

## Fallen on hard times

**A**laska's forests support vibrant ecosystems and economies. They provide a backdrop against which many Alaskans live, work, and play.

The economic importance of Alaska's forests has changed over time. Forest products—including timber—have been harvested in Alaska for more than 10,000 years by Alaska Natives, who relied on traditional uses of available resources for survival. Alaska's commercial, sport, and subsistence salmon fisheries rely on forests to provide productive nursery habitat for spawning salmon. Tourism, which is foundationally important to many Alaska communities, relies on splendid scenery and magnificent wildlife to draw the crowds.

The commercial timber industry in Alaska was a major economic driver in Alaska, particularly Southeast Alaska. Now, the timber industry is

a shadow of its former self. Timber harvest in Alaska peaked in 1989, with more than one billion board feet harvested. (See Exhibit 1.) The most recent harvest estimates from 2007 measure total harvest in millions of board feet—not billions. Harvest levels haven't been so low since 1954, the year Alaska's industrial timber economy was born.

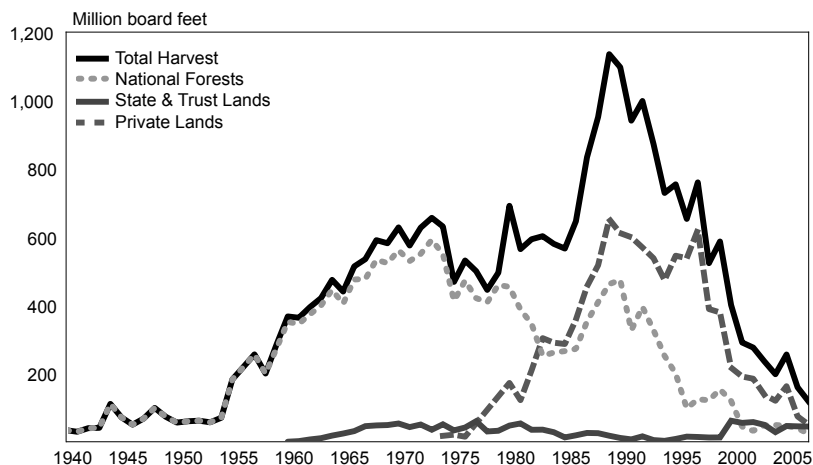
### An early Alaska industry

For most of Alaska's history, timber and other forest products were harvested for subsistence purposes. Timber was used across Alaska for a wide variety of purposes such as wooden frames for bidarka boats in the Aleutians, fish traps in the Yukon, and bark used in the Chilkat blankets of Southeast. Many of these traditional uses for timber are still employed.

Through the early part of the 20th century, Alaska's timber industry supplied local demand and engaged in minimal export activity, but major development was stunted by the Great Depression in the 1930s. World War II propelled the United States out of the economic hardships of the previous decade, and Alaska's bountiful natural resources were called upon.

After the war, the Alaska statehood movement gained traction. Statehood advocates in Alaska and Washington D.C. knew that the territory's small population was a liability for the statehood movement. A pulp industry, supplied by the ample forests of Alaska's southeast coast, would provide an economic base and a population boom in Southeast Alaska. The United States Forest Service began to offer long-term timber contracts. The first was swept up in 1948 by the

## 1 Alaska's Timber Harvest Historic estimates by landowner, 1940 to 2007



Sources: United States Forest Service; Alaska Department of Natural Resources, Division of Forestry

Puget Sound Pulp and Timber Company and American Viscose Corporation, which formed the Ketchikan Pulp Company (KPC). They were awarded a contract for 8.25 billion board feet over 50 years, and in 1954 the KPC pulp mill began operation near Ketchikan.

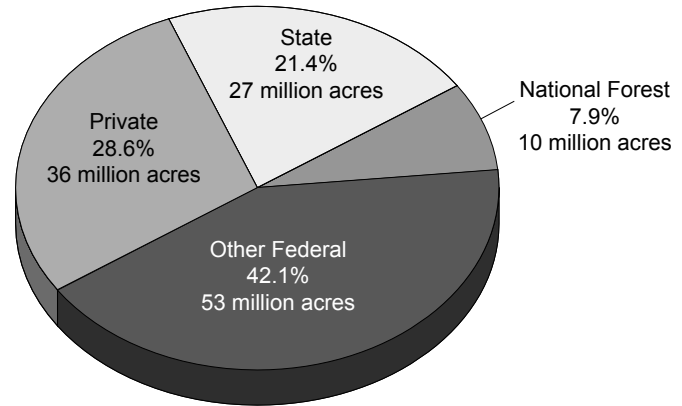
A second large, long-term timber contract was awarded to Japanese investors, who formed Alaska Lumber and Pulp Company (APC). This contract was also for 50 years and 5 billion board feet. The APC mill opened near Sitka in 1959, and Alaska's industrial-scale timber industry was born.

During the 1960s and 1970s, the biggest player in Alaska's timber industry was the Tongass National Forest, which supplied the pulp mills and sawmills in Southeast Alaska. In 1973, timber harvested from national forests in Alaska peaked at around 590 million board feet, almost all of which was from the Tongass National Forest. The Tongass is the largest national forest in Alaska. In fact, it is the largest national forest in the United States. Half of Alaska's forests are federally owned, but less than a fifth of federal timberland is part of a national forest.

Considerably less logging occurred in Interior Alaska, but smaller sawmills did operate near Fairbanks and in the Matanuska-Susitna area. Interior forests yielded more hardwood than the coastal forests and often supplied local lumber and whole logs for log houses. Most timber processing occurred in coastal Alaska, from Kodiak Island to the Kenai Peninsula and along the Southeast Panhandle.

In 1990, under pressure from environmentalists and fiscal hawks, Congress passed the Tongass Timber Reform Act. It established more wilderness and roadless area in the Tongass, and it eliminated the guaranteed annual timber supply to the mills. This act—along with a depressed international market for pulp, a stagnating economy in Japan, and further lawsuits by environmental groups—brought an end to the pulp mills in Southeast Alaska. The APC mill in Sitka, which employed 427 workers, announced in June 1993 that it would close its

## Alaska's 126 Million Acres of Forest Half is federal land **2**



Source: Alaska Department of Natural Resources, Division of Forestry

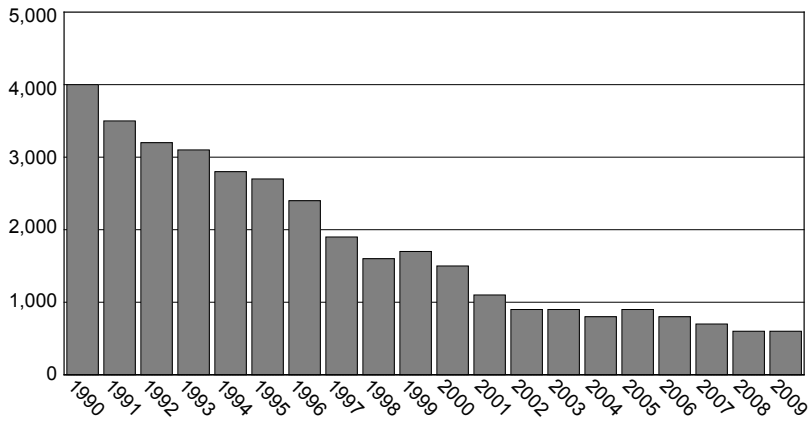
doors. Between 1993 and 1994, Sitka's total earnings fell by \$12 million, or 11 percent, and didn't return to pre-closure levels until 2000.

The KPC mill in Ketchikan held on for another four years but closed permanently in 1997, laying off 516 workers. Earnings fell 7 percent, or \$18 million, the first year after the closure and continued to fall the next four out of five years. Ketchikan didn't return to pre-1996 earnings until 2007. From 1995 through 2002, when the economy hit bottom, total earnings in Ketchikan fell by \$39 million.

After the pulp mills closed, the going didn't get any easier for what remained of the timber industry in Alaska. The Asian economic collapse in 1997 reduced demand for Alaska's timber products in the Pacific Rim. The Forest Service also drastically reduced the number of timber sales offered in the Tongass. Alaska's remoteness and higher costs of operating did not help the fragile sawmills get their lumber to market.

In 1990, there were about 4,000 timber industry jobs spread between the pulp mills, sawmills, and logging operations. (See Exhibit 3.) By 1999, the number of jobs had been reduced by more than half. There were 2,300 timber industry jobs lost in Alaska in the 1990s, almost all in Southeast Alaska, amidst a decade of growth in the rest of Alaska's economy.

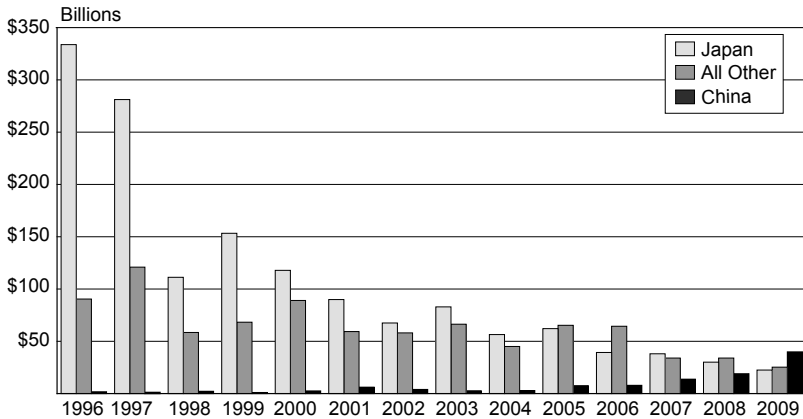
### 3 Timber Industry Employment Slides Alaska, 1990 to 2009



Note: Data are based on the Current Employment Statistics Program. Timber includes logging, sawmill, and pulpmill jobs.

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

### 4 Alaska's Timber Exports Values by select countries, 1996 to 2009



Source: Office of the Governor, Alaska Office of International Trade

#### Down, but not out

In 2009, there were about 600 jobs in the timber industry, down from 1,500 jobs in 2000. (See Exhibit 3.) The remaining sawmills and logging businesses are small and owned by individuals and families. Mills used to rely on timber harvested from federal lands, but timber from the national forests is less available. In 2009, sawmills in Southeast Alaska were operating at 5 percent capacity. Faced with low lumber prices and a low and inconsistent supply of timber, sawmills in Alaska are extremely troubled.

Since 1983, most timber in Alaska has been harvested on Native corporation lands. About 30 percent of forested land in Alaska is privately owned, most of it by Native corporations. (See Exhibit 2.) The amount of timber harvested from Native lands has been in decline, as much of the commercially available timber has already been harvested. The prominence of harvest from Native lands has not contributed to Alaska's wood product manufacturing employment, as those logs are not required to undergo any in-state processing.

#### International integration

Alaska exports much of its timber, and its timber markets are tightly integrated with the North American and Pacific Rim markets. Most of Alaska's milled lumber is sold domestically, while whole logs are most often shipped overseas. Alaska timber products are shipped to Canada, the Pacific Rim, or even domestically—depending on where suppliers can get the best price for their timber. In some cases, whole logs or rough-cut timber may be shipped to domestic or Canadian mills for further milling for eventual shipment to Asia. As a result, more Alaska timber ends up across the Pacific than our direct export numbers to Asia indicate.

Alaska wood-product exports were valued at \$88 million in 2009, up from \$83 million in 2008. Wood-product exports only make up about 3 percent of Alaska's total exports but are still one of Alaska's top export commodities. Competition from British Columbia and the Pacific Northwest, international economic contraction, and lower harvest volumes in Alaska have all contributed to declining timber exports from Alaska.

China is emerging as a major importer of Alaska's softwood logs. While log exports to Japan have fallen in recent years, exports to China have risen. (See Exhibit 4.) In 2009, for the first time ever, China surpassed Japan as the largest importer of Alaska wood products. China will likely become an even more significant buyer of Alaska wood products in the future, especially if coordinated efforts are made at marketing Alaska timber.

## Looking forward

The high cost of transporting lumber to market, the current recession, and an uncertain supply of timber present significant challenges for sawmills in Alaska. Mills that supply local markets, like those that produce logs for building log houses, may have more success. But unless the 1890s come back in style and log homes enjoy a massive resurgence in popularity, small niche markets won't bring the timber industry back to decade-ago levels.

Alaska's forests produce more than just timber; they produce energy. Biomass energy sources abound in Alaska's forests, from the sawmill waste produced in Southeast Alaska to the acres of brushy alders in the Interior. Some communities in Alaska are already using biomass for heat and power for residential, commercial, and public buildings. With the high cost of heating fuel in rural Alaska, these projects are demonstrating that biomass can be a cheaper alternative to petroleum products. And unlike oil, forests are a renewable resource—if managed properly.

More importantly, a thriving biomass energy economy could help existing sawyers and loggers. Since the pulp mills shut down, low grade timber harvested in Alaska has not had a market; consequently, loggers often harvest selectively. Selective harvesting, the practice known as high-grading, can be less

economical than harvesting all commercial timber from an area. Biomass generators and wood pellet manufacturers create demand for low-grade timber, which would make previously uneconomical timber tracts profitable for loggers. Increased logging activity could yield more lumber-grade timber as well, providing material for struggling sawmills. A boost like biomass energy could invigorate the ailing industry.

The changing role of Alaska's timber industry has had a dramatic effect on the economy and population of Southeast Alaska. Alaska's timber industry today more resembles the early 1900s than the 1990s. Bright spots—like exports to China and alternative energy projects—do shine some hope on an otherwise gloomy prognosis.