

Nature-Based Tourism in Southeast Alaska: Results from 2005 and 2006 Field Study



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Executive Summary

This report explores the economic importance of nature-based tourism in Southeast Alaska based on field research conducted during 2005 and 2006. We define nature-based tourism as those tourism activities for which the natural environment is a significant input. This report covers Phase 2 of a larger research project whose goal is to provide a broad overview of the regional economy of Southeast Alaska, including trends over time for individual communities and boroughs. The purpose of the Southeast Alaska economy project is to add to the information and knowledge base available to help people make informed decisions.¹

The field research in 2005 was conducted as two case studies: 1) Ketchikan as a *gateway community* for nature-based tourism activities, and 2) Chichagof Island as a *destination*. The communities investigated included Ketchikan, Elfin Cove, Hoonah, Pelican, Tenakee Springs, Sitka and Juneau. An important goal of the summer 2005 field work was to determine which field methods were most effective and efficient.

As part of this research, field staff interviewed both nature-based tourism businesses and visitors. In Ketchikan, 37 companies and 223 visitors, including cruise, air and ferry passengers, were interviewed. In the communities on Chichagof Island, 67 companies were interviewed. Additional local experts and other travelers were interviewed to expand our overall understanding of the tourism industry and its various subsectors.

In 2006, field work occurred only in Sitka and Juneau. Applying lessons learned from 2005, Only businesses were interviewed, primarily in person but also by phone and email. In Sitka, 39 businesses were interviewed; in Juneau, 50 businesses were interviewed. An additional 10 multi-day charter yacht companies were interviewed that operated in the northern waters of Southeast Alaska.

In addition to businesses, field staff also interviewed harbormasters and fuel dock personnel; staff at Convention and Visitor's Bureaus; personnel with the U.S. Forest Service, Alaska Department of Fish & Game, and borough/city accounting office staff. City Accountants in Hoonah and Sitka, and the mayors of Hoonah and Pelican were also interviewed.

Key findings from this research include the following:

- Nature-based tourism generates over \$250 million per year of direct business revenues in Sitka, Juneau and Chichagof Island for the companies we surveyed. This is most likely an underestimate of total revenue because not all nature-based tourism businesses and business sectors were surveyed or included in our estimates. In addition, the summer of 2006 was especially wet, which decreased activity for some businesses.
- Tourism in Southeast Alaska is primarily focused on nature-based activities as people are attracted to the region for its beautiful scenery, fisheries, wildlife, marine mammals, glaciers, and other natural attributes.

¹ The Phase 1 companion report, "The Regional Economy of Southeast Alaska," is available from the ISER Web site: www.iser.uaa.alaska.edu.

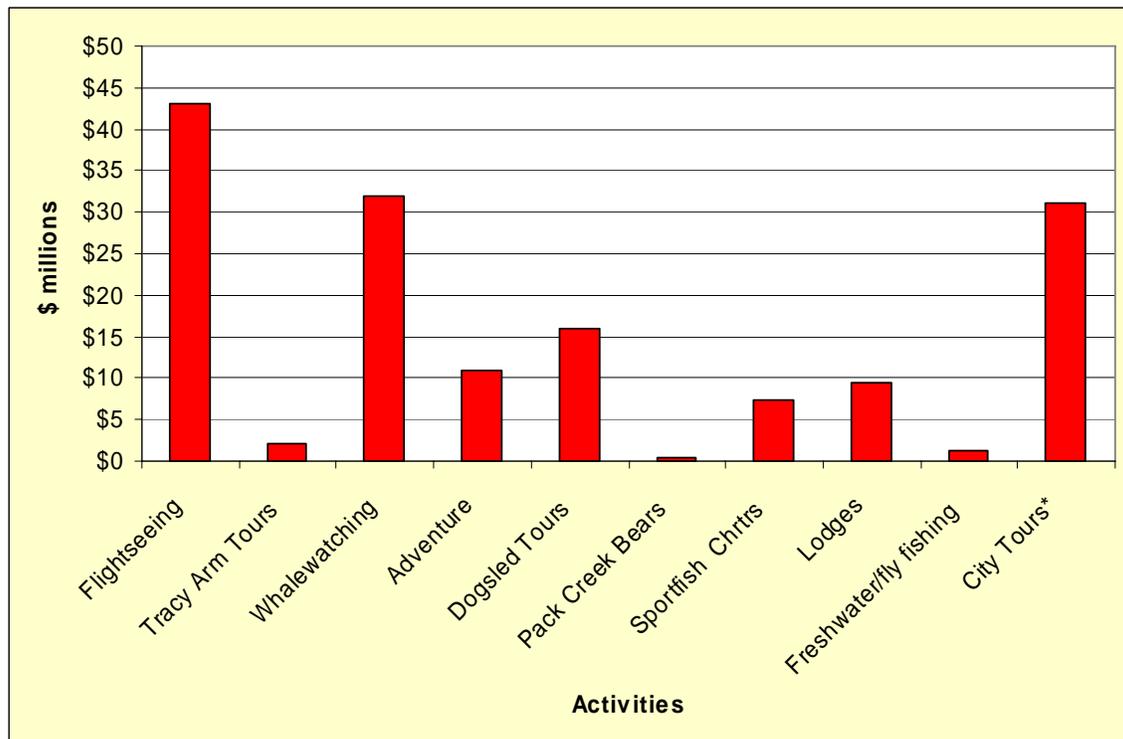
- Nature-based tourism creates a significant economic ripple effect that keeps money circulating through many sectors of the economy. This money supports jobs in marketing, support services, food and beverages, accommodations, fuel sales, government, and other sectors.
- A large and growing portion of Southeast Alaska's visitors are cruise ship passengers. Both cruise passengers and independent travelers are similarly interested in nature-based tourism services. The majority of cruise ship shore excursions offer nature-based activities, from hikes and glacier viewing to flightseeing and forest canopy zip lines.
- There is a complex and extremely competitive system for prebooking cruise ship shore excursions. Businesses with exclusive cruise contracts make price and tour information available only to cruise passengers and often agree not to sell tours without going through the cruise line.
- The tourism businesses in cruise ports of call that appear to be most successful either have a cruise ship shore excursion contract or are catering to overnight (non-cruise) guests with high quality and high value services. Examples of these types of businesses include sportfishing lodges and multi-day yacht cruises.
- Unless a company offers a new creative shore excursion idea, it is difficult to compete with businesses holding existing cruise contracts. Despite this hurdle, A number of companies are offering creative new products including canopy ziplines, glass bottom boats, and an amphibious "duck" tour.
- Some operators attribute the increased interest in adventure activities to a change in cruise ship clientele. In recent years, cruise companies have been catering to a younger crowd, targeting families. In any event, increasing numbers of passengers are interested in more active pursuits.
- For shore excursions aimed at cruise passengers, competition exists not just with companies within a community but with other ports, as people are booking their shore excursions in advance and look at all the options. Sitka companies mentioned they were carefully tracking ziplines in Juneau and Ketchikan, dogsled tours on the Mendenhall Glacier, and other activities to see which market niche they could capture.
- There is some evidence that visitors are willing to pay premium prices for higher quality experiences in more pristine environments. It is not clear, however, what specific attributes (seclusion, fishing experience, food, services, perceived exclusivity, and environmental amenities) are the key components of this higher market value.
- It is possible to design a community-based tourism program that provides employment to local residents as is occurring in Hoonah. However, Elfin Cove appears to bring in more in gross revenues than Hoonah with about one-eighth as many visitors because Hoonah's operation is relying on volume while Elfin Cove's is relying on a higher-priced fishing lodge experience. Day trips seem to be relatively higher cost, lower profit operations.
- Independent travelers appear to avoid the crowds and many are repeat visitors. Most tend to stay longer and have more open itineraries than those on cruise ships or organized tours. These characteristics make independent travelers more difficult to survey directly.

- The primary marketing mechanisms for smaller, non-cruise related businesses are the Internet and word of mouth. In addition, many customers return to the same fishing lodge, yacht tour, or other business year after year.
- Companies in several communities expressed a desire to move toward more marine wildlife viewing and sightseeing and away from sport fishing. These operators preferred wildlife viewing as it was less stressful with less pressure to catch fish. Wildlife viewing is highly attractive to visitors due to spectacular scenery and abundant wildlife including whales and other marine mammals. Some operators were making this shift, while others think they would not be able to match the revenue generated by sport fishing.
- Weather has a significant impact on business for companies whose tours are not prebooked on cruise ships. Operators noted a marked difference between the sunny, dry summer of 2004 and the remarkably wet summer of 2006. Visitors walking off a ship in the rain were much less likely to go on marine tours or hikes in soggy conditions, and seasonal revenue was down. Businesses with cruise contracts did not experience this setback as passengers are not reimbursed for presold tours when weather conditions are poor. The one exception was flightseeing, where companies had to cancel tours due to unsafe weather conditions.
- Promoting wildlife watching is an important marketing strategy for Southeast Alaska communities. Visitors' bureaus produced pamphlets with charismatic megafauna, such as whales and bears. Bureau staff cited studies showing the desire to see wildlife is what attracts a large portion of out-of-state visitors.
- A significant economic question that emerges from this research is how the public lands might be managed to maximize the economic returns to residents of Southeast Alaska communities, especially the smaller communities that can only accommodate smaller numbers of visitors at one time.

Table E-1.
Estimated gross revenue and number of visitors from
nature-based tourism activities in Juneau, Summer 2006

Activity	Revenue	Visitors
Flightseeing	\$43,000,000	118,000
Tracy Arm Tours	\$2,150,000	16,000
Whalewatching	\$32,000,000	230,000
Adventure	\$11,000,000	80,000
Dogsled Tours	\$16,000,000	31,000
Pack Creek Bear Viewing	\$525,000	510
Sportfish Day Charters	\$7,440,000	29,000
Lodges	\$9,400,000	3,400
Freshwater/fly fishing	\$1,200,000	3,500
City Tours*	\$31,000,000	560,000
Total**	\$153,715,000	1,071,410
* City tours includes tours to the Mendenhall Glacier, McCauley Salmon Hatchery, Glacier Gardens, and the Goldbelt Tramway. While not necessarily offered collectively as a tour, they are grouped together to protect proprietary information of individual companies.		
**Juneau hunting is included in Sitka information to protect proprietary information of Juneau guides.		
Sources: Company interviews and websites, summer 2006.		

Figure E-1.
Estimated revenue by activity from
nature-based tourism activities in Juneau, Summer 2006



**Table E-2.
Estimated gross revenue and number of visitors from
nature-based tourism activities in Sitka, summer 2006**

Activity	Revenue	Visitors
Wilderness drop off	\$590,000	3,200
Whale/wildlife watching	\$6,200,000	54,000
Adventure	\$1,850,000	18,000
Charter Yachts*	\$21,000,000	4,400
Sportfish Day Charters	\$5,649,600	32,000
Lodges	\$34,500,000	14,400
City Tours**	\$8,200,000	97,000
Hunting***	\$1,500,000	310
Total	\$79,489,600	223,310

*Charter Yacht revenues are attributable to both Sitka and Juneau but are included in the Sitka number to avoid double counting.
 * City tours includes tours to the Raptor Center and Sitka National Historic Park. While not necessarily offered collectively as a tour, they are grouped together to protect proprietary information of individual companies.
 **Juneau hunting is included in the Sitka section to protect proprietary information of Juneau guides.
 Sources: Company interviews and Web sites, summer 2006.

**Figure E-2.
Estimated revenue by activity from
nature-based tourism activities in Sitka, Summer 2006**

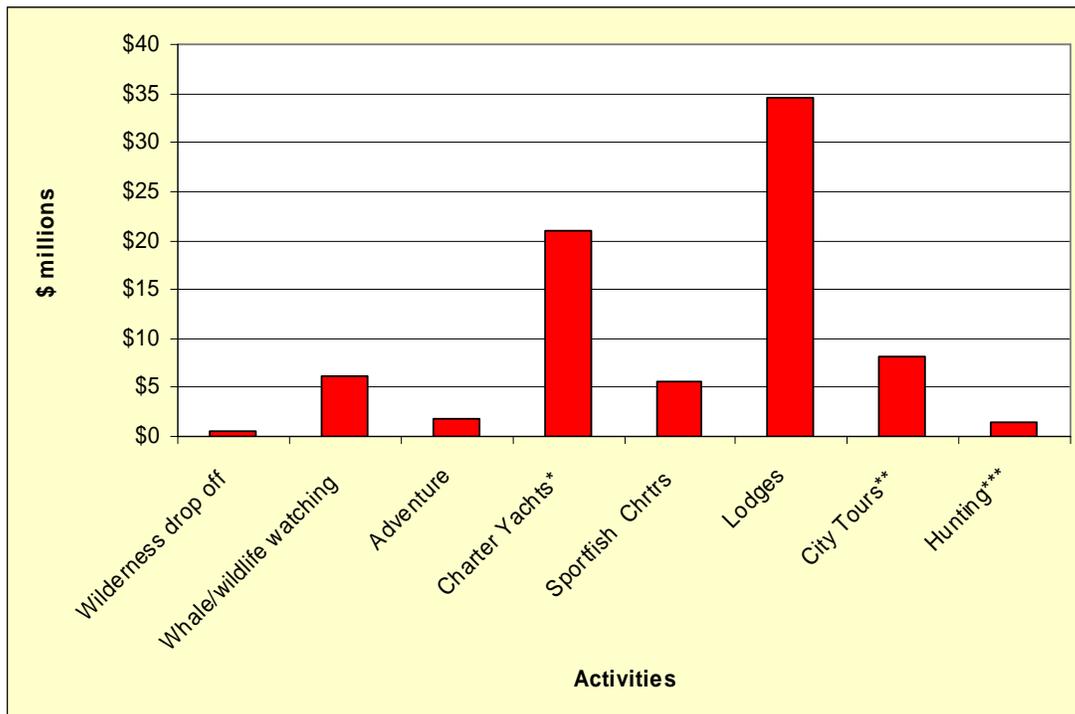


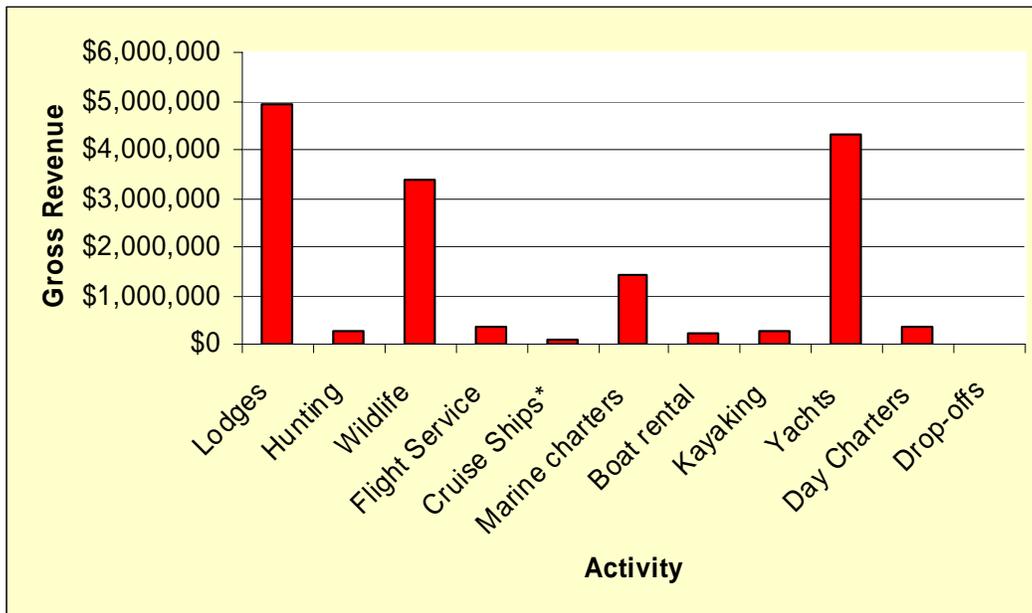
Table E-3.
Estimated revenue and visitor numbers by community from
nature-based tourism activities on Chichagof Island, Summer 2005

Community/Activity	Revenue	Visitors
Elfin Cove		
Lodges	\$4,889,500	1,528
Small Cruise Ships*	\$90,000	3,000
Subtotal	\$4,979,500	4,528
Hoonah		
Marine charters/Fishing lodge	\$840,320	1,060
Hunting	\$252,000	20
Sightseeing/Wildlife	\$3,360,350	33,610
Subtotal	\$4,452,670	34,690
Juneau		
Flight	\$268,230	--
Boat rental	\$209,000	72
Guided Kayaking	\$259,280	283
Charter Yachts	\$4,059,450	1,105
Subtotal	\$4,795,960	1,460
Pelican		
Day Charters	\$396,900	300
Charters/Lodging & Lodging only	\$396,000	350
Drop-offs	\$17,130	90
Subtotal	\$810,030	740
Sitka		
Marine Charters/Kayaks	\$19,930	40
Flight Service	\$92,390	360
Multi-night	\$240,930	100
Subtotal	\$353,250	500
Tenakee		
Marine Charters	\$155,000	100
Estimated Total	\$15,546,410	42,018
*The small cruise ship industry is centered on northern Southeast Alaska in part due to the scenic beauty of Chichagof Island. As a result, these numbers are underestimates of economic activity attributable to small cruise ships.		
** Flight service companies provided only very rough estimates of passengers. Revenues were estimated based on numbers provided by businesses receiving clients from flight service companies that did not include transportation in their tour prices. These are likely underestimates.		
Sources: Company interviews and websites, summer 2005.		

Table E-4.
Estimated revenue by activity from
nature-based tourism activities on Chichagof Island, Summer 2005

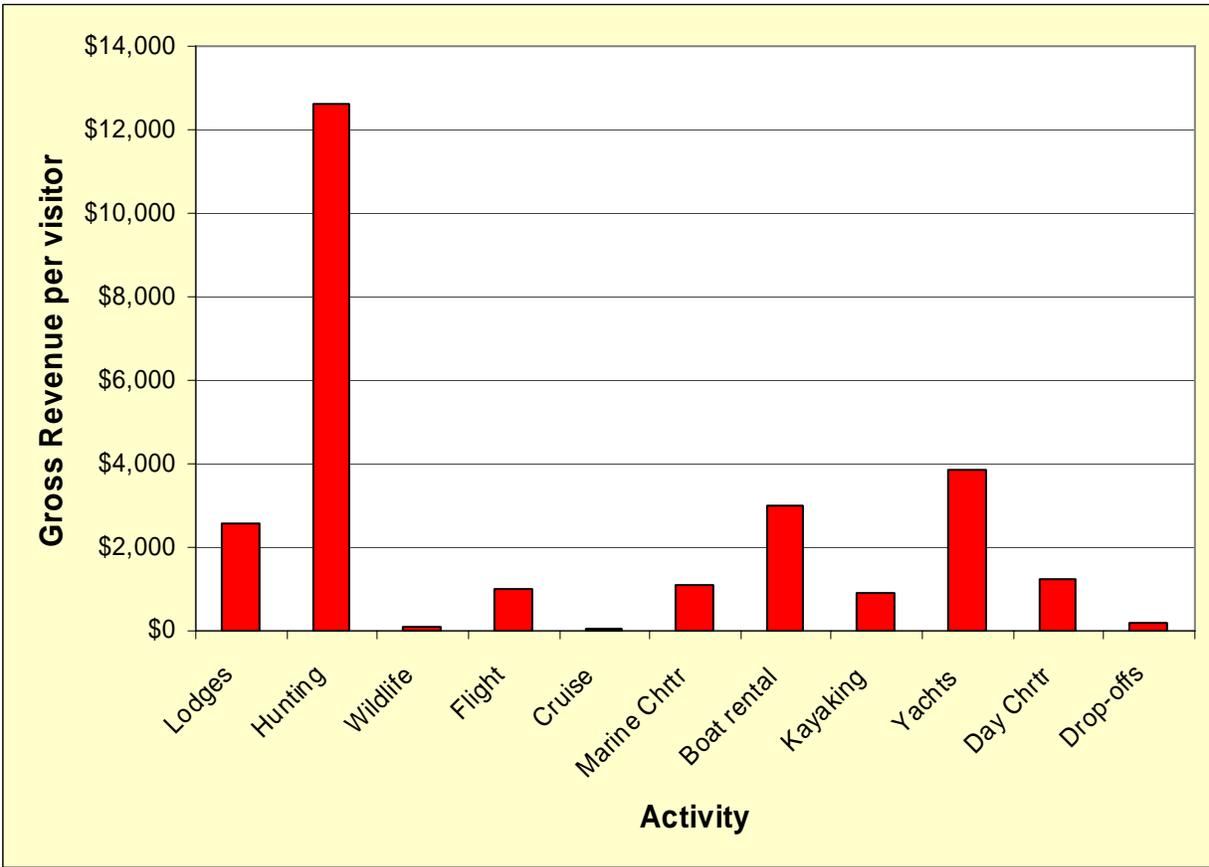
Activity	Revenue	Visitors
Lodges	\$4,917,550	1,908
Hunting	\$252,000	20
Sightseeing/Wildlife	\$3,360,350	33,610
Flight Service	\$360,620	360
Small Cruise Ships*	\$90,000	3,000
Marine charters	\$1,409,320	1,270
Boat rental	\$209,000	70
Guided Kayaking	\$261,210	285
Charter Yachts	\$4,300,380	1,110
Day Charters	\$371,850	300
Drop-offs	\$17,130	90
Total	\$15,549,410	42,023
*The small cruise ship industry is centered on northern Southeast Alaska in part due to the scenic beauty of Chichagof Island. As a result, these numbers are underestimates of economic activity as a result of small cruise ships.		
Sources: Company interviews and websites, summer 2005.		

Figure E-3.
Estimated revenue by activity from
nature-based tourism activities on Chichagof Island, Summer 2005



Note: Small cruise ship revenue is based only on shore activities and expenditures by passengers in Elfin Cove.

**Figure E-4.
 Estimated revenue per person by activity from
 nature-based tourism activities on Chichagof Island, Summer 2005**



Note: Small cruise ship revenue is based only on shore activities and expenditures by passengers in Elfin Cove.

1. Introduction

This report explores the economic importance of nature-based tourism in Southeast Alaska based on field research conducted during 2005 and 2006. We define nature-based tourism as those tourism activities for which the natural environment is a significant input.² This report covers Phase 2 of a larger research project whose goal is to provide a broad overview of the regional economy of Southeast Alaska, including trends over time for individual communities and boroughs. The purpose of the Southeast Alaska economy project is to add to the information and knowledge base available to help people make informed decisions.³

The nature-based tourism sector is growing rapidly in Southeast Alaska. However, its contribution to the regional economy is difficult to assess using traditional economic analysis methods based on publicly available data. To gain a more in depth view, two field researchers spent eight weeks of field time in Southeast communities during summer 2005. Finer-scale research was conducted on the amount of revenue generated, which activities are attracting tourists, and how the money flows through the economy.

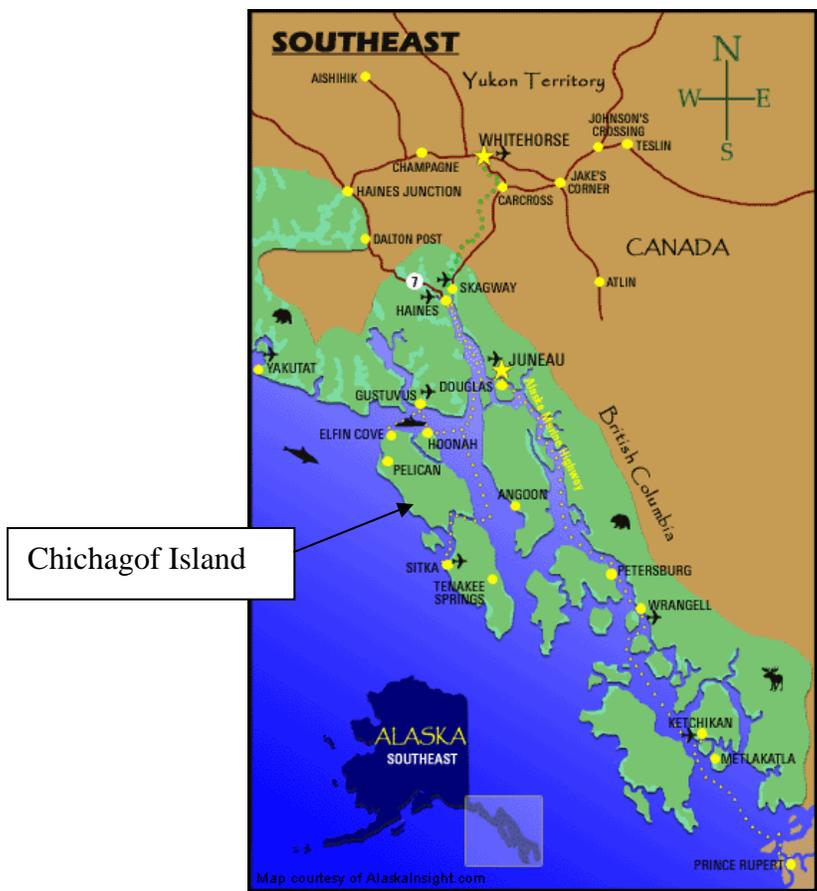
In 2005, the field research was organized into two case studies: 1) Ketchikan as a *gateway community* for nature-based tourism activities, and 2) Chichagof Island as a *destination* (Map 1). These two cases constituted different approaches, as tourism in Ketchikan is mainly driven by cruise ships, with people leaving town on different excursions for partial day trips. Chichagof Island, on the other hand, encompasses several small communities, is more difficult to access, and attracts primarily independent travelers visiting a wider geographic area. The communities investigated included Ketchikan, Elfin Cove, Hoonah, Pelican, Tenakee Springs, Sitka and Juneau. An important goal of the summer 2005 field work was to determine which field methods were most effective and efficient.

In 2006, research days and staff in the field were more limited so field work occurred only in Sitka and Juneau. However, applying lessons learned from 2005 resulted in extensive findings in 2006, especially in Juneau, the most visited community in Southeast Alaska. Greater efficiency was gained by interviewing only businesses instead of visitors in 2006. Interviews were primarily conducted in person but also by phone and email. A larger goal of the field work from both years is to link direct and indirect visitor revenue to specific geographic areas using Geographic Information System (GIS) methods.

² We prefer to avoid the term “ecotourism,” which has come to acquire multiple meanings and could lead to needless confusion.

³ The Phase 1 companion report, “The Regional Economy of Southeast Alaska,” is available from the ISER Web site: www.iser.uaa.alaska.edu

Map 1 – Southeast Alaska



2. Methods

In Ketchikan, two researchers spent 2.5 weeks and collected data from 32 nature-based tourism companies and 43 cruise ship ‘shore excursion’ tours. The team talked to both visitors and tourism operators to determine how many people booked various tours, what geographic areas were visited, and how much money visitors spent to participate in various activities. Informal interviews were conducted with visitors at the cruise dock, the Alaska Marine Highway System ferry terminal, and the airport. Meetings were also held with companies offering flightseeing, sport fishing charters, wildlife viewing, and other nature-based products to collect data on customer volumes and company expenses. Phone interviews were conducted when operators were unable to meet in person. Occasionally information on approximate numbers of clients was obtained from dock representatives if they had worked multiple seasons and were familiar with visitor travel patterns and bookings. Economic information was also obtained from the Ketchikan Borough tax office and Ketchikan Visitor and Convention Bureau.

Five weeks were spent studying Chichagof Island as a destination. Field research was done primarily by interviewing nature-based tourism businesses, as visitors were widely dispersed in time and space. For all locations, whenever possible company interviews were done in person

with the business manager or owner. Phone interviews were conducted with business owners or managers who were not available to meet in person. Companies in Juneau and Sitka were also interviewed that make drop-offs or use Chichagof Island for charters. Overall, over 70 companies that operate on Chichagof Island were contacted. The information from these interviews is contained in the Chichagof Island section. In addition, Sitka and Juneau also each have a stand alone section from 2006 research. As the Chichagof Island information is reported again in these results (as a subset of Sitka- and Juneau-based tourism), these numbers are not strictly additive. This situation illustrates the inherent difficulty of allocating the output of the tourism industry to a particular place.

Many companies were reluctant to provide detailed economic information, so discussions often focused on numbers of visitors and activity patterns. Companies were asked about the types of tours or excursions offered and how many people they took (either total numbers for the season or average numbers per day and length of season for each tour). When possible, they were asked to highlight geographic locations on a map. This information combined with tour price listings on the Internet, brochures, or obtained directly from businesses allowed calculation of revenues. No company was asked for total gross revenue, although this number was provided voluntarily on several occasions.

People often estimated the number of visitors since they did not know precise totals. Sometimes employees did not want to guess at their company's numbers which made it difficult to obtain precise data. In these cases, yes-no questions such as "would you say more than 70% went on the longer tour..." were used to elicit estimates. Information on the capacity of vessels or buses was obtained for companies that could not provide detailed data. Some charter sport fish companies estimated clients based on how many fishing license registration books they had filled out.

This study is focused on guided excursions. Revenue associated with non-guided activities is another important piece of the economy not captured in this study. Some examples include lodging, rental cars, provisions for trips, etc. This study does not arrive at one revenue number for nature-based tourism in Sitka. There are potentially small companies that don't advertise or operate infrequently that were not picked up during the research – particularly in the sport fishing sector. The categories here are not all-inclusive but are meant to show examples of the magnitude of revenue nature-based tourism brings to Sitka.

In 2005, the prices for activities and excursions were 2005 prices provided by businesses, brochures, or Web sites. Similarly, prices for 2006 excursions were 2006 prices. However, estimates of visitor volumes often reflect a combination of years. For example, in 2005 a business owner might estimate their visitor numbers based solely on the number of 2004 customers or 2004 customer numbers as well as a sense of how businesses was going in 2005. As a result, the number of visitors estimated in this report is a melding of data from 2004 to 2006. Given that visitation has grown in Southeast during this period, these visitor volume estimates are most likely a conservative estimate of current reality.

In addition to company personnel and visitors, a number of other local experts were consulted including an economist, hotel owners, hostel managers, accommodation booking services, sport fish charter booking services, borough tax offices, harbor masters, and staff at convention and

visitors bureaus. Internet listings and shore excursion descriptions offered by different cruise lines were used to make a check-list of shore excursions. The cruise lines did not usually advertise the name of the company providing the excursion, but the information could usually be obtained by talking to dock representatives.

Other important sources of information were the U.S. Forest Service and the Alaska Department of Fish and Game (ADF&G). The U.S. Forest Service provided detailed information on the special use permit holders for some parts of the Tongass: how many client days they had the previous year and what specific locations they took specific numbers of clients too. Companies must have permits to bring clients onto the Tongass National Forest land above mean high tide, and must provide a season summary which becomes public information. The ADF&G, Division of Sport Fish charter fishing data base contains extensive information on fishing effort by statistical area as well as charter fishing companies.

Unless otherwise cited, information in this report was obtained from business interviews. To protect proprietary information, citations are not given. However, the names of businesses interviewed are listed in the appendix to this report.

3. Ketchikan

In 2005, Ketchikan hosted approximately 887,000 cruise ship passengers. This number reflects a steady increase in cruise passengers over the last ten years. As a result of these large and growing numbers, Ketchikan has a well-developed network and system of shore excursion offerings. There are 47 shore excursions advertised among the different cruise lines. Of these, 33 are directly nature-based and an additional four are nature-related.

Map 2 – Ketchikan and Environs



The large influx of cruise visitors over the last ten years has changed the face of tourism in Ketchikan. It has also resulted in two types of visitors—the cruise and non-cruise visitor—with the latter often being referred to as the independent traveler. However, the latter group also includes a significant number of package tour visitors such as those who do week-long, all-inclusive fishing trips.

Most nature-based activities from Ketchikan fall into four main categories: flightseeing, marine charters, adventure experiences, and general sightseeing. The following four sections provide an overview of these subsectors.

Flightseeing: Misty Fjords and Bear Viewing

Flightseeing, especially over Misty Fjords National Monument, is one of the most publicized cruise ship shore excursions in Ketchikan. Ten flight companies operate directly from the waterfront in town, ranging in size from fleets of ten planes to a single plane/single pilot operation. Over 95% of the passengers taken on flightseeing tours out of Ketchikan are cruise travelers who have prebooked the flight through the cruise line. Most trips to Misty Fjords involve approximately 1.5 hours of flying time with a ten minute water landing in one of the fjords, and cost between \$200 and \$230.

Bear viewing, another popular excursion, begins in mid- to late July. Bear viewing tours involve a 25 to 45 minute flight from Ketchikan where the visitors are dropped off and met by a Forest Service ranger or a company guide, and walk a short distance to a bear viewing platform. Prices run between \$275 and \$400 per person depending on the destination, and are fairly uniform among operators. Major destinations include Anan Creek, Polk Inlet on Prince of Wales Island, Traitors Cove, and Margaret Bay.

Misty Fjords National Monument is one of Ketchikan's largest draws. Each season, 90,000 to 100,000 tourists visit Misty Fjords via one of the ten Ketchikan-based flightseeing operators or two marine cruise companies. This visitation amounts to over 600 people per day and around \$20 million in revenue for the season. These figures are from day-trips alone and do not include independent boaters or kayakers, or the several guided group kayak trips per season that are led by a Ketchikan-based company.

Marine Charters

The Alaska Department of Fish and Game distributes permits to over 120 different marine sport fish charter companies in Ketchikan, including those in the nearby marinas of Ward and Knudson Coves. While some of these companies are lodges or other marine sightseeing operations for which fishing is only a portion of the business, there are also a significant number of independent sportfish charter operators consisting of just one boat and captain.

Many of these independent companies are affiliated with one of the four larger booking agencies in town (Ketchikan Sportfishing, Alaska Sportfish Adventures, Knudson Cove Marina and Baranof Skiffs.) Ketchikan does not have a sportfishing cooperative but these four companies allocate the majority of the cruise ship passengers to their fleet of 20 or so captains, all of whom provide similar half-day tours and are paid by the booking company. Three of these four

companies took in a combined 20,000 clients during the 2005 summer season, and generated approximately \$4.2 to \$4.4 million in revenue.

Many charter boat captains affiliated with booking agents will also take charters independently, usually from their Web sites and sometimes walk-ups on the dock. The going rate per person for sport fish charters is \$250 for a full day, \$175 for six hours, and \$135 for a half day.

Captains that are not affiliated with a booking agency must have effective Web sites, wide-spread reputation, or representatives at the Visitors Bureau or dock who will help book charters. One independent captain mentioned that he tries to make at least \$400 per trip and will negotiate with people on the price accordingly. He pays commission fees to other representatives on the dock who help him put together charters, and he sometimes shows up at the dock early in the morning to walk around and hope for a phone call.

Non-fishing marine charters include wilderness and sightseeing-oriented boat rides. Several tours included underwater cameras or a glass bottom boat. The six prominent companies engaged in these activities had approximately 55,000 to 65,000 clients in 2005, and generated an estimated \$4.3 to \$4.5 million in revenue. These figures include the popular “Duck Tour” which involves a city tour and a tour around the Tongass Narrows in one amphibious vehicle.

Cruise passengers make up the overwhelming majority of marine charter clients. There are a limited number of people who arrive in Ketchikan by plane or ferry and will charter a boat for one to several days, taking either guided trips with a captain or renting a skiff to access U.S. Forest Service cabins in the area.

Adventure

The adventure tours sector has been growing rapidly in Ketchikan in the past few years with new offerings targeted directly at cruise ship passengers. Adventure excursions include canoeing, kayaking, “adventure-karts,” snorkeling, zip-line forest canopy tours, and biking. They take place on both public and private land, encompassing Herring Cove, Mountain Point, Harriet Hunt Lake, Clover Pass, Tatoosh Island, and Knudson Cove. Most of these locations are found on the road system and are generally less than 25 minutes by bus from the cruise docks. While not accessing any remote locations, these tours offer cruise passengers an opportunity for a more personal outdoor experience. The five predominant adventure companies took over 70,000 clients in 2005, generating approximately \$6.2 million in revenue.

While some of the excursions cover a wide geographic area, the companies generally run the same tour routes over and over, usually visiting the exact same location several times a day everyday for the entire season. As a result, there is a concentration of use by each company in just a few specific areas.

Examples of the new developments in the adventure tour market are two zip-line canopy tours, sold by Southeast Exposure and the Alaska Rainforest Sanctuary. Both of these excursions were immediately popular and business continues to grow as their reputations spread.

Almost all adventure tour patrons are cruise passengers, as most of the tour companies contract exclusively with the cruise lines and the tours are prebooked aboard the ship. Even those that do not prebook on the ships reported that over 95% of their business came from selling half-day tours to cruise ship passengers. Research showed limited tour offerings tailored to independent travelers, with many activities not being advertised off the ship. Several travelers interviewed in the airport and many of those interviewed in the AMHS ferry terminal expressed interest in hiking, although information about available trails was limited. One comprehensive trails guide was found at the Southeast Alaska Discovery Center but there was little else to direct people on how to access the forest on their own.

Sightseeing

Sightseeing tours are abundant in Ketchikan. We included as “nature-based” those that specifically advertised a natural location or natural quality as one of their primary attractions. Major categories of sightseeing included town and totem tours, Misty Fjords tours, and wildlife and scenery tours. This section does not provide figures for number of clients and revenue generated by such activities as some of the companies have been included in other sections.

Because of the distance, tours to Misty Fjords are mostly limited to flightseeing, which were discussed previously as a separate category. Two companies, however, run boat tours to Misty Fjords despite the limited time window of cruise passengers. Goldbelt Tours, in tandem with various flightseeing companies, offers a combined cruise and flight tour where passengers fly one direction and boat the other. Allen Marine, the other prominent day cruise company, operates boats fast enough to make the round trip in four hours. Both excursions can be purchased on the cruise ship or by walk-up travelers.

Local wildlife and scenery tours take place by bus and boat and offer chances to view wildlife and marine life around Ketchikan. Some interesting offerings include the Light Island Ventures, whose military-built boat is equipped with both underwater microphones and cameras. Two other examples are the Alaska Undersea Tour, a semi-submersible tour boat, and the Wilderness Exploration and Crab feed, which combines a naturalist-narrated boat tour to check crab pots with an all-you-can-eat crab lunch.

Because of the large number of sightseeing tours in the area, competition between companies appeared high. This has led to negative feelings between the cruise-ship affiliated tour operators and those whose excursions were not sold aboard the ships. Many smaller independent operators felt as though the cruise companies were increasingly shutting locals out of the sightseeing industry in order to capture a greater percentage of the profits. All of the sightseeing tours, however, relied almost entirely on cruise ship passengers for their business whether they were prebooked or walked off the ship.

In summary, it is clear from the data collected that well over \$50 million of gross revenue can be attributed to nature-based tourism activities based in Ketchikan. However, because our methodology was exploratory, insufficient data were collected to accurately estimate the full economic extent of these activities; the above estimate represents a lower bound.

4. Juneau

Juneau, Alaska's state capital, is located on the "panhandle," 577 air miles southeast of Anchorage. With a population of 31,193⁴, it is the third largest city in Alaska and the commercial and governmental hub of the Southeast Region. Juneau is also a popular tourist destination and serves as the staging point for nature-based trips in the surrounding area. Over one million visitors come through Juneau between May and September, making it the most visited community in Southeast. Popular attractions include Mendenhall Glacier, Juneau Icefield air tours, Tracy Arm Fjord, and the Mount Roberts Tramway.

Cruise Industry

Tourism in Juneau is dominated by the cruise industry. This is immediately clear driving into downtown, as cruise tourists fill the sidewalks and large ships line the piers seven days a week. Thirty-seven large ships passed through Juneau during the summer of 2006, making 613 port calls. Projected arrivals anticipated 922,449 cruise ship passengers between May and September, an increase of 1% over 2005, according to Juneau Convention and Visitor Bureau statistics. Juneau averages three to six ships per day that dock in the downtown harbor along Marine Way and Franklin Street, or sometimes anchor and lighter passengers to shore. More ships arrive later in the morning and leave later in the evening (around 10:30pm) than in Sitka or Ketchikan, where arrivals and departures tend to be earlier. The average Juneau port time is around 12 hours.

The six major cruise lines (Princess, Holland America, Royal Caribbean, Carnival, Norwegian, and Celebrity) each offer 34 to 37 shore excursions available for purchase on the ship or before the cruise begins.⁵ The majority, 32, of these are fully or partially nature-based trips. Prices range from \$39 to \$490 aboard the ship. Typically, about 1,000 or more people on the large 2,000+ passenger ships prebook shore excursion in Juneau according to shore excursion managers.

In addition to the major cruise lines with large ships, several cruise companies conduct trips based out of Juneau on much smaller vessels. Many of these are seven-day trips between Juneau and Sitka.⁶

Flightseeing

Juneau, located on the doorstep of the 3,900 square kilometer Juneau Icefield, is the helicopter flightseeing hub of Southeast. Four helicopter companies offer various flightseeing tours over parts of the icefield and surrounding area. Almost all of these tours include a stop on a glacier, and several include glacier hikes. Three of the companies have established sled dog camps on the icefield, and offer dog sled rides. One company has 300 dogs at its camp, and many of the teams compete in endurance races, such as the Iditarod, in Interior Alaska during the winter. The

⁴ Alaska Division of Community Advocacy, community online database

⁵ Information taken from cruise line Web sites

⁶ For more information on small cruise ships see Colt, Fay and Dugan, *The Regional Economy of Southeast Alaska*, 2006. (Available at www.iser.uaa.alaska.edu)

visitors are given a chance to meet the dogs and the handlers, as well as ride on the sled and tour the tent camp.

Helicopter tours are some of the most expensive shore excursions in Southeast. These four companies took an estimated 90,000 people on helicopter tours, generating approximately \$36 million in gross revenue. Over 30,000 of those people were on the glacier dog sled tours, which brought in an estimated \$16 million.

In addition to helicopters, a float plane company offers flightseeing from the dock, booking almost entirely cruise passengers onto multiple flights a day. Four other air taxi services make infrequent flightseeing trips on the side of their transport business, as does a fly-out fishing company. These six companies bring in \$6 million from approximately 28,000 people.

City Tours

Thousands of people visiting Juneau by cruise ship choose one of the various “city tours” involving attractions along the road system. The tours originate at the dock and go by bus or van to natural and historical sites. This study includes those with some type of nature-based component such as the Mendenhall Glacier, salmon hatchery, or Glacier Gardens. There are about six different combinations of local tours offered by the large cruise lines.

The **Mendenhall Glacier** is the most visited attraction in Juneau, and perhaps in all of Southeast. In 2005, 367,291 visitors came to the U.S. Forest Service’s Mendenhall Glacier Visitor Center on the edge of Mendenhall Lake between May 9 and Sept 27. Throughout the June to August peak season, the average number of visitors was almost 3,000 per day. Approximately 98% of the visitors arrived with one of the twenty-three companies permitted by the Forest Service to bring clients. These visitors were usually associated with a cruise tour which ranged in price from \$39 to \$170 depending on tour components. Approximately 27% of the trips made by permitted companies were shuttle services simply moving people from downtown to the glacier and back, rather than a tour. Shuttle services left from the cruise dock and cost between \$6 and \$22 per person. Of the company trips, 18% were made by taxis.

While the Mendenhall Glacier itself is retreating, visitation has continued to grow. There was a 12% increase in visitors to the Mendenhall Visitor Center between 2003 and 2004, and a 16% increase between 2004 and 2005.

It is important to note that these counts and revenue figures do not include the number of people that come to the glacier to hike, picnic, or take pictures and do not go to the visitor center. This number has not been estimated. While not providing direct revenue to the U.S. Forest Service, these people still contribute to the local economy by renting cars, purchasing meals, and incurring other incidental expenses.

The **McCauley Salmon Hatchery** is located at the mouth of Salmon Creek between downtown and the Mendenhall Valley and is another popular visitor attraction. The hatchery receives 116,000 visitors per season to tour the facility and learn about the life cycle of Pacific salmon

and the operations of the hatchery. Over 100 different species of Alaska marine life are on display in salt water aquariums.

Over 95% of the hatchery's visitors are cruise passengers on tour. Similar to the Mendenhall Glacier offerings, these tours incorporate other activities in the Juneau area. A tour of both the Mendenhall Glacier and salmon hatchery runs around \$45. A tour that also goes to Glacier Gardens and the State Museum costs approximately \$85. Conservatively assuming \$50 per cruise passenger tour, and the \$3.25 charged to the 5% independent visitors, the salmon hatchery is associated with over \$5.5 million in visitor revenue.

Glacier Gardens, located in the Mendenhall Valley, is another stop on many city tours. The gardens encompass 50 acres of lush rainforest, botanical landscaping, and scenic views. Guided tours with golf carts on nature trails provide background on Juneau's flora and fauna. Tour prices range from \$42 to \$57, depending on the cruise line, for trips exclusively to the gardens. Tours combined with other activities can cost more than \$100. Ninety-nine percent of visitors to Glacier Gardens were cruise passengers, most of whom went to the Mendenhall Glacier on the same tour.

Also included in this category for data calculation purposes is the **Mount Roberts Tramway**. This 2,000-foot lift takes visitors from Franklin Street near the cruise dock part way up Mount Roberts for magnificent views of Gastineau Channel, Douglas Island, and the surrounding area. There are ample opportunities for hiking from the top of the tram, although most cruise passengers remain relatively close to the terminal which includes a restaurant and gift shop.

It is difficult to assess the amount of revenue generated by these tours because of the number of companies involved, and the different tour combinations offered. Revenue generated by the salmon hatchery is a subset of the revenue generated by tours that include the Mendenhall Glacier since all cruise ship-based hatchery tours include the glacier, and 95% of hatchery visitors are cruise passengers. Similarly, at least 85% of visitors to Glacier Gardens can also be assumed to have gone to the Mendenhall Glacier. The Mount Roberts Tramway is not combined with other tours except for a small portion of people (less than 4,000) that participated in a tram and trek tour run by a company in the adventure category. Therefore revenue from Mount Roberts can be added without double counting.

Using estimates based on average tour prices and visitors per season, tours associated with the Mendenhall Glacier, Glacier Gardens, or Mt. Roberts Tramway generated almost \$31 million in 2005⁷ paid by 560,000 people⁸. Not included in this figure is the revenue associated with over 9,000 visitors who arrive at the visitor center independently.

⁷ The average taxi ride to the glacier costs approximately \$30 each way, and taxi tours to the glacier are typically one to two hours, and cost between \$55 and \$110 for the vehicle. This figure was calculated assuming the average shuttle is \$15 per person, the average taxi is \$20 per person, and the average cruise ship-based tour involving the Mendenhall is conservatively estimated at \$120.

⁸ It should be noted, however, that many of the people that went to the Mendenhall Glacier also went up the tram as a separately purchased activity. The combined number of people cited here is the number of tours people took, not the total number of people.

Adventure

Eight companies in Juneau offer active adventure tours that include rainforest zip lines, guided hiking, kayaking, cycling, canoeing, rafting, and glacier trekking. Most of these are part-day tours targeting cruise passengers, but two companies offer overnight and multi-day trips that go farther afield. Five of the eight companies have contracts with large cruise lines.

Interviews were conducted with seven of the eight companies. Together, these seven companies brought in an estimated \$10.8 million from about 80,000 customers.

The two zipline companies were new to Juneau in 2006. One is located at the old Treadwell Mine site and the other at Eaglecrest Ski Area . Both are on Douglas Island, and guests are transported by van to the base of the zipline course. One of these companies is associated with the Ketchikan zipline, has a cruise line contract, and takes a higher volume of clients. The other is a smaller operation that takes mostly independent travelers. Both appeared to be doing well in their fledgling year.

Two companies offer guided hiking on local coastal and forest trails, as well as from the top of the Mount Roberts tramway. Two of the five tour options include a whale watching portion by boat. These are 'soft' adventure tours that provide some physical exertion but are directed at the average visitor. A second company offers glacier trekking, ice climbing, kayaking, and helicopter camping among other activities. This company provides customized and more intensive trips based on client interest and ability.

Three companies offer various forms of water recreation. One large company runs canoeing and rafting trips on Mendenhall Lake and Mendenhall River, and kayaking trips off the shore of North Douglas Island. They have 70 to 80 employees at any given time during the tourist season, and over 90% of their customers are cruise passengers who prebooked the tour aboard the ship. The second company takes all independent travelers, mostly on three to nine day trips that involve wilderness camping, hiking, and kayaking. Some of these trips visit the Pack Creek bear viewing area on Admiralty Island, Glacier Bay National Park, and the prominent whale viewing area of Point Adolphus on Icy Straight. Several of these trips begin or end in Haines or Gustavus. The third company provides kayak rentals, boat rentals, water taxi services, and whale watching tours. Water taxi rates range from \$110 to \$150 per hour. Most drop-offs are to U.S. Forest Service cabins or lighthouses within one hour of Juneau. Most kayak and boat rentals are for one-day trips.

Another company offers guided bike rides with an option of three tours, prebooked on the cruise ship. They range from 3.5 to 5.5 hours and include the mountain road to Eaglecrest ski area or by the Mendenhall Glacier.

Marine Charters

Whale watching. A variety of whale watching tours depart from Juneau and Auke Bay on a daily basis. Three companies capture most of the business. Two are large operations with tours in multiple ports, one with its headquarters out of state. The third is local to Juneau. All three offer part-day tours, and two include other options such as a stop at the Mendenhall Glacier or a

salmon bake at a lodge accessed from the whale watching boat. Combined, these three companies take over 185,000 clients and generate \$21.5 to \$25.5 million per year.

Five medium-sized operators in Juneau were interviewed that each take between 600 and 8,000 clients on whale watching trips per season. For most of these companies, whale watching is one of several activities they offer – three also did sport fishing and one operated a bus service to and from the Mendenhall Glacier. These five operators took a combined 15,000 to 21,000 passengers and generated \$1.6 to \$2.3 million from the whale watching portion of their business.

Additionally, a tour boat runs to Juneau from Haines and Skagway, spending several hours in Juneau for visitors to see the Mendenhall Glacier and downtown before cruising back. While the tour has several components, it prominently advertises whale watching opportunities along Lynn Canal. This tour boat takes several thousand people per year, and the revenue is included in the estimated total whale watching figures described below.

It is difficult to accurately report the total whale watching revenue in Juneau because many small (one-boat/one-captain) sport fishing charters also do whale watching tours. These generally cost between \$110 to \$140 per person and carry four to six people. Because not all of the small sport fish charter operators could be contacted, it is not possible to provide an accurate count of whale watching trips. Total whale watching revenue is likely over \$30 million with over 215,000 clients per summer.

Additionally, it is important to note that whale watching is incorporated into many sport fish charters, by virtue of the setting around Juneau. Humpbacks are commonly seen within close proximity to Auke Bay and on the way to sportfishing grounds, and captains will commonly make a point to let their customers observe the whales if they express interest or have finished fishing for the day. These whale watching opportunities are part of what makes fishing around Juneau so special.

According to observations of business owners, whale watching business appears to be on the rise. While this may be due to an increase in visitor interest, it is also a consequence of increased marketing. Operators noted a marked shift in the sector since the two largest operators entered the market. The high volume capacity of these companies has caused smaller operations to shift away from whale watching and more towards sportfishing or sometimes multi-day sightseeing charters.

Sport Fishing. Fifty-three entities in Juneau possessed charter sportfishing permits from the Alaska Department of Fish and Game in 2005. They encompassed a wide range of company types and sizes – from large-scale sport fishing brokers, to “Mom and Pop” bed and breakfasts with a fishing boat, to full time sport fish charters. Some were multi-day yacht charters, fishing lodges, or primarily wildlife viewing operations that offered fishing on the side. It should be noted that not all of these permit holders were taking clients, however. It was widely suggested that some companies applied for permits mostly for the tax write-off, or to establish a history of business in the event of limited entry regulations in the future. These companies may make only one or two “commercial sport charter” trips per year, often just with friends or relatives, and do not operate as a true charter business. While ADF&G shows 45 “active” entities that took clients

out for at least one day, around 40% may not actually be “active” in the sense that they advertise and earn money from sport fish charters. Five of the 45 operators were known by the field researcher to be charter yachts or sightseeing businesses that did not advertise sport fishing. According to a local sport charter guide whose family had been in the business for 15 years, about 40 sport fish charters operated out of Juneau but only about 12 depended on charter sportfishing for 100% of their summertime work.

Four entities act as sport fishing brokers in Juneau. Two of them split most of the cruise ship prebooked passengers, each working with different cruise lines. A third broker is a cooperative of nine higher-end boats, and a fourth mainly books its own business but contracts out when it becomes overbooked. One of the larger brokers, who has been in business over 20 years, has 15 to 20 captains that work exclusively for the brokerage, and an additional ten to five captains that can be called when there is additional demand.

The typical four-hour sport fish trip, popular among cruise passengers, ranges from \$199 (Princess) to \$229 (Royal Caribbean, Carnival, and Holland America) to \$249 (Celebrity and higher end cruise lines). The standard cruise commission is 25-35%. According to a charter guide in the industry, a typical revenue breakdown works something like this:

- Cruise ship takes around 30% of gross price (differs slightly by cruise line)
- Captain takes around \$88 per person
- Broker takes the rest

A full day of salmon and halibut fishing generally runs between \$250 to \$300 per person, with halibut trips slightly more expensive than salmon trips. These are eight to ten hours in length and are not tailored for cruise passengers, thus avoiding the additional cruise commission.

The average group size per charter boat in Juneau used to be four clients but in recent years it has grown to five or six client per boat. Captains often prefer four or five because it is more manageable in the boat, but need five or six to turn a profit if they are paying a commission to the broker and cruise line.

“High season” runs about 100 days in the middle of the summer when charter captains maximize business to the greatest extent possible. Captains who do not work exclusively with brokers may vary between four hour trips with cruise passengers, full-day trips for halibut, contract day-trips for lodges, or contract for yachts as lightering transport. Acting as a captain for a bed and breakfast is considered a good job because there is only one commission taken instead of two (cruise passengers’ money goes to both the broker and the cruise industry). During the middle of summer season, the full-time captains may take two to four trips a day, five days a week. A typical day for a captain working exclusively for a broker might entail a morning four-hour fishing trip, a noon two-hour whale watching trip, and an afternoon four-hour fishing trip. Captains make about \$88 per person for fishing and \$60 per person for whale watching when arranged through a broker.

There are many captains that work in a wide variety of capacities, both independently and through brokers; as a result it is difficult to estimate the total number of visitors taking sportfishing trips. Most captains generated between \$50,000 to \$70,000 of revenue based on

number of clients and price per person. This is not gross revenue for each captain, as these figures are before commissions were removed. A total of 104 captains turned in activated logbooks to ADF&G in 2005. Based on our interviews with captains, we assume that 70% of these did day charters, divided roughly in half between half day and full day charters, with each captain taking approximately 450 visitors out each year. This results in an estimate of approximately 29,000 visitors going on day charter trips generating \$7.4 million in revenue.

Six fishing lodges in the Juneau vicinity offer all-inclusive packages. Prices run from \$400 to \$500 per day/night. These lodges declined to be interviewed. We assume for the purposes of this study that their revenue is similar to that in Sitka, resulting in 3,400 clients generating \$9.4 million.

Fly-out fishing and stream fishing. Three companies offer stream fishing. Two are fly-out fishing with float planes, and one is skiff-based. One of the companies used to be primarily fly-fishing but now uses the plane predominately for bear viewing at Pack Creek and other locations. Together, the three companies took 3,500 people in 2005, generating \$1.2 million. This included the bear viewing trips taken by the one company.

Tracy Arm

The Tracy Arm-Ford's Terror Wilderness is located about 50 miles southeast of Juneau off Stephens Passage and is a highly advertised attraction for people visiting Juneau. Tracy and Endicott Arms are long, narrow fiords, with steep granite walls and calving tidewater glaciers. This mystical area is often strewn with floating icebergs and is a prime location for scenic boat tours. Three tour boat companies offer excursions to Tracy Arm on a consistent basis, running two, four and seven days a week respectively. The tours are full-day, leaving the dock around 8:00 in the morning and returning around 5:00 in the evening. As a result, this tour does not fit the usual cruise passenger schedule. Consequently, this tour takes more independent travelers than perhaps any other commercial tour in Juneau. One company has found a way to tap into the cruise market by picking up clients directly from the cruise ship as they pass the mouth of the arm on their way to Juneau. This company consequently takes only cruise passengers. Altogether, 15,850 people visited Tracy Arm with these three companies, generating an estimated \$2.15 million in revenue. None of the clients get off the boat at any point during these tours.

The Tracy Arm area is also a popular destination for smaller boat operators, charter yachts, private yachts, kayakers, and other wilderness enthusiasts. These visitors are harder to count and track, as their use is inconsistent and dispersed. Several small higher-end marine tour operators also noted during interviews that they might take clients into Tracy Arm once or twice per season. Consequently, the revenue described above does not capture the full economic impact of Tracy Arm. It is also important to note that several cruise ships now sail into Tracy Arm as part of the cruise. This is new within the last several years, and cruise revenue attributable to Tracy Arm is not included in this account.

Pack Creek Bear Viewing

Pack Creek is a world renowned bear viewing sight located on Admiralty Island about 30 miles south of Juneau. The estuary around the mouth of the creek attracts a high concentration of brown bears during the summer months when the salmon make their annual run up the river. Pack Creek is carefully managed by the Forest Service and the Alaska Department of Fish and Game during bear season to preserve the wildlife and wilderness values. It has a smaller number of bears in a smaller area than other famous sites such as Brooks Camp at Katmai National Park. However, visitors are able to have a unique wilderness experience with few other people, as the area is carefully managed from June 1 through September 10. About 1,200 to 1,300 people per season visit during this time period.

During the July 5 to Aug 25 peak season when most of the bears are present, 24 people per day area allowed to enter the area. Twelve spaces are reserved for visitors guided by one of four companies, and 12 are reserved for unguided visitors. Only one company can have clients on the ground at any given time. During the shoulder season, June 1 to July 4 and August 26 to September 10, an average of five to ten people visits Pack Creek per day, and occasionally as many as 30 to 40.

Pack Creek is about a 30 minute flight from Juneau and 85% to 95% of visitors fly out with one of the Juneau-based float plane companies. The remaining 10% to 15% come in kayaks or yachts. Most people stay only a few hours as there are no campsites near Pack Creek. Group size is usually two to five people; large groups are uncommon.

Of the four companies that are permitted to bring customers during peak season, one brings almost half of all customers via one-day or three-day guided kayaking trips, paddling over from Windfall Island. A fly-out fishing company brings the second highest number of clients, and two charter yacht companies show up every few weeks on one of their seven- to ten-day yacht trips. In 2005, these four companies brought slightly over 500 clients to Pack Creek, most during peak season, generating an estimated \$525,000.⁹

Approximately 120 guided visitors came during shoulder season with other nature-based tourism companies. Assuming the average cost of the trip was the average of the prices for the four permitted companies (around \$1,030), this group generated \$124,000.

Of the 605 non-guided visitors arriving at Pack Creek, 73% or 443 people came by plane. Prices vary for flights depending on group size and plane size, but using Forest Service and company estimates, almost \$100,000 was spent on flights for unguided visitors in 2005. An additional 146 people arrived by private boat, and 16 arrived by kayak. Estimates were not calculated for the revenue generated by private boaters or independent kayakers.

While it is not possible to calculate an accurate total amount of tourism revenue generated by Pack Creek, it is likely that \$750,000 of revenue is generated in guided trips and transportation costs alone. The U.S. Forest Service took in an additional \$41,820 in Pack Creek permit fees in

⁹ The full seven day yacht trip is included in these figures even though guests only stayed one day at Pack Creek. It is difficult to parse out the fraction of the trip attributable to bear viewing. While bear viewing is for a limited part of the trip, it is the sole reason why many of the clients book the trip.

2005. Demand for visits to the area continues to outpace available capacity, and Pack Creek is clearly a nature-based tourism success.

Hunting

There are only two active hunting guides based in Juneau. A third is part-time and two more have recently ended their business and are not operating in 2006. It appears that more hunting guides are based in and registered in Sitka, various parts of Chichagof Island, Gustavus, Admiralty Island, and other parts of Southeast Alaska. The two active guides are skiff-based and most of their hunting takes place in areas far from Juneau. Targeted animals include brown bear, black bear, deer, and goat; one of the guides offers sightseeing, fishing, and photography trips as well. Revenue and client per year figures are combined and included in the Sitka section in order to protect proprietary information. Both guides observed at least a slight increase in hunting interest in recent years. One believed it was due to increased marketing.

Unguided Independent Travelers

A significant number of unguided independent travelers make their way through Juneau enroute to hiking, kayaking, boating, hunting, wildlife viewing, and other outdoor pursuits. This market segment is inherently more difficult to track because activities are dispersed and do not follow set patterns. In addition, these travelers often do things with friends and family and consequently blend in as residents that are difficult for businesses to discern or identify. Because of limited resources, independent travelers were not the focus of this study. Some brief generalities about the sector are described in this section.

Independent travelers usually arrive by commercial jet aircraft, or by ferry on the Alaska Marine Highway. The Juneau Visitors' Bureau estimated 72,000 air visitors between May to Sept of 2005. While not all of these can be assumed to be coming for primarily nature-based reasons, it is likely that most participated in some kind of nature-based activity such as going up the Mount Roberts Tramway, or out to the Mendenhall Glacier.

Independent travelers also rent U.S. Forest Service cabins for outdoor trips. Nine cabins in the Juneau area are available for rent on a nightly basis, and a total of 154 cabins are listed on the Tongass National Forest. Rental rates run between \$25 and \$45 per night depending on location and demand. While the U.S. Forest Service has annual statistics on cabin occupancy, local residents indicated the data did not reflect an accurate count. Forest Service records showed 1,164 occupied nights in 2004. It included a note that the 2003 and 2004 seasons had "record warm winter like FY02 with the least amount of snowfall for sometime which may have contributed to low wintertime use of all Juneau road system cabins." This suggests that the cabins have received higher use in the past. Additionally, the recently-upgraded online reservation system was frustrating to users, who reported that unreserved nights appeared to be reserved so that people could not sign up. Others noted that people frequently stayed in open cabins without registering if they arrived and found them empty. Reports from community members suggested cabins were popular for both locals and out of town outdoor enthusiasts. It is possible that the 1,164 occupied nights could be off by up to half.

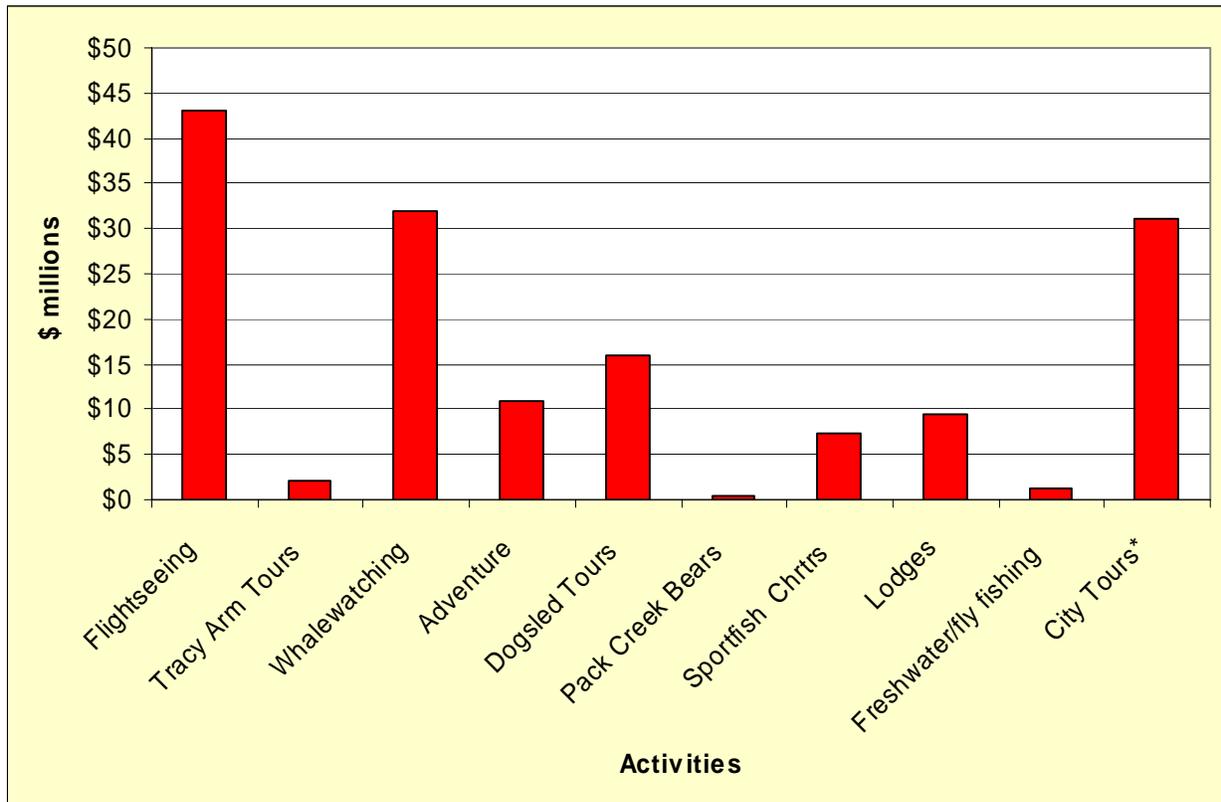
Independent travelers also rented boats in Juneau to voyage on their own in Southeast Alaska waters. Two Juneau-based companies rented boats to about 275 groups in 2005. Trips typically lasted seven days in length. The average week-long rental cost between \$1,000 to \$2,000 depending on the size and quality of the boat.

Visitors wanting to explore the Tongass National Forest without a boat often use air taxi services for drop-offs at cabins, lakes or inlets. Three air service companies perform relatively frequent wilderness drop-offs based from the Juneau airport, and two others do several drop-offs per season. Two companies often take hunters and fishers on their daily scheduled service flights to communities such as Hoonah, Pelican, Angoon, and Elfin Cove, but they could not estimate what percentage of their business these types of clients comprised.

Table 1.
Estimated gross revenue and number of visitors from nature-based tourism activities in Juneau, summer 2006

Activity	Revenue	Visitors
Flightseeing	\$43,000,000	118,000
Tracy Arm Tours	\$2,150,000	16,000
Whalewatching	\$32,000,000	230,000
Adventure	\$11,000,000	80,000
Dogsled Tours	\$16,000,000	31,000
Pack Creek Bear Viewing	\$525,000	510
Sportfish Day Charters	\$7,440,000	29,000
Lodges	\$9,400,000	3,400
Freshwater/fly fishing	\$1,200,000	3,500
City Tours*	\$31,000,000	560,000
Total**	\$153,715,000	1,071,410
* City tours includes tours to the Mendenhall Glacier, McCauley Salmon Hatchery, Glacier Gardens, and the Goldbelt Tramway. While not necessarily offered collectively as a tour, they are grouped together to protect proprietary information of individual companies.		
**Juneau hunting is included in Sitka information to protect proprietary information of Juneau guides.		
Sources: Company interviews and websites, summer 2006.		

Figure 1.
Estimated revenue by activity from
nature-based tourism activities in Juneau, Summer 2006



Juneau Data Caveats

Adventure: Statistics in the section do not include revenue or client numbers for one of the eight adventure companies, who declined an interview. Additionally, one of the smaller adventure companies also generated part of its revenue from whale watching and water taxi services. This revenue, which was 30% or less of its total, is included in these (adventure) figures.

Whale watching: The \$30 million figure for total whale watching revenue is an estimate based on the known large and small operators and the approximate number of sport fishing operators who do whale watching tours to augment their business. Multiple-day yacht charters also spend substantial time whale watching, as do kayakers, and private yachters who often have guests. Revenue from these companies is tabulated in the “other” category and is not included here. It should also be noted that ferry travelers see whales on a frequent basis aboard the Alaska Marine Highway System ferries, and some visitors travel on the ferry exclusively for sightseeing.

Pack Creek: The Forest Service has precise data on the number of people on the ground at Pack Creek from the four companies permitted to come in peak season. This study refers to “estimates” because some of those people were company guides, counted by the Forest Service as visitors because they regulate total number of people on the ground at the site. We removed the estimated or company-reported number of guide visits from the total numbers per season provided by the Forest Service in order to calculate total visitors and visitor revenue. In addition,

one of the four permitted companies had two Pack Creek package options. The price of those tours was averaged to get the cost per person per trip for that company.

Hunting: Other hunters may come into the Juneau Ranger District infrequently. That revenue is not included here. Data collected from the two operating hunting guides were aggregated with Sitka data to protect proprietary information.

General caveats: This study focused on guided excursions. Revenue associated with non-guided activities is another important part of the tourism economy, but not captured in this study. Some examples include lodging, rental cars, groceries and supplies for trips, etc. This study does not arrive at one total revenue number for nature-based tourism in Juneau. There are likely small companies that do not advertise or operate infrequently that were not picked up during the research, as well as companies that did not fit into one of the sectors described above. The categories here are not all-inclusive but are meant to show examples of the magnitude of revenue that nature-based tourism brings to Juneau.

5. Sitka

Sitka is located on the western coast of Baranof Island, 95 air miles southwest of Juneau. The community maintains a year-round population of 8,950 (2005), of which 25% is Alaska Native. Sitka attracts visitors from around the globe with its unique combination of natural, cultural, and historic qualities. Sitting on the threshold of Sitka Sound and the Tongass National Forest, Sitka provides immediate access to one of the most prosperous fishing grounds in the world as well as boating, hiking, camping, hunting, and almost unlimited wilderness opportunities.

Sitka is less dominated by large cruise ships than the other coastal communities, and a higher share of its visitors are “independent” travelers. Multi-day fishing packages are popular, as well as guided and unguided kayaking and hunting. Cruise passengers are still the most visible form of tourism, with three large ships on Wednesdays, one or two more during other weekdays, and no large ships on weekends. Because there is no deepwater dock in town, ships drop anchor offshore and passengers lighter in on 120-person-capacity vessels.¹⁰ Due to the absence of the cruise ships towering over the waterfront, the lower overall number of cruise visitors, and the slower rate at which they arrive onshore, Sitka has retained its small-community atmosphere. Cruise visitors and independent travelers alike frequently noted that “Sitka feels like a real town,” or words to that effect.

Tourism is only one portion of Sitka’s diverse economy. The health and social services sector is the largest employer at 17%, followed by government (14%), services (14%) seafood (13%), tourism (11%), and education (10%). After watching other Southeast communities experience negative impacts of unchecked tourism growth, Sitka residents realized the need to involve the whole community early on in the process of tourism planning and development. In 2006, the community started the Sitka Collaborative Tourism Project. Comprised of a steering committee and a stakeholder group open to all citizens, participants set out on a course to “create a plan for

¹⁰ The decision not to construct a cruise ship dock was a conscious and controversial decision by Sitka residents. It has, however, been successful in limiting the number of cruise ships that visit Sitka in any given day or season.

sustainable tourism development that maintains Sitkans' quality of life, recognizing characteristics that make Sitka attractive to both residents and visitors." Meetings are held twice per month and emphasis is placed on consensus and dialogue instead of advocacy and coalitions. Efforts have been made to acquire and circulate background data and information on various social, economic, and environmental aspects of Sitka tourism in order to help in the decision-making process. An extensive Web site contains meeting notes, assembled data, and goals, reflecting the desire for a transparent process with full community involvement.

Cruise Industry

Approximately 267,000 cruise ship passengers were scheduled to arrive in Sitka in 2006. This is substantially fewer than the 948,226 cruise passengers that came to Juneau, 921,429 to Ketchikan, and 774,361 to Skagway (data from 2005). The average length of stay was 8 to 12 hours. Of the 340 total cruise ship stops, 121 were small ships under 250 passengers. However, these small cruise ships brought only 4 percent of total cruise passengers, or 11,716 visitors.

Nineteen shore excursion tours were available for prebooking on the large cruise lines. Cruise line shore excursion managers indicated 45 to 50 percent of the passengers prebooked tours, fewer than in Ketchikan, Juneau and Skagway. This was assumed to be because of the smaller number of tours offered. Sitka is also the last stop for many ships, and passengers may have already spent their money on expensive excursions such as Misty Fjords flights and Juneau helicopter tours.

Sitka business owners indicated there was generally a 40 percent price mark-up for shore excursions when purchased through the cruise ship. This is slightly higher than the estimated 30 percent mark-up in Juneau.¹¹ There is currently no cruise passenger head tax in Sitka, but cruise lines are charged lightering fees for bringing their passengers to shore. In 2006, the fee was \$660 per ship per day, paid to the City and Borough of Sitka, totaling around \$225,000 in 2006. These monies are used to maintain infrastructure and services provided to visiting cruise ships and passengers.

Adventure

Adventure tours make up one of Sitka's most rapidly growing tourism sectors. Five companies offer adventure-type activities that include snorkeling, kayaking, biking, hiking, and ATV riding on nearby Kruzof Island. These tours are aimed mostly at cruise passengers who are almost 100 percent of these businesses' clientele. Four of the five companies had contracts with large cruise lines and the fifth had a contract with a small cruise line. Three of these contracts were new in 2006, and participation levels were reportedly up from the previous year.

Drysuit snorkeling takes place around Love Island and Magic Island, accessed from the road system, and clients are provided drysuits for the 45 to 60 minute snorkel. The same company also offers dive instruction courses and guided dives. These diving activities are day-long or multi-day and are more common in winter months because of better underwater visibility.

¹¹ This information was obtained through interviews. However companies did not disclose the specifics of cruise line contracts due to stiff competition and these estimates cannot be confirmed.

Guided kayaking is offered by two companies. One exclusively operates tours designed for cruise passengers, taking clients by boat to a floating base camp off a nearby island to start an hour and a half kayak paddle. These tours run between \$105 and \$110 depending on the cruise line. The other company offers more customized several-hour, full-day, or multi-day kayaking trips, as well as kayak rentals and drop-offs. Tours start at \$60 and depart directly from Crescent Harbor in downtown Sitka.

Guided rainforest hikes, bike rides, and bird walks are offered by a fourth company. During the tour, visitors are educated in natural history, indigenous plants and animals, and other cultural and historic aspects of Sitka. Hikes follow well-maintained trails at the end of the road north, and bike rides generally take place on the Green Lake and Blue Lake roads south of town.

The ATV tour, advertised as the “4x4 Wilderness Adventure” transports clients to Kruzof Island by boat for ATV riding on logging roads. This tour was new in 2006 and was reportedly achieving business success. The employee interviewed noted that the company planned to apply for more special use permits from the U.S. Forest Service since they would likely exceed their quota of clients before the end of the season. This company also owns and operates the Sea Life Submersible Tour described in the marine wildlife section.

An estimated 16,000 to 18,000 people took part in adventure tours with these five companies in the course of the 2006 season, generating \$1.7 to \$1.85 million in gross revenue.

It should also be noted that the statistics in this section represent guided adventures only. Sitka also attracts a significant number of independent travelers seeking kayaking, hiking, and other wilderness pursuits. However due to limited resources, this study was not able to generate accurate data on visitor counts or expenditures for these independent travelers.

Two other local entities provide visitors with channels into the outdoors. Sitka Trailworks, a nonprofit organization committed to improving the overall health of the community through the development, maintenance and promotion of a comprehensive trail system, is preparing to lead guided hikes in the Sitka area. Their activities were not quite up and running in 2006 but volunteer students took about 20 visitors on local trails when inquiries were made. The group plans to guide more hikes in 2007 for a nominal fee.

In addition, SEATrails is a community-run program encompassing 17 Southeast communities and providing visitors and residents with comprehensive information about hiking, biking, paddling, and SCUBA diving in the region. An impressive interactive Web site highlights trails and opportunities around each community, promoting the “easy and enjoyable ways to experience Alaska's great outdoors.” This program won an award from the Alaska Recreation and Park Association in 2006.

City Tours

Many people arriving in Sitka choose one of several road-based integrative tours which include historical, cultural, and natural elements. Many of the tours include the Sitka National Historic

Park, Sitka Raptor Center, or salmon hatchery and present some sort of natural history interpretation. They also provide narration while traveling along parts of Sitka's 15-mile road system, sometimes stopping along the way at scenic lookouts or active eagles' nests. In addition, many also include Russian dancing, Native dancing, and walking tours of some of Sitka's most historic buildings. Data from this section reflect only those tours which include some sort of nature-based element.

Five prominent companies run these multifaceted tours. Two are large entities that employ a combined 90+ people during the tourist season. Both have contracts with cruise lines and the majority of their business is prebooked on the ship. These two companies are very visible around town with white vans or buses. Tours range from one to three and a half hours. Another medium-sized company focuses on wildlife viewing from the road system, and operates two-hour tours with several 14-passenger vans. Passengers are booked on the dock or over the Internet. Two smaller operations also run city tours in minivans, sometimes going up Harbor Mountain or taking visitors into the Sitka National Historic Park. One of the two larger companies provided only limited data. Assuming this company operated similarly to the others, the businesses described in this section took an estimated 97,000 clients and generated over \$8.2 million. Descriptions of two of the highlights are included below.

The Sitka National Historic Park is perhaps Sitka's most visited attraction. Alaska's oldest federally designated park was established in 1910 to commemorate the 1804 Battle of Sitka. All that remains of this last major conflict between Europeans and Alaska Natives is the site of the Tlingit Fort and battlefield.¹² The Park Service estimated over 133,000 people used the Historic Park trails between May and September of 2005.¹³ 1,440 tour groups stopped there, comprising over 54,000 people.¹⁴ Inside the 113-acre park Tlingit totem poles highlight the canopied trails which wind through a diverse ecosystem including temperate rainforest, open meadow, estuary, an anadromous river, and marine intertidal shoreline. Several interpretive signs along the way offer natural and cultural history, and a visitor center is stationed near the entrance. Tours through the park capture the Tlingits' inseparable connections to nature. In addition to those on the many guided tours, thousands of independent travelers take time to wander through the park as well.

The Sitka Raptor Center is another highly visited attraction in Sitka. The facility accepts injured birds from all over Southeast Alaska and provides bird treatment and rehabilitation, as well as public education. The center is also home to 25 to 30 resident birds that cannot be released and are open to viewing. Visitors witness up-close presentations with raptors on the shoulder of a handler, explore the museum, and observe recovering birds in covered flyways and forested outdoor enclosures. During the 2005 tourist season, 44,000 people visited the center. It is difficult to attach a dollar revenue value to this activity as 75 % of visitors came on a tour that included other stops, and their revenue is reflected in the overall city tour numbers. However, as an example, independent travelers arriving on their own pay \$12 each. If all visitors paid just the \$12, the Raptor Center would generate \$528,000. Half of the visitors to the center come with the

¹² www.nps.gov/sitk/

¹³ This includes local people in addition to visitors.

¹⁴ The statistics use monthly 2006 data published by the NPS, except for September which was not yet available at the time of publishing. A 4-yr average is used for the September total.

largest city tour company, whose tours cost between \$51 and \$129 per person. Conservatively estimating \$75 per person for the 33,000 visitors on cruise tours, and \$12 per person for the remaining 11,000, the Raptor Center is associated with \$2.6 million in tour revenue.

Sport Fishing

Sitka is a fishing mecca. Almost 600 residents hold commercial fishing permits, and the ADF&G showed 214 registered saltwater charter sport fishing guides in 2005. The City and Borough operates five small boat harbors with 1,350 stalls, making Sitka the largest harbor in Alaska. Fully 73% of summertime visitors arriving by air went fishing. Of those, 86% went on charters and 14% were unguided (McDowell Group, Alaska Travelers Survey Summer 2005).

As a result, it is not surprising that charter sport fishing encompasses the most operators and generates the most revenue of all the nature-based tours in Sitka. In 2005, 100 companies turned in a logbook to the Alaska Department of Fish and Game indicating they took at least one day of charter clients. However, not all of these are actually charter operators, for the same reasons described in the Juneau section. Determining precisely who was operating and how many clients they took in the course of a season is difficult due to the long listing of charters and the fact that many captains assume multiple roles within the sector. Some work solely as independent day-trip fishing guides, while others work exclusively for lodges or charter brokers. Still others contract partially with lodges or charter brokers while also booking their own clients, and some serve as lighters for large yachts. Most use several of these avenues to generate work. Since so many captains work in multiple capacities, the licensed ADF&G permittee list was less helpful for figuring out how many companies were operating, as there was undoubtedly overlap between boats and captains, and a name might appear for a captain who had a permit for his own charter business but worked 100% of the time for a lodge.

Most charter trips could be broken into one of two categories: four-hour fishing trips and multi-day all-inclusive fishing packages offered by lodges or charter operators.

Four-hour fishing. Because of their limited time in port, most cruise passengers interested in fishing opt for a four-hour salmon fishing trip.¹⁵ The majority of cruise passenger fishing trips are arranged through one of two brokers – one arranges advance bookings through the cruise line and the other books directly with cruise passengers. The brokers each work with 10 to 20 captains with little overlap. Prices advertised on the ship for a four-hour trip range between \$189 and \$194 depending on the cruise line, and are \$165 through the independent broker. The average group size in Sitka is four people per boat. Approximately 1,500 people went on half-day trips arranged through brokers, generating over \$270,000 in revenue. However, there are also many operators that get part or all of their business without a broker. Long-time Sitka locals involved in the industry identified around 28 active companies on an ADFG list that offered day trips. Average prices for fishing trips booked directly with the captains were reported to be around \$125 for a half day of fishing and \$250 to \$300 for a full day. The \$300 price usually involved halibut fishing. Eight day-trip captains were interviewed, many of whom did two four-hour trips per day during peak season or sometimes contracted with brokers or lodges for full-day trips. These captains averaged around 425 clients per season, generating \$80,000 per captain.

¹⁵ Six-hour trips were also offered but were less popular.

¹⁶ This revenue figure is based on calculations made by multiplying the number of people by the advertised price, and commissions have not been removed. We estimate that approximately one-third of the 214 registered guides predominately do day fishing charters. This results in an estimated \$5.7 million in revenue in this portion of the sport fishing market.

Multi-day packages. Approximately 32 operators provide multi-day fishing packages that include lodging and meals. About 20 of these are advertised as “fishing lodges,” or are in the home of the charter operator with bed and breakfast services. Some are located slightly out of town along the road system or within a short skiff ride. The rest put their clients up in one of the downtown hotels or a local bed and breakfast. These Sitka sport fish operators discovered a creative way to package a more lucrative multiple day package without the hefty capital investment in a lodge structure that is used only seasonally. Several of the operators offer choices between staying in their home or at a hotel.

Packages usually involve three or four days of fishing and four or five nights of lodging. A day of fishing generally includes ten hours on the water and seven hours of rod time, leaving the dock at 5:00 or 6:00 in the morning and returning around 3:00 or 4:00 in the afternoon. Virtually all captains reported taking four clients per boat. One of the sport fishing brokers provided package deals by booking trips with local captains putting clients up in one of four hotels in town. The five-night, four-day option ranged between \$1,700 and \$1,900 for double occupancy depending on the particular hotel. These packages do not including breakfast or dinner.

Eight fishing lodges were interviewed that provided all-inclusive packages including all meals. These trips were generally three to four days in duration but occasionally as long as six days. Prices averaged \$2,400 per person, and the lodges averaged 500 to 600 people per season. Assuming the 32 multiple-day package providers each had a conservative 450 clients per season at this average price, multi-day package fishing would generate over \$34.5 million in revenue with 14,400 clients, not including the fishing/hotel packages set up by brokers.¹⁷ Seven lodges that were interviewed brought in a combined \$9.4 million with 3,400 clients.

Sitka has a Charter Boat Operators Association (SCBOA) with about 50 members, representing around 35 sport fish charter companies and lodges. The members join to help play an active role in the politics of the sector, and agree to pay the \$200 annual fee. Not all companies have chosen to be members. In addition to being a major sport fishing port, Sitka is also home to Southeast Alaska’s largest commercial fleet and major seafood processors. As is the case with most Alaska fisheries, this results in allocation conflicts and tensions between the sport fish charter and commercial fishing fleets.

Operators had different perceptions of recent changes in the sport fish charter market. Some thought visitor interest in sport fishing had increased, while others said operators were constantly leaving and entering the market while overall demand remained relatively constant. Many of the operators advertised a variety of services on their Web sites, such as water taxi

¹⁶ This may be higher than the average number of clients per boat captain in Sitka, as the boats were lined up along the Crescent Harbor dock most mornings when the cruise passengers were coming in.

¹⁷ This is only an estimate. The lodges that were not interviewed most likely had a range of capacities and the accuracy of this estimate cannot be confirmed.

services, wilderness drop-offs, wildlife viewing, and various types of multi-day trips, but in actuality ended up doing only fishing day trips. The season's weather made a difference in year to year revenue for operators that were not associated with the charter broker who organized prebooked cruise passengers. The summer of 2006 was deemed to be a particularly wet year, and revenue for independent operators was down.

The sport fishing charter industry also generates other revenue that should be noted. Fish processing fees were usually included in lodge packages for the first 100 pounds, but clients buying half-day trips and fishing/hotel packages were usually charged an additional sum. Several places around town charged \$1.90 per pound and processing at the dock was \$2.50 per pound. Shipping the fish home usually cost additional money. Several operators noted that by the time the tourists got their fish to their freezer, it was worth about \$100 per pound when taking into consideration the airfare, lodging, fishing charter, processing, and shipping. Data collected during this study could not be used to accurately calculate total revenue from shipping and processing in Sitka.

In addition, nonresident fishing licenses bring in revenue to the State of Alaska. One-day licenses are \$20 per person, a \$10 increase from 2005. Three-day licenses are \$35, and seven-day licenses are \$55. A king salmon stamp is \$10, \$20, or \$30 for one, three, and seven days respectively, regardless of whether any kings are caught.

Marine Charter Wildlife Viewing/Sightseeing

The abundant marine wildlife of Sitka Sound creates ample opportunities for wildlife viewing. Humpback whales use the area as a feeding ground and whale sightings are almost guaranteed on tour boats. Other animals commonly sighted include sea lions, porpoises, sea otters, harbor seals, and a wide variety of birds. St. Lazaria, a small volcanic island near Kruzof, is a popular tour boat attraction. As part of the Alaska Maritime National Wildlife Refuge, it has cliffs, caves, and intertidal areas that provide habitat for thousands of birds.

Several wildlife viewing tours depart daily from the Sitka harbor. The vast majority of clients go with a large company active in three Southeast cruise ports. This company owns and operates 14 vessels in Sitka with capacities from 6 to 100 people, and offers four main tours ranging in price from \$50 to \$184 depending on the tour and the cruise line. One tour is operated in tandem with one of the city tours and includes a land-based cultural segment.

This single company takes the vast majority of marine wildlife viewing business, and visitors book this tour through their cruise line. Other one-boat/one-captain operations obtain clients by holding a sign at the dock or making arrangements in advance through their Web site. Three of these small operators focus almost exclusively on wildlife and sightseeing. In addition, some of the sport fish charter operators also advertise wildlife viewing trips. Several operators indicated they used to book these trips more often until the large multiple-boat operator expanded to Sitka. The independent Sitka sport fish broker will also book wildlife viewing trips.

Another unique wildlife tour is the Sea Life Submersible tour where passengers board a glass-bottom boat and explore the ocean floor and marine life as the vessel moves over shallow water.

This tour is run by the same company as the 4 x 4 Adventure Tour, and tickets are booked in advance aboard cruise ships.

Since not all the individual sport fish charter operators were contacted, it is difficult to accurately estimate the total number of visitors engaging in marine sightseeing and wildlife viewing activities out of Sitka. However, between the large marine sightseeing company, the submersible tour, and the three wildlife-focused small operators, an estimated \$6.2 million was spent by approximately 54,000 clients. This does not include the wildlife viewing trips taken with predominantly sport fish guides.

One major wildlife viewing event that does not coincide with the regular tourist season is the Sitka Whale Fest, taking place each November. This international event attracts scientists and whale enthusiasts from around the globe with speakers, presentations, and whale watching excursions. In 2005, 69 visitors arrived from out of town to attend the activities, with 19 coming from out of state. They stayed in Sitka and average of five to six days, lodging in town, eating in local restaurants and purchasing gifts and other incidental goods and services. The festival generates revenue in Sitka at a time when typical visitor traffic is low.

Hunting

Eleven registered hunting guides operate out of Sitka using special use permits issued by the U.S. Forest Service. These guides took between 4 and 43 clients each during the course of the season in pursuit of black bear, brown bear, mountain goat, Sitka black-tailed deer, wolf, and waterfowl. Prices were provided by four of the guides and averages were applied to the other companies to estimate revenue. In addition, the two active hunting guides based in Juneau are included in this section to protect their proprietary information. Together, these 13 businesses generated an estimated \$1.55 million from 308 clients. The most expensive trips were brown bear hunting trips which cost around \$12,000 per person and last up to 10 days or until the hunt is successful. This activity generated \$607,000 with 51 clients. \$376,000 was generated from 85 clients hunting black bear.¹⁸

Not included in these revenue numbers are the tag and license fees purchased by each hunting client from the Alaska Department of Fish and Game. In 2006, hunting license fees for nonresident U.S. citizens and non-U.S. citizens were \$85 and \$300, respectively. The cost of hunting tags varied by animal: \$500 for brown bear, \$225 for black bear, \$300 for mountain goat, \$150 for deer, and \$30 for wolf per person, irrespective of the success of the hunt.¹⁹

Almost all the hunting clients were transported in the guide's private boat, or dropped off by one of the two local air taxi services. Clients stayed on the live-aboard boat, returned to a lodge in the evening, or camped.

¹⁸ Data for most of the hunting guides was taken from FS special use permits. These permits are required for any guided commercial activity taking place on the forest above mean high tide. While data from special use permits was not reliable for fishing and other marine-based excursions, hunting is land based and all hunting guides were assumed to have obtained the proper permits and accurately reported their clients use.

¹⁹ Prices are higher for foreign residents but most clients were U.S. residents.

Because hunting season for most species does not run through the summer, some of the hunting guides advertised fishing and sightseeing trips during June, July, and August. Saltwater-only trips did not require a special use permit, and therefore not all of these trips are captured in the permit data. Because several guides advertised such trips, it is likely that revenue brought in by hunting guides is greater than the total estimated in this report.

According to one operator, the market for hunting in 2006 was excellent. He believed hunting peaked around 1995, dropped off, and then rebounded during the past three years. This particular operator indicated that he was booked through 2009. He guessed that interest was high because the only other place to hunt bears is in Russia, and national marketing for hunting and sightseeing in Alaska had been extensive. His sightseeing trips were also fully booked through 2007.

Wilderness Drop-offs

With the mountains, forest, and islands of the Tongass National Forest on all sides, Sitka is an ideal springboard for wilderness trips. Limited resources made it impossible to track all aspects of this activity and the associated revenue. However, several transportation support services were interviewed to estimate how much these parties spent to reach their destinations. Three local water taxis and two air taxis took approximately 3,200 people to wilderness destinations, generating \$570,000 to \$590,000 in revenue. These operators are described below. It should be noted that these figures capture only a portion of the total local economic impact of unguided wilderness recreationists, as parties likely also purchased food, supplies, lodging, and other incidental items in Sitka.

Water taxis. Most water-based wilderness drop-offs were done by one of three local water taxis with one boat/one captain operations. The three operators were well-known to be adept at getting kayaks and gear into tricky areas. Other sport fish charters also advertised water taxi services, but performed the work infrequently. Between the three primary companies, 525 to 675 people were dropped off on the Tongass National Forest during the course of the season. The average price for water taxi transport was \$140 per hour and most trips lasted one to five hours. One of the operators reported an average of four to five people per group, with an average stay in the outdoors of three to four days. Water taxi revenue is combined with air taxi revenue below.

Popular areas for wilderness drop-offs included Kruzof Island, (home of the scenic Mount Edgecumbe volcano), and some of the 22 U.S. Forest Service cabins spread across the Sitka Ranger District. Most parties were dropped off and picked up, but sometimes parties were dropped off with kayaks to paddle back. Others brought bicycles to ride on logging roads, or gear for fishing and hunting. West Chichagof Wilderness area on Chichagof Island to the north was a highly coveted destination, known for its world-class kayaking. However, its distance from Sitka, the exposed waters on the way, and the high price of fuel made it an expensive destination. A drop off and pick-up at West Chichagof sometimes totaled \$2,000 per group, but people who made the trip reported it was well worth the cost.²⁰

²⁰ A more detailed analysis of Chichagof Island trips and revenue can be found in the section 6 of this report.

Air taxi services. Two pilots provide Sitka with float plane service to lakes and cabins around Baranof and Chichagof Islands. A third pilot operated exclusively flightseeing trips until leaving town in 2006. Like water taxis, air services went to U.S. Forest Service cabins and lakes to drop hunters, fishers, campers, and kayakers. One of the two pilots helped transport lodge guests, although it was a small fraction of his business. Sometimes water taxis would drop off kayakers in remote areas and pilots would transport the kayakers to meet them. One pilot reported a high percentage of one-day fly-out trips for stream fishing, deer hunting, and mountain goat hunting in the summer. Most flights were within a one-hour radius of Sitka.

One of the pilots also offered flightseeing trips over the Sitka area. These were generally one hour in duration and cost \$139 per person. Tours could not be prebooked on the ship, but 80% of the clients were cruise passengers. The pilot reported a decrease in business both in flightseeing and wilderness drop-offs in recent years due to bad weather.

One operator noticed less use of the Tongass for unguided recreational pursuits than there used to be, attributable to increased U.S. Forest Service restrictions for floatplane drop-offs. Also, a recent change in the reservation system for Forest Service cabins now requires signing up and paying online one week in advance. He felt this had significantly cut down on use by locals who had routinely checked the weather on Thursday night before embarking on a weekend cabin trip. Discontent about the online cabin reservation system was also expressed by other operators in Juneau and Sitka, who indicated it did not run smoothly and was preventing people from using cabins. The Forest Service has stated an intent to close several cabins in the area due to low occupancy, but these locals felt it was directly due to poor management.

Sitka Data Caveats

Sport fishing: Due to the large number of sport fish companies based in Sitka and the hectic tourist season, only a portion could be interviewed. The best opportunity to intercept these captains was early in the morning along the dock when they were waiting for clients – usually from the cruise ships. Thus, the boats that were interviewed were likely to be the ones that showed up the most frequently and potentially took a higher than average number of clients.

City tours: Both of the two larger city tour companies were interviewed, but only one provided estimates of total clients per tour. The second company was assumed to be similar to the first based on numbers of buses and employees, and tour types. However, this is only an assumption and cannot be verified. The two large companies dwarf the remaining city tour companies in terms of clients per season.

Hunting: While most tourism activities take place between May and September, it should be noted that hunting begins in the spring and extends into the fall and early winter. During these months, Sitka sees less tourism, and while hunters are usually out of town for consecutive days during their trip, their economic impact when they depart and return is helpful to the shoulder season economy.

Table 2.
Estimated gross revenue and number of visitors from
nature-based tourism activities in Sitka, summer 2006

Activity	Revenue	Visitors
Wilderness drop off	\$590,000	3,200
Whale/wildlife watching	\$6,200,000	54,000
Adventure	\$1,850,000	18,000
Charter Yachts*	\$21,000,000	4,400
Sportfish Day Charters	\$5,649,600	32,000
Lodges	\$34,500,000	14,400
City Tours**	\$8,200,000	97,000
Hunting***	\$1,500,000	310
Total	\$79,489,600	223,310

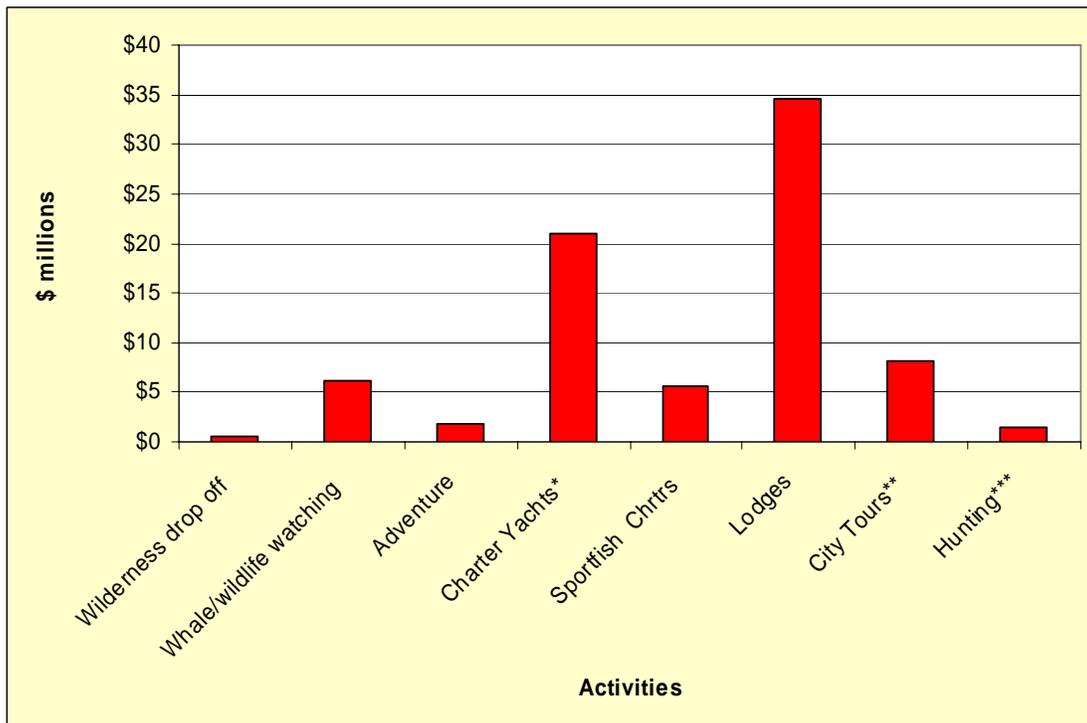
*Charter Yacht revenues is attributable to both Sitka and Juneau but included in the Sitka number to avoid double counting.

* City tours includes tours to the Raptor Center and Sitka National Historic Park. While not necessarily offered collectively as a tour, they are grouped together to protect proprietary information of individual companies.

**Juneau hunting is included in Sitka information to protect proprietary information of Juneau guides.

Sources: Company interviews and Web sites, summer 2006.

Figure2.
Estimated revenue by activity for
nature-based tourism activities in Sitka, Summer 2006



6. Northern Southeast Alaska Yachts

Yachts, including charter, private and rental yachts, constitute a relatively new and growing tourism sector in Southeast Alaska. The Inside Passage with its relatively calm waters, beautiful scenery, and abundant fish and wildlife is fueling the growth of a lucrative tourism niche for the region.

Charter Yachts

General information was gathered on 28 charter yacht companies operating 35 boats. Most trips range between six to ten days in length, and carry six to eight passengers. However, several vessels are equipped for up to 21 passengers. While a portion of the yachts do one-week trips between Juneau and Sitka, most trips are custom-designed to fit the desires and interests of the clients. Common activities include whale watching, fishing, sightseeing, wilderness hiking, and hot springs visits. Popular destinations include Chichagof and Baranof Islands, Icy Strait, Glacier Bay, and Misty Fjords. Most vessels are equipped with kayaks, binoculars, reference books, gourmet food, and a staff familiar with the natural environment of Southeast Alaska.

More specific data on number of visitors, packages offered and revenues were obtained for 21 companies representing 26 yachts. Incomplete data was also gathered for an additional 10 yachts known to operate in Southeast Alaska, and revenue calculations were made using industry averages. These 36 yachts averaged 12 trips and 115 clients per season. Combined, they carried 4,400 total passengers and brought in \$21 million in direct revenue. Several other yachts were observed by captains to operate infrequently or every few years in the area so these figures are most likely a conservative estimate.

Expenditures on inputs to support these vessels were high. Operators reported spending significant amounts on fuel –examples included \$1,500 per week, \$15,000 per season, \$30,000 per month, and \$40,000 per month at the fuel dock. Food and provisions were generally purchased in Juneau and Sitka, ranging from \$10,000 to \$20,000 per yacht over the course of the season. One operator noted \$5,500 of revenue had been generated for the state by his clients paying for fishing licenses.

Charter yacht clients tend to belong to a high-income bracket, and incidental expenditures by yacht clients were reported to be significantly higher than those of the average traveler to Southeast. Most clients spend a night in town on either or both ends of their trip, and operators observed their clients buying expensive artwork, carvings, and other gifts in local shops. One operator noted that his clients had spent \$150,000 in a single art gallery in the first two months of the season. In addition, these visitors usually buy alcohol, eat in expensive restaurants, and go on tours in port such as the \$480 dog-sledding helicopter tour in Juneau. Another operator noted his clients usually spend about \$500 per week on alcohol not provided as part of the charter.

All operators said they had a high rate of repeat clients – often around 80%. Most client groups were families, or several couples who enjoy traveling together.

Private Yachts

In addition to commercially chartered yachts, Southeast Alaska is also a playground for many private yachts from the Pacific Northwest and California. These boats often travel up the Canadian coast in the spring and spend the summer exploring the Inside Passage and docking in communities. While they are not considered commercial vessels, these yacht owners commonly use their boats to entertain, and invite friends and family who fly in and sail around for a week or two.

Quantifying the number of private yachts is a difficult task due to the vast geographic expanse of the region, and the lack of a regimented route or schedule that all the yachts take. Harbormasters generally record whether a boat moored in their harbor is local or transient, and how long they stay, but not necessarily whether it is a private yacht or another type of vessel.

According to observations made by the Sitka harbormaster, twenty-five yachts over 90 feet in length had moored in Sitka during the summer of 2006, as well as an additional twenty-five 50-90 foot yachts. They generally stayed between four and five days in town. The harbor master also observed that high fuel prices did not appear to be affecting the large yacht sector and there were as many yachts as ever coming through Sitka. As of mid August, Sitka had collected \$62,000 from moorage of yachts between 100-125 feet. Sitka recently instated a special moorage fee system for yachts where owners pay a reserve moorage to ensure they will have a place to stay. The harbor master indicated this system was attracting yachters and bringing in substantial city funds.

Private yacht owners also contribute a significant amount of money to the economy through provisions, restaurant meals, artwork, gifts, fuel, and boat repairs. One harbor employee noted that parties on the larger vessels spend \$10,000 to \$20,000 per week in Juneau or Sitka to outfit the yacht with food, flowers, alcohol, and accessories for the ten or so people onboard.

7. Chichagof Island as a Destination

Chichagof Island, studied in 2005, is located in northern Southeast Alaska. It contains a few scattered communities whose economies have been historically dependent on timber harvesting and commercial fishing. Most of the forested landscape is part of the 17 million acre Tongass



National Forest. The communities of Tenakee Springs and Hoonah were surrounded by extensive timber harvesting in the 1970s and 1980s, much of which was halted after the closing of the pulp mills in Ketchikan and Sitka and the passage of the Tongass Timber Reform Act in the early 1990s. Elfin Cove and Pelican served the commercial fishing fleet. Pelican was home to a fish processing facility, which closed in the late 1990s as a result of low salmon prices brought about by competition from world farmed salmon

production. Elfin Cove transitioned to a sport fishing center with its strategic location on Icy Strait, but Pelican's more remote setting presents more of a challenge to tourism development.

Collectively, North Chichagof offers scenic beauty and outdoor recreation opportunities that are driving the development of nature-based tourism in the region. The next sections discuss tourism development in individual communities on the island, as well as in Juneau and Sitka, which serve as gateways for supplies and access.

Map 3 – Chichagof Island



7.1 Elfin Cove

Elfin Cove is a small community on the northwest coast of Chichagof Island along Icy Strait. For decades, the community's economy was centered on commercial fishing but in recent years the focus has shifted to tourism and sportfishing. This transformation has resulted in a seasonal population that fluctuates between 12 people in the winter and almost 200 in the summer.

Fishing Lodges

Most tourism revenue comes from eight sport fishing lodges tucked into the small cove, plus one on a nearby island. Altogether, these nine lodges bring in \$4.5 to \$5.2 million per summer and serve about 1,500 clients. Each lodge offers similar four-day/five-night packages, which typically include transportation from Juneau, lodging, meals, fishing equipment, and fish processing and shipping. The capacity of these lodges ranges from 8 to 25 guests; the average price is \$580 per person per night. Most lodges reported being fully booked throughout the season from mid-May to September. The majority of the lodges rely on repeat clients and referrals to book their customers.

Approximately 54 people are directly employed by the lodges; almost 95% of these people are non-local to Elfin Cove. A significant portion of lodge owners and employees maintain their primary residence out of state, most commonly in the Pacific Northwest. Food and fishing

supplies used by the lodges are generally purchased in Juneau and Seattle and transported to Elfin Cove by the same charter planes that carry their clients in and out of the community. Most food items come from Costco and Juneau Wholesale. One lodge owner estimated that 40% of the money that flows through his lodge goes directly to Juneau businesses. In contrast, fuel is purchased locally in the cove, costing the lodges between \$600 and \$1,500 per week depending on the number and type of boats, and the distance to where they fish on those particular days.

Most sport fishing activity based in Elfin Cove takes place in the waters of Cross Sound, from Lemnashire Island in Icy Strait to Deer Harbor on the outer coast of Yakobi Island. A few of the lodges also take clients into Dundus Bay in Glacier Bay National Park as well as some of the freshwater streams on Chichagof Island, provided they have the appropriate permits from the U.S. Forest Service and the National Park Service.

Small Cruise Ships

In the past five years, Elfin Cove also began receiving small cruise ships, mostly carrying 60 to 70 passengers with one ship carrying 130 passengers. Visitors are primarily attracted to the community's scenic and quaint boardwalk setting. In 2005, there were 30 small cruise ship dockings during the course of the summer with an estimated \$2,000 to \$4,000 of revenue associated with each cruise ship stop. One local resident is employed directly, speaking to passengers on the ship before it docks and directing activities while onshore. Aside from walking around on the boardwalks and browsing the community museum, there are no specialized activities designed for cruise passengers.

Transient Boaters

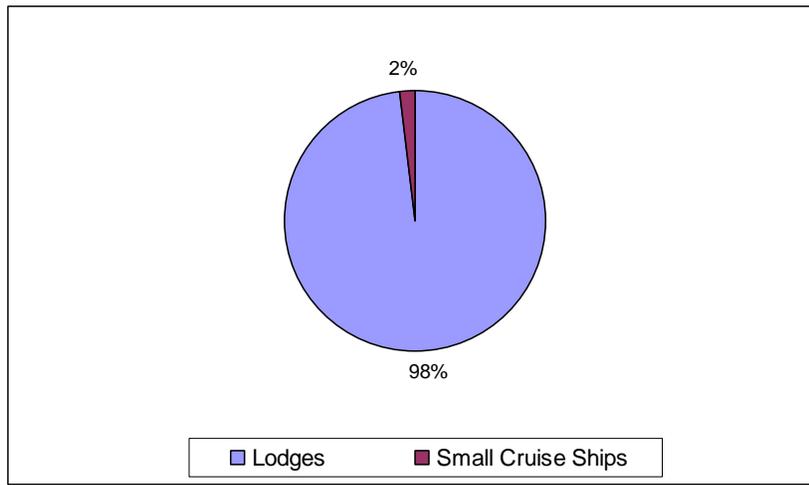
Transient recreational boats, sailing vessels, and yachts come through Elfin Cove on their way through Icy Strait. According to fuel dock records, about one-third of business comes from these boaters. Numbers were not available for the entire season at the time of this research, but the logbook indicated 124 transient boaters refueled there during June 2004. The fuel dock attendant indicated more independent boaters came in May and August, especially from Washington, first on their way north and then heading south at the end of the summer. Fewer boats cross the Gulf in the middle of the summer and most of the non-local boats that refuel in July are fishing vessels.

Exact numbers of transient recreational boaters stopping at Elfin Cove are unknown since the town is not incorporated and there is no harbormaster. The dock is owned and operated by the State of Alaska. Accommodations are limited other than the fishing lodges, and most visitors sleep aboard their boats. The general store manager could not predict what percent of business might be attributed to these visitors, but most of her patrons were commercial fishermen.

Table 3.
Elfin Cove estimated nature-based tourism revenue and visitors, 2005

	Revenue
Lodge	\$4,889,500
Small Cruise Ships	\$90,000
TOTAL	\$4,979,500
# of visitors 2005	1,528

Figure 3.
Composition of Elfin Cove nature-based tourism revenue, 2005



Elfin Cove Data Caveats

The \$2,000 to \$4,000 estimate for revenue per cruise ship stop was provided by a local resident involved in directing Elfin Cove cruise tourism, but was questioned by other locals who had negative feelings about cruise passengers in their community.

Five of the lodges provided information on the length of their season and an estimate of the degree of occupancy instead of exact numbers of clients per season. Figures were calculated from these estimates.

Land and waters surrounding Elfin Cove are also used by several companies based out of Gull Cove (a tiny settlement east of Elfin Cove, directly across from Glacier Bay). No Gull Cove companies were available for interviews during the time of research, and their revenue is not covered in this report. However, one lodge on one of the Inian Islands, about five miles by boat from Elfin Cove, was interviewed and included in the data.

7.2 Pelican

The community of Pelican, population 115, is situated in the Lisianski Inlet on the northwest coast of Chichagof Island. It is 80 miles north of Sitka and 70 miles west of Juneau. Like many of the communities in Southeast Alaska, Pelican's economy was historically based on commercial fishing, supported in large part by a fish processing plant located on one end of town. The citizens of Pelican have struggled to redevelop their economy to preserve the town and their way of life in the face of recent changes in the commercial fishing industry and international markets as a result of the growth of salmon farming, and the closure of the processing plant.

While there have been low levels of tourism activity in the community for some time, declines in commercial fishing activity in Pelican have encouraged more growth in tourism businesses. Tourism activity in town is predominantly focused on sportfishing and wildlife viewing marine charters. In addition, the town serves as a jumping-off point for travelers accessing the West

Chichagof and Yakobi Island Wilderness area. Three U.S. Forest Service cabins are located within the designated Wilderness, including the popular White Sulfur Hot Springs cabin.

Charter Operators

Day charters and lodges. Twelve marine charters operate out of Pelican, offering a range of activities including sportfishing, wildlife viewing, guided hiking, and kayak drop-offs. In the 2005 summer season, these businesses brought in an estimated 740 clients. Seven of the twelve operators provide lodging, either in an adjacent lodge or in their private home. The remaining clients stay at a newly opened 40-person lodge, or are dropped off in the wilderness to camp. Most of the charter businesses are small scale, often owned and run by a single family or captain. While several of the lodges are located on the boardwalk in Pelican, many are further out of town and require water transportation. Collectively, these businesses generate an estimated \$720,000 to \$840,000 per season.

Prices for day trips on marine charters averaged \$200 per person, while the charter/lodging combination averaged \$300 per person per day. Most visitors stayed four to five days, going out each day with the same captain. Common destinations are Lisianski Inlet, the outer coast of West Chichagof Island, and Yakobi Island.

Revenue from fuel, supplies, and transportation. Charter operators generally purchase fuel at the fuel dock in Pelican. One captain estimated his consumption at 30 to 55 gallons of fuel in a typical day fishing around Yakobi Island. This translated to \$95 to \$175 at Pelican's 2005 summer prices.

Most supplies for the lodges come from Juneau, and are transported in by floatplane and on the biweekly Alaska Marine Highway System ferry. A recent termination of barge transport that previously serviced the community significantly increased the cost and difficulty of transporting supplies, also causing frustration among business owners.

Unlike those in Elfin Cove, Pelican fishing lodges and charters do not include transportation from Juneau in the cost of fishing packages. The round trip cost for scheduled service is \$250 per person. With 740 clients, the revenue from transportation would be approximately \$185,000. However, it should be noted that sometimes kayakers using charter services for drop-offs from Pelican arrive or depart on the ferry. The three main air service companies used by Pelican clients are based in Juneau and Gustavus.

Drop-offs. Approximately 90 to 100 backcountry enthusiasts use the water taxi services of Pelican companies each season, generating \$16,000 to \$19,000 in gross revenue. Most clients are dropped off at White Sulfur Hot Springs, a two- to four-hour round trip from Pelican depending on the boat and conditions. The going rate to the hot springs is \$150 per person for a drop-off or pick-up. Reported fuel costs ranged from \$100 to \$130 per trip.

It appears that Pelican will see continued growth in the marine charter sector, with two additional businesses expected to offer marine charter services in 2006. A lack of available lodging was previously a constraint on the number of visitors the community could support. However, the construction of the large new lodge is providing accommodations for those seeking day trips.

Independent Boaters

Pelican also receives a steady but unquantified amount of traffic in the form of independent boaters and kayakers. Independent boaters, often traveling from Juneau, Sitka, or other ports in the lower 48 states, appear to use Pelican as a stopping place either before or after visiting the West Chichagof area. These travelers have highly variable itineraries, with trips ranging from several days to several months and visiting a wide range of destinations both on Chichagof Island and throughout Southeast Alaska. Popular areas include West Chichagof and Yakobi Island, particularly the Forest Service Cabins at White Sulfur Hot Springs and Greentop Harbor, south of White Sulfur Hot Springs.

Independent boaters use some of the town's services, including the grocery store, the four restaurants and bars, and the fuel dock. Many travelers, however, are unlikely to buy large amounts of fuel or supplies in Pelican unless absolutely necessary because of higher prices and smaller selection of goods, compared to Sitka or Juneau.

Kayakers

The West Chichagof-Yakobi Wilderness area is home to world-class kayaking. The area does not receive as many adventure enthusiasts as Glacier Bay or Prince William Sound due to its remoteness, more challenging outside waters kayaking conditions, and lack of publicity. However, there are kayakers that come back year after year for extended trips through the small islands and lagoons that rim Chichagof's western coast. Because Pelican is serviced by the ferry, the community sometimes serves as a gateway for kayakers accessing these areas. In 2005, eleven kayaks were transported to Pelican from Juneau on the ferry, and four kayaks were taken back to Juneau. In addition, one company in town recently began renting kayaks at a rate of \$50 and \$75 a day, but the rental portion of the business is in its fledgling stage.

The total number of kayakers in the Pelican/West Chichagof area is difficult to estimate since most paddlers have personal kayaks or rentals from Juneau, and do not necessarily stop in the town of Pelican. One local resident suggested that kayakers had little economic impact in town because they often camp instead of paying for lodging, and may also bypass town altogether rather than traveling the extra distance up the inlet to visit the community. However, we observed kayakers in Pelican during the summer of 2005 purchasing food and restaurant meals from Pelican businesses.

Alaska Marine Highway Service

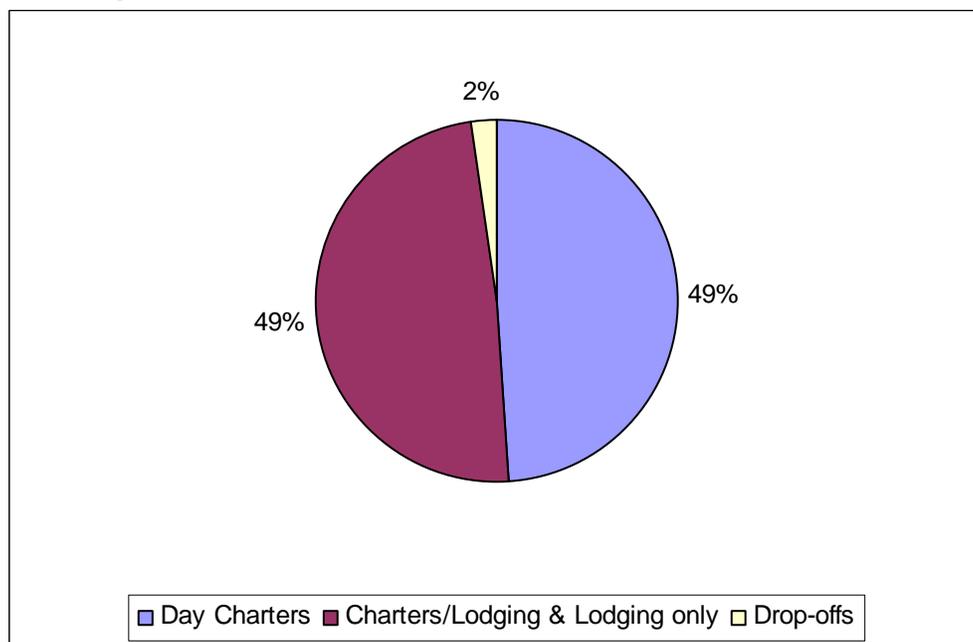
The Alaska Marine Highway System services Pelican biweekly during summer months, providing locals with less expensive access to supplies. The ferry also provides visitors a beautiful day trip through Icy Strait with almost certain opportunities to see whales and other marine mammals, and an opportunity for a "peek" at a small, rural Southeast community. The ferry leaves Juneau in the morning, spends two hours in Pelican in the afternoon, and returns to Juneau in the late evening. A sales promotion offering half price fares dramatically increased ridership during the summer of 2005, with 190 to 205 passengers per trip. During a return trip from Pelican in early August, twenty-seven parties were interviewed (accounting for 77 people), and 74% of the parties indicated they were on a day trip from Juneau to enjoy a scenic day along Icy Straits. Sixty percent of the parties were Juneau locals and an additional 11% were living in

Juneau for the summer. Fifteen percent of the parties (nine people) were kayakers, all of whom stayed at least two weeks in the Chichagof Island area.

Table 4.
Pelican estimated nature-based tourism revenue and clients, 2005

Activity	Revenue	Total Clients
Day Charters	\$ 396,900	299
Charters/Lodging & Lodging only	\$ 396,000	350
Drop-offs	\$ 17,130	92
TOTAL	\$ 810,030	740

Figure 4.
Composition of Pelican nature-based tourism revenue, 2005



Pelican Data Caveats

Two marine charter operators were unable to be reached during the time of research. This included one day trip charter and one charter/lodge. Averages for number of clients and revenue were taken for the other ten charters and extrapolated to include the two missing charters. Since it was unknown whether the two operators made drop-offs to West Chichagof, they were assumed to make none.

7.3 Tenakee Springs

Tenakee Springs is a community of 120 residents located on the north side of Tenakee Inlet on eastern Chichagof Island. Unlike its other Chichagof Island neighbors, Tenakee has gained a reputation as a quiet retirement community and does not provide a base for significant commercial fishing or tourism operations. An estimated 25% of the houses are second homes. Two family-run marine charters are the only tourism businesses in town, and Tenakee residents have been vocally opposed to tourism development.

Marine Charters

Between the two marine charters, Tenakee attracts about 100 people per season for salmon and halibut fishing, whale watching, wildlife viewing, and sightseeing. While both companies are primarily fishing charters, they each emphasize enjoying the other aspects of nature, and seek to provide a 'real wilderness experience'. Revenue from these companies totals approximately \$120,000 to \$155,000 per season. Prices run \$300 and \$425 per person per night, and trips generally last four to five days. Like Pelican, air transportation to Tenakee is not included in the package price.

One of the charters, in an effort to patronize other local businesses, provides a massage by a local masseuse as part of the fishing package. Many of the clients schedule additional massages after their initial visit. The charter also brings clients back to town each evening, and encourages shopping at the local store, gift shop, and bakery. The other charter utilizes its live-aboard boat and typically does not return to Tenakee in the evenings. All activities take place on or from the boat.

One of the companies reported getting 80% of their supplies from Juneau and Seattle, while the other used their own garden and the local store for much of their food purchases.

Transient Boaters

The majority of Tenakee's visitors are transient boaters stopping in on their way through Southeast waters. In 2004, 230 recreational boats came through Tenakee during the summer season (May through September). One-hundred forty four boats stayed one night, and 12 boats stayed 6 days or more. Almost half were from out of state, mainly Washington, and one-third were from Juneau. Moorage fees from these boaters totaled \$4,600 for the season.

According to the general store owner, transient boaters do not generate a significant portion of store business. Most boats large enough to handle the unwieldy seas of Chatham Straits have the capacity to carry ample food and supplies, and consequently these visitors make few if any purchases in Tenakee. The town bakery did receive some business but it usually amounted to a small purchase, such as a greeting card or croissant.

Other Travelers

Other than the visitors described above and people coming to visit friends or relatives, Tenakee attracts few tourists. A major reason, one local pointed out, is the limited accommodations. "Travelers move on when they find out there are no facilities, no places to stay, and that camping is illegal," another noted. Tenakee does, however, attract couples from Juneau coming for a weekend getaway and a soak in the hot springs located in the center of town. These trips are facilitated by the convenient Friday/Sunday ferry service. Several cabins are rented periodically, but likely have total revenue of less than \$15,000 per season. It cannot be assumed that all occupants take part in nature-based activities.

In addition, deer hunters from the region come to Tenakee in the fall for several days at a time, but many have second homes or stay with friends, so their impact on the economy is minimal.

In summary, approximately 125 people visited Tenakee Springs in 2005 for nature-based activities. Revenue from these visitors is estimated to be approximately \$140,000. This does not include air charter revenues for companies based in Juneau.

Tenakee Data Caveats

Another local resident was said to rent a cabin periodically but was unavailable for interview. Neither their visitor numbers nor their revenue are included in this report.

7.4 Hoonah

Situated on the northeast shore of Chichagof Island, 40 miles west of Juneau, Hoonah is the largest Tlingit Native settlement in Alaska. The Tlingit tribe has inhabited the Glacier Bay region for centuries. The current population of Hoonah is approximately 880, and the local economy is based mostly on the commercial fishing and logging industries. As a result of its proximity to Glacier Bay, its position along the Icy Strait thoroughfare, and its accessibility via a short plane hop from Juneau, it occupies a strategic location for developing local tourism. The economy of Hoonah has undergone a marked change with the construction and opening of Icy Strait Point, a cruise ship port of call that began receiving visitors in 2004.

Icy Strait Point

Decades ago, Icy Strait Point was the home of one of the world's most productive salmon canneries. Beautifully restored, the cannery site reopened in 2004 as a museum and base for other tours and nature-based activities. Icy Strait Point is a partnership between the Huna Totem Corporation and the Icy Strait Development Corporation. In 2005, its second summer of operation, the site hosted 37 cruise ship visits and a total of 55,000 passengers. Located 1.5 miles from town, Icy Strait Point quickly became the largest single employer in Hoonah with 124 employees working three to four days per week. Ninety-six percent are Hoonah residents.

Among the ten tours offered, six are directly nature-based. These include a forest and nature visit, whale watching and marine mammal cruise, remote bush exploration and brown bear search, all-terrain vehicle expedition, and salmon and halibut fishing charter.²¹ These nature-based tours attracted over 30,000 people in the 2005 season, bringing in \$3.3 to \$4.3 million in gross revenue.

According to the Icy Strait Point director, each cohort of cruise ship passengers leaves behind \$70,000 to \$90,000 from tours, restaurant meals, and gift shop purchases. In 2006, Icy Strait Point is expected to receive 55 or more ships, roughly doubling the number of cruise days and tours. Employment is expected to increase to 135 or 140, with current employees working more days per week.

Economic impacts. Local business owners observed that with higher employment, community residents have more disposable income to spend at restaurants and other local merchants. In addition, some businesses benefit directly from the cruise passengers. In 2005, Icy Strait Point began operating a bus between their site and the town of Hoonah, selling 300 to 400 tickets per

²¹ A Glacier Bay flightseeing tour is also offered, but Glacier Bay is not in the Chichagof Island study area selected for this research.

day (\$55,000 to \$75,000 for the season). This provided a better chance for passengers to patronize local businesses. One popular restaurant catering to passengers on cruise days reported serving 200 to 400 cruise passengers and crew per day, generating a minimum \$65,000 in revenue from the 37 ship days alone.

The Hoonah city mayor also noted increased interest in Hoonah from outside agencies, likely a result of the tourism expansion. In the past three years, Hoonah received 'more projects and agency grants than the town has seen in its entire life'. As of 2005, \$40 million in projects are contracted including funds to upgrade the harbor. In 2004, the city collected \$83,000 in sales tax from Icy Strait Point business activity. Icy Strait Point business increased substantially in 2005. As a result, sales tax revenues to Hoonah are also expected to rise dramatically, and will likely continue to grow with twice as many ships planned for 2006.

Despite these employment, tax, and revenue benefits, some locals still feel the portion of money trickling back to the Hoonah economy from cruise ventures is less than what it should be. Given that Icy Strait Point appears to provide significantly greater benefits than other cruise destinations in Southeast Alaska, this highlights the tensions often accompanying tourism development. One business owner noted that cruise passengers only buy the cheapest items in her store, and displace the locals who avoid the crowds on cruise days.

Independent Operators

A handful of independent guides and marine charters operate out of Hoonah, including marine charters and others described below.

Marine charters. Four recognized marine charters serve Hoonah visitors, providing salmon and halibut fishing, whale watching, wildlife viewing, and beach walks. These are generally one boat/one captain operations. At least one operator takes groups on multi-night adventures in which clients sleep on the boat, and another hosts clients overnight in his lodge. Two companies were not reachable during the time of this research, but the impression was given that all four companies take cruise passengers that have booked online independently. An estimated \$185,000 to \$215,000 is generated by these charters including the lodge.

Logging road excursions. A central restaurant in Hoonah books visitors on bear viewing and sightseeing tours along the logging road with local residents. Most of the clients are cruise passengers. An estimated 30 to 40 people per week took tours. In addition, about 200 clients went on guided stream fishing day trips from the road with a local fisherman. Revenue from stream fishing and bear viewing was estimated at \$160,000 to \$215,000 for the 2005 season.

Hunting. Hoonah is home to two local bear hunting guides, and four guides are registered with the Hoonah Ranger District. The going rate for a nonresident guided bear hunting trip is approximately \$12,000 per client. Most guides take one to two clients at a time and stay on a live-aboard boat for up to ten days (until the hunt is successful). Three of the four hunting guides were unable to be reached. Assuming all have similar operation of approximately seven clients per year, bear hunting activity in the Hoonah area generates over \$300,000 in gross revenue.

Lodging. Six accommodations options are available in Hoonah, including two lodges and several bed and breakfasts/rentals. Several of the owners indicated that most of their clients were business travelers. Rooms ranged around \$60 to \$80 per night.

Independent boaters. Hoonah’s strategic location provides an ideal stopping point for many non-local independent boaters. About 50% of the business at the Hoonah fuel dock comes from transient recreational boaters. According to the fuel dock attendant, an average of one recreation boat per hour stops to refuel on a busy day. These boats are estimated to generate \$15,000 to \$20,000 dollars in fuel dock business during the summer season. According to the Hoonah harbor, about 40% of the boats stopping in Hoonah are recreational skiffs, yachts, sailboats, or sport vessels. Residents noted that these visitors commonly get out and walk around town. With a well-protected harbor and comparatively low moorage fees, Hoonah is becoming a popular port in which to over-winter boats owned both by Southeast Alaska residents and by nonresident visitors who return each year.

Regional visitors. According to local residents, there has been a visible increase in visitors from Whitehorse and other parts of Canada in recent summers. These visitors often keep their boats in Skagway and travel to Hoonah for fishing and deer hunting. Numbers of these boaters increase during weekends and the fuel dock attendant noted that on holidays, “it’s Canadians all day long.” Other Canadian visitors are driving to Haines, putting their vehicle on the ferry, and spending several days driving the logging roads. These visitors often camp along the road but stay in Hoonah on either end of their trip. In addition, parties of fishermen and hunters without personal boats arrive in Hoonah via small plane. In 2005, Skagway Air made 20 chartered flights from Skagway to Hoonah with groups of sport fishermen. Two other flight companies also bring visitors from Juneau.

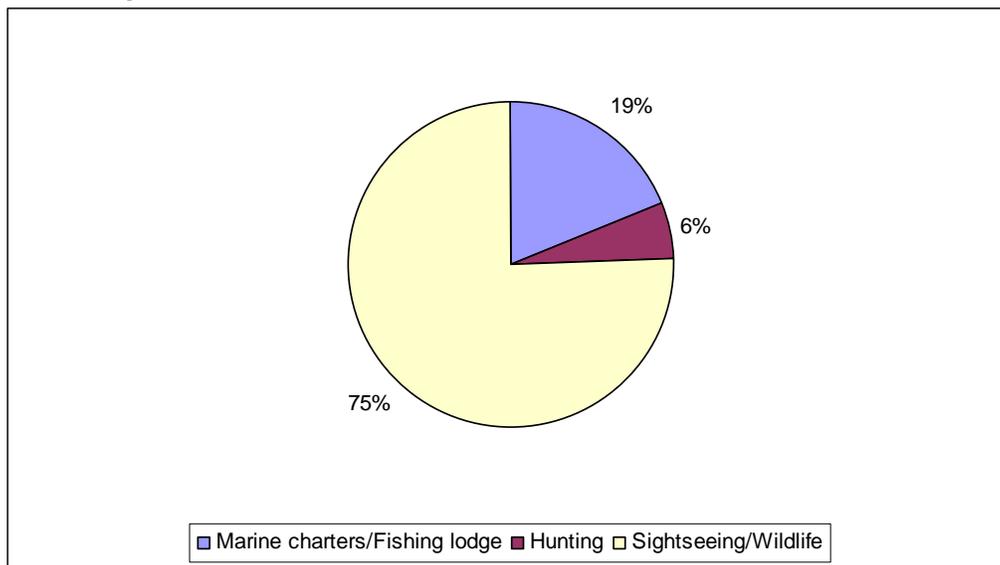
Hoonah is a popular destination for hunting for Alaska residents coming from Juneau, Skagway, and Haines because of ease of access by ferry and the road system into more remote areas out of town. Regional visitors often arrive by ferry and camp in their recreational vehicles or stay in the lodges. The number of independent travelers staying in lodges was not determined and the number of people who come in their own vehicle and depart for remote areas out of town immediately after disembarking off the ferry is unknown.

Table 5.

Hoonah estimated nature-based tourism revenue, 2005

Activity	Revenue	Visitors
Marine charters/Fishing lodge	\$840,320	1,060
Hunting	\$252,000	20
Sightseeing/Wildlife	\$3,360,350	33,610
Total	\$4,452,670	34,690

Figure 5.
Composition of Hoonah nature-based tourism revenue, 2005



Hoonah Data Caveats

Two bear hunting guides and two sport fish charters were unavailable for interview during the study period. Revenue and client numbers for these two guides were calculated using the going rate of \$12,000 per client and the same number of clients as reported by other bear guides in the area. The sport fish operators were assumed to take out one party of cruise passengers each day a cruise ship was in port. These numbers are likely conservative estimates, as there were only two cruise ships a week and the companies advertised multiple marine activities in addition to fishing.

Despite interviewing accommodation owners, it was difficult to estimate a specific number of travelers that can be attributed to nature-based tourism in Hoonah. Many visitors were business travelers. Some were construction workers staying a long time working on community projects. People were hesitant to provide numbers, or the numbers they gave came with a lot of explanation. Two accommodations known to house recreational visitors could not be interviewed. As a result of this uncertainty, no revenue estimates were made for Hoonah accommodations. Consequently, total revenue is underestimated.

Another important aspect of tourism in the Hoonah area is the activity generated by Point Adolphus. Located on Chichagof Island 15 miles northwest of Hoonah and 10 miles south of Gustavus, the waters off Point Adolphus are some of the most nutrient-rich in Southeast Alaska, and they attract a large and consistent population of humpback whales during the summer. Boats and kayakers are virtually assured of seeing whales, sometimes bubble feeding in groups near the point. Consequently, the area around Point Adolphus has one of the highest levels of recreational use on the Tongass, attracting campers, kayakers, multi-day charter tours, private yachters and boaters, commercial wildlife viewing operations, locals, and even cruise ships. Clearly, revenue attributable to Point Adolphus is significant. However the focus necessary to generate accurate dollar estimates and to avoid double counting --was not possible in this study.

7.5 Chichagof via Sitka

Sitka serves as a major gateway for visitors traveling to Chichagof Island. As a result of the distance, the exposed gulf sea conditions, and higher costs, Chichagof receives less traffic from Sitka than from closer communities with better access such as Juneau and Gustavus. Most visitors coming from Sitka use private boats or get dropped off by marine charters or float planes.

Air Service and Water Taxis

In 2005, three flight operations transported about 360 people per season to Chichagof Island for outdoor recreation. The average price for a round trip drop-off and pick-up runs around \$730, and the total summer gross revenue is approximately \$85,000 to \$100,000. The most popular destinations are White Sulfur Hot Springs, Goulding and Suloia cabins, followed by Greentop Cabin, Sitkoh Lake, Crab Bay, Kook Lake, and several other bays. Pilots reported an average of two to three people per party. One pilot indicated about half his clients were from out of state, and the average length of stay on Chichagof was five to six days.

Three local water taxis transport kayakers and other outdoor enthusiasts to the west coast of Chichagof Island. Combined, these operators take approximately 30 to 35 people per season with revenue totaling about \$18,000. The cost of a drop off and pick up averages \$2,000, and a round trip can take anywhere from 6 to 12 hours depending on the speed of the boat and the specific destination.

Marine Charters and Boaters

Marine charters. Three Sitka-based companies offer multi-night marine charters in the Chichagof area. About 100 people book these trips per season, bringing in around \$235,000 to \$240,000 in gross revenues. Activities on the charters include freshwater fishing, beach hiking, and exploring with small skiffs, mostly in the Hoonah Sound area. These trips are two to four days and cost \$1,100 to \$2,700 per person.

Independent boaters and kayakers. Independent boaters and kayakers also access Chichagof Island from Sitka. Information on these parties is sparse since their activity is dispersed and they reach sites by their own means. The U.S. Forest Service has placed a survey at the head of the one-mile trail to White Sulfur Hot Springs periodically since the mid 1990s. Surveys were completed by ten parties in June and July of 2005. The average group size was 3.1 people and the average length of stay in the West Chichagof Wilderness area was 5 to 6 days. Half of the parties were traveling by sailboat. Half were residents of states other than Alaska. All parties mentioned paddling, solitude, or exploring as reasons they visited the area.

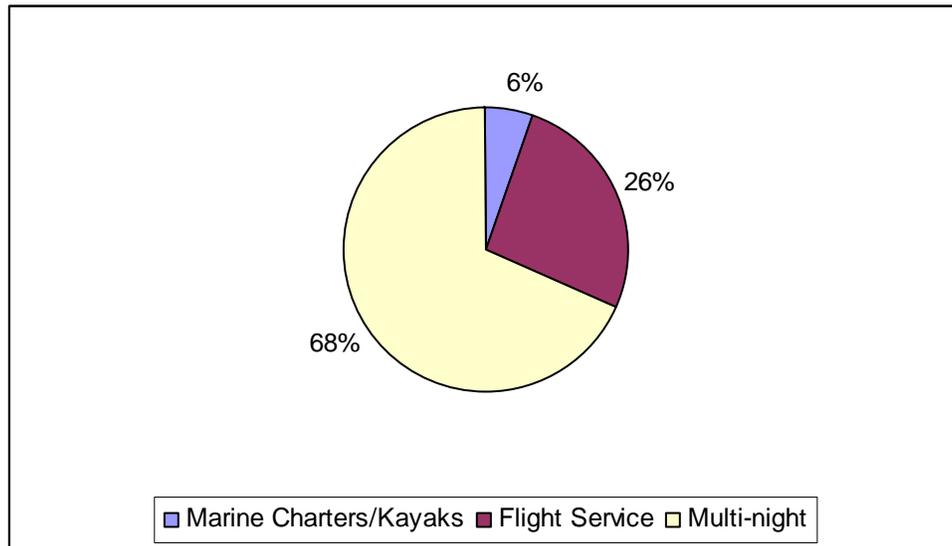
U.S. Forest Service records show 111 reserved nights in 2004 for the White Sulfur Hot Springs, Goulding, and Suloia cabins. It is widely recognized that these numbers underreport the actual total use because many people staying in the cabins do not register. There are a total of 9 cabins on Chichagof Island. Greentop is another popular cabin which has registered guests somewhere between 30-75 nights per season.

Most kayakers paddling around Chichagof Island bring their own kayaks or use rentals from communities other than Sitka. Only one company in Sitka rents kayaks for extended periods of time, and less than \$2,000 of the revenue could be attributed to Chichagof in 2004²². However, this should not imply that kayakers do not affect the local economy. It can be assumed that most kayak parties departing from Sitka will spend more than five days in the wilderness and likely buy supplies before they leave.

Table 6.
Chichagof/Sitka estimated nature-based tourism revenue, 2005

Activity	Revenue
Marine Charters/Kayaks	\$19,930
Flight Service	\$92,390
Multi-night	\$240,930
Total	\$353,250

Figure 6.
Composition of Chichagof/Sitka nature-based tourism revenue, 2005



Chichagof/Sitka Data Caveats

On several occasions, it was not stated whether parties were dropped off and picked up on Chichagof, or just dropped off. For air drop-offs, all parties were assumed to be picked up as parties did not have means to get back on their own. The ‘round trips’ reported by water taxis were also assumed to be drop-offs and pick-ups, although it is likely that instances occurred where kayakers paddled back to Sitka on their own or continued on to Pelican.

Two bear hunting guides operate out of Sitka. The information associated with this business is included in the Sitka section of this report. Similarly, many high-end charter yachts contribute to the Sitka economy; these are included in the Juneau Charter Yacht section.

²² This included a drop-off

7.6 Chichagof via Juneau

Juneau also serves as a gateway for visitors accessing Chichagof Island for recreation. Most visitors come to Chichagof Island from Juneau by charter plane, scheduled air service, rental boats, charter yachts, and personal watercraft. Because the closest tip of Chichagof is over 30 miles by air from Juneau and significantly further by water, day trips are uncommon and most people stay for several days to several weeks.

Air Services

Five flight companies serve Chichagof Island from Juneau. Two of the companies have wheeled planes and only serve Hoonah. The remaining companies have floatplanes and land at Elfin Cove, Pelican, Tenakee, and other bays, lakes, and inlets around the island. It was difficult for the company staff to determine numbers of clients coming for outdoor recreation. In particular, companies providing scheduled air service do not gather information on travelers' trip purposes or their full itineraries. Collective estimates by four of these five companies suggest approximately 1,760 people fly to Chichagof Island for recreation in the summer and fall; gross revenue from these flights is approximately \$260,000 to \$275,000 per season. However, this estimate is significantly low because it does not include the company that serves Elfin Cove lodges (around 1,500 people per season) and Pelican.²³

Charter Yachts

Another major sector of Chichagof Island tourism includes high-end charter yachts, often traveling between Juneau and Sitka. Twelve yacht companies were identified that use Chichagof waters, which collectively serve an estimated 1,900 people per season. Trips average eight days, and revenue from these companies is approximately \$4 million. Yacht owners observed that their clients typically spent one additional night on each end of their trip in Juneau or Sitka, and have a significant impact on the local economy of each of the communities of Juneau and Sitka. Since the trips usually attract high-income visitors, they leave behind substantial revenue in restaurants, hotels, and local shops. One operator noted that his clients alone spent about \$40,000 at one Alaska art shop in Sitka.

Boat Rentals and Kayaking

Two Juneau companies rent boats or yachts to parties for one to three week trips. While many go to Glacier Bay or other areas of Southeast Alaska, the company owners estimated 15 to 18 groups spent time in the Chichagof area, and around \$200,000 in rental fees could be attributed to the island and surrounding waters.

Guided kayaking outfits coming from Juneau and Gustavus also spend time around Chichagof Island. Point Adolphus, a world-class whale-watching area, is the main draw for guided kayak tours. Two companies took a total of about 283 people to Point Adolphus and its shores in 2005,

²³ Assuming 1,500 clients per summer, transportation to and from Elfin Cove fishing lodges would generate approximately \$300,000 at the schedule fare of \$100 per one-way trip per person. Since lodges have seasonal contacts with air service companies, the rate is slightly less.

ranging from one-day trips and four to five-day trips. These activities generated about \$260,000 of gross revenue attributable to Chichagof areas.²⁴

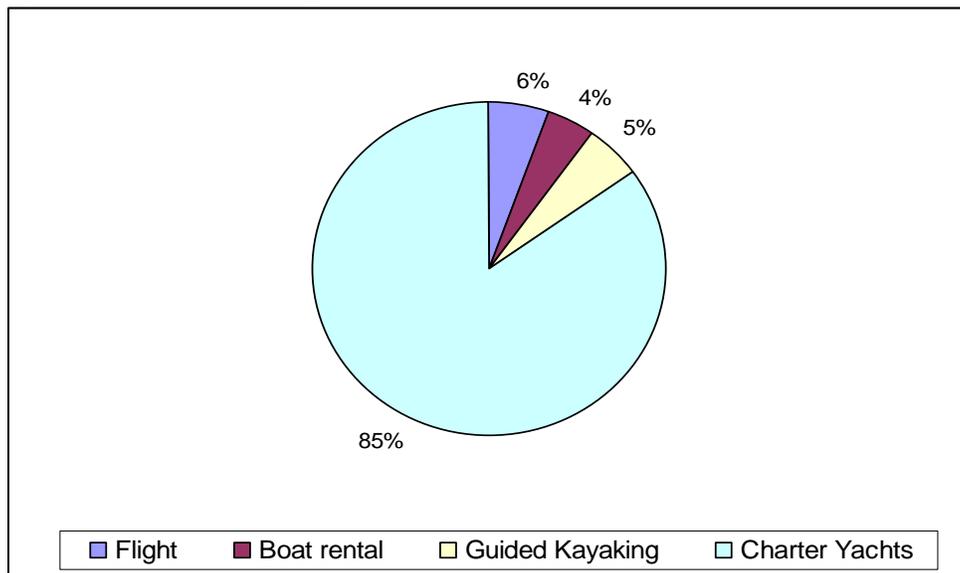
Juneau as a Supply Hub

Juneau is a major beneficiary of Chichagof Island tourism as a result of the large quantities of supplies purchased by companies providing services to visitors. All of the charter yachts buy groceries, fuel, and other items in Juneau and Sitka at the beginning or end of each trip. One captain reported spending \$600 to \$700 per week on groceries in Sitka or Juneau for his four to six-client boat. A larger boat reported biweekly purchases of \$3,000 to \$4,000 at Safeway and Costco and \$15,000 for fuel in Juneau. This totals \$144,000 to \$152,000 per season for one boat alone. In addition, fishing lodges in Elfin Cove and Pelican rely almost entirely on Juneau for food and supplies.

Table 7.
Chichagof/Juneau estimated nature-based tourism revenue, 2005

Activities	Revenue
Flight	\$268,230
Boat rental	\$209,000
Guided Kayaking	\$259,280
Charter Yachts	\$4,059,450
Total	\$4,795,960

Figure 7.
Composition of Chichagof/Juneau nature-based tourism revenue, 2005



²⁴ Several trips had components in Glacier Bay but only the percentage of time at Point Adolphus was used to calculate revenue.

Chichagof/Juneau Data Caveats

It is difficult to estimate the number of companies who take clients to Chichagof Island from Juneau because some companies include Chichagof intermittently in their itineraries and routes. There are many companies in Juneau and we were not able to contact all of them. For example, three companies not interviewed are known to provide fly-in fishing, outdoor leadership training, and marine charters, respectively.

Charter yacht gross revenues were calculated after interviewing and gathering information on seven of twelve charter yacht companies. The remaining five were assumed to be similar to average of the seven interviewed.

7.7 Chichagof Island Summary

Our research shows that more than \$15.5 million of revenue is generated from about 42,000 visitors to Chichagof Island. An interesting mix of high-volume and high-price enterprises generates this money. The following tables summarize these findings.

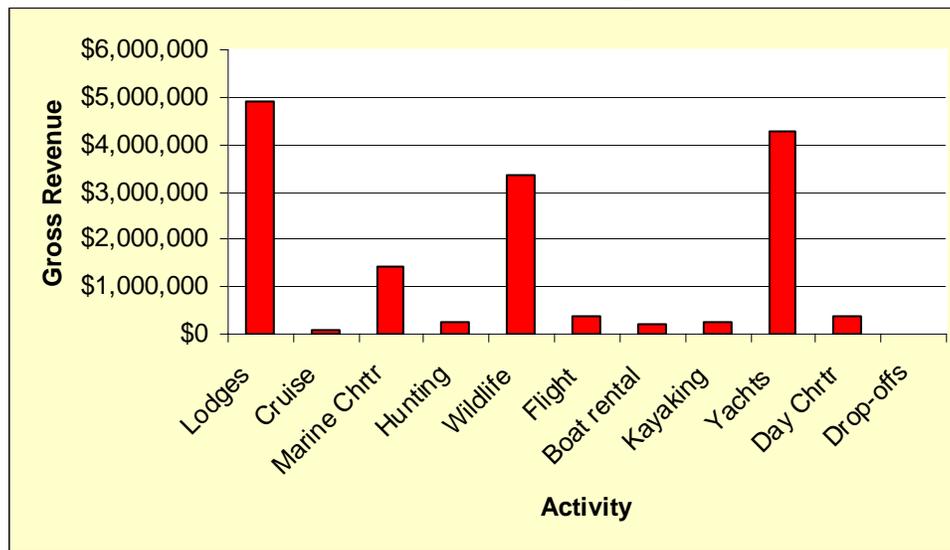
Table 8.
Estimated revenue and visitor numbers by community from
nature-based tourism activities on Chichagof Island, Summer 2005

Community/Activity	Revenue	Visitors
Elfin Cove		
Lodges	\$4,889,500	1,528
Small Cruise Ships*	\$90,000	3,000
Subtotal	\$4,979,500	4,528
Hoonah		
Marine charters/Fishing lodge	\$840,320	1,060
Hunting	\$252,000	20
Sightseeing/Wildlife	\$3,360,350	33,610
Subtotal	\$4,452,670	34,690
Juneau		
Flight	\$268,230	--
Boat rental	\$209,000	72
Guided Kayaking	\$259,280	283
Charter Yachts	\$4,059,450	1,105
Subtotal	\$4,795,960	1,460
Pelican		
Day Charters	\$396,900	300
Charters/Lodging & Lodging only	\$396,000	350
Drop-offs	\$17,130	90
Subtotal	\$810,030	740
Sitka		
Marine Charters/Kayaks	\$19,930	40
Flight Service	\$92,390	360
Multi-night	\$240,930	100
Subtotal	\$353,250	500
Tenakee		
Marine Charters	\$155,000	100
Estimated Total	\$15,546,410	42,018
*The small cruise ship industry is centered on northern Southeast Alaska in part due to the scenic beauty of Chichagof Island. As a result, these numbers are underestimates of economic activity attributable to small cruise ships.		
** Flight service companies provided only very rough estimates of passengers. Revenues were estimated based on numbers provided by businesses receiving clients from flight service companies that did not include transportation in their tour prices. These are likely underestimates.		
Sources: Company interviews and websites, summer 2005.		

Table 9.
Estimated revenue by activity from
nature-based tourism activities on Chichagof Island, Summer 2005

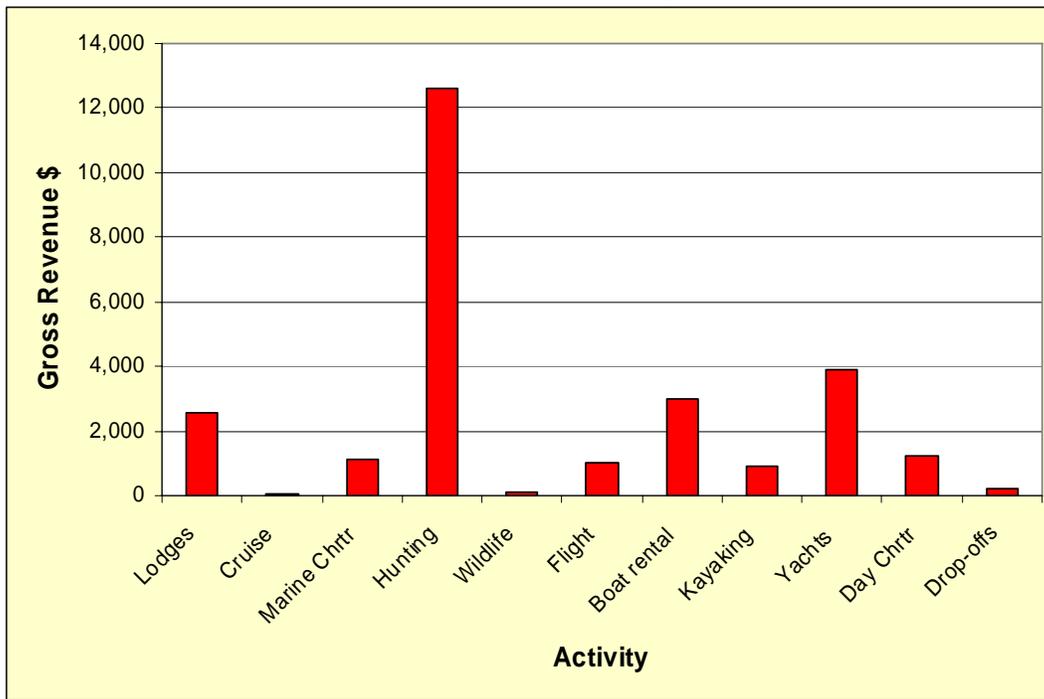
Activity	Revenue	Visitors
Lodges	\$4,917,550	1,908
Small Cruise Ships*	\$90,000	3,000
Marine charters	\$1,409,320	1,270
Hunting	\$252,000	20
Sightseeing/Wildlife	\$3,360,350	33,610
Flight Service	\$360,620	360
Boat rental	\$209,000	70
Guided Kayaking	\$261,210	285
Charter Yachts	\$4,300,380	1,110
Day Charters	\$371,850	300
Drop-offs	\$17,130	90
Total	\$15,549,410	42,023
*The small cruise ship industry is centered on northern Southeast Alaska in part due to the scenic beauty of Chichagof Island. As a result, these numbers are underestimates of economic activity as a result of small cruise ships.		
Sources: Company interviews and websites, summer 2005.		

Figure 8.
Estimated revenue per person by activity from
nature-based tourism activities on Chichagof Island, Summer 2005



Note: Small cruise ship revenue is based only on shore activities and expenditures by passengers in Elfin Cove.

Figure 9.
Estimated revenue per person by activity from
nature-based tourism activities on Chichagof Island, Summer 2005



Note: Small cruise ship revenue is based only on shore activities and expenditures by passengers in Elfin Cove.

8. Conclusions

8.1 Key Findings

Nature-based tourism generates over \$250 million per year of direct business revenues in Sitka, Juneau and Chichagof Island for the companies we surveyed. This is most likely an underestimate of total revenue because not all nature-based tourism businesses and business sectors were surveyed or included in our estimates. Also, this total does not include sales tax revenue to local government. In addition, the summer of 2006 was especially wet, which decreased activity for some businesses.

A number of key findings emerged from this research, despite its limited geographic scope. These include the following:

- Tourism in Southeast Alaska is primarily focused on nature-based activities as people are attracted to the region for its beautiful scenery, fisheries, wildlife, marine mammals, glaciers, and other natural attributes.
- Nature-based tourism creates a significant economic ripple effect that keeps money circulating through many sectors of the economy. This money supports jobs in marketing, support services, food and beverages, accommodations, fuel sales, government, and other sectors.

- A large and growing portion of Southeast Alaska’s tourism sector and visitors are cruise ship passengers. These visitors are similarly interested in nature-based tourism services as are independent travelers. The majority of shore excursions provide nature-based activities, from hikes and glacier viewing to flightseeing and forest canopy zip lines.
- There is a complex and extremely competitive system for prebooking shore excursions the cruise ship. Businesses with exclusive cruise contracts make price and tour information only available to cruise passengers and often agree not to sell tours without going through the cruise line. While having a shore excursion contract with cruise lines appears to ensure a consistent client base, the trade-off is accepting the marketing, advertising, pricing, and commission restrictions imposed by the cruise companies.
- The tourism businesses in cruise ports of call that appear to be most successful either have a cruise ship shore excursion contract or are catering to overnight (non-cruise) guests with high quality and high value services. Examples of these types of businesses include sportfishing lodges and multi-day yacht cruises.
- Unless a company offers a new creative shore excursion idea, it is difficult to compete with businesses with existing cruise contracts. This is especially true if the new business requires a large number of clients to be profitable.
- There are a number of companies, however, that are tapping into new and creative markets including canopy ziplines, glass bottom boats, and an amphibious “duck” tour.
- Some operators attribute the increased interest in adventure activities to a change in cruise ship clientele. In recent years, cruise companies have been catering to a younger crowd, targeting families. In any event, increasing numbers of passengers are interested in more active pursuits.
- For shore excursions aimed at cruise passengers, competition exists not just with companies within a community but with other ports, as people are booking their shore excursions in advance and look at all the options. Sitka companies mentioned they were carefully tracking ziplines in Juneau and Ketchikan, dogsled tours on the Mendenhall Glacier, and other activities to see which market niche they could capture.
- There is some evidence that visitors are willing to pay premium prices for higher quality experiences in more pristine environments. It is not clear, however, what specific attributes (seclusion, fishing experience, food, services, perceived exclusivity, and environmental amenities) are the key components of this higher market value.
- It is possible to design a community-based tourism program that provides employment to local residents as is occurring in Hoonah. However, Elfin Cove appears to bring in more in gross revenues than Hoonah with about one-eighth as many visitors because Hoonah’s operation relies on volume while Elfin Cove relies on higher-priced fishing lodge experiences. Day trips seem to be relatively high-cost, low-profit operations.
- Independent travelers appear to avoid the crowds and many are repeat visitors. Most tend to stay longer and have more open itineraries than those on cruise ships or organized tours. These characteristics make independent travelers more difficult to survey directly.

- The primary marketing mechanisms for smaller, non-cruise related businesses are the Internet and word of mouth. In addition, many customers return to the same fishing lodge, yacht tour, or other business year after year.
- Companies in several communities expressed a desire to move toward more marine wildlife viewing and sightseeing and away from sport fishing. These operators preferred wildlife viewing as it was less stressful with less pressure to catch fish. Wildlife viewing is highly attractive to visitors due to spectacular scenery and abundant wildlife including whales and other marine mammals. Some operators were making this shift, while others think they would not be able to match the revenue generated by sport fishing.
- Weather has a significant impact on business for companies whose tours are not prebooked on cruise ships. Operators noted a marked difference between the sunny, dry summer of 2004 and the remarkably wet summer of 2006. Owners noted that visitors walking off the ship in the rain were much less likely to go on marine tours or hikes in soggy conditions, and their seasonal revenue was down. Businesses with cruise contracts did not experience this setback as passengers are not reimbursed for presold tours when weather conditions are poor. The one exception was flightseeing, where companies had to cancel tours due to unsafe weather conditions.
- Promoting wildlife watching is an important marketing strategy for Southeast Alaska communities. Visitors' bureaus produced pamphlets with charismatic megafauna, such as whales and bears. Bureau staff cited studies showing the desire to see wildlife is what attracts a large portion of out-of-state visitors.
- A significant economic question that emerges from this research is how the public lands might be managed to maximize the economic returns to residents of Southeast Alaska communities, especially the smaller communities that can only accommodate smaller numbers of visitors at one time.

8.2 Effective Research Methods

A primary goal of this research was to test the efficiency and effectiveness of different data collection strategies for estimating tourism revenue and visitor numbers. Therefore, our 2005 fieldwork served, in part, as a pilot project to determine which methodology was most effective in collecting economic data. Particularly in Ketchikan, we tested various techniques for intercepting visitors and also interviewed businesspeople and other key informants. These methodologies were tested in relation to a community's role as a visitor gateway, destination, or combination of both.

Several clear conclusions emerged from this comparative work. First, company interviews are more effective than visitor interviews. Company interviews provided coverage on a larger amount of people in a short amount of time as figures could be collected on summer totals of visitors doing a specific activity. Additionally, companies could provide accurate information on what visitors actually did, instead of what they were thinking of doing. One of the biggest drawbacks of visitor interviews was the difficulty of systematically interviewing independent travelers since their movement was so dispersed. This was especially apparent on Chichagof Island where it was extremely difficult to generalize from itineraries that varied widely. The

business interview method was used almost exclusively for obtaining information on nature-based tourism on Chichagof Island.

Second, company interviews also have drawbacks. Companies were not always as open or easy to interview as visitors, especially when competition was stiff such as in Ketchikan. We were not successful in asking direct questions regarding revenue. Also, company interviews did not always catch the independent travelers depending on the types of services the travelers were patronizing. If a group of kayakers had their own boats, was dropped off on Chichagof by a friend, and bought groceries from Fred Meyer in Juneau, their economic activity would not be detected through company interviews.

Third, the destination-based approach used on Chichagof Island was determined to be more effective than the gateway approach used in Ketchikan. The destination-based approach made it easier to discern what areas and which travelers should and should not be counted. Boundaries were more clearly defined – any activity taking place on Chichagof no matter where the company was based or how the travelers accessed the island. One drawback of the destination approach involved the difficulties with feeder communities like Juneau and Sitka. Considerable effort was expended trying to determine which companies went to Chichagof since trips there comprise only a small portion of activities originating in Juneau.

The gateway approach made it difficult to draw boundaries for the area of focus. Issues came up in Ketchikan that complicated matters, such as how to count activities taking place on Prince of Wales Island, or other areas close to Ketchikan that might be accessed by other jumping off points. Huge revenues are generated by scattered fishing lodges on Prince of Wales, but the island is a separate destination with varying links to Ketchikan. Similar problems arose with Misty Fjords: Can one capture the full revenue generated by travel to Misty Fjords if some visitors do not stop in Ketchikan? In addition, many independent travelers are missed who only buy support services in Ketchikan without taking tours. To fully gauge the population of independent travelers, a greater number of (inefficient) visitor interviews would be required. In general, the gateway approach may capture direct visitor purchases but it misses the more complex money flows associated with a particular destination or group of destinations.

Finally, it became increasingly clear that a comprehensive, region-wide approach would be the most efficient way to collect data. With regional totals to work from, an effective mix of data collection in destinations and in hub communities could be used without running the risks of undercounting or double-counting.

Methodology during the 2006 field season was refined to reflect these lessons. Businesses were exclusively targeted for interviews instead of visitors. This more efficient strategy allowed one researcher to cover two large communities in less field time than was spent in 2005. As in 2005, most businesses were gracious and open to being interviewed, although some were hesitant to make estimates about visitor numbers.

Special use permits issued by the U.S. Forest Service were analyzed to determine number of visitors going to specific locations on the Tongass National Forest. These permits are necessary for companies taking clients above the mean high tide level, and companies request a certain

number of permits for the season that are allocated in advance. The U.S. Forest Service has recently completed a database linking special use permits across ranger districts, and the field researcher was able to query the database for company usage.

However, after some analysis and comparison to company interviews, the database was deemed to be unreliable for revenue calculations. This was due to two reasons: first, not all activities necessitated special use permits (such as saltwater charter fishing if clients do not come ashore). For companies that operated both land-based and ocean-based activities, the amount of clients recorded in the database did not always provide an accurate breakdown of client activity use without gaining additional information from the company. Second, some companies that did offer entirely land-based activities did not report statistics that aligned with the special use permits. For this reason, special use permit data was used only for calculating hunting client numbers on the Sitka Ranger District. The U.S. Forest Service files provided specific numbers of clients for specific species hunted, and since additional hunting permits and tags must be obtained by the ADF&G for legal hunting activities, companies were assumed to have reported accurate visitor numbers. These data were used for revenue calculations for nine hunting guides registered in the Sitka area whose U.S. Forest Service reports were more detailed than what was shown in the database.

After two seasons of refining methods in the field, researchers feel confident that a third and final summer of fieldwork could provide enough data to look at nature based tourism in Southeast Alaska through a comprehensive regional perspective. Additional study could provide a more complete estimate of nature-based tourism activities and values in the region.

Several data caveats pertain to all communities. First, revenue figures in this report do not include tips, which make up a large portion of some employees' income. Because tourism is a service-based industry, many of the activities generate significant tips. One owner noted that a bus driver taking visitors on one to two hour tours to in-town attractions might get \$50 to \$100 per bus. Additionally, some charter boat captains make \$400 to \$500 per day off tips. For sport fish day trips, this could increase revenue by up to 25 percent.

Other revenue not included in this report includes sales taxes. Revenue was calculated based on advertised prices which did not include tax. Sitka sales tax is 6% during tourist season, with an additional 6% bed tax. In 2005, the City and Borough of Sitka collected bed tax revenue of \$26,448 for the first quarter, \$125,980 for the second quarter, \$175,891 for the third quarter, and \$25,965 for the fourth quarter.

Sales tax in Juneau is 5% and bed tax is 7%. Ketchikan sales tax is 6%. None of the tax revenue is included in this report. It should be noted that the city governments do not collect taxes for shore excursions sold to cruise passengers on their ships. This practice is another reason why companies with exclusive cruise contracts will not sell their excursions to walk-up visitors on shore.

Appendix A

List of Contacts

Bold –Interviewed someone associated with company

Italics – used data from another source (U.S. Forest Service Special use permit, Web site)

Plain text – estimated visitors and revenues based on similar companies

Ketchikan

Alaska Amphibious Tours

Alaska Rainforest Sanctuary

Alaska Travel

Alaska Travel Adventures

Alaska Undersea and Northern Tours

Alaska Wilderness Outfitting

Alie Bob Charters

Allen Marine

Awesome Adventures

Bailey Bay Charters

Baranoff Skiffs

Cape Fox

Carlin Air

Experience Alaska Tours

Explore AK

Family Air

First Light Charters

Goldbelt Tours

Grayline of Alaska

Guard Island Excursions

Island Wings

Ketchikan International Youth Hostel

Ketchikan Reservation Services

Knudson Cove

KTN Charter Boats

Light Island Ventures

Misty Fjords

Northern & Undersea Tours

Pacific Air

Promech Air

Rainbird

RDM Pilot and Guide

Ryteful Adventures

Sea Wind Aviation

Snorkel Alaska

Southeast Aviation

Southeast Exposure

Southeast Seakayaks

Stimson Charters

Taquan

Wilderness/Crab Feed

Elfin Cove

Cross Sound Lodge

Eagle Charters
Elfin Cove Lodge
Fishmaster Inn
Hobbit Hole
Icy Straits Adv.
Inner harbor Lodge
Tanaku Lodge
The Cove Lodge

Hoonah

Tok River outfitters
Icy Strait Point Development Corporation
Hoonah Indian Association
Ken Meserve
The Office Bar
Royal Charters and Tours
The Galley
Tinas Lodge
Whale Watch Lodge/F.I.S.H.E.S.
Wind and Sea B&B
Mayor of Hoonah
Hoonah City Accountant
Hoonah Trading Company
Tideland Tackle
Hubbards' B&B
Ear Mt. B&B

Juneau 2005

Admiralty Tours
58 Degree Charters
Spirit Walker
Alaska Seaplanes
LAB
Skagway Air
Nine Lives Charters
Wings of Alaska
Alaska Fly N Fish
West Wind Charters
Alaska Bear Yacht Charters
Alaska Song
Alaska Story
The Boat Company
Alaska on the Homeshore
Adventurer
Explorer
Snow Goose
Ursa Major
Alaska Legion
Safari Quest

Pelican

Avery Simmons
Chicobi Charters
Dragonfly Charters
Highliner Lodge
Howard Charters

Joe Quinn
Ken Wolfe
Lisianski Café Charters
Lisianski Charters and Lodge
Mayor of Pelican
Pelican Charters

Sitka 2005

Air Sitka
CC Charters
Death Barge
Dragon Lady
Harris Air
Hunter Air
Ester G. Sea Taxi
Sitka Sound Ocean Adventures

Tenakee

Fishing Bear Charters
Jason's Custom Charters
Snyder Mercantile
Wings of Alaska

Other Entities (2005 and 2006)

Sitka Harbor
Tenakee Harbor
Hoonah Harbor
Hoonah Fuel Dock
Elfin Cove Fuel Dock
Ketchikan Visitor's Bureau
Sitka Visitor's Bureau
U.S. Forest Service
Alaska Department of Fish & Game
Borough/city accounting offices
Petro Marine, Sitka

Juneau Companies 2006

Alaska Fly 'N Fish Charters
Above and Beyond Alaska
Admiralty Tours
Adventure Bound Alaska
Air Excursions
Alaska Boat and Kayak LLC
Alaska Canopy Adventures
Alaska Discovery Wilderness Adventures
Alaska Fjordlines Inc.
Alaska Seaplanes
Alaska Travel Adventures
Alaska Zipline Adventures
Allen Marine
Auke Bay Sportfishing & Sightseeing Charters
Bear Creek Outfitters
Big Jim's charters/Alaska Adventure Charters
Cadigan Enterprises
Capitol Cabs

Chatham Strait Charters
City Sales Tax Office
Coastal Helicopters, Inc
Dolphin Jet Boat Tours
ERA Helicopters
Four Seasons Tours
Gastineau Guiding Company
Glacier Gardens Rainforest Adventures
Goldbelt Tours
Griffin Boat Rental
Harv and Marv's Outback Alaska
Hi-Time Charters
Juneau Sport Fishing and Sightseeing
LAB Flying Service
Last Frontier Tours
McCaughey Hatchery
Mendenhall Glacier Visitor Center
MGT (Mendenhall Glacier Transportation)
Nine Lives Charters
Northstar Trekking
Ocean Point Alaskan Adventures
Orca Enterprises
Rum Runners Charters
Sea Runner Guide Service
Seahook Charters of Alaska
Skagway Air
Tal Air
Temsco Helicopters Inc.
Ward Air
Wings Airways
Wings of Alaska

Sitka Companies

Adams Alaska Safaris

Air Sitka

Alaska Adventures Unlimited

Alaska Anglers

Alaska Coastal Outfitters

Alaska Glacier Adventures

Alaska Ocean Runners

Alaska Travel Adventures

Alaska Wildlife Tours and Charters

Alaska's South East Excursions

Alaskan Reel Affair Charters

Allen Marine, Inc.

Angling Unlimited

Annahootz Alaskan Adventures

August Redmoon Charters

Baranof Expeditions

Baranof Wilderness Lodge

Big Blue Charters

Brownie Charters

Captain Black Bart's Charters

CC Charters

Coastal Wilderness Charters

Death Barge

Dove Island Lodge
Ester G. Sea Taxi
Fish Alaska
Hanks Cabs and Tours
Harris Air
Island Fever Diving Adventures
Island View Resort and Charters
Jolly Rogers Charters
Kain's Fishing Adventures
Parker Guide Service Inc
Peterson's Guide and Charter Service
Pioneer Guide Service
Premier Charters
Raven Guide Service
Saltwater Sportsman Charter Service
Sea Life Discovery Tours
Sitka Bike and Hike
Sitka Charter Brokers
Sitka Raptor Center
Sitka Rose Charters
Sitka Sound Ocean Adventures
Sitka Tours
Sitka Trail Works
Sitka Wildlife Tours
Tribal Tours

Charter Yachts

Adventures Afloat
Alaska Charter Service
Alaska Passages
Alaska Sailing Charters
Alaska and NW Charters
Alaska's Sea Adventures
All Aboard Yacht Charters
Anytime Yacht Charters
Beartrack Charters – double check
The Boat Company
CEO Expeditions
Creole
Dolphin Charters
Explorer Yacht Charters
Homeshore
Jamal
Legion
Misty Yacht Charters
Safari
Sea Mist/Grand Slam
Seatex
Skookumchuck Adventure Sailing Charters
Alaska Song and Alaska Story
Sound Sailing
Southeast Alaska Wildlife Cruises
Stabbert Maritime
True Blue
Wild Alaska Charters
Ursa Major