookup Database

N. Ocean Acidification & Fisheries

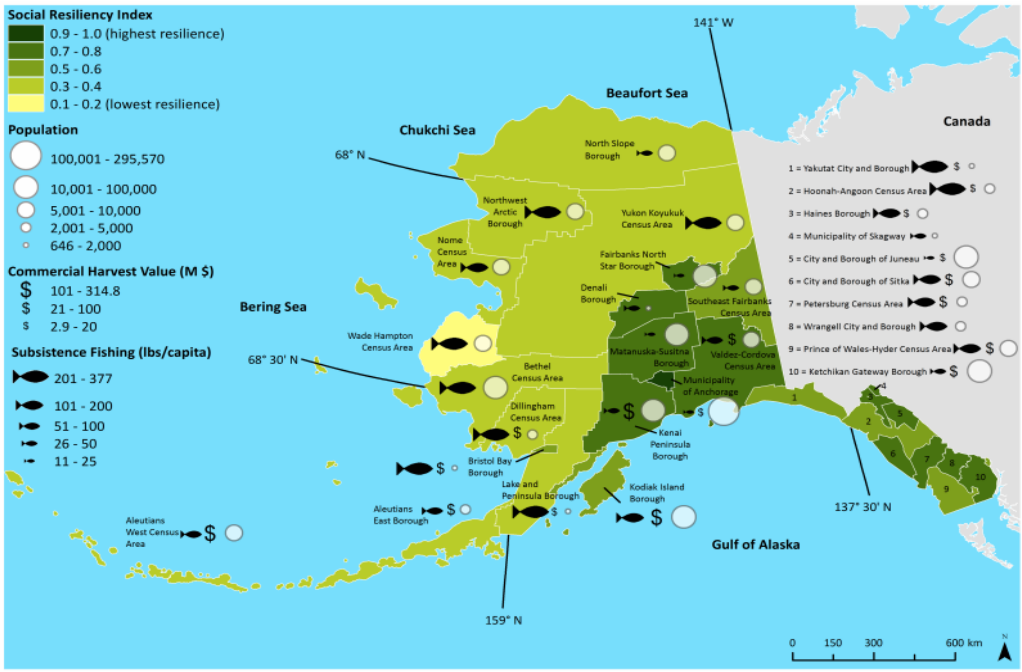
1. Regional Fisheries Vulnerability

Final Index Scores

		Exposure		Vulnerability					Hazard	
Region	Census/Borough	$E_{H,E}$	E_N	$V_{S,N,C}$	$V_{S,N,Q}$	$V_{S,E,C}$	$V_{S,E,Q}$	V_C	H	Rank
South Central	Anchorage	3	2	2	1	2	4	1	4	18
North	N. Slope Borough	1	1	1	1	2	3	4	1	29
Interior	Yukon Koyukuk Census Area	1	3	3	4	2	2	4	2	21
Northwest	Wade Hampton Census Area	2	2	2	4	3	1	4	3	17
South Central	Yakutat City and Borough	2	4	4	4	3	2	2	4	7
Southeast	Wrangell City and Borough	4	4	4	2	4	4	2	4	3
Southwest	Lake and Peninsula Borough	4	4	4	4	4	3	4	4	1
West	Bristol Bay Borough	3	4	4	4	4	1	3	3	7

2. Social Resilience to Ocean Acidification

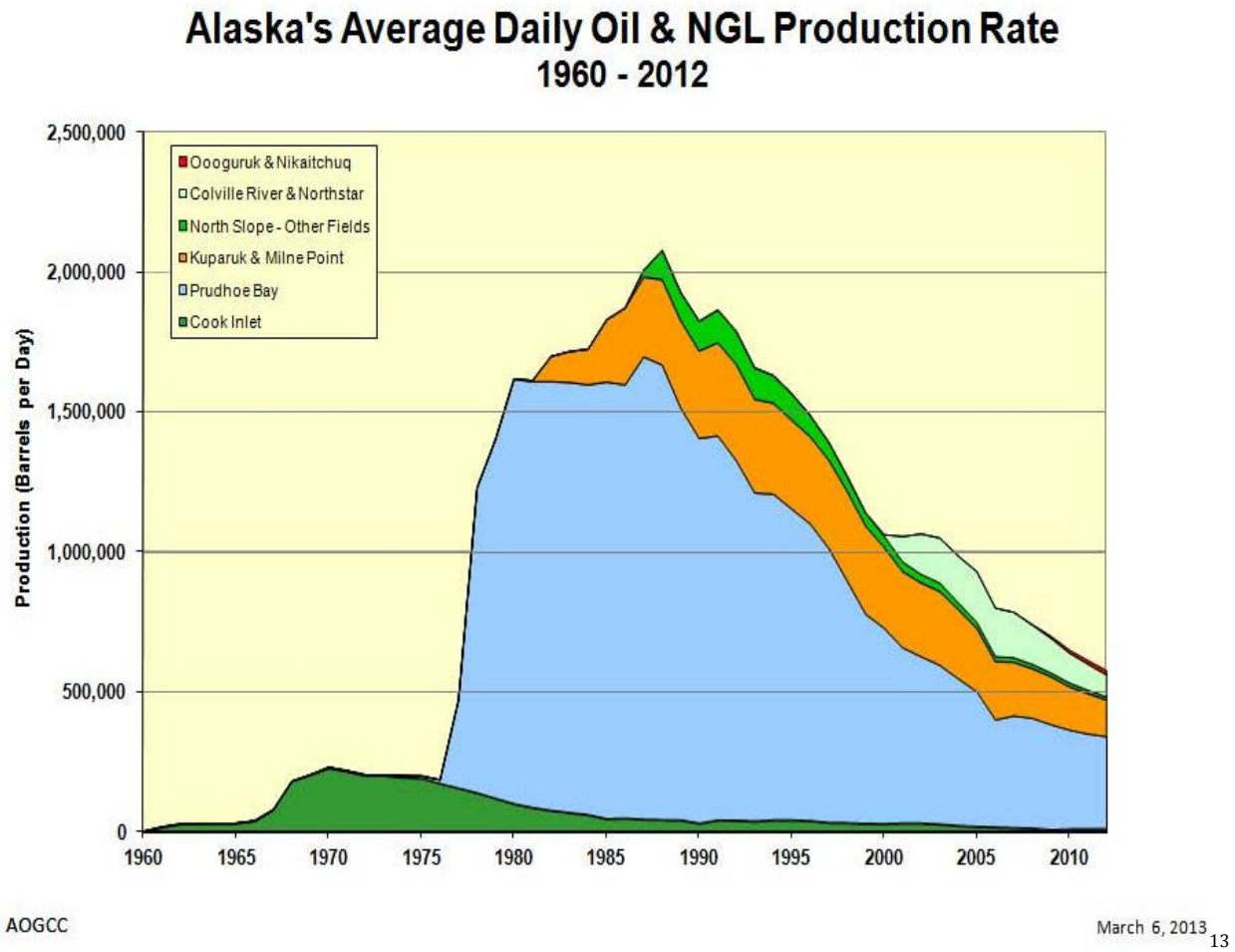
Individual components of the final index



12

[12] Source: Ocean Acidification Risk Assessment for Alaska's Fishery Sector, https://accap.uaf.edu/?q=project/ocean-acidification-sensitivity-index-oasi

O. Oil and Gas



[13]

[13] Source: Alaska Department of Natural Resources, Division of Oil + Gas, http://dog.dnr.alaska.gov/Royalty/Production.htm