

# Jobs, Natural Resources, and Community Resilience A Survey of Southeast Alaskans about Social and Environmental Change



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### Building knowledge for families and communities

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A Carsey Institute Report

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# **Key Findings**

As part of the Community and Environment in Rural America (CERA) project, researchers at the Carsey Institute surveyed 1,541 residents of the ten boroughs and unincorporated census areas in Southeast Alaska to better understand social and environmental change in the region and their implications for Alaskan community and families. Major findings include the following:

### Key Social Issues and Concerns

- More than three-fourths of Southeast Alaskans are concerned about rising energy costs and the lack of affordable housing. These are the most pressing social concerns facing the region.
- The lack of job opportunities is also a significant problem. However, residents of Ketchikan and outlying communities are much more concerned about employment options than residents of the capital city, Juneau.
- Drug use and manufacturing is considered a major social problem in Southeast Alaska. More than one-half of residents from even the most remote rural towns cite drugs as a significant concern.
- Southeast Alaska is geographically isolated and a majority of residents believe access to fresh fruits and vegetables is a problem in their community.
- Limited access to high-quality food also affects nutrition, with two-thirds of respondents citing childhood obesity as a major social issue.
- Sprawl and population growth are not major concerns, but residents of Juneau did register greater concern about these issues, suggesting potential problems with growth in the future.
- Race-ethnicity affects levels of concern. Alaska Natives are more concerned than non-Native residents about virtually all social issues, and in particular school quality, recreational access, and crime.

## Key Natural Resource Use and Environmental Concerns

- Three-fourths of Southeast Alaskans believe forestry job loss is negatively affecting their community. Residents of rural towns and villages are most affected by changes in this industry.
- Overharvesting of timber is not considered a major problem. More than one-half of residents say it had no effect on their community.
- Loss of jobs in the fishing industry is also a major issue, illustrating a common concern about the decline of extractive industries and its impact on the local economy.
- Nearly two-thirds of residents view overfishing as a significant issue. While loss of fishing jobs is a concern, residents recognize the importance of healthy fisheries for sustainability.
- Residents did not view other environmental issues such as the loss of scenic beauty, wildlife habitat, or fish and game as problems in the region.
- Most Southeast Alaskans believe climate change is occurring, but they do not see it as a threat to the region.

### Views about Natural Resources Development and Management

- Southeast Alaskans are divided on the best approach to natural resource management. Juneau and Sitka residents are more likely to favor conserving resources for the future, while individuals from Ketchikan and outlying communities support near-term development over conservation.
- Further developing hydroelectric energy production, tourism, and fishing are considered priority areas for increasing economic opportunities in the region.
- Residents of Juneau and Sitka view their local governments as effective, while support is lower among individuals from Ketchikan and outlying communities.

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- Although there is an intra-regional divide about local government's effectiveness, trust in government is low across the region. Only one-fourth of Southeast Alaskans believe the government does what is right most or all of the time.
- While there is a lack of confidence in government, most residents do not favor major changes in environmental regulations. They favor leaving fishery and forestry regulations as they are, rather than regulating more or less.

#### Views about Population, Migration, and Community Character

- Southeast Alaska has historically been a transient location, but most residents have strong social ties to the area and plan to stay in their community despite difficult economic conditions.
- More than one-half of residents would advise young people to leave the area to pursue opportunities elsewhere, but three-fourths of those who would encourage youth outmigration hope that they will return later.
- The high quality of life, natural beauty of the area, recreation opportunities, and local food are the features residents most often cited as important reasons for staying in Southeast Alaska.
- Local foods are especially important in outlying communities and Alaskan Native villages, where access to imported food is limited and cultural connections to the land and sea are strong.
- Alaska Natives are significantly more likely to plan to stay in the area in the future. Strong ties to family, religious and cultural roles in their communities, and access to local foods are the attributes that most often connect Native residents to the area.
- Residents from all regions of Southeast Alaska generally do not think there will be marked change in either economic conditions or community well-being in the future.
- Southeast Alaskans are connected to their communities and most individuals believe that residents get along, work together, and are willing to help their neighbors solve problems.
- Civic engagement is high throughout the region, with residents from outlying communities expressing the highest level of involvement.

### **Key Policy Implications and Recommendations**

- Southeast Alaska is an extremely isolated region. National programs that increase access to affordable energy and quality foods should focus on this region.
- Social problems such as crime and drug use are closely related to economic distress, particularly in small outlying Alaskan communities. Economic development interventions should be paired with social assistance to address these interrelated problems.
- Natural resource industries are highly valued, and supporting sustainable expansion of these industries will be critical in the future.
- Residents highly value the natural and cultural character of the region. Southeast Alaska's natural assets and strong social capital suggest that residents can collaborate to address social and environmental concerns.
- Trust and confidence in government is low. However, increasing local engagement may help bridge this divide and encourage public-private partnerships and more cooperative relationships.
- Significant economic and social challenges can make life in Southeast Alaska a challenge. Despite this, residents remain resilient and optimistic about the future of their communities.

Social and environmental changes are dynamic and ongoing. Communities in Southeast Alaska and across the United States will need to confront these challenges and chart alternative paths forward. Through the CERA project, researchers at the Carsey Institute will continue to track and analyze these trends and provide policy and management-relevant research that supports government, communities, and families in these efforts.

# **Executive Summary**

#### Investigating Linked Social and Environmental Change in Rural America

Agriculture, forestry, and fishing are emblematic of rural places across the United States. Extractive activities such as these fueled growth and prosperity across rural America, and the social life and cultural character of these communities became closely tied to these economic endeavors. As these industries fall into decline, policymakers, natural resource managers, and rural residents struggle to understand the social implications of these changes and to identify alternative paths forward. In 2007, researchers at the Carsey Institute at the University of New Hampshire began the Community and the Environment in Rural America (CERA) initiative to generate policy-relevant social science data that could aid rural communities in confronting these challenges. This project surveys rural Americans across the United States to better comprehend how social and economic change is affecting families and rural places. As rural communities are closely tied to nature, the CERA research team focuses on investigating how rural residents view environmental problems as well as how attitudes about these issues influence perceptions about future development opportunities.

With support from the USDA's Rural Development Program and the Ford Foundation, Carsey researchers developed a special CERA module that investigated social and environmental change in the ten boroughs and unincorporated census areas in Southeastern Alaska. Although unique in its geography and history, the "Alaska panhandle" exemplifies patterns of social and environmental change in rural America.

The region's isolation has made it difficult for residents to find affordable energy, housing, food, quality schooling, and transportation. Southeast Alaska's economy has been built on forestry and fishing, and these industries are closely tied to the culture of the region. However, international competition, shifting consumer demand, a dwindling natural resource base, and increased environmental regulation have affected these traditional activities and contributed to a decline in the region's population. Finding socially and culturally appropriate alternatives to these waning industries has been a challenge. Widespread job loss, accompanied by population loss and a high cost of living, are having a significant impact on the social and economic well-being of Southeast Alaskans.

This report includes findings from the CERA survey implemented in Southeast Alaska in 2010-2011. It outlines residents' views about current social and environmental conditions, economic development opportunities, and population trends, and then considers how this information might inform policymaking and natural resource management efforts. In concluding, we consider the links between the Southeast Alaska experience and that of rural America more broadly.

#### Confronting Social and Economic Concerns in Southeast Alaska

Many of the social problems plaguing American society are also serious concerns to rural Alaskans. CERA survey respondents identified drug use as the most significant issue facing Southeast Alaskan communities. Unease about drugs was highest in Ketchikan Borough, where unemployment and economic decline linked to the closure of a sawmill are likely associated with substance abuse. Economic distress is also apparent. Concern about poverty was especially high in Juneau Borough and was of least concern in sparsely populated outlying communities. However, respondents from the smallest rural places voiced greater unease about unemployment than those from Juneau. This finding suggests that while job loss is negatively affecting small communities, they may have greater self-reliance or social support networks, leading to less anxiety about poverty.

Owing to its isolation, Southeast Alaska has a high cost of living, making financial issues particularly challenging for residents. Outlying communities appear vulnerable to soaring energy costs. In increasingly gentrified cities such as Juneau and Sitka, the high cost of housing was also a major concern. The limited transportation infrastructure and lack of access to health services were also problems, but residents did not consider these as pressing as energy costs and affordable housing. In locales such as Ketchikan that have been hard hit by declines in forestry, residents considered population decline a significant problem. Family and community issues were also on residents' minds. Childhood obesity was one of the most pressing family concerns. A related lack of fresh produce illustrates that problems with nutrition require targeted interventions. Residents also saw a need for improved schooling, and regional inadequacies in education may be related to an ongoing problem of population loss. Limited educational options and people leaving the area could have a significant impact on economic development as both the lack of well-trained individuals and smaller numbers of young people may constrain economic diversification efforts.

Finally, Alaska Natives (American Indian or Alaska Native) were more concerned than non-Natives about virtually all social issues, and in particular school quality, recreational access, and crime. Native residents have deep cultural and family ties to the region and leave the area at lower rates. Those who have lived in the same community for generations feel the changes to the social landscape most acutely.

#### Shifting Views of Natural Resources and Environmental Conditions

Residents are also concerned about natural resources and environmental conditions. Worries about forestry job loss were particularly high in Ketchikan, Sitka, and small outlying communities—all areas affected by mill closures. Conversely, few considered overharvesting of timber a major problem in the region. Although not as troubling as declines in forestry employment, loss of fishery jobs was also a concern among some residents. Individuals residing in outlying areas and in Ketchikan were most acutely concerned with loss of fishing jobs, while overfishing was perceived as a significant issue most particularly in Juneau. Clearly Southeast Alaskans recognize that resource use and environmental conditions are interconnected, and that changes to the ocean ecosystem may affect the future of this important economic sector.

Changing environmental conditions and loss of jobs based in natural resources may be why residents also identified tourism as important for their community's economic future. Along with fisheries, residents most often identified tourism as critical for future economic development. Given the importance of commercial and sport fishing, it is not surprising that developing aquaculture is a low priority. These operations could threaten wild fish stocks and thus affect the region's fishing industries.

The natural world is central to life in Southeast Alaska, but the relatively high environmental quality in the region means that residents are not overly concerned about environmental problems. Although many considered overfishing a problem, loss of scenic beauty, wildlife habitat, and fish and game were not as pressing. Most South-east Alaskans believed climate change was occurring, but they generally did not see it as a threat to the region. This lack of concern about climate change was most prevalent in Ketchikan and outlying communities. Intraregional differences in environmental attitudes suggest that local social and economic conditions as well as varying ties to nature may influence perceptions of linked social and environmental problems

#### Future Natural Resource Management and Environmental Governance

Government and community groups must combine efforts to advance socially and environmentally sustainable development in Southeast Alaska. Presently, residents have mixed views about government's ability to achieve these objectives. Residents in Juneau and Sitka considered local government as relatively effective, but less so in Ketchikan and outlying communities. These trends were also evident in residents' assessments of environmental rules. Residents of Juneau and Sitka generally saw them as effective, while individuals in Ketchikan and outlying communities. Although there is an intraregional divide about environmental rules and local government effectiveness, trust in government was low among all residents. This presents a challenge for policymakers and managers who will need local support in their collaborative efforts to address social and environmental problems.

Residents are divided on development approaches. In Juneau and Sitka, more residents favor conserving resources for the future than expanding use now. In contrast, residents from Ketchikan and outlying communities favor near-term development. Similar trends exist in residents' views about trade-offs related to forest use, with

those in Juneau favoring increased forested-related tourism while those in outlying areas emphasize extraction. Although residents are divided on conservation, they see hydroelectric energy production, tourism, and fishing as the priority areas for economic development. Most residents do not favor major changes in environmental regulations. They favor leaving fishery and forestry regulations as they are, rather than regulating more or less. This suggests that working within existing regulatory frameworks and emphasizing hydro-energy, tourism, and fishing might increase trust in government and create opportunities for public-private partnerships.

#### Confronting Shifting Population and Building on Community Cohesiveness

Although Southeast Alaska has historically had a transient population, most residents plan to stay in the area despite difficult economic conditions. CERA survey results show that most residents would advise young people to leave the area to pursue opportunities elsewhere, but hope that they might return later. These findings reflect the strong social ties to the region, but also the recognition that without new economic development, young people may need to seek employment elsewhere.

Among the most common reasons to stay in the region were the high quality of life, natural beauty of the area, recreation opportunities, and local food. Local foods are particularly important in outlying communities, where access to imported food is extremely limited. Wild fish, game, and plants are critical to meeting the food needs of many communities, particularly Native Alaskan ones. Although outmigration is a significant problem, there are marked differences between Alaska Native and non-Native residents. Alaska Natives are significantly more likely to plan to stay in the area. Strong ties to family, religious and cultural roles in their communities, and access to local foods were the attributes that most connect Native residents to the area. Not surprisingly, this may be why Alaska Natives voiced greater concern about environmental issues while simultaneously supporting natural resource-based economic development.

Although there is interest in new types of economic development, residents of Southeast Alaska generally did not foresee marked change in either economic conditions or community well-being in the future. This does not suggest, however, that they are resigned to accepting current conditions. Residents expressed strong social ties to their communities, and most individuals believed that residents get along, work together, and are willing to help their neighbors solve problems. Civic engagement is high throughout the region, with residents from outlying communities expressing the highest levels of involvement. This social capital is a critical resource that may enable towns and villages across Southeast Alaska to address pressing social and environmental issues and chart an alternative path forward.

#### **Policy and Management Considerations**

Significant challenges as well as opportunities lie ahead for Southeast Alaskans. Geographic isolation and difficulties with access to energy and transportation are problems that will continue to create unique hurdles for the region. However, the region's natural amenities, strong social ties, and a shared desire to remain in the area are attributes that lead to considerable optimism in Southeast Alaska. These features create the foundation for innovative solutions that can increase resilience and lead to a socially and environmentally sustainable future for the region.

Problems such as drug use and poverty are not endemic to Southeast Alaska. They are issues facing many others in the United States. National programs focused on these problems should consider whether they are meeting the needs of isolated rural communities like those in Alaska. As the CERA study shows, these and other social issues are closely tied to natural resource development and environmental conditions. The decline of the timber industry in particular has created economic hardship and individual financial stress, which in turn may contribute to crime. Although supporting the revitalization of the forestry sector is one intervention, most residents see greater prospects in fisheries, tourism, and hydro-power as the economic paths forward.

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Residents' ties to nature and to their fellow Southeast Alaskans provide a foundation for charting an alternative future for the region. The beauty of the area is valued by virtually all residents and harvesting food from the land and sea has been a key coping strategy given the issues with access to other resources. Southeast Alaskans have strong social ties to their fellow residents and appear willing to work together to solve problems. Unfortunately, similar trust does not extend to governmental actors and confidence in government's ability to solve problems and promote economic development alternatives is low. Policy makers and managers need to focus on capitalizing on the strong social capital in Southeast Alaskan communities, empowering local groups, and working within existing regulatory frameworks, rather than crafting new laws.

The results of the CERA study provide government actors and community leaders with new insights to tailor interventions to the expressed needs of the local population. Residents understand the links between social and environmental change as well as the importance of sustainable development. If government can demonstrate sensitivity to these concerns and needs, it may be possible to chart a socially and environmentally sustainable future for Southeast Alaska.

## Introduction

#### Southeast Alaska in the Twenty-First Century

Known colloquially as the "Alaska panhandle," Southeast Alaska is composed of ten boroughs and census areas characterized by their rugged mountain ranges, forested islands, intercoastal waterways, and glaciers (Cerveny 2005). The region's economy was built around resource-based industries, including timber, mining, fishing, and tourism (Uloth et al. 2009). Indigenous people, or Alaska Natives (predominantly Tlingit, Tsimshian, and Haida), have inhabited this area for thousands of years. During the late 1800s and early 1900s, the boom in resource-extractive industries fueled growth among the non-Native population (Southeast Conference 2006; Sepez et al. 2005).

Despite steady growth during the twentieth century, the population of Southeast Alaska is now in decline (U.S. Census Bureau 2011). Economic recession, global competition, shifting consumer demand, depletion of natural resources, and changes in environmental regulations have all played a role in weakening the traditional economic drivers of the region. Widespread job loss, accompanied by population loss and a high cost of living, has had a significant impact on the social and economic well-being of Southeast Alaskans.

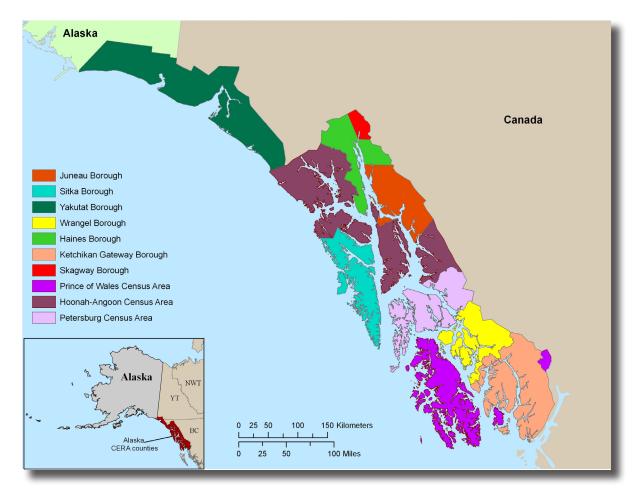
Residents nevertheless remain highly connected to the natural environment and their communities. New forms of economic development, such as hydro-powered electricity generation, are becoming increasingly important alongside more traditional industries such as tourism and commercial fishing. At the same time, residents are grappling with whether natural resources should be used now to create jobs or be conserved for future generations. Like many rural places across the United States, Southeast Alaska must strike a balance between maintaining its unique rural character and natural amenities that connect residents to these areas and stimulating sustainable, diversified economies.

#### Four Areas of Southeast Alaska

In response to the need for data and insights on changing social and environmental conditions in rural America, researchers at the Carsey Institute at the University of New Hampshire initiated the Community and Environment in Rural America (CERA) project in 2007. The CERA research team has surveyed almost 19,000 individuals in rural places across the United States. Results have provided insights into the ways social, economic, and environmental change is affecting families and rural communities. The information outlined in this report comes from CERA surveys conducted in Southeast Alaska in 2010-2011. For this analysis, we divide Southeast Alaska into four areas: Juneau City and Borough, Ketchikan Gateway Borough, Sitka City and Borough, and outlying communities (Yakutat City and Borough, Haines Borough, Skagway-Hoonah-Angoon Census Area, Wrangell-Petersburg Census Area, and Prince of Wales-Hyder Census Area) (see Figure 1). This categorical scheme reflects geographic, demographic, economic, cultural, and social differences between the four areas. The number of residents surveyed from each place roughly reflects the actual proportion of population from the area, with Juneau Borough being somewhat undersampled and Ketchikan Borough somewhat oversampled (see Table 1). Our survey data is weighted based on actual U.S. Census information to ensure the results are representative of the region (U.S. Census Bureau 2011).

**Juneau City and Borough** is the largest incorporated area in Southeast Alaska, with a population of 31,275. It includes nearly one-half of this region's total population and is the political and economic hub. Alaska Natives constitute 11.8 percent of the population (U.S. Census Bureau 2011). Substantial non-Native settlement in Juneau began in the 1880s as a result of a gold rush. The "golden age" of mining peaked in 1920, and now fishing, tourism, and government employment characterize Juneau's economy (Sepez et al. 2005). As capital of the state, Juneau is home to a substantial number of public employees (Uloth et al. 2009). With its relative abundance of retail and service amenities, Juneau attracts residents from more rural parts of the panhandle for shopping and services, bolstering its economy. In the past ten years, the city experienced slight population growth as residents of rural towns and

#### FIGURE 1: SOUTHEAST ALASKA



#### TABLE 1: NUMBER OF RESPONDENTS BY AREA, AND POPULATION CHANGE FROM 2000 TO 2010

Four Areas of Southeast Alaska	Number of Respondents (percent of sample)	Total Population 2000 (percent)	Total Population 2010 (percent)	Population Percentage Change 2000-2010
Juneau City and Borough	502 (33.7%)	30,711 (42.0%)	31,275 (43.6%)	+1.8%
Ketchikan Gateway Borough	403 (25.5%)	14,066 (19.3%)	13,477 (18.8%)	-4.2%
Sitka City and Borough	220 (14.4%)	8,835 (12.1%)	8,881 (12.4%)	+.5%
Outlying communities*	416 (26.4%)	19,466 (26.6%)	18,031 (25.2%)	-7.4%
Total	1,541 (100%)	73,082 (100%)	71,664 (100%)	-1.9%

Source: American Fact Finder 2 (U.S. Census Bureau 2011).

\*Includes Yakutat City and Borough, Haines Borough, Skagway-Hoonah-Angoon Census Area, Wrangell-Petersburg Census Area, and Prince of Wales-Hyder Census Area.

villages relocated because of the relatively low cost of living, availability of jobs, and educational opportunities (U.S. Census Bureau 2011; Juneau Economic Development Council 2010a).

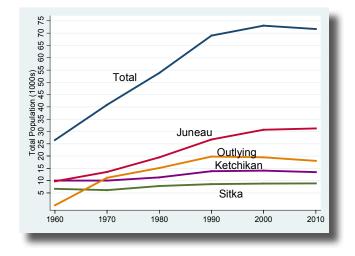
**Ketchikan Gateway Borough** has the second largest population in Southeast Alaska, with a little over 13,000 residents. Alaska Natives constitute 14.2 percent of the population (U.S. Census Bureau 2011). Over the past decade, Ketchikan lost 4.2 percent of its population. The borough's population tends to fluctuate with booms and busts in its natural resource-dependent economy (Sepez et al. 2005). During the 1990s, the city's economically vital pulp mill closed, leading to a loss of more than 450 jobs (and many more indirectly). The timber, tourism, and commercial and sport fishing industries remain important components of Ketchikan's economy (Uloth et al. 2009).

**Sitka City and Borough** has a population of almost 9,000 residents. During the past decade, the borough's population grew by only one-half of one percent. Alaska Natives make up 16.8 percent of the population (U.S. Census Bureau 2011). Just as in Ketchikan, Sitka lost an economically important pulp mill in the mid-1990s. The current economy is heavily dependent on public-sector jobs, private and commercial fisheries, and tourism (Uloth et al. 2009).

The remaining **outlying communities** vary in population size, ranging from 5,559 in Prince of Wales-Hyder Census Area to 662 in Yakutat City and Borough (U.S. Census Bureau 2011). Compared with the other three areas, these locales have relatively few service or retail amenities, limited infrastructure (e.g., roads and power), and are more geographically and socially isolated. Alaska Natives compose 23.1 percent of the population in the outlying communities, a higher rate than in the remainder of the region. Overall, these communities have lost a high percentage (7.4 percent) of their population during the past decade (See Table 1), making it difficult for them to maintain and improve important community-level services such as public education, health and social services, and infrastructure (U.S. Census Bureau 2011; Uloth et al. 2009). The economic base of these areas varies substantially. While places such as Skagway depend highly on tourism, the economies of Haines, Yakutat, and Petersburg-Wrangell depend more on resource-extractive industries.

#### Population Change in Southeast Alaska

As of the 2010 U.S. Census, Southeast Alaska had 71,664 residents, 66 percent of whom were non-Hispanic white and 22 percent Alaska Native (see Table 1). Most of the population is concentrated in Juneau, Ketchikan, and Sitka boroughs, with three out of every four people living in these places. From 1960 to 2000, Southeast Alaska steadily gained population (see Figure 2). Population growth in the region was fueled by tourism and expanding government activity, as well as resource-dependent industries such as fishing, timber, and mining (Juneau Economic Development Council 2010a; Sepez et al. 2005).



#### FIGURE 2: POPULATION SIZE BY AREA IN SOUTHEAST ALASKA 1960–2010

Despite significant population growth during the past half-century, in the first decade of the twenty-first century, the area began to lose population, particularly in its outlying communities. This is in contrast to the rest of Alaska, which grew by 13.3 percent during the past decade (U.S. Census Bureau 2011). Although Juneau and Sitka have seen minimal changes in population, Ketchikan and the outlying communities experienced substantial declines. Population gains in Juneau over the past decade resulted primarily from natural increases (more births than deaths) (U.S. Census Bureau 2010). In Ketchikan and the outlying communities, however, population loss was due primarily to outmigration. Outmigration is more common among youth, leaving an aging population in many areas (Uloth et al. 2009). Overall, Southeast Alaska lost population during the past decade primarily because large numbers of residents left their communities, not because of natural decrease.

#### Economic and Employment Trends in Southeast Alaska

Compared with many parts of rural Alaska, the economy of Southeast Alaska is well developed. However, it is currently undergoing a transition (Sepez et al. 2005). During the past 30 years, the regional economy has shifted from a dependence on extractive activities (and associated manufacturing) to government jobs, the service sector, and unearned income.<sup>2</sup>

Tongass National Forest is the largest national forest in the United States and makes up 80 percent of the total land in Southeast Alaska (Juneau Economic Development Council 2010a). Forestry once dominated the region's economy, but as global markets shifted and mills closed, it was surpassed by fishing and seafood processing (Allen et al. 1998). Direct employment in harvesting timber or in the mills peaked at approximately 3,400 jobs in 1990 and has steadily decreased since then. Although difficult to measure, jobs indirectly associated with the timber industry were also lost as a result of the decline. During the recent recession, the number of jobs in the timber industry dropped from 372 in 2007 to 214 in 2009—a loss of 43 percent (Juneau Economic Development Council 2010b). Closures of numerous mills and more restrictive federal regulations in the Tongass National Forest have led the Juneau Economic Development Council (2010b) to predict further declines in the industry.

Commercial fishing and associated manufacturing is the backbone of the region's economy. Nonetheless, fluctuating markets, prices, and regulations—often driven by global forces—have made commercial fishing less stable than in the past (Uloth et al. 2009). For example, fishermen earned 18 percent less for their catches in 2009 than in 2008, despite a 22 percent increase in pounds landed. In 2010, fish prices increased again, illustrating the volatility within this industry (Juneau Economic Development Council 2010b). In 2009, 4,674 Southeast Alaska residents were employed in the commercial fishing industry (Commercial Fisheries Entry Commission 2009), a number that has been declining as harvest capacity and resource access is consolidated (Juneau Economic Development Council 2010b).

Tourism, largely through the cruise ship industry, is an increasingly important component of Southeast Alaska's economy (Cerveny 2005). Many places in Southeast Alaska are not accessible by road, and cruise ships have proved important in bringing tourists to the area. Nonetheless, the recent economic recession curtailed the number of visitors (Uloth et al. 2009). Sport fishing, closely linked with tourism, is also an important part of the regional economy (Sepez et al. 2005). Charter boat fishing in particular provides alternative employment for many and generates local tax revenue. However, regulations that favor commercial fishermen are a growing source of conflict, raising questions about the compatibility of tourism with other natural resource-based industries.

Although it played a formative role in the history of Southeast Alaska, mining has waned in the region. In 2009, 413 residents still held mining jobs near Juneau, with an average salary of \$92,000. The Juneau Economic Development Council (2010b) expects more mining prospects to open, which it hopes will provide new high-paying employment options for Southeast Alaskans.

#### **CERA:** Investigating Linked Social and Environmental Change

As noted above, the information in this report comes from CERA surveys conducted in Southeast Alaska in 2010-2011. Although many of the questions relate to unique issues in the region, we also included questions we asked in the broader surveys of rural America. Collecting the data in two survey waves, we conducted the first set of surveys during the summer of 2010 (June 22 to August 2) with 509 residents of Ketchikan Gateway Borough and Prince of Wales-Hyder Census Area. We conducted the second wave during the winter of 2010 to 2011 (November 16 to December 19, and February 24 to 27), interviewing 1,032 residents of Juneau, Sitka, Yakutat, Skagway and Haines boroughs and Wrangell-Petersburg and Hoonah-Angoon census areas. A total of 1,541 residents responded to these surveys. Several new questions were added in the second wave of data collection. Thus, not all themes outlined in this report include data from Ketchikan Gateway or Prince of Wales-Hyder.

Residents over age 18 were randomly selected for the telephone interviews, which lasted 27 minutes, on average. We asked respondents approximately 100 questions on their backgrounds and demographic characteristics as well as their opinions on a wide range of environmental and socioeconomic issues. All CERA data outlined in this report have been weighted on the basis of age, race, and sex (per the most recent U.S. Census Bureau population estimates) in order to adjust for minor sampling discrepancies.

#### **Report Themes**

This report is divided into five sections that reflect major themes in the CERA survey:

**Community Context and Socioeconomic Issues**—A variety of social issues confront Southeast Alaskans. This section outlines residents' perceptions of social problems that are affecting their lives, families, and communities, such as crime, poverty, jobs, energy costs, and schools.

**Natural Resource Use and Environmental Concerns**—Natural resources play a key role in the economy and culture of Southeast Alaska. This section shows what residents think about a variety of common environmental issues. We focus on perceptions of problems typically associated with the fishing and forestry industries and on views of climate change.

**Natural Resources and Economic Development**—This section looks at residents' views of government efforts to mitigate important problems, their confidence that government can meet community needs, and perceptions on government regulation and management of natural resources. We also examine differences by political party on these topics and investigate the importance of different forms of economic development for the future of Southeast Alaska.

**Population and Migration**—Connections to place and patterns of migration have significant influence on residents of Southeast Alaska. We asked respondents about future migration plans, reasons for staying in their community, and their perceptions of opportunities for youth in the community.

**Community Cohesiveness and Outlook on the Future**—Social cohesion is an important resource that can help foster resilience to change. General optimism about the future of the region, the ability of communities to work together to solve important problems, and levels of volunteerism and belonging are all discussed in this section.

# Community Context and Socioeconomic Issues

Communities across Southeast Alaska are confronting myriad social concerns. How residents view the severity of these issues provides an important foundation for understanding broader patterns of socioeconomic and environmental change in the region. The tables below display the relative importance of issues related to crime, poverty, jobs, energy costs, and schools for each of the four geographic areas: Juneau Borough, Ketchikan Gateway Borough, Sitka Borough, and outlying communities.

#### **Crime and Poverty**

When asked about pressing social issues in their communities, most residents in Juneau and Ketchikan boroughs reported that drug manufacturing and sales were major concerns (see Figure 3). Concern in Sitka Borough and the outlying communities was substantially lower, but still indicates considerable apprehension about these problems. Responses to questions about violent and property crime were similar across the four regions, although the level of concern was substantially lower than was concern about drugs in all communities (see Figure 3).

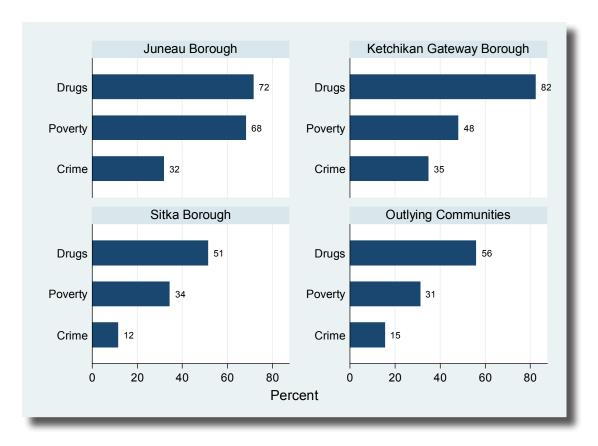


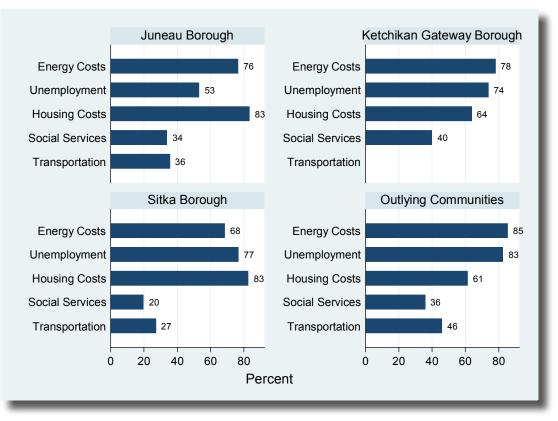
FIGURE 3: IMPORTANT SOCIAL ISSUES RELATED TO CRIME AND POVERTY BY GEOGRAPHIC AREA

Although Ketchikan and Juneau borough residents shared similar concerns about drugs and crime, anxiety about poverty was considerably higher in Juneau than in Ketchikan (see Figure 3). Interestingly, poverty rates are lowest in Juneau and Sitka (U.S. Census Bureau 2009). This suggests that public concern about poverty may not be solely influenced by actual poverty rates in the area.

### **Economic Concerns**

Recent economic challenges have affected rural communities around the nation. Figure 4 shows how Southeast Alaska residents ranked five key economic factors confronting their community.





Note: As some questions were not included in the first wave of the CERA Southeast Alaska survey, data from Ketchikan Borough and Prince of Wales-Hyder Census Area are not available for this question.

For those in Juneau and Sitka, affordable housing was the most cited economic problem (see Figure 4). U.S. Census Bureau data indicate that homes are more expensive in Alaska—particularly in Southeast Alaska—than in the United States as a whole. In 2009, the average housing unit cost \$250,600 in Southeast Alaska compared with a national average of \$185,200. Rental units were also substantially more expensive, with the highest rents found in Juneau (Juneau Economic Development Council 2010a). Although a majority of residents from Ketchikan and the outlying communities still felt that housing affordability was an important issue, the numbers were substantially lower, even though housing costs were only slightly lower in these locales than in Juneau.

Among economic issues, the high cost of energy was a substantial concern (see Figure 4). Seventy percent of Southeast Alaskan homes are heated with oil, so the rising price of oil may be felt more strongly here than in other parts of the United States (nationwide, only 6.7 percent of homes use oil for heat) (Juneau Economic Development Council 2010a).<sup>3</sup> For those residing in Ketchikan and outlying communities, energy costs were the most important of these five issues.

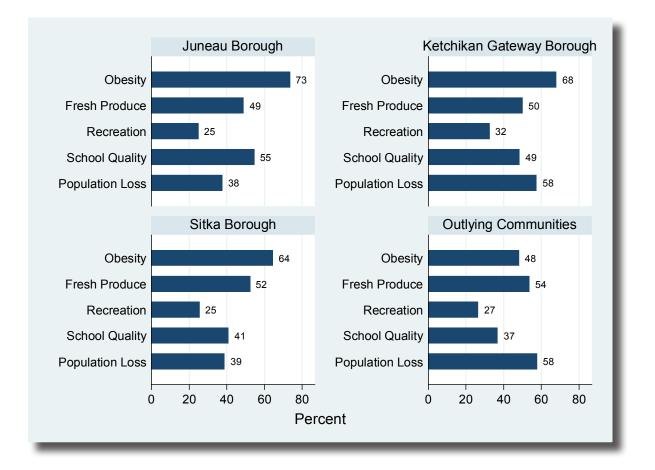
A majority of residents in all four areas cited a lack of job opportunities as a concern. The only exception was in Juneau, where levels of unemployment are lower due, in large part, to state government jobs (see Figure 4). Across all of Southeast Alaska, the unemployment rate was 9.4 percent in 2010. There is a fair amount of variation, however, in the four geographic areas. Juneau Borough's unemployment was 6.5 percent, but in outlying communities, the rate was 16.7 percent. Although this implies that the public's perceptions are consistent

with employment trends, residents in Ketchikan and Sitka reported similar levels of concern over job opportunities even though Ketchikan has substantially higher unemployment at 9.6 percent than Sitka, at 7.9 percent. For context, the statewide unemployment rate was 7.7 percent, and nationwide it was 9.0 percent as of 2011 (Current Population Survey 2011).

Just as the rate of unemployment varies across these four areas, so does income. At \$76,437, median family income in 2009 was almost \$20,000 higher in Juneau than in the other three areas. The 2009 poverty rate was 6.7 percent for Juneau and Sitka, but 9.3 percent in Ketchikan (U.S. Census Bureau 2009). Finally, 37 percent of all southeast Alaskans cited a lack of transportation options as a problem, although the rate was substantially higher in the outlying communities, where many individuals live on islands or areas of the mainland where roads are often limited or nonexistent (see Figure 4) (Uloth et al. 2009). Transportation options and costs often limit Southeast Alaskans' ability to commute to work. The marked difference in how residents in each of the four areas view transportation is an indicator of the economic health and resilience of their communities.

#### Family and Community Issues

Other types of social problems are also affecting communities across Southeast Alaska (See Figure 5). Childhood obesity is a growing concern, with approximately two-thirds or residents rating it as a problem. Juneau and Ketchikan reported the largest proportion of residents concerned about this issue.



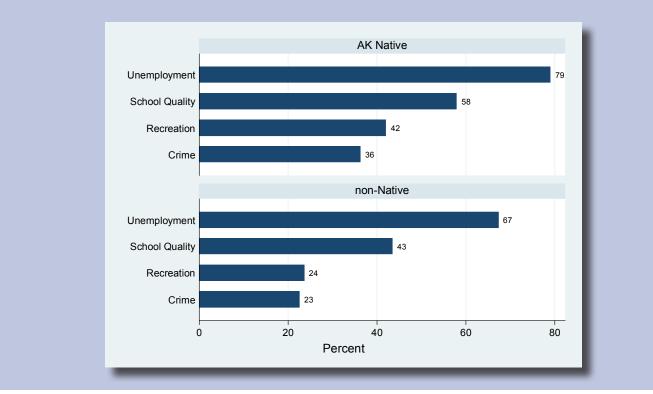
#### FIGURE 5: IMPORTANT COMMUNITY SOCIAL ISSUES BY GEOGRAPHIC AREA

Although previous research suggests that Alaska Natives may have higher rates of childhood obesity than other groups, our survey did not find a difference in rates of concern by race or ethnicity (Alaska Department of Health and Social Services 2009).<sup>4</sup> Also related to obesity, access to fresh produce was a significant issue for about one-half of residents in each of the four regions. Southeast Alaskans also held similar views on access to recreational opportunities. Only 27 percent cited a lack of recreational opportunities as a problem in their communities.

About one-half of residents in Ketchikan and Juneau indicated that school quality was a problem, while those in other areas were less likely to have expressed concern (see Figure 5). Consistent with the demographic trends summarized in the introduction, population decline was a big concern for residents of Ketchikan and outlying communities and of lesser concern in Sitka and Juneau. Population decline often results in less demand for public services such as schools and provides a smaller tax base to support such community services. On the other hand, places that are growing may see increased stress (in terms of finances and human resources) on their schools as enrollment increases.

### Box 1: Alaska Natives More Concerned than Non-Natives about Social Issues

Alaska Natives are significantly more likely than non-Natives to be concerned about the availability of jobs, the quality of schools, recreational opportunities, and crime.<sup>5</sup> Figure 6 suggests that area-wide statistics may hide other important differences. Although about two-thirds of non-Native residents said the need for more jobs was an important issue, fully 79 percent of Alaska Natives were concerned about this issue. Patterns were similar on other topics as well. Alaska Natives are more likely to live in communities where they perceive jobs and recreational opportunities as scarce, schools as subpar, and crime as higher.



#### FIGURE 6: CONCERN ABOUT COMMUNITY ISSUES BY ETHNICITY

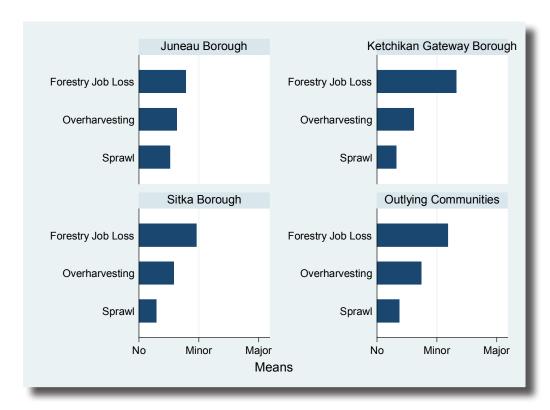
In the next section, we examine how Southeast Alaskans view environmental issues that may be intertwined with the important social issues affecting their lives and communities.

# Natural Resource Use and Environmental Concerns

It is important to consider the economic and environmental context in which residents form their opinions about social issues. The natural environment plays a key role in Alaska's economy, so fluctuations in the availability of natural resources, changes to the landscape, and climate trends have direct ties to job availability and demographic trends. This section highlights the CERA survey findings relevant to the environment and natural resources.

#### The Timber Industry in Southeast Alaska

As noted in the introduction, the timber industry has been shedding jobs since the 1990s. When mills close (as many did in the 1990s), well-paying, working-class jobs are lost. Ketchikan and the outlying communities are feeling the impact of job loss in the forestry sector more than Sitka or Juneau, which have more diversified economies (see Figure 7).

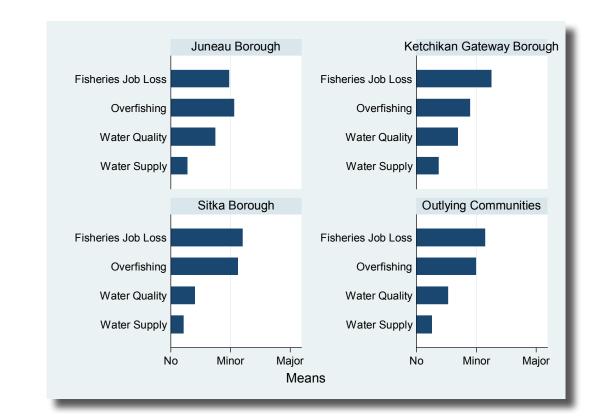


#### FIGURE 7: PERCEIVED EFFECTS OF ISSUES RELATED TO FORESTRY

Our survey findings show that residents are less concerned about overharvesting than forestry job loss. This suggests that residents value the timber industry and see it as a key component of the region's natural resourcebased economy. Urban sprawl is another issue affecting many rural communities across the United States. However, in Southeast Alaska, sprawl ranked substantially lower on the list of issues, likely because of a lack of metropolitan places in the area. As expected, residents from Juneau, where the population is growing and may be affecting smaller towns and villages on the periphery of the city, were more likely to indicate sprawl as an issue.

### The Fishing Industry in Southeast Alaska

One of the most important industries in Southeast Alaska is commercial fishing. Residents categorized job loss in fisheries as somewhat important across the board (see Figure 8). Overfishing was also an important issue, as it affects the long-term viability of the fishing industry. As fish stocks decline, competition for scarce resources will increase among commercial fishermen and charter boat operators. Tension is already growing between these fisher sectors, particularly over the allocation of key fisheries such as halibut (Meyer 2010). In this way, environmental conditions affect not only key economic activities, but also relations among different user groups.

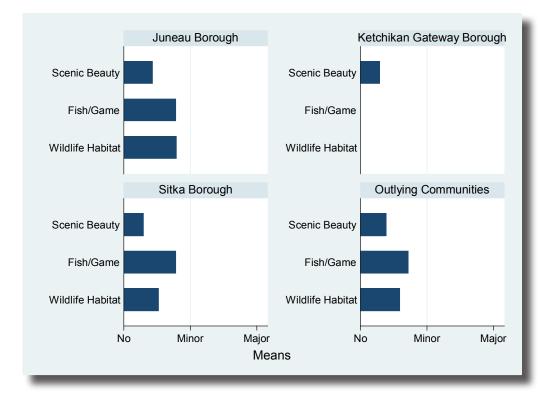


Residents also were somewhat concerned about water quality and supply in Juneau and Ketchikan but less so in Sitka and the outlying communities (see Figure 8).

#### FIGURE 8: PERCEIVED EFFECTS OF ISSUES RELATED TO FISHERIES

#### The Social Importance of Natural Resources

Alaska's landscape, coasts, and vistas are some of the main reasons people live in the area as well as important drivers of tourism and migration. When asked whether the "loss of natural beauty" had affected their community, residents across all four areas were not concerned about threats to natural amenities. Similarly, the loss of the ability to fish and hunt was not a major concern (see Figure 9). The following section outlines additional findings that provide deeper insights into residents' views on the social importance of the natural environment.



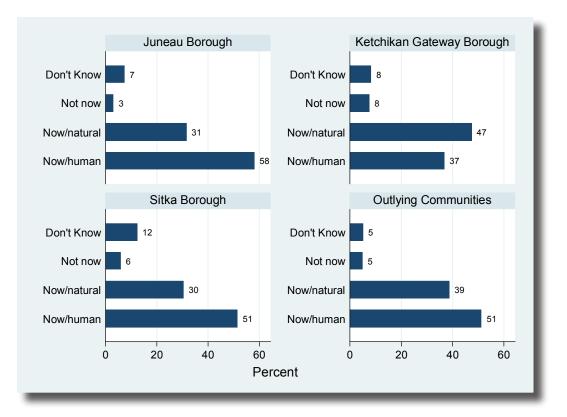
#### FIGURE 9: PERCEPTIONS OF LOSS OF ENVIRONMENTAL ATTRIBUTES BY GEOGRAPHIC AREA

Note: These questions were not included in the first wave of the CERA Southeast Alaska survey, data from Ketchikan Borough and Prince of Wales-Hyder Census Area are not available for this question.

### Climate Change as Indicator of Environmental Understanding

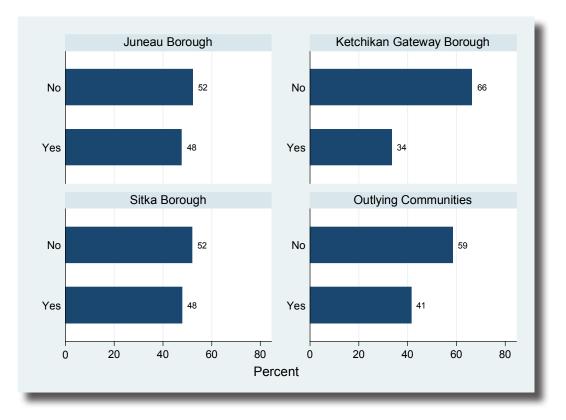
Previous research has shown that opinions about the potential impact of climate change vary across rural America (Hamilton 2011). Residents of communities that rely heavily on natural resources and those with extreme weather conditions are most likely to acknowledge an impact of climate change. Figure 10 shows that most residents of Southeast Alaska believe that climate change is occurring. However, they diverge on its causes. In all areas except Ketchikan, the majority of residents believed that climate change was the result of human activities. Those in Ketchikan, however, were more likely to attribute the source of climate change to natural forces.

FIGURE 10: DO YOU PERSONALLY BELIEVE THAT CLIMATE CHANGE IS HAPPENING NOW, CAUSED MAINLY BY HUMAN ACTIVITIES; HAPPENING NOW, BUT CAUSED BY NATURAL FORCES; NOT HAPPENING NOW; OR DON'T KNOW?



Residents had minimal concern about future implications of climate change (see Figure 11). When asked if they believed that climate change would affect their way of life during their lifetime, only 42 percent thought it would.





Overall, although changing environmental conditions are of limited concern, job loss in extractive industries was a growing issue, particularly in Ketchikan and outlying communities where forestry and fishing are vital to the local economies. State officials in Alaska have proposed designating more forests in the southeastern parts of the state for timber harvesting (Schoenfeld 2011). The CERA study shows that residents were only mildly concerned that overharvesting was affecting their communities, and they are likely to look positively on any interventions that will add forestry jobs. Similarly, residents were more concerned about the loss of fishing jobs than overfishing. Therefore, programs that focus on the sustainable harvest of natural resources are likely to garner significant support from Southeast Alaskans. The following section further explores these topics by investigating residents' views about different economic development options and the role of government in supporting both economic expansion as well as environmental conservation.

# Future Trends: Natural Resources and Economic Development

The CERA survey provides a window into what Southeast Alaskans value as well as problems they see as threats to their communities. Understanding how residents view development options as well as government's role in these efforts is equally important. In this section, we examine residents' faith in the government to mitigate important problems and their perceptions regarding the regulation and management of natural resources. We also investigate the importance of different forms of economic development for the future of Southeast Alaska.

### Perceived Local Government Effectiveness

To assess views of public-sector capacity, we asked residents whether they thought their local government was effective in dealing with important community problems. Residents were nearly evenly divided in their responses. Fifty-four percent said they had faith in their local government while 46 percent did not. However, patterns in these responses varied by region (see Figure 12). Residents from Juneau Borough were significantly more likely than those from Ketchikan Borough and the outlying communities to think that the local government could effectively solve important problems. The more positive perceptions in Sitka and Juneau may be related to the higher percentage of public-sector employment in these boroughs and closer connections to government.

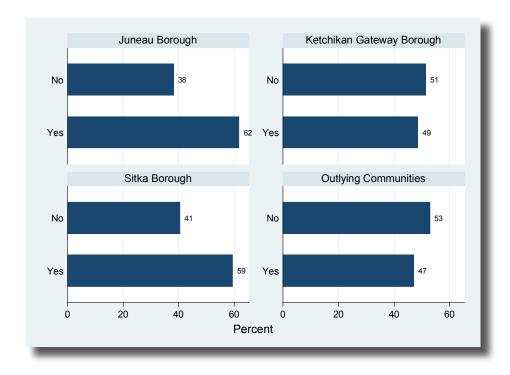
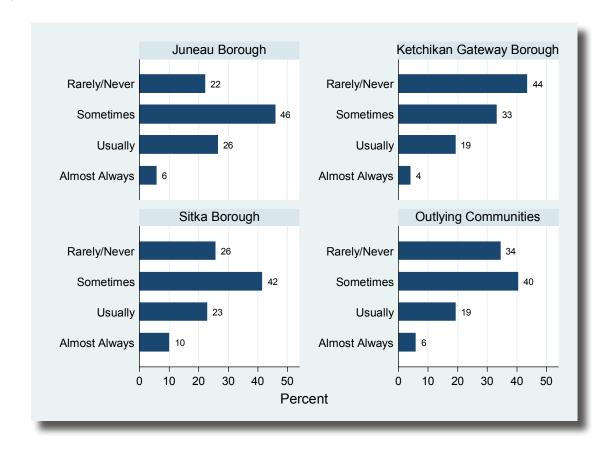


FIGURE 12: DO YOU THINK THAT LOCAL GOVERNMENT HAS THE ABILITY TO DEAL EFFECTIVELY WITH IMPORTANT PROBLEMS?

Assessments of local government's problem-solving capacity also appear to reflect broader assessments of government's ability to meet community needs (see Figure 13).<sup>6</sup> The majority of residents from all areas thought that the government does what is right usually or some of the time. Residents from Sitka most frequently said that they almost always trusted the government to do what was right. Residents from Ketchikan and the outlying communities, however, were most likely to say they rarely or never trusted the government. This suggests that public-sector efforts to address community concerns in Ketchikan and outlying communities may be met with more skepticism than in Juneau and Sitka.

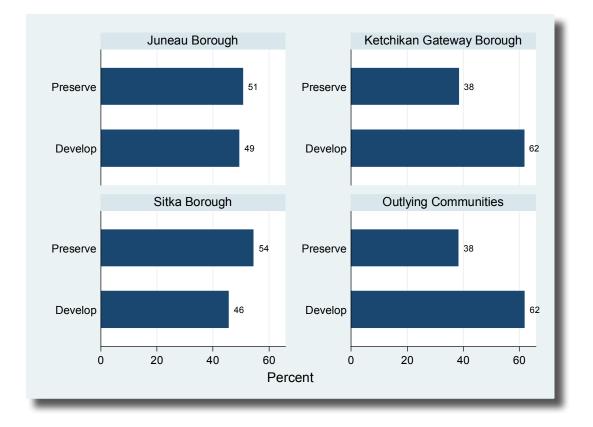




#### **Regulation and Management of Natural Resources**

We asked residents a number of questions about tradeoffs between protecting the social and environmental characteristics of their communities and promoting economic growth and development. Residents of the region were almost evenly divided about whether local governments should attempt to preserve the traditional character of their communities and perhaps risk losing out on attracting new jobs into the community, or encourage economic development and perhaps see a change in the character and types of businesses in their community. Overall, 55 percent supported development, while 45 percent favored preserving their community's character. There were marked differences, however, in the four different areas (see Figure 14). The majority of residents from Ketchikan Borough and the outlying communities favored economic development over preserving the character of their towns. Conversely, slight majorities in Sitka and Juneau boroughs favored preserving the character of their communities. The areas with the highest share of residents favoring economic development over preservation are the same areas that are losing high percentages of their populations and jobs.

Figure 14: When your local government is considering future development in your town, which do you think is MORE important...preserving the traditional character of my town, such as protecting historic buildings, farms, or working waterfront, even it if means fewer new jobs, OR encouraging economic development that brings new jobs to my town even if it means a change in the character and types of business in my community?



In a similar question, we asked residents whether they thought it was more important to use natural resources to create jobs or to conserve natural resources for future generations. Responses for this question align roughly with those from Figure 14. A majority of residents from both Ketchikan Borough and the outlying communities favor using resources to create jobs over conserving them for future generations (see Figure 15). In comparison, only about 30 percent of individuals from Sitka and Juneau boroughs chose use over conservation.

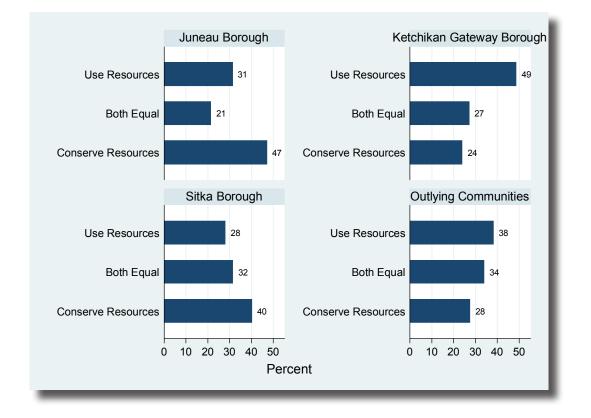


FIGURE 15: DO YOU THINK IT IS MORE IMPORTANT TO USE NATURAL RESOURCES TO CREATE JOBS, OR TO CONSERVE NATURAL RESOURCES FOR FUTURE GENERATIONS?

Conversely, only about one-quarter of residents from Ketchikan said that conserving resources was more important than using them to create jobs, reflecting the area's continuing dependence on natural resource-extractive industries. On the other hand, almost one-half of individuals from Juneau Borough favored conserving natural resources over using them. These findings may reflect relative economic hardship and levels of dependence on natural resources in these distinct areas, as well as differences in social experiences and ideological orientations of residents in these distinct regions of Southeast Alaska (see Box 2).

### Box 2: Republicans More Likely to Favor Encouraging Economic Development and Using Natural Resources to Create Jobs

Political party affiliation closely is related to opinions about economic development and conservation of natural resources. Republicans were more likely than Independents and Democrats to favor encouraging economic development over preserving the traditional character of their communities. Republicans were also more likely than residents of other political affiliations to think that natural resources should be used to create jobs rather than conserved for future generations.

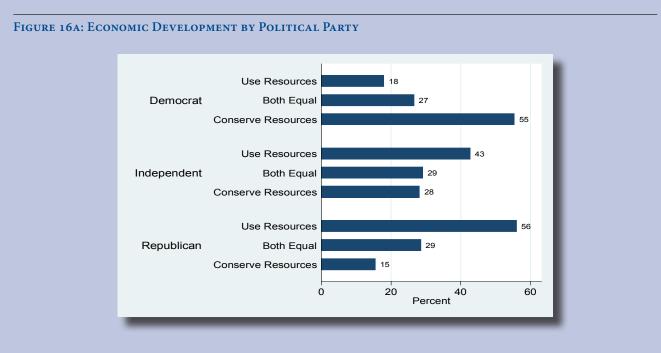
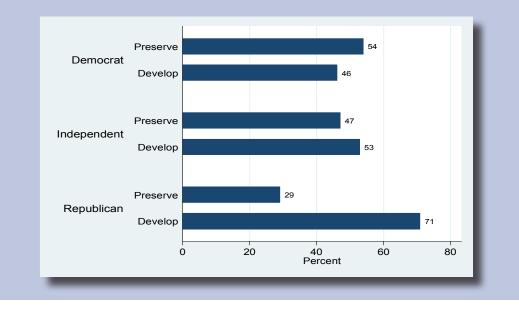


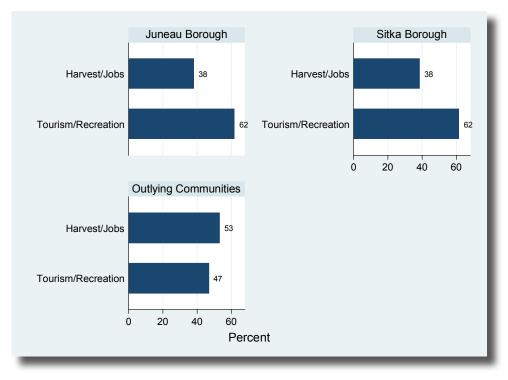
FIGURE 16B: RESOURCE CONSERVATION BY POLITICAL PARTY



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Because timber extraction is often posed as at odds with tourism and environmental conservation efforts, we queried residents about their opinions regarding different uses of old-growth forest. Specifically, we asked individuals if they think it is more important to harvest trees to maintain forestry jobs or to conserve forests and increase access for tourism and recreation (see Figure 17). Residents from the outlying communities were more likely to favor harvesting timber to maintain jobs than those from Juneau and Sitka boroughs. This assessment is in line with the findings reported in **Community Context and Social Issues** (see page 16) where residents indicated that they did not believe that the natural beauty of the region is affected even in the face of increasing natural resources extraction.

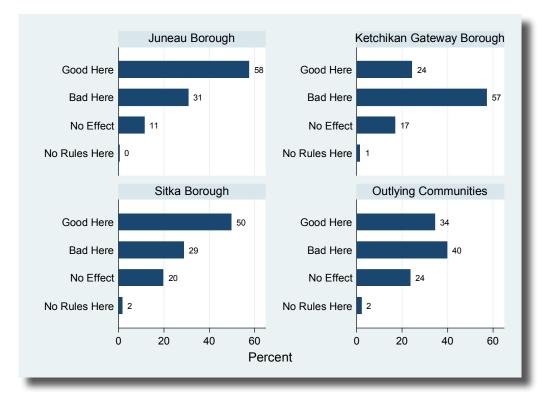
# FIGURE 17: WHEN CONSIDERING DIFFERENT USES OF OLD-GROWTH FOREST DO YOU THINK IT IS MORE IMPORTANT TO HARVEST TIMBER AND MAINTAIN FORESTRY JOBS OR INCREASE ACCESS OF TOURISM AND RECREATION?



Note: As some questions were not included in the first wave of the CERA Southeast Alaska survey, data from Ketchikan Borough and Prince of Wales-Hyder Census Area are not available for this question.

Intraregional differences also appear in residents' assessments of specific government interventions linked to social and environmental concerns. When asked about conservation or environmental rules and regulations governing local development, residents from the four areas had widely diverging opinions (see Figure 18). About one-half of residents from Sitka and Juneau saw the rules as a good thing while a majority of residents in Ketchikan Borough and outlying communities saw rules that restrict development as a negative for their communities.

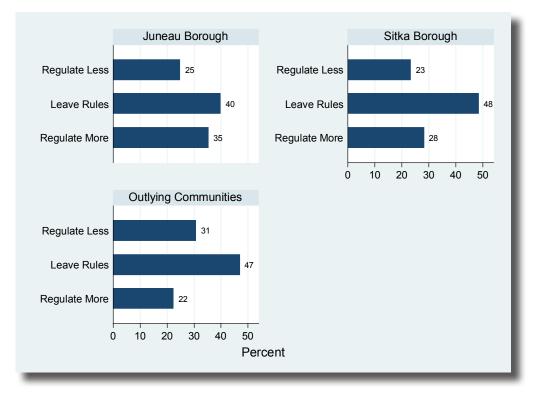
FIGURE 18: HAVE CONSERVATION OR ENVIRONMENTAL RULES THAT RESTRICT DEVELOPMENT GENERALLY BEEN A GOOD THING FOR YOUR COMMUNITY, A BAD THING, HAVE THEY HAD NO EFFECT?



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We also asked residents several questions specifically about the timber and fishing industries because of their traditional roles in the region's economy and culture. When asked their opinions about government regulation of the commercial harvesting of timber (see Figure 19), Southeast Alaskans most frequently said that they thought the government should leave forestry rules as they are. Support for more regulation was highest in Juneau, where the economy is less directly dependent on timber and fishing. The outlying communities voiced the most opposition to regulations on the commercial harvesting of timber.

FIGURE 19: DO YOU THINK THE GOVERNMENT SHOULD DO MORE TO REGULATE COMMERCIAL HARVESTING OF TIMBER, SHOULD IT DO LESS, OR SHOULD IT LEAVE THE RULES AS THEY ARE?



Note: As some questions were not included in the first wave of the CERA Southeast Alaska survey, data from Ketchikan Borough and Prince of Wales-Hyder Census Area are not available for this question.

A plurality of residents from all four areas also preferred that the government did not change the rules regulating commercial fishing (see Figure 20). In Juneau and Ketchikan, however, more residents preferred that the government increase regulations. Residents from the outlying communities were the most likely to think that the government should regulate commercial fishing less. When comparing these findings with those related to forestry, it is clear that commercial fishing remains vibrant in Southeast Alaska and residents appear to recognize a link between regulation and this industry's success. Conversely, forestry has experienced serious challenges and residents may attribute this to inadequacies in existing timber rules and regulations.

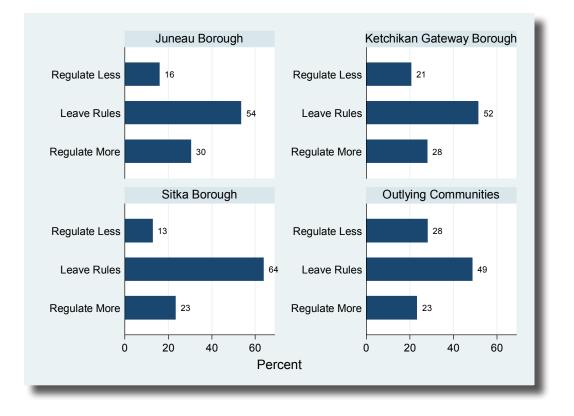


FIGURE 20: DO YOU THINK THE GOVERNMENT SHOULD DO MORE TO REGULATE COMMERCIAL FISHING, SHOULD IT DO LESS OR SHOULD IT LEAVE THE RULES AS THEY ARE?

#### Economic Development in Southeast Alaska

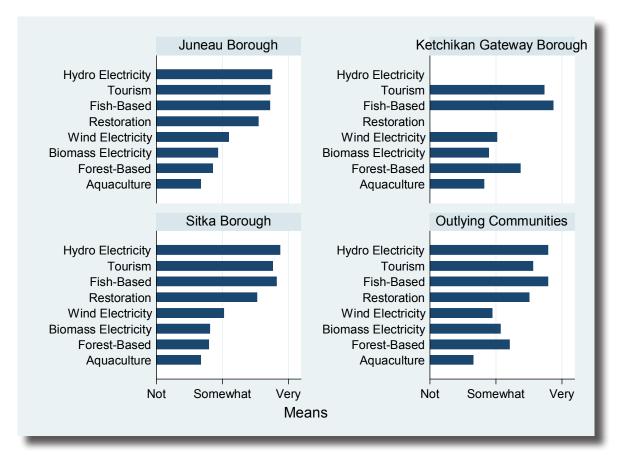
We also sought to understand the economic activities that Southeast Alaskans viewed as most critical to their community's future (see Figure 21). All areas of the region considered hydro-powered electricity generation to be the most important economic development activity, with the exception of Ketchikan Borough, where we did not ask the question in the earliest edition of the survey. Eighty-four percent of Southeast Alaskans think that hydro-powered electricity generation is a very important economic opportunity for their community. This finding parallels results showing significant concern over the high cost of energy.

Three of four respondents also identified tourism as very important for the future economic growth of their communities. Despite recent fluctuations, fishing and fish-processing remain very important to the region among 82 percent of residents. Other traditional industries, such as timber, appear to be less important. Finally, 63 percent of residents believed that projects restoring fish and wildlife habitat were very important. This finding illustrates an interest in environment-related activities that support subsistence uses of natural resources as well as the regionally important fishing sector.

Wind-powered electricity generation, wood-fired biomass electricity generation, and forest-based industry were all seen as moderately important. A little more than one-third of individuals said wind-powered and wood fired biomass electricity generation was very important. This suggests that residents have specific ideas about the types of activities that could address the high cost of energy in the region. Residents from all areas were least likely to cite aquaculture, or fish farming, as important to their community's economic development. Given the considerable discussion about the potential dangers of farmed salmon on wild stocks, these findings are unsurprising.

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We do see some regional differences on economic development. Similar to the patterns about environmental concerns, residents of Ketchikan and outlying communities still saw forestry as a critical economic activity. However, hydro-power development, fisheries, and tourism were considered priority industries across Southeast Alaska.



#### FIGURE 21: IMPORTANCE OF DIFFERENT FORMS OF ECONOMIC DEVELOPMENT

Note: These questions were not included in the first wave of the CERA Southeast Alaska survey, data from Ketchikan Borough and Prince of Wales-Hyder Census Area are not available for this question.

#### The Role of Natural Resources in Southeast Alaska's Economic Future

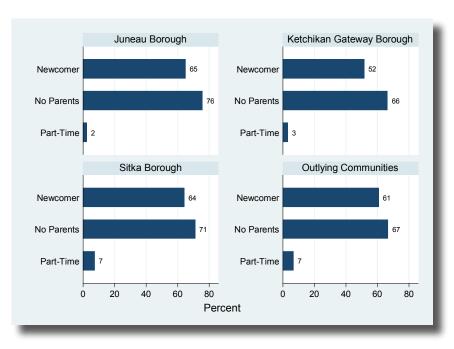
Southeast Alaskans share some opinions and diverge on others in their views about natural resource use and regulation and economic development. Regardless of the question, residents of Ketchikan and the outlying communities were less likely to perceive the government as effective, more likely to perceive resource regulations as inhibitive to economic growth, and they were more likely to prefer using natural resources to promote economic development than conservation. Our findings regarding the relative importance of different economic development activities show diverging views regarding forest-based industries, but regional consensus about the importance of commercial fishing, tourism, and hydro-power. Expanding both traditional and new economic development activities will depend on the availability of an appropriately trained local workforce. The demographic characteristics of the region along with trends in migration suggest both challenges and opportunities in this area. The following section looks more closely at how migration trends and attachment to community vary by area.

# Future Trends: Population and Migration

Residents of rural areas often have strong ties to their communities, but economic declines can lead to population loss. The CERA survey looked at Southeast Alaskans' roots in the region as well as migration patterns. We asked respondents about future migration plans, reasons for staying in their communities, and their perceptions of opportunities for youth in the area. Given the potential mitigating influence of cultural and social ties, we also investigate differences between Alaska Natives and non-Natives with regards to their connections to Southeast Alaska.

#### **Roots in Community**

A number of findings from the CERA survey support the idea that Southeast Alaskans are a highly mobile population. The majority of survey respondents were not native to the region, but rather moved there as adults. Ketchikan Borough has the lowest percentage of newcomers, and yet more than one-half of all residents are new to the area (see Figure 22). In other parts of Southeast Alaska, approximately 60 percent had moved to the region as adults. Newcomers tend to have higher levels of education and are more likely to be non-Native than those who have been living in the region since childhood. The majority of Southeast Alaskans are also living somewhere other than where their parents grew up. This trend is most evident in Juneau.



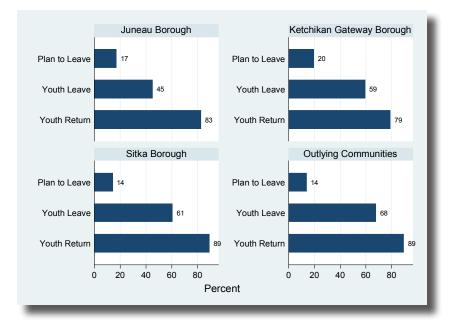
#### FIGURE 22: PERCENTAGE NEWCOMERS, NO PARENTS FROM REGION, AND PART-TIME RESIDENTS

Overall, these findings indicate that the majority of Southeast Alaskans are relatively transient and this fact may be playing an important role in the loss of population in the area. If residents do not have family or communal ties to a region, their decision to leave may be less difficult. However, despite lacking long-standing familial ties to the region, the majority of Southeast Alaskans are not simply part-time residents or second-home owners, but full-time, year-round residents. Ninety-six percent of the individuals reached through the CERA survey live in the region yearround. The highest percentages of part-time residents are found in Sitka Borough and the outlying communities.

#### Migration Plans of Residents and Community Youth

To further understand residents' connections to their community, the CERA survey asked about plans to continue living in the area for the next five years (see Figure 23). Almost 17 percent of Southeast Alaskans said they planned to leave in the near future. In other words, nearly one out of every five residents may move out of the region.<sup>7</sup> Those intending to leave are more likely to be young (18 –29 years old) and non-Native. This high volume of outmigration could have dramatic effects on Southeast Alaskan communities and economies already affected by population loss and economic transitions over the past decade.

Figure 23: Percentage Who Plan to Leave, Would Advise Youth to Leave, and Would Advise Youth to Return by Geographic Area



The majority of residents would advise their own teenage child or the child of a close friend to move away for opportunities elsewhere. Those who would recommend a teen to leave were more likely to be younger than those who would recommend a teen to stay. Although not specified in the question, opportunities that youth are likely to seek elsewhere include higher education or specialized employment. Both of these are often scarce in isolated rural places such as Southeast Alaska.

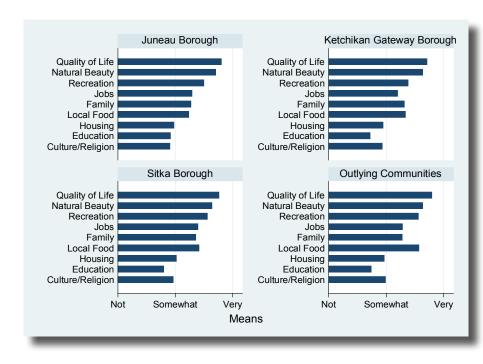
Opinions on advice to youth differed significantly between the four areas (see Figure 23). Only in Juneau did the majority of respondents say they would advise youth to stay in the region. Individuals from locales with smaller populations and those that are more rural—outlying communities in particular—were more likely to think that a teen should leave to pursue opportunities elsewhere. Sixty-eight percent of those from outlying communities said they would advise a teen to leave. Residents from outlying communities were also least likely to say that they planned to leave the community themselves. This indicates that, although many residents from isolated rural communities are not planning to leave, they likely recognize that youth would be better served by pursuing opportunities elsewhere.

Across all four areas, the majority of people who would advise teens to leave also want them to return to the community when they are ready to start their own families or find work (see Figure 23). The less-populated areas were more likely to recommend that a teen leave to pursue opportunities elsewhere, but they were also more likely to hope that young people would return to the community. These trends suggest that many Southeast Alaskans are aware of the lack of opportunities for youth in their community. However, they also think that it is important for young people to return to their home communities with their new skills to help build and maintain the local economy and community character.

### Reasons to Stay in Southeast Alaska

In general, there were few differences by area when we asked residents to consider why they would stay or leave in the future (see Figure 24). In all four regions, quality of life ranked as most important to those planning to stay, followed closely by natural beauty and recreational opportunities. Housing, educational opportunities, and cultural and religious roles were cited the least as important reasons to stay. The importance of job opportunities, family, and local hunting, harvesting, and gathering all generally fell in the middle.

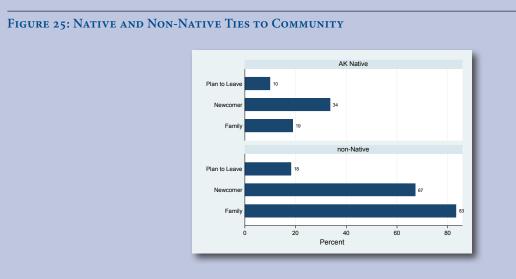
There were a small number of notable differences across the four areas when residents were asked their reasons for staying. The ability to hunt, harvest, or gather wild fish, game, or plants was significantly more important to those in outlying communities than to residents of Juneau and Ketchikan boroughs. While recreational opportunities were important to residents of all places, a larger percentage of those from Sitka than Juneau said this was a very important reason for staying. Nearly 60 percent of residents of Ketchikan said family was a very important reason to stay or go, while only 50 percent from Juneau said the same. Finally, while 38 percent in Juneau said educational opportunities were not an important reason to stay, 51 percent from Ketchikan Borough said the same.



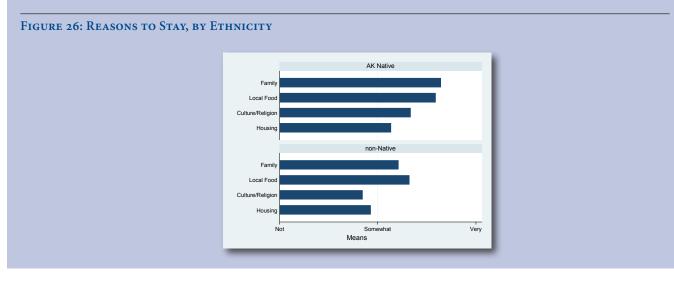
# Figure 24: Do the following things seem ... very important, somewhat important, or not important to you, when you think about whether you will stay here or move away in the future?

# Box 3: Alaska Natives Report Closer Ties to Community than non-Natives

Based on responses to the CERA survey, Alaska Natives appear to have closer ties to their communities than non-Natives. Although 18 percent of non-Natives plan to leave their community within the next five years, only 10 percent of Alaska Natives said the same (see Figure 25). Similarly, non-Natives were much more likely than Natives to have moved to the region as adults. Although more than 60 percent of non-Natives were newcomers to the region, only about 30 percent of Natives said the same. In addition, about 80 percent of non-Natives did not live in the same community in which their parents grew up. This compared to 19 percent of Alaska Natives.



There were also significant differences in how important Alaska Natives and non-Natives viewed various reasons for staying in their communities (see Figure 25). Alaska Natives were more likely than non-Natives to say that being near family, access to local food, cultural or religious roles, and housing opportunities were very important reasons to remain in their community. Although three out of every four Alaska Natives said being near family was a very important consideration, only about one-half of non-Natives said the same. More than two-thirds of Alaska Natives said that it was very important to be able to hunt, harvest, and gather local food. This compares with only one-half of non-Natives. Cultural or religious roles were very important to a majority of Alaska Natives, while 25 percent of non-Natives identified cultural or religious roles as very important. Finally, while 72 percent of Natives saw housing opportunities as very or somewhat important, only 59 percent of non-Natives said the same.



# Population and Migration Trends in Southeast Alaska

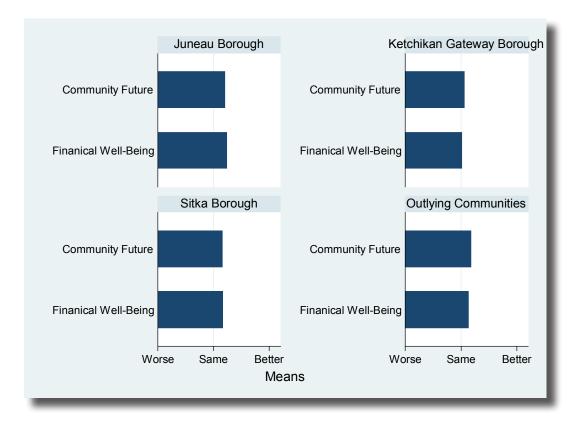
Although Southeast Alaska is losing important segments of its population—particularly youth in the more rural areas—the social and natural features of the region create strong community connections. Many feel that Southeast Alaska is a place where they can enjoy a high quality of life enhanced by the area's natural beauty, abundant wild-life, and local foods, and cultural and familial ties. Alaska Natives are even more likely than non-Natives to express these strong attachments to the Alaska panhandle. Southeast Alaskans also expressed strong community cohesiveness, which can have an important effect on migration trends and outlooks on the future. Residents' connections to community and place are more closely examined in the following section.

# Community Cohesiveness and Outlook on the Future

Connections to community are a critical asset that can help rural residents in confronting both social and environmental concerns. We explored how residents of Southeast Alaska perceive the social climate in their area and how well people get along and contribute to their communities. In addition, we queried respondents about their expectations for change and examined perceptions of social shifts over time.

# **Community Outlook and Family Economic Assessment**

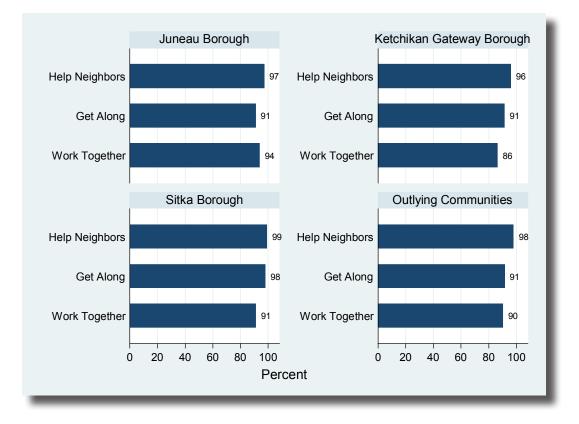
Southeast Alaskans do not anticipate much change in their financial situation or community well-being in the near future. When asked to evaluate whether their community would be worse, the same, or better in ten years, 60 percent indicated that it would be the same (see Figure 27). Twenty-eight percent said their community would be better off in the future, more than twice the share (12 percent) who said it would be worse. Similarly, nearly one-half of residents said their own family's financial situation had not changed during the past five years. When individuals are already satisfied with their community, it is a positive sign when they predict life will generally be the same or slightly better in the future.



#### FIGURE 27: COMMUNITY OUTLOOK AND FAMILY ECONOMIC ASSESSMENT BY GEOGRAPHIC AREA

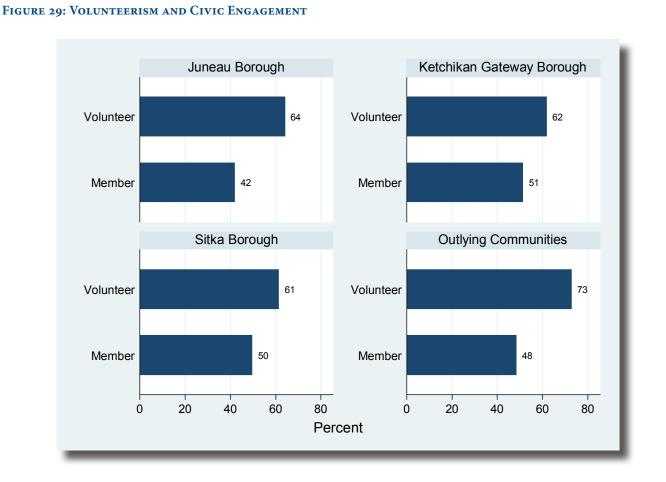
# **Community Cohesion in Southeast Alaska**

Almost all residents reported that people in their community get along and are willing to help their neighbors (see Figure 28). There is very little variation across the four areas on these two measures, although individuals from Sitka reported the highest levels of both neighbor helpfulness and trust. We also asked residents to assess how well local people would work together in the case of a hypothetical community problem (see Figure 28). The question posed was: *"If this community were faced with a local issue such as the pollution of a river or the possible closure of a school, people here could be counted on to work together to address it."* Although responses were slightly lower than the other two measures, they are still considerably high. Overall, 91 percent of residents agreed with this statement. These survey results suggest a high degree of community cohesiveness and social capital in Southeast Alaska. This cohesiveness is a resource that may help the region confront both the social and environmental challenges discussed earlier in this report.



#### FIGURE 28: Assessment of Community Cohesion by Geographic Area

Figure 29 demonstrates residents' commitment to being involved in their communities. In each of the four areas, the majority of residents reported having served as a volunteer within the last year. The rate of volunteerism was particularly high in the outlying communities, where almost three-quarters had volunteered. Rates of official membership in local civic or service organizations were lower throughout the region, but still relatively high. Those in Juneau were least likely to formally participate in a local group.



# Community Cohesiveness and Outlooks on the Future

Although Southeast Alaskans do not expect significant changes in their community or in their own financial wellbeing, they did express high levels of community cohesiveness and engagement, which may help them weather difficult economic times. These findings as well as those from the previous sections provide the foundation for policy and management recommendations, which we outline next.

# Policy Recommendations and Conclusions

The combined efforts of both policymakers and residents will be needed to ensure the resilience of Alaskan communities and to chart a socially and environmental sustainable path forward. Insights from the CERA project can focus collaborative management efforts on the issues that are most pressing to residents while also highlighting those problems that may be more divisive. This synthesis of our findings includes potential policy and management interventions while identifying areas where Southeast Alaskan communities can lead efforts to address the region's social and environmental problems.

### **Community Responses to Pressing Social Problems**

Even in one of the most remote regions of the United States, drug use is a significant social problem that has broad implications for Southeast Alaskan communities. That well over one-half of CERA survey respondents identified drugs as a major problem illustrates the need for comprehensive drug use prevention across the region.

Public concern about drug abuse cannot be viewed in isolation. Patterns in the CERA data show that this problem can be linked with broader social and economic changes in Southeast Alaska. For example, more than 80 percent of residents of Ketchikan thought drugs were a major concern. Ketchikan has suffered significant economic hardship in the wake of mill closures and related economic downturns. Policymakers should consider not only how changes in the forestry-based economy affect jobs and the environment, but also broader social problems, such as drug use. Workers with skills in extractive industries may not be interested in or prepared to switch to jobs in a service industry driven by tourism. Individuals struggling with these social and economic changes are likely more vulnerable to drug-related problems. Establishing programs focused on both job training and social support for families affected by economic shifts will be critical to ensuring community resilience. Such interventions can mitigate the ripple effects from economic declines that are illustrated in high levels of concern about drug-related problems in hard-hit towns and communities in Southeast Alaska.

Although government and the service sector provide stable employment in cities such as Juneau, other economic issues affect vulnerable segments of the population in those more rural towns and villages. Residents in Juneau identified housing costs as a major concern, while the high cost of energy was cited as a significant challenge across Southeast Alaska. As the region diversifies its economy, it will be critical to address systemic affordable energy issues, and to bolster housing aid programs for low-income families and communities during this transition. Energy assistance and outreach efforts focused on conservation will help reduce the cost of electricity and enable financial resources to be diverted to other family needs.

In many rural places, economic downturns can also force some to seek opportunities elsewhere. Given that CERA respondents from outlying communities identified unemployment as a major problem, it is not surprising that many from smaller communities would seek jobs elsewhere. Nonetheless, our results suggest that most Southeast Alaskans would prefer to stay in their communities rather than migrate. Creating diverse employment opportunities that build on residents' strong connections to family, community, and the natural environment will be critical in the future. Supporting efforts to increase employment in sectors favored by residents such as habitat restoration, alternative energy, fisheries, and tourism will help create more resilient communities in rural Alaska.

As policymakers and managers develop programs to aid Southeast Alaskans, they should consider the intraregional differences and linkages. It is clear that life in a village of 100 individuals on a remote island is markedly different from that in a city such as Juneau. Diversifying the region's economy will likely lead to greater economic stability, but these transitions may affect communities in different ways. Social programs need to include site-specific interventions, while at the same time develop cooperative approaches that collectively engage rural places as well as important cities and towns like Juneau and Ketchikan. Finally, programs focused on assisting rural Alaskans should consider how the region is connected with the broader U.S. economy. Spikes in the price of oil or shifts in consumer preferences for fish could have devastating effects throughout the area. In the same way, national programs that create incentives for alternative energy production or the purchase of wild seafood could bring benefits to Southeast Alaska. Residents and community leaders should focus on not only engaging local citizens in sustainable development, but increasing their dialog with national policymakers to ensure that the needs and concerns of remote places like Southeast Alaska are considered within broader efforts to support resilient rural communities across America.

### Links Between Regional and Family Social Change

Patterns of natural resource-based development and demographic trends are closely linked in Southeast Alaska. Most residents were not born in the region and the transient nature of the population influences how individuals and communities respond to socioeconomic concerns. There is a widespread recognition that current economic conditions are not optimal, and a majority of residents would advise young people to leave the region. Nonetheless, an even larger number of Southeast Alaskans would like to see these young people return in the future. School quality and population loss are also considered serious problems. Improving educational opportunities and focusing on economic development activities to attract young people should be priorities going forward. Using technology such as digital media and the internet may be one way to reach students in isolated areas while also exposing them to novel forms of information-sharing and interaction. These emerging teaching platforms can also bolster skills in information technology, which could allow young people to engage in new areas of employment while remaining in Southeast Alaska.

Results from the CERA survey show that the high quality of life, natural beauty of the area, local food, and recreational activities are what Southeast Alaskans value most. This finding illustrates residents' positive connections to their communities. Developing programs that foster community cohesiveness and build on the existing social capital in the region will be critical for Southeast Alaskan towns and villages in the future. Whether confronting drug abuse and poor quality schools or developing innovative economic development interventions, residents will need to collaborate to solve problems. Programs focused on maintaining valued community attributes could be a foundation for interventions seeking to improve social and economic conditions.

The social and economic transitions currently occurring in Southeast Alaska have individual- as well as community-level implications. Residents, for example, consider the interrelated issues of obesity and access to fresh and nutritious foods as some the most urgent problems. By increasing access to high-quality food and educating residents on appropriate consumption, policymakers can help foster more healthy living conditions in the region. Given that many residents, and Alaska Natives in particular, harvest fish and game, encouraging consumption of local food products may help mitigate the costs of obesity. The abundance of these local foods is closely linked to the high environmental quality in the region. Thus, maintaining ecosystem health and encouraging its sustainable use will be a critical part of creating healthy Southeast Alaskan communities.

Finally, cultural and geographic differences exist among residents in their perceptions about social problems and appropriate responses. Alaska Natives are significantly more concerned about unemployment, the quality of schools, and crime. State and federal authorities should work closely with tribal and village authorities to ensure that the distinct needs and concerns of this segment of the population are met. Native communities face unique challenges, but they also have valuable cultural resources and deep social ties that are assets not only to their individual communities, but to all of Southeast Alaska.

### Balancing Natural Resource-Based Development and Environmental Conservation

Industries that depend on natural resources continue to be critical to the Southeast Alaska economy. This connection is particularly evident in outlying communities where fishing and forestry are dominant. Nonetheless, residents increasingly see non-extractive activities as central to the region's economic future. Creating a diversified economic base can create opportunities for a wide range of individuals and both large and small communities across Southeast Alaska.

Residents consider fishing as the most important natural resource-related industry, and they consistently rate it as very important to their community's future. Residents in Ketchikan and outlying communities still view forestry as vital, while support for forestry is significantly lower in Sitka and Juneau. Tourism is seen as the second most important industry for the region's future.

Although residents nearly unanimously consider fishing and tourism as priority industries, the two industries are not always compatible. Access to waterfront areas and debates over allocation of fishery resources can lead to conflict. These issues have regional as well as policy dimensions. Given the potential impacts of policy changes on employment and community character, fishery and tourism managers should collaborate to address inequalities and mediate conflicts, as having both vibrant fishing and tourism industries is critical for the region's future.

Finally, there is strong support among residents for hydroelectric energy and interest in new job opportunities in environmental restoration-related activities. These alternatives not only create jobs but can increase access to low-cost energy and maintain natural areas that are important to subsistence activities and tourism.

Although views about particular industries and activities show a high degree of consensus, residents are divided on broader development pathways and their trade-offs. Residents of Ketchikan and outlying towns tend to favor the immediate use of resources to create jobs, while people in Juneau and Sitka prefer conservation for the future. Similar patterns appear regarding the relative importance of preserving community character versus encouraging new forms of development. A majority of residents in Juneau and Sitka favor preserving community character, while those in Ketchikan and the outlying communities prefer near-term development even if it changes the identity of the area.

For policymakers and natural resource managers, these divisions may make it difficult to achieve regional consensus on appropriate interventions. However, the broader support for particular industries suggests these apparent divisions are not insurmountable. Results from the CERA survey illustrate that, like other areas in the United States, environmental concerns are increasingly seen through ideological lenses. Respondents who self-identify as Democrats prefer resource conservation and preserving local character. Conversely, Republicans prefer using resources for immediate economic development even if it changes their community's character.

One way to limit the politicization of the issue may be to focus on the implications of different development activities on the widely valued community characteristics noted above. This might encourage dialogue and greater consensus on a common path forward. Another important way to avoid political impasse and ideological debates is by helping communities focus on the substantive elements of social and environmental problems and their impacts on families and communities across the region. Consistent majorities of residents in all parts of Southeast Alaska are concerned about social problems such as drug use, energy and housing costs, and unemployment. Emphasizing the links between these pressing social concerns and the natural resource-based economy and environmental conditions may help depoliticize these issues and create space for regional dialogue. As long as natural resource and environmental issues are interpreted through ideological lenses, it will be difficult to find a broadly supported path forward.

Climate change is a key issue that could have both social and environmental implications for Southeast Alaska. A majority of residents in Juneau and Sitka see climate change as human-induced, while in Ketchikan, most believe the changing climate stems from natural causes. Residents were similarly divided on whether climate change was a threat to the region, with significant majorities in Ketchikan and outlying communities believing it is not.

Scientific evidence increasingly suggests that climate shifts could lead to rising sea levels, lowered forest productivity, and declines in commercially important fish populations. If these changes occur, they would come with dramatic social and economic implications for Southeast Alaskan communities. As in debates about use versus conservation, climate change is viewed through politically ideological lenses, which may be influencing local views about this linked social-environmental problem. Whether discussing climate change, overfishing, or pollution, conveying information that demonstrates how these issues might affect the social and economic life of Southeast Alaskan communities may be the most effective way to engage residents in collaborative efforts to foster socially and environmentally sustainable development.

### Public-Private Partnerships as a Path Forward

Perhaps the most significant challenge facing policymakers in Southeast Alaska is the divide among residents about the role government should play in addressing social and environmental concerns. The CERA survey shows that residents of Juneau and Sitka see environmental rules as a good thing. Those in Ketchikan and outlying communities, in contrast, see these regulations as problematic. Many Southeast Alaskans do not trust government to do what is right for their community. Thus, views about environmental programs may reflect deeper feelings about public-sector agencies more generally as much as perspectives about particular management interventions.

Despite the aforementioned trends, other results from the CERA survey indicate that residents are not uniformly against government involvement in natural resource management. In the case of both forest and fisheries management, a majority of residents in all four areas believe the existing regulations are appropriate and sufficient. This suggests that rather than crafting new laws or rules, managers and policymakers should focus on working within existing regulatory structures to implement programs that will ensure social and environmental well-being in the region.

Finally, residents are resilient and bring considerable social capital to collective efforts to address social and environmental problems. Even with the difficult economic conditions, most residents remain optimistic and believe their family's situation will either remain the same or improve. Our survey results suggest that community cohesiveness is high in Southeast Alaska, with the vast majority of respondents perceiving residents as getting along and willing to work together to solve problems. There is also evidence of significant civic engagement, with the highest levels in outlying communities. Given these patterns, efforts to address social problems and promote sustainable development should incorporate this civically engaged population. Focusing on collaborative, community-led projects will likely reduce the distrust in government and enable government and community groups to work together to chart a positive future for Southeast Alaska.

### Social and Environmental Concerns in Rural America

The Community and Environment in Rural America (CERA) project at the Carsey Institute has highlighted the serious challenges facing communities across rural America. Results from CERA surveys across the United States illustrate that social and environmental problems are closely linked and that rural Americans know that their future depends on embracing both socially and environmentally sustainable development. This makes natural resource management and environmental conservation critical issues. As local, regional, and national policymakers attempt to develop interventions that address rural communities' concerns, having social science data that demonstrates these interconnections will be critical. Generating rigorous policy-relevant social science research will continue to be a priority for researchers at the Carsey Institute in the future.

The results from the Southeast Alaska CERA study highlight the daunting challenges facing some of the most isolated and natural resource-dependent communities in the United States. Solving the problems facing rural Alaskans, and those encountered in other parts of rural America, requires engaging citizens as collaborators, tailoring programs to the top community concerns, while also recognizing that national social and environmental trends have local implications. Findings from the CERA study in Southeast Alaska and those from other U.S. regions demonstrate that rural communities continue to be vibrant places, and residents' close ties to their neighbors and the natural world are the assets that will enable these places to prosper in the future.

# References

Allen, S. D., Robertson, G., and Schaefers, J. (1998). "Economies in Transition: An Assessment of Regional and Community Economic Conditions and Trends in Southeast Alaska." Portland, OR: United States Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Bureau of Labor Statistics. (2011). "Labor Force Data by County, Not Seasonally Adjusted, December 2009–January 2011." Washington, DC: U.S. Department of Labor. Available at http://www.bls.gov/lau/laucntycur14.txt (May 2011).

. (2011). "Preliminary Unemployment Rate for December 2009 – January 2011, Not Seasonally Adjusted." Washington, DC: U.S. Department of Labor. Available at http://www.bls.gov/lau/ (April 2011).

Cerveny, L. K. (2005). "Tourism and Its Effects on Southeast Alaska Communities and Resources: Case Studies from Haines, Craig, and Hoonah Alaska." Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Commercial Fisheries Entry Commission. (2009). "2009 Permit & Fishing Activity by Year, State, Census Area, or City." Juneau: State of Alaska. Available at http://www.cfec.state.ak.us/gpbycen/2009/mnu (May 2011).

Fenaughty, A.,M., Fink, K., Peck, D., and Utermohle, C.J. (2009). *Childhood Obesity in Alaska*. Juneau: Alaska Department of Health and Social Services, Division of Public Health, Section of Chronic Disease Prevention and Health Promotion. Available at http://www.hss.state.ak.us/dph/chronic/obesity/pubs/Childhood\_Obesity.pdf (January 2011).

Hamilton, L. C. (2011). "Climate Change: Partisanship, Understanding, and Public Opinion." Issue Brief no. 26. Durham, NH: University of New Hampshire, Carsey Institute.

Juneau Economic Development Council. (2010a). *Southeast Alaska Economic Development Map*. Juneau: JEDC. Available at http://www.jedc.org/seclusterinitiative.php (May 2011).

. (2010b). *The Juneau and Southeast Alaska Economic Indicators 2010*. Juneau: JEDC. Available at http://www.jedc.org/indicators.php (May 2011).

Mazza, R. (Ed.). (2004). *Economic Growth and Change in Southeast Alaska*. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Meyer, S. (2010). "Changes Coming to Alaska's Charter Halibut Fishery." *Alaska Fish and Wildlife News*. Anchorage: Alaska Department of Fish and Game. Available at http://www.adfg.alaska.gov/index.cfm?adfg=wildlifenews. view\_article&articles\_id=482&issue\_id=91 (May 2011).

Schoenfeld, E. (2011). "Bill Would Expand State Forest Boundaries." Wrangell, AK: KSTK Public Radio. Available at http://kstk.org/modules/local\_news/index.php?op=sideBlock&syndicated=true&ID=1612 (January 2011).

Sepez, J.A., Tilt, B.D., Package, C.L., Lazrus, H.M., and Vaccaro, I. (2005). "Community Profiles for North Pacific Fisheries-Alaska." Washington, DC: National Oceanic and Atmospheric Association.

Southeast Conference and Central Council Tlingit and Haida Indian Tribes of Alaska. (2006). *Southeast Alaska Comprehensive Economic Development Strategy*. Juneau: Southeast Conference and Central Council Tlingit and Haida Indian Tribes of Alaska.

Uloth, E., Cole, F., Norse, R., Perkins, K., and Richert, B. (2009). "Tongass Initiative Report: Southeast Alaska: Economic and Social Context." Juneau: Tongass Initiative.

U.S. Census Bureau, Population Division (2010). "Cumulative Estimates of the Components of Resident Population Change for Counties of Alaska: April 1, 2000 to July 1, 2009 (CO-EST2009-04-02)." Washington, DC: U.S. Census Bureau.

\_\_\_\_\_ (2011). American Community Survey, 2005-2009 Summary Tables; generated by Megan Henly; using American FactFinder <a href="http://factfinder2.census.gov">http://factfinder2.census.gov</a>> Washington, DC: U.S. Census Bureau, U.S. Department of Commerce.

# Endnotes

1. The area includes Haines Borough, Juneau City and Borough, Ketchikan-Gateway Borough, Sitka City and Borough, Yakutat City and Borough, and Prince of Wales-Hyder Census Area, Skagway-Hoonah-Angoon Census Area, and Wrangell-Petersburg Census Area.

2. Unearned income, or investment income and transfer payments from government to individuals, has become an important source of income in many rural communities throughout southeast Alaska. Unearned income, often in the form of retirement or medical benefits, can play a substantial role in the economy of a transitioning region.

3. This survey was conducted in late 2010 and early 2011 before the most recent spike in oil prices.

4. Observed differences between Alaska Natives and whites are only suggestive of a difference; Because of the small numbers of Alaska Natives included in the survey, differences are not statistically significant.

5. Differences are statistically significant at alpha=0.05. Alaska Natives voiced higher levels of concern for all issues outlined in this section and that for those issues not displayed in Box 3.2, differences were significant at alpha=0.10.

6. The survey question did not specify which level of government (local, state, or federal) respondents' trust. However, it is still useful for gauging general trust in all levels of government.

7. The survey question does not ask respondents where they plan to move. This means that those who said they plan to leave their communities might plan relocate to somewhere else in Southeast Alaska (likely a larger village or city) perhaps mitigating the problem of outmigration in the region.

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