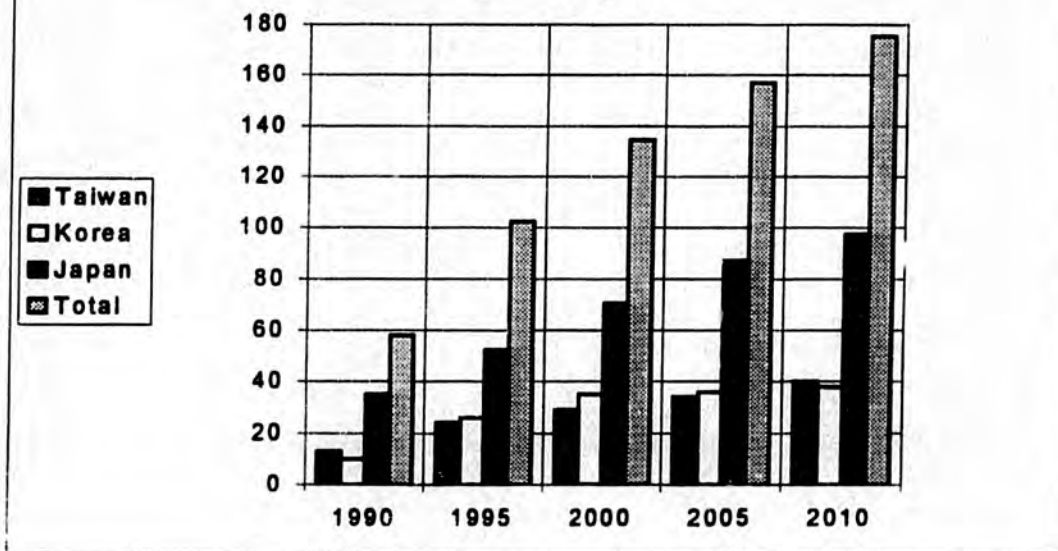


ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILES 8672

2597 SCOMM 113: HOUSE SPEC. COMM ON ECON. DEV. & TOURISM, 1999-2000

Fig.1 Current & Projected Steam Coal Imports (MM tpy)



In addition to switching from oil to coal, wherever possible, Japan has re-emphasized long range energy policy plans and expanded coal research and technology development. They have also committed to a significant backward integration for their energy and feedstocks supply and have begun acquiring equity positions in coal mines in a number of countries principally, Australia and Indonesia. Today Japanese companies own about 26% and 18% of the coal mined in New South Wales and Queensland, Australia, respectively.

Generating Practice Changes and Expanded Use of Low-Rank Coals

Beginning in the 1950s demand for power grew rapidly in industrialized nations and utilities were driven by economies of scale, i.e., the larger the plant, the cheaper the power. This led to the construction of numerous large generating plants, 1000 mega watts (MWs) and larger. In many cases, especially in the U.S., large generating plants were built at the site of the coal mine (mine mouth) and electricity was exported over high voltage transmission lines to population centers hundreds of miles from the mines. With the advent of the mega-sized mine mouth generating plants and improved high voltage transmission lines, the sale of "coal by wire" opened the way for low-rank coal mine development in Western U.S. and Southeastern Australia. Low-rank coals (LRCs), lignite and subbituminous coal, are young coals that have a much higher inherent moisture (25-40%) and lower energy content than their high-rank bituminous counterparts. As operating experience was gained and less conservative designs adopted, LRC-fired plants have become the cheapest source of thermal power in the U.S. and Australia. Despite these successes, Pacific Rim steam coal importers that have little or no experience with LRCs remain skeptical about their value.

