

Introduction

In October 2010, the U.S. Department of Agriculture (USDA) Forest Service awarded a contract to the Juneau Economic Development Council (JEDC) to complete an Economic Development Asset Map and a Strategic Plan for Southeast Alaska that would focus on actions to strengthen select industry sectors in the region. Known as the Southeast Cluster Initiative, the project called for two deliverables that are intended to help strengthen Southeast Alaska's regional economy:

1. A Southeast Alaska Asset Map identifying the human, financial, institutional, and natural assets of Southeast Alaska.
2. A cluster-based economic development plan for promoting regional growth in certain key industries.

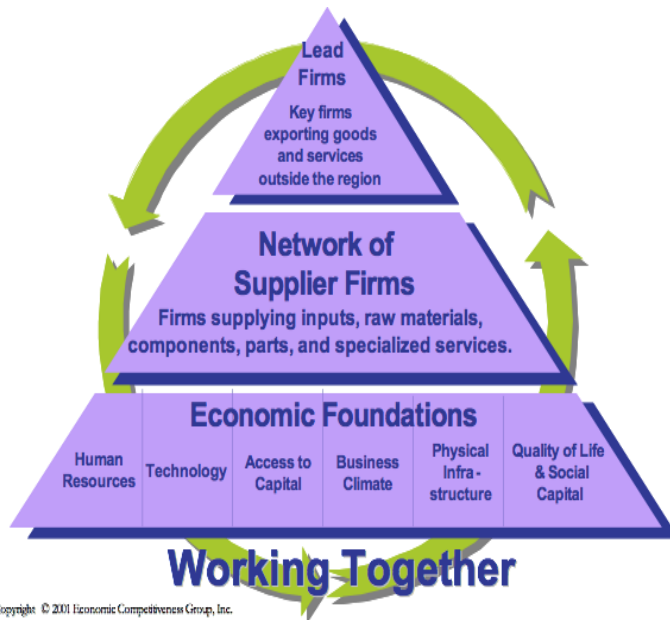
For this work, the Juneau Economic Development Council (JEDC) partnered with Southeast Conference, Sheinberg Associates, Alaska Map Company, and consultants Brian Kelsey and Ted Lyman, a team that brought regional, national and world-renowned expertise to the project.

In December 2010, the JEDC partnership delivered the Southeast Alaska Asset Map as Phase I of the Southeast Alaska Cluster Initiative. The asset map included a dynamic database and a report that compiles tangible and intangible regional assets including: employment and demographics, education and workforce readiness, physical infrastructure, private industry, natural resources, the regional business climate, and financial metrics. This report, entitled "Southeast Alaska Economic Asset Map," can be found on the JEDC website at <http://jedc.org/assetmapping-seakregionalassetmap.php>.

For Phase II, JEDC chose a Cluster Working Group (CWG) approach to regional economic development because it brings together a private sector industry cluster with federal, state and local agencies, University faculty, trade association representatives and other stakeholders committed to commonly addressing industry needs, concerns and opportunities on a partnership basis. An industry cluster is a set of businesses in the same or related field that are located near one another. These businesses compete with one another but also complement one another. They share a reliance on regional knowledge and on the regional labor market and draw productive advantage from their mutual proximity. They are linked by their buyer-supplier relationships and by their shared reliance on the six foundations of the Southeast Alaska economy (or indeed, any economy): human resources, technology, access to capital, business climate, physical infrastructure, and quality of life and social capital.

The cluster working group approach brings each industry cluster together, and through intensive facilitation -- meeting support and ongoing follow-up, sharing of work and feedback among CWG members, frequent small-group or task-oriented meetings -- each CWG develops a set of industry specific action initiatives based on their shared economic vision.

The cluster concept is illustrated below:



business climate. The business environment should be constantly shaped to meet the needs of society and enterprise.

Physical Infrastructure—Well-developed, cost-effective and efficient roads, marine ways, ports, and airports that meet the transit and transportation needs of both workers and business. Sewer, water, trash, communications, and electricity infrastructure that meets community needs.

Quality of Life and Social Capital—A region's quality of life—from vibrant communities to safety to natural beauty and recreation opportunities—is a primary competitive advantage that helps attract new businesses and talent. Many of the things that make up quality of life are intangible. Social capital refers to a community's culture and ability to solve problems. Strong social capital is found where there is mutual trust and community-based problem solving programs.

The team's Asset Map work identified 12 regional clusters of economic activity, each with a unique combination of employment concentration and industry growth that together represent 74% of all private sector jobs in Southeast Alaska:

Star clusters (higher than average employment concentration in the region, in growing markets)

- Arts and Entertainment
- Social Assistance
- Forestry and Logging
- Real Estate

Opportunity Clusters (lower employment concentration than average, but in growing markets)

- Advanced Business Services

Human Resources—The availability of an educated and productive workforce.

Technology—The quality of research and development and other systems for capturing innovations and transferring them to the commercial marketplace.

Access to Capital—Access by small and large firms to both debt financing and equity financing, such as venture capital, so businesses can start and expand.

Business Climate—A supportive environment with clear and effective tax and regulatory policies. Political decisions and the work of public agencies largely define the region's

- Health Care
- Construction

Mature Clusters (higher employment than average, but in slower growing markets)

- Fishing and Seafood Processing
- Mining
- Ship and Boat Building
- Transportation and Tourism

Challenge Clusters (low employment concentration and in slow growth markets)

- Energy

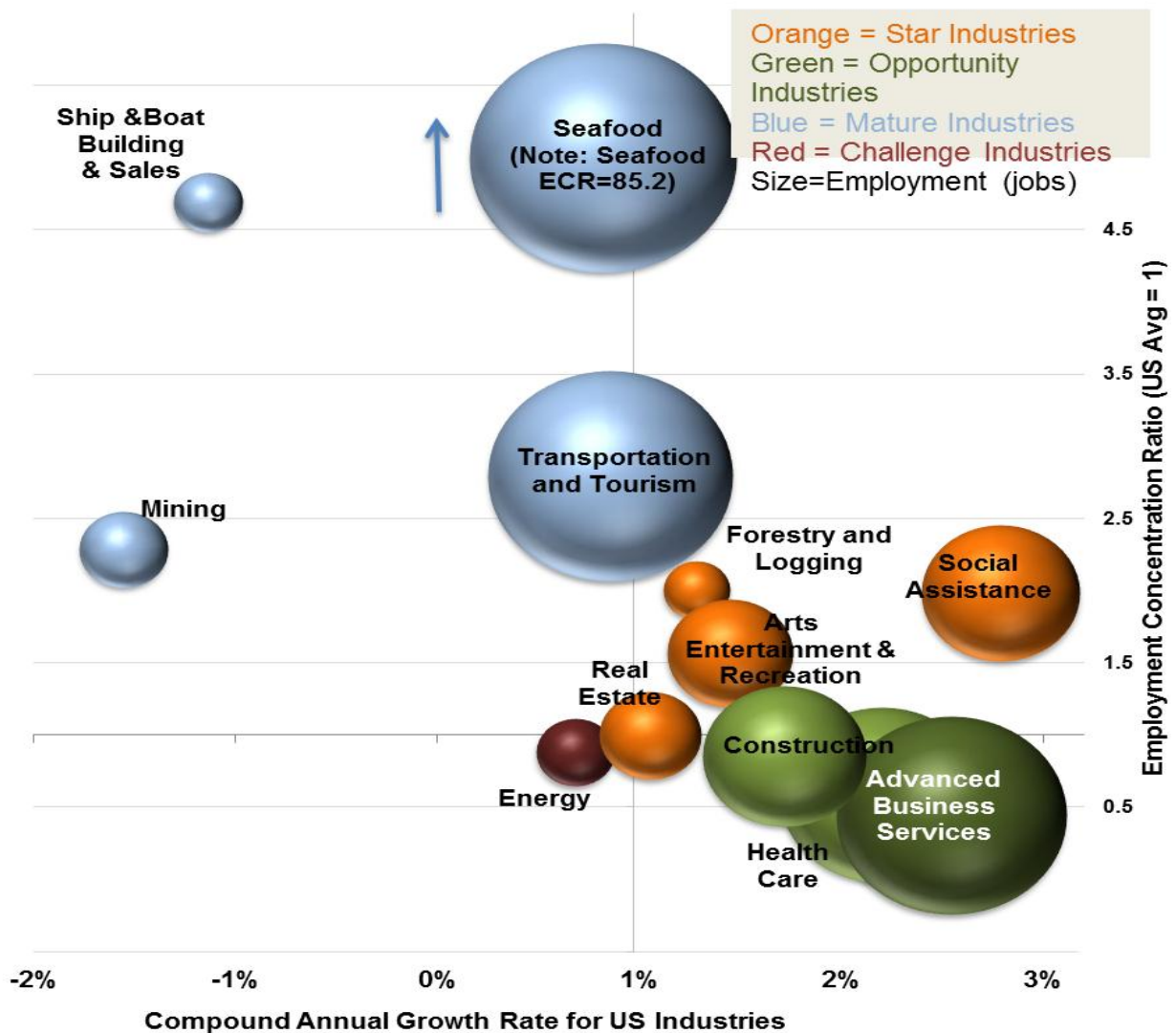
Southeast Alaska Annual Private Sector Employment: Select Clusters

Cluster/ Industry Name	NAICS Industry Code	Annual Average Monthly Employ- ment 2003	Annual Average Monthly Employ- ment 2009	SE Businesses 2009	SE Wages 2009	Avg. SE wage 2009	Eco- nomic Concen- tration Ratio	US Compound Annual Growth Rate 2009- 2019
Star clusters (higher than average employment concentration in the region, in growing markets)								
Arts, Entertainment, and Recreation	71	653	849	102	\$16,392,498	\$19,310	1.6	1.4%
Social Assistance	624	1,155	1,344	85	\$34,797,825	\$25,896	2.0	2.8%
Forestry and Logging		510	238	32	\$11,759,446	\$49,375	2.0	1.3%
Real Estate and Rental and Leasing	53	419	553	93	420,967,669	\$37,933	1.0	1.1%
Opportunity Clusters (lower employment concentration than average, but in growing markets)								
Advanced Business Services		2,582	2,856	442	\$120,487,309	\$42,195	0.4	1.4%
Health Care		2,080	2,232	134	\$103,951,255	\$46,570	0.6	2.2%
Construction	1012	1,748	1,436	304	\$87,105,638	\$60,648	0.9	1.7%
Mature Clusters (higher employment than average, but in slower growing markets)								
Seafood		3,680	3,845	2,396	\$199,896,080	\$51,989	85.2	0.4%
Mining	21	291	413	14	\$37,980,160	\$91,962	2.3	-1.6%
Boating/Ship Building		140	254	24	\$12,090,194	\$47,662	4.7	-1.1%
Transportation and Tourism		3,175	3,225	312	\$109,505,610	\$33,953	2.8	0.9%
Challenge Clusters (low employment concentration and in slow growth markets)								
Energy		338	329	38	\$11,447,202	\$34,768	0.9	0.7%

Sources: Alaska Department of Labor, U.S. Bureau of Labor Statistics, JEDC Analysis

In order to understand the relative contribution of each cluster to the regional economy, the chart on the next page presents the compound annual growth rate for U.S. industries along the horizontal axis. Growth rates range from a high of 2.8% for social assistance, to a negative rate of growth of -1.6% for mining. Economic Concentration Ratio (a.k.a Location Quotient) is measured on the vertical axis. Here seafood takes top position with a concentration of 85.2. This means that per capita, there is 85.2 times more seafood employment in Southeast Alaska than the US as a whole. Advanced Business Services is the most under-represented in employment in the region with a concentration of only 0.4, meaning that per capita, far fewer people are employed in this cluster than national averages. The chart also shows relative employment in each cluster by the size of the individual "bubbles." The industry with the greatest average monthly employment is seafood.

Southeast Alaska Clusters



Sources: Alaska Department of Labor, U.S. Bureau of Labor Statistics, JEDC Analysis

In the previous “bubble chart,” the size of each bubble symbolizes the size of the cluster in terms of employment. Bubbles above the horizontal line at 1.0 are clusters in which our region has a higher concentration of jobs than the U.S. average. Those below the line are clusters that are currently below the U.S. average. Bubbles to the right of the vertical line are clusters that are expected to grow faster than the national average between 2011 and 2018. Those to the left are expected to grow more slowly or decline during those years.

Southeast Alaska Cluster Working Group Facilitation and Action Initiative Development

Cluster Working Groups are facilitated public sector and private industry collaborations designed to facilitate communication and problem-solving among businessmen and women and other key stakeholders in order to remove barriers and make connections that will allow growth in jobs and businesses in the specific areas that those in the Cluster Working Groups believe hold the most promise. Between January and May 2011, JEDC assembled private industry and other sector leaders to create Cluster Working Groups for the following three established and one emerging industry sectors identified in Phase I:

- Southeast Alaska Ocean Products
- Southeast Alaska Forest Products
- Southeast Alaska Visitor Products
- Southeast Alaska Renewable Energy Seed Cluster

Over 130 individuals participated in the CWG effort. Each CWG was comprised of a mix of private businesses, public agencies and others active in the sector. During a series of up to four meetings, Cluster Working Group participants identified key Action Initiatives that would remove obstacles and take advantage of opportunities to create more jobs in their industry. JEDC prepared meeting agendas, facilitated dialogue, provided meeting summaries, and assisted with other in-between meeting work.

Each CWG began by broadly identifying opportunities and challenges specific to their industry and then moved to focus on to a number of possible initiatives. At subsequent meetings, each Cluster Working Group determined the readiness of each initiative for action. A total of 33 action initiatives were developed, most of which enjoyed consensus by all participants; ten by the Oceans Products CWG, five by the Visitor Products CWG, nine by the Forest Products CWG, and nine by the Renewable Energy CWG.

In the body of this report each initiative is described in detail including:

- The team that is committed to working on the initiative
- Motivation and objectives
- The sequence of steps that must be accomplished to make the initiative happen
- Who must be involved to complete each step
- A schedule and funding requirements (if known)

- Outcomes which have been identified as a measure of success

The Action Initiatives can be used as a roadmap for strengthening each industry and can guide the USDA Forest Service, Rural Development, the State, and other agencies in efforts to promote economic development for Southeast Alaska. JEDC hopes that with the further support of USDA Forest Service and other partners, the Cluster Working Group approach may continue after this contract ends and become part of the economic infrastructure of the region.

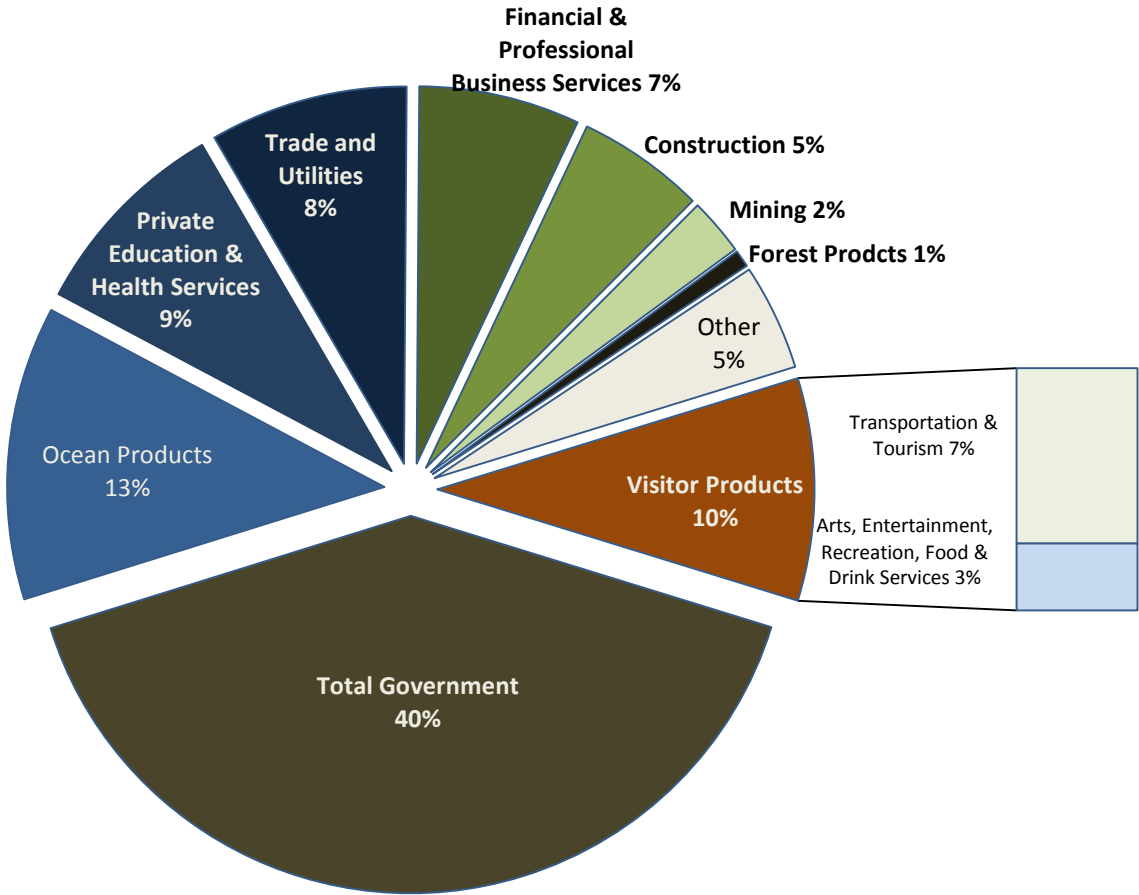
Overview of the Southeast Alaska Economy

The region of Southeast Alaska stretches from Yakutat in the north to Metlakatla in the South. Southeast is a maritime region comprised of 34 communities with a population greater than one. The region covers a 500-mile long stretch, with islands making up 40 percent of the region's total land area.

Southeast Alaska is often referred to as having two economies: Juneau (with 44% of the regional population) and the rest of Southeast Alaska; however the region as a whole shares economic dependence on several key industry clusters.

Employment by Industry Sector

Annual Average Southeast Alaska Employment 2009 by Industry Payroll



In 2009, the annual average employment in Southeast Alaska was 38,542, including the seafood sector. Annual average employment between 2000 and 2010 was basically flat: There was a regional net gain of just 100 jobs in the last decade. The slight gain in employment, despite a population decline, is likely due to

the high ratios of nonresident workers in Southeast Alaska. Regionally, non-Southeast Alaska residents held 39 percent of all jobs in 2008 (excluding commercial fishing).

The following table, along with the preceding pie chart, shows the distribution of employment in the region between industries.

Total Southeast Alaska Employment, 2009

	Annual average Employment 2009	% of SE Employees	Total Payroll x 1000	Avg. Annual Wage
Private Sector	25,246	66%	\$946,456	\$37,489
Seafood Industry (Ocean Products)	3,845	10%	\$199,896	\$51,989
Mining	431	1%	\$38,823	\$90,111
Forestry, Logging, Wood Manufacturing (Forest Products)	238	1%	\$11,759	\$49,375
Transportation and Accommodation (Visitor Products)	3,225	8%	\$109,506	\$33,953
Construction	1,436	4%	\$87,106	\$60,659
Manufacturing (non fish/wood)	479	1%	\$20,665	\$43,134
Trade and Utilities	5,044	13%	\$134,912	\$26,746
Information	561	1%	\$23,819	\$42,458
Financial Activities	1,319	3%	\$56,812	\$43,072
Professional Business Services	1,325	3%	\$52,784	\$39,837
Education & Health Services	3,666	10%	\$140,560	\$38,342
Arts, Entertainment, Recreation, Food & Drink Services (Visitor Products)	2,464	6%	\$41,957	\$17,025
Other Services	1,212	3%	\$27,857	\$22,984
Total Government	13,296	34%	\$642,082	\$48,291
Federal Government	1,745	5%	\$120,846	\$69,253
State Government	5,483	14%	\$268,867	\$49,036
Local Government	6,068	16%	\$252,370	\$41,590
Total Employment	38,542	100%	\$1,588,538	\$41,216

Note: Local government includes tribal government.

Source: Alaska Department of Labor and Workforce Development, Research & Analysis

Seafood Industry

The seafood industry is the largest private sector employer in Southeast Alaska in terms of wages, accounting for 13% of all regional wages, and 10% of all employment.² In 2009, more than 10,000 people participated in the Southeast Alaska commercial fishery industry, including 4,674 Southeast residents (as crew or fishermen). In 2008 Southeast residents participating in the commercial fishing industry earned \$1.49 million. In 2009, 178.7 million pounds of seafood were processed in Southeast by shore-based processors, with a wholesale value of \$374.3 million.

Travel Industry

If the visitor products industry is defined to incorporate both the categories of transportation and accommodation and arts, entertainment, recreation, food & drink services, it would be the largest private sector regional employer in term of employees, accounting for 15% of all regional employment, and 10% of all regional wages.

The number of cruise ship visitors to the region doubled between 1997 and 2007, when more than a million passengers visited the region. However, in response to the global recession tourism has declined in recent years. The number of cruise passengers visiting the region has decreased by 15% over the past two years, but is expected to decrease again in 2012.

Government

Despite the strength of the private sector industries previously discussed, the economy of the Southeast Alaska region is highly dependent on government employment and spending. State, federal and local government comprise 35% of the region's jobs and 40% of regional wages. (To compare, 15% of jobs nationally are with the government.) Unfortunately, State and Federal government employment is declining. Between 2003 and 2009, the region lost 219 federal jobs and 199 state jobs. Government investment in regional infrastructure has also slowed. Expected Federal budget cuts will likely impact Federal Government employment, and a decline in Federal earmark spending will also impact both State and local government programs in the region.

Timber Industry

While the regional economy had its roots in resource extraction, currently timber accounts for only one percent of jobs and wages in the region. The decline of the timber industry has been well documented. At one time there were 12 large sawmills operating in Southeast Alaska. Today there are none, and only one mid-sized mill remains. In 1990, there were 3,450 direct sawmill and logging jobs in the region; however, by 2009 only 214 sawmill and logging jobs remained in Southeast.

² Due to different rules regarding wage and labor data, fisheries statistics are often excluded from the overall picture of wages and jobs distribution. The chart above includes wages earned by Southeast Alaska fishermen and crew based on JEDC analysis.

Mining Industry

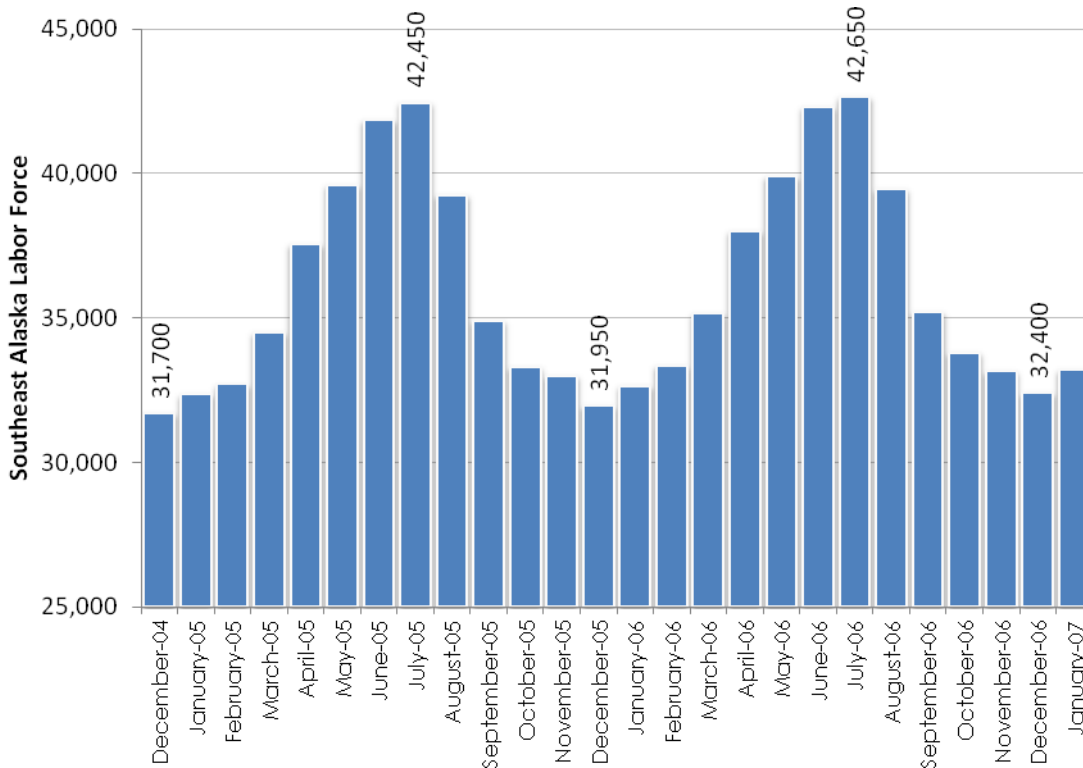
Mining accounts for one percent of regional jobs, and two percent of regional wages. Mining jobs pay the best wages of any regional sector. In 2009, the average annual regional mining wage was \$90,111, or 1.4 times the average private sector wage.

With the 2010 opening of the Kensington Gold Mine in Juneau and the skyrocketing price of gold and silver, the Southeast mining industry has been booming. In 2009, there were 413 mining jobs in Southeast Alaska. With the opening of the Kensington Gold Mine in Juneau in 2010, the region's mines are expected to have 600 employees and a payroll of more than \$50 million annually by the end of 2011.

Seasonal Employment

Another hallmark of the regional economy is its seasonality, depicted in the chart below. According to the Alaska Department of Labor, the difference in the workforce between the peak month of employment in Southeast Alaska—August—and the month with the lowest employment levels—January—is nearly 11,000. Because the commercial fishing industry is not captured in these numbers, the actual discrepancy is much higher.

**Southeast Alaska Employment by Month
January 2009 to February 2011**



Business Climate Survey Results: Clusters Barriers and Benefits Analysis

We thought it would be beneficial to look at the regional benefits and barriers through the eyes of the Visitor Products, Ocean Products, and Forestry Products industries. In terms of overall findings, Southeast Alaska business leaders were more likely to ascribe a barrier rating to freight and real estate costs, while quality of life attributes, such as access to recreation, cultural opportunities and safety, were seen as being the biggest benefit to businesses in the region.

The cross-tab analysis of each of the three clusters, Visitor Products, Ocean Products, and Forestry Products, identified freight costs as the top barrier to their business operations, and recreation and cultural opportunities as the biggest assets. In terms of the top four barriers, each cluster group also identified federal regulations as obstacles to business operations.

Southeast Tourism, Fishing, Forestry: Top Barriers

Tourism	Net Barrier	Fisheries	Net Barrier	Forestry	Net Barrier
1. Freight costs	78%	1. Freight costs	94%	1. Freight costs	100%
2. The cost of electricity	61%	2. State regulations	89%	2. Suppliers in Southeast Alaska for your business	100%
3. The cost of real estate	61%	3. Federal regulations	72%	3. The cost of electricity	88%
4. Federal regulations	59%	4. Level of taxation	61%	4. Federal regulations	88%

Southeast Tourism, Fishing, Forestry: Top Benefits

Tourism	Net Benefit	Fisheries	Net Benefit	Forestry	Net Benefit
1. Recreational opportunities	80%	• Recreational opportunities	61%	1. Recreational opportunities	50%
2. Cultural opportunities	58%	• Cultural opportunities	50%	2. Cultural opportunities	50%
3. Safety	55%	• Availability of high-speed internet in your area	44%	3. Southeast Alaska's marine transportation	38%
4. Availability of high-speed internet in your area	53%	• Southeast Alaska's air transportation	39%	4. Job-readiness of entry-level workforce	38%

Cluster Working Group Process

The cluster working group process encompassed a series of three or four facilitated large group meetings for each industry cluster, each an assemblage of leaders representing the cluster being addressed. The invitation list was developed through collaboration with industry experts, the Forest Service and regional and local economic development entities. Each large group meeting had two facilitators and two support staff from JEDC. The meetings lasted approximately 5 hours each.

Meeting 1—Introduction to the Southeast Alaska Cluster Development Initiative and review of the findings and conclusions of the Asset Mapping Analysis. An identification of opportunities for industry development, critical issues that are impeding the growth of the cluster and a priority ranking of critical issues concluded the meeting. The core question asked of each group was "How can we strengthen your industry in our region."

Meeting 2—Discussion of the critical issues and formulation of possible action initiatives, interventions in the status quo in the form of new partnerships, institutional reform, new or revised public policies, or other steps that could be taken. The objective was to identify specific interventions that would take advantage of opportunities or overcome obstacles to a more competitive regional economy. "Champions" were identified to take ownership of each of these action initiatives and, with a small working group, tasked to prepare a detailed plan of action. Small working groups met between meeting 2 and 3 through conference call.

Meeting 3 and Meeting 4 (if needed)—Group discussion and refinement of each action initiative was presented in a format that detailed:

- The team that is committed to working on the initiative
- Motivation and objectives
- The sequence of steps that must be accomplished to make the initiative happen
- Who must be involved to complete each step
- A schedule and funding requirements (if known)
- Listing how it will be known when success has been achieved

Specific problems were identified and recommendations were made to strengthen each initiative. Readiness to launch decisions were made and the group empowered the "champions" to take the lead to move from discussion to direct action. For Forest Products, group discussion and refinement were not finished and a fourth CWG meeting was needed.

Seed Cluster Development— For Renewable Energy, which does not have an established industry presence in the region, a first meeting of private sector entrepreneurs, public sector agencies, economic development organizations and consultants was convened to gauge interest in participating in the formal

Cluster Working Group process. This meeting led to formation of a steering committee to prepare for subsequent CWG meetings. At the conclusion of a second group meeting, action initiatives were chosen for developing into actions plans in preparation for a third meeting. JEDC has committed to providing one more facilitated large group meeting for the Renewable Energy Seed Cluster Working Group.

The meeting schedule for the Cluster Working Groups is presented below:

Meeting Schedule for Southeast Alaska Cluster Working Groups

Date	Forest Products	Ocean Products	Visitor Products	Renewable Energy
February	CWG #1 Location: Juneau	Informational Teleconference	Informational Teleconference	
	CWG Teleconference	CWG #1 Location: Juneau		
		CWG Teleconference		
March	CWG #2 Location: Juneau	CWG #2 Location: Juneau	CWG #1 Location: Juneau	CWG #1 Location: Juneau
	Presentation in Thorne Bay, POW		CWG Teleconference	Steering Committee Location: Juneau
			CWG #2 Location: Juneau	
April	CWG #3 Location: Ketchikan and Teleconference	CWG #3 Location: Juneau	CWG #3 Location: Juneau	Steering Committee Location: Juneau
				Steering Committee Location: Juneau
May	CWG #4 Location: Craig, POW			CWG #2 Location: Juneau

In the following sections we will more closely examine three industry clusters (Ocean Products, Visitor Products, and Forest Products), and one emerging seed cluster (Renewable Energy). Each section will contain a regional economic summary of the cluster, as well as an overview of the cluster process and a discussion of the Action Initiatives developed by each CWG.