LRC use in the U.S. also was boosted by the environmental movement as the New Source Performance Standards for air quality significantly reduced the amount of allowable sulfur emissions. The lower S in many LRCs makes them attractive fuels for achieving the required new air quality standards. Many eastern U.S. utilities examined a number of options to reduce sulfur oxide (SO_x) emissions including, blending or switching to low S coals, adding wet or dry scrubbers and/or buying emission credits from other utilities. In actual practice the majority chose to blend or switch. Blending and switching options could choose from a

variety of coals, both bituminous and subbituminous. The extremely low production costs of Wyoming and Montana Powder River Basin (PRB) subbituminous coal and better than expected handling and combustion characteristics has enabled LRCs to compete very successfully in central and eastern U.S. markets. Wyoming has displaced Kentucky as the leading coal producer in the U.S. at over 180 MM tpy and growing. Large test shipments from the PRB have also been evaluated in Europe and Japan and PRB coal may begin to penetrate foreign markets. However, their long distances from ports cause high overland transportation costs.

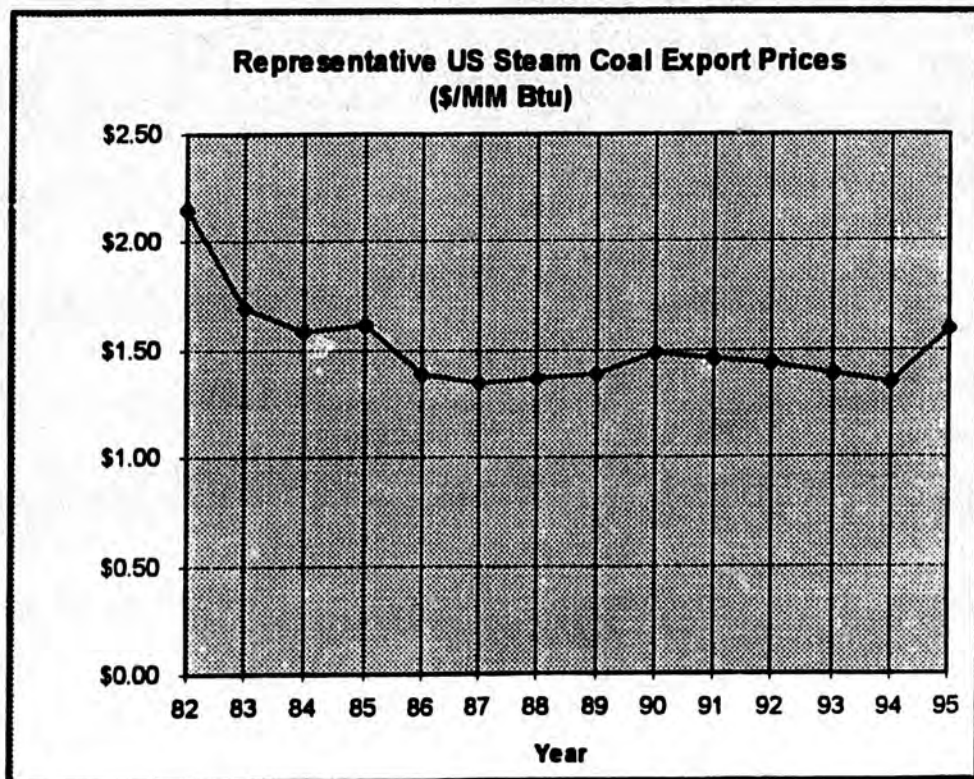
Until very recently, all seaborne steam coal was high rank, bituminous coal. Low-rank coals, subbituminous, lignitic and brown coals are younger coals existing in thicker seams with less overburden than higher rank, bituminous coals, making them amenable to low-cost-open cast (strip) mining. Due to the high moisture content of LRC, low production costs associated are often outweighed by increased transportation costs to distant markets. However, from a utilization aspect, LRCs contain more volatile matter, have no tendency to agglomerate (stick together) when heated and have a higher surface area than bituminous coals. These characteristics lead to rapid ignition and nearly complete carbon burnout making them excellent fuels for most modern combustion applications. The perception of poor quality associated with LRC unnecessarily limits options for the coal importing nations since low-rank coal could be used to replace more costly bituminous coals, either as a blending component with high rank coal in existing boilers, or in new boilers designed with the flexibility to use low-rank coal. However, it wasn't until 1983 that LRCs entered the international steam coal market. The precedent setting contract between UCM, Suneel Alaska and KEPCo in 1983, marked the first long-term export contract for LRC in the world.

Steam Coal Prices

Today, most steam coal is recovered by open cast (strip) mining techniques that have been highly mechanized. Similar advances have occurred in the bulk coal transportation sector and have greatly increased productivity while reducing coal costs. As more operating experience was gained on a variety of coals and dependable coal quality data became available, coal buyers began buying allotments of similar quality coal from the lowest cost producer. The goal of reducing dependence on a single supplier has intensified competition between the various coal producers and helped keep thermal coal prices depressed.

Japan's aggressive effort to reduce dependence on imported oil and diversify energy supply has led to them becoming the world's largest steam coal importing nation at 52 MM tpy in 1995 and projections of over 87 MM tpy in ten years, Fig.1. Australia with enormous reserves of bituminous steam coal is the leading steam coal exporter with sales topping 63 MM tpy last year. Every year a Japanese utility is selected to negotiate with Australian coal suppliers to establish bench-mark steam coal prices. These prices apply to contract or term sales that account for between 70-80% of Pacific Rim utilities' coal purchases, and become the basis upon which all contracts between other suppliers and utilities are negotiated. Recently, KEPCo has become the largest single steam coal buyer and has had some success in negotiating contract prices marginally below the Japanese benchmark.

Since the early 1980s, except for short upward cycles associated with supply problems or unusually heavy demand, steam coal prices have trended downward while surplus capacity existed. However, prolonged periods of low steam coal prices slowed investment in expansion and new mines. By the end of 1994 the growth in power demand, especially in developing nations, finally began to cut coal surpluses and depressed coal prices began to rebound. As shown in Fig. 2, U.S. steam coal export contract prices have risen from lows of around \$1.35 per MM British thermal units (Btus) to over \$1.60 per MM Btus for coal freight on board (FOB) at a U.S. port.



It remains to be seen how long the current supply/demand imbalance will last and if it can sustain the current rate of growth in coal prices. Some believe prices may even approach the high values seen in the early 1980s of over \$2 per MM Btus. Most energy forecasters contend that the current price escalation is not just another example of cyclic price swings common in the energy industry, but reflects a real gap of about 15 MM t between supply and demand that is unlikely to go away quickly. They expect the rate of increase to begin tapering off, followed by a more gradual increase into the next century.

The rate of price increases will primarily be determined by how rapidly additional coal capacity can be added by the major exporters, Australia, Republic of South Africa (RSA), Indonesia, Columbia, Canada, and the U.S. China may well develop some nearby export markets; i.e., Hong Kong, Singapore, and the Philippines. However, their insatiable internal demand for power as they become a modern industrial nation will make severe demands on their coal industry and it's questionable just how much coal will be available for export. Indonesia, which has rapidly become a major coal exporter, has decided to maximize its use of coal for internal power generation at the expense of coal exports in order to increase its export of oil. Others like RSA and Indonesia may also be limited by the availability of capital to add new transportation infra-structure to meet increased export demands.

Alaskan Coal Resources and Potential

History

Alaskan coal has been instrumental in the state's industrial development and, with proper development, could begin to lessen the impact of jobs and income lost as oil production declines.

Alaskan coal's role in state development has included:

1. First mined in 1855, it powered early ocean and river steam ships;
2. Fueled large mining operations and the Alaska railroad;
3. Provided the driving force for the RR's expansion to the Mat-Su and Nenana coal fields;
4. Supplied power for all the military bases until natural gas displaced coal at the bases in Anchorage in 1968;
5. With the UCM nominal 800,000 tpy contract with KEPCo, became the first LRC traded internationally;
6. Provides low-cost power at military bases, utility and university cogeneration plants in the Interior;
7. Will power the 55 MWe \$227 MM Healy Clean Coal Technology Demonstration Project that is expected to be one of the cleanest coal-fired power plants in the world.

Current Industry

The harsh climate and distance from major steel and machine fabricators add considerably to mine development and equipment costs. Operating costs are also more expensive in Alaska than the lower 48, due to higher personnel and insurance costs.

UCM which pioneered the development of self sufficient remote site open cast mining and mined land reclamation in the Sub-Arctic has been in operation for over 50 years. UCM is currently Alaska's only commercial coal mine producing approximately 1.5 million tons of ultra low-sulfur subbituminous coal per year from the Nenana Coal Field near Healy, AK. About half of the UCM coal is consumed for low-cost power generation and heating in military, municipal and university cogeneration plants in the Interior.

The other half is shipped on the state owned Alaska Railroad (ARR) 360 miles to the modern Suneel Alaska coal terminal in the Port of Seward, AK. In Seward coal is loaded into Korean vessels and shipped to the KEPCo generating plant at Honam, Korea.

The entire Alaskan coal supply chain, UCM, ARR and Suneel have shown that they could reduce costs and provide coal to KEPCo at competitive prices, even when the international steam coal market was depressed. This was critical to begin to establish the international credibility of Alaskan coal. It is estimated that the amount of UCM coal exported to Korea could roughly be doubled with only modest capital investments required at the mine, railroad and port.

Alaska Coal Resources and New Mine Potential

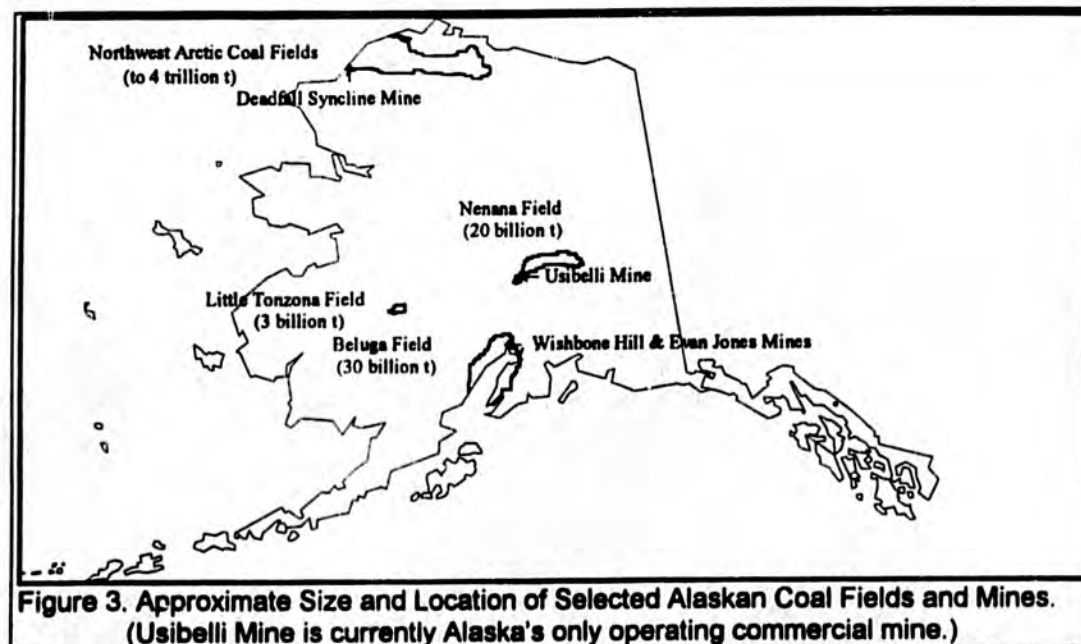
Coal is widely distributed in Alaska and the hypothetical coal resources have been estimated at over 5 trillion tonnes with over 2 billion tonnes of measured reserves, Fig. 3. Most of the coal that is near year-round open water or the ARR is low-rank, subbituminous or lignitic coal.

The largest resources of both bituminous and subbituminous coal are located in the Arctic on the North Slope of the Brooks Range and thus are amenable to conventional marine transportation only during the hundred or so odd days when the ice is out. The Arctic Slope Regional Corp. (ASRC) is assessing mining and transportation options for bituminous coal located on their property at the Deadfall Syncline. Their property is the most inhospitable location considered for mine development in Alaska. Nevertheless, ASRC believes that underground mining may provide the most efficient means of recovering Arctic coals by enabling year-round mining with a higher recovery factor with less surface disturbance than surface mining. ASRC has determined that a 2.7 MM tpy under-ground mine is probably the

optimum size to achieve economy of scale for their Deadfall Syncline coal. Since transportation is the most critical issue, they are evaluating the use of ice strengthened bulk carriers to extend the typical three-month, ice-free season to 8 months.

The Beluga Coal Field which probably contains the largest source of ultra-low sulfur coal near tidewater in the world has been well explored. Two organizations, The Beluga Coal Co. (a joint venture between Placer Dome U.S. Inc. and CIRI) and the Chuitna Group (former affiliates of Diamond Shamrock) each hold measured reserves of nearly a billion tonnes. Based on assessment of geological data, infra-structure needs, environmental requirements and economies of scale, they estimate that an investment of around \$100 MM would be required to develop a 1 MM tpy open pit mine in the Beluga field and about another \$40 MM would be needed for a new port near the mine. It would require about 4 years for a permitted project to construct the mine and make test shipments to end-users or about 7 years to bring a non-permitted Beluga mine into production. Both organizations are seeking investors and/or coal contracts to provide funding to develop the mine and infra-structure in the Beluga field.

There are two modest reserves of bituminous coal near Anchorage that supported mining earlier, the former Evan-Jones mine now held by Nerox Corporation and the Wishbone Hill property now held by Cook Inlet Region, Inc. (CIRI). The Evan Jones mine was closed in 1968 when the Anchorage military bases switched from coal to gas. On an adjacent property, a major Japanese energy company, Idemitsu Kosan, Ltd. was on the verge of opening the Wishbone Hill mine when delays arising from the Mental Health Trust Lands Act (MHTL) disputes contributed to a decision to suspend operations and sell their leases. Both new owners are seeking joint venture partners and contracts that would allow them to start production.



In addition, a number of native corporation villages have looked at developing small mines on native lands to provide fuel for the villages. Since there would be no economy of scale and no existing infrastructure, production cost estimates could be many times that for larger mines in South Central Alaska. However, a local mine would create jobs, retain money spent on fuel in the community and end pollution from rural bulk fuel storage systems.

Value-added Coal Products

The economic base for the state would be enhanced if, instead of shipping raw coal, the coal was upgraded to higher valued products. In addition to the mining and transportation jobs, additional jobs would be created to upgrade the coal.

Research on upgrading Alaskan LRCs has focused mainly on drying technologies that would permanently reduce the moisture content of LRCs. If an economical permanent moisture reduction technique could be developed, Alaskan LRC would be upgraded to bituminous coal energy content and could compete on an equal footing with bituminous coals in the international steam coal market. To date, no drying techniques have been developed that can produce a stable dried LRC at a low enough cost to compete in the steam coal market. With the depressed coal prices that prevailed until late 1994, there was very little room to do any significant upgrading before pricing the upgraded product out of the market. However, today's rising coal prices could provide an opportunity to reassess drying technologies that were ruled out when coal prices were low.

The concerns over oil prices and supply security have caused many oil importing nations to seek alternatives. The most promising alternative to heavy oil is coal-water fuel (CWF) which originally was made by mixing finely ground bituminous coal with costly proprietary additives to control viscosity and settling in water. This quasi-liquid fuel enjoys all the benefits of liquid handling and storage, is non-hazardous if spilled and is independent of OPEC pricing. Led by Japan, China, Italy and Russia, CWF is a growing industry that could see over 14 MM t of CWF traded by the turn of the century. An attractive, but often overlooked feature of CWF is that it enables coal to compete in the oil market which is significantly higher valued than the steam coal market on a dollar per million Btu basis.

The high inherent moisture levels in LRC precluded their entry into conventional bituminous CWF market. However, hydrothermal treatment can permanently reduce the inherent moisture content to levels that permit formulation of CWFs from LRCs without the use of costly additives. The technical feasibility of producing a premium low-rank coal-water fuel from Beluga and Usibelli subbituminous coals was demonstrated at the pilot-scale in a project jointly sponsored by the Alaska Science and Technology Foundation (ASTF) and the U.S. Dept. of Energy (DOE) in 1991. Preliminary cost estimates for production of 1 MM tpy LRCWF near the Beluga mine site, pipeline transportation to a mono-buoy in Cook inlet, and ocean transport to Japan, indicate that Alaskan LRCWF would be competitive with heavy oil and imported Chinese bituminous CWF in Japan.

The next step in commercialization is to demonstrate the technology at a large enough scale to provide potential LRCWF users with sufficient data to develop their own economic analysis and adequate quantities of LRCWF for testing in their own facilities. A commercial demonstration project has been proposed at the University of Alaska Fairbanks (UAF) Power Plant.

A unique opportunity has arisen to secure the required DOE funding from Clean Coal Technology (CCT) funds that have already been appropriated. One of the projects selected in the fifth and final round of the DOE CCT Program was one developed by AD Little, Inc. and Cooper-Bessemer, Inc. to demonstrate a coal-water fuel (CWF) fired diesel system. The \$38.2 MM project was to produce 14 MWe of power from two 20 cylinder diesel engines powered by CWF at a utility in Easton, MD. Recently, the utility host decided to withdraw from the project and the developers were forced to look for alternate sites. The CWF diesel developers were aware of the likely superiority of LRCWF over bituminous CWF and are enthusiastic about integrating the projects and bringing the existing DOE funding of over \$19 MM to Alaska. The combined project would provide two distinct marketable products, LRCWF and its technology, and CWF-fired diesel engines which should enhance the chances for success.

A commercial LRCWF plant in the Beluga field would require opening of a nominal 1 MM tpy open cast mine, a pipeline and mono-buoy tanker loading terminal and all attendant facilities. Capital construction costs would approach 250 million dollars and the combined facilities would require over 200 primary employees.

Institutional Developmental Barriers

Low-Rank Coal (LRC) Image

With the exception of the Wishbone and Evan Jones properties in the Mat-Su valley, the remainder the coal near the railroad or year-round open ports is low-rank. The belief that Alaskan LRCs will be sought by world markets when they can be delivered at competitive prices, because of Alaska's "strategic" location and/or the abundance of these coals should really be considered as another myth surrounding economic development in Alaska. Despite the successes in the U.S. and Australia where, for about the last decade, the lowest cost thermal electric plants have been fired by LRC the perception in the Pacific Rim is that LRCs are inferior to more costly bituminous steam coals. Recent announcements that some of the new coal-fired generating plants to be built in Japan, Korea, and Taiwan will be designed to work with LRC and LRS—bituminous blends indicate that this perception is beginning to change.

In order to qualify a new fuel for purchase considerations, large test quantities of Alaskan LRCs at prices below prevailing market rates for testing in potential user's boilers. Since the coal will be obtained from areas without operating mines, under conditions well below the optimum production level to benefit from economies of scale, money from the sale of test coal will be substantially less than the cost of production. Thus, millions of dollars will have to be spent just to begin to get market acceptance before any contracts will be consummated. Only when extensive testing in potential end user's facilities has demonstrated that Alaskan LRCs have excellent combustion characteristics, do not lead to excessive boiler fouling, can be stored without generating excessive dust or catching fire in the stockpiles, will a market exist for Alaskan LRCs.

Environmental Issues

Environmental permitting in Alaska is perceived by many to be a major hurdle to new mine development. This is because Alaska has "green reputation" and in many instances, "pristine" conditions are invoked to inhibit development. This perception has been exploited by local and national "environmental" experts.

For example, the well publicized challenges to the Healy Clean Coal Project air quality permits by the National Park Service nearly doomed a project that is assured to be one of the cleanest coal-fired generating plants in the world. In another case, President Clinton has and maintains he will continue to use veto power to prevent opening a tiny portion of the Arctic National Wilderness Refuge (ANWR) to limited oil drilling and potential production. This action is contrary to the wishes of a majority of the state residents, including the native Americans who would be most impacted.

The Alaska Department of Environmental Conservation (ADEC) tends to act independently from industry concerns in promulgating new legislation. Currently, ADEC has proposed regulations in at least 5 areas of the state's air quality control act that are more stringent than those in the Federal Clean Air Act enforced by EPA. If these stricter regulations are not reduced to EPA levels by ADEC or challenged by the Legislature, thermal power production costs in Alaska, especially from coal-fired generators will needlessly increase. These

VI—Alaskan Coal Industry—Sector Analysis

confrontations between state agencies and Alaskan industry could largely be avoided if industry were involved during the formulation of new regulations.

State and Federal Governmental Issues

As mentioned earlier, disputes and litigation over Alaska Mental Health Trust Lands (MHTL) contributed to a major Japanese company, Idemitsu Kosan, Ltd.'s decision to divest the Wishbone Hill coal mine project.

The 1920 Jones Act requires that all goods shipped between U.S. ports move only on U.S. built, owned and crewed ships. Since the U.S. does not have any Panamax or Cape size coal haulers, and has the highest marine operating costs, U.S. coal shipping costs are far higher than rates of competitors. The noncompetitive U.S. shipping rates cost Alaskan coal an opportunity to compete for a 15-year coal contract for about 1.2 MM tpy at a new 140 MWe coal-fired generating plant that was installed near Honolulu, Hawaii. Instead, the contract was awarded to an Indonesian coal supplier.

Conclusions & Recommendations

Given the high cost of project development, labor and transportation in Alaska and the developmental barriers, both real and perceptual, it is little wonder that Alaska is regarded as a difficult place to do business. Potential investors also have reason to be concerned about how much time and cost will be required to obtain permits and whether the state's inability to achieve a balanced budget will ultimately lead to higher taxes on industry. In addition, potential coal developers must also contend with the need to provide enough coal for large scale testing at costs below prevailing market rates just to obtain market acceptance which extends the length of time required from investment to any profit. The following recommendations for both industry and the state could help stimulate growth in the Alaskan coal industry. As expected, the list of recommendations dovetails, because if industry and the state do not work together closely the chance for large growth in the coal industry is minimal.

Alaskan Coal Industry

- ◆ Prospective Alaskan coal producers should work closely with one another and the various state and federal agencies on resolving common issues to improve the health of the industry.
- ◆ Industry should strive to enhance working relationships with the following key organizations and entities to support industry growth—Alaska Departments of Commerce and Economic Development (ADCED), Environmental Conservation (ADEC), and Natural Resources (ADNR), the Alaska Industrial Development and Export Authority (AIDEA), the Alaska Coal Association, the Alaska Miners Association, the Resource Development Council and, of course, state and federal legislators.
- ◆ Industry assistance could come in many forms including, DOE-sponsored research directed at problems or opportunities for recovering, transporting and utilizing Alaskan coal, streamlined permitting procedures for new mine development, elimination or reduction of severance taxes on test shipments of coal sold for user-acceptance testing.

VI—Alaskan Coal Industry—Sector Analysis

- ◆ The coal industry should make use of Alaska's congressional power and seek exemptions from the Jones Act for shipping Alaskan coal and coal products to U.S. markets in Hawaii and the Lower 48.
- ◆ Maintaining a competitive position in the coal industry that is dependent on large volume mining and transportation will require that UCM, ARR and Suneel Alaska to keep abreast of and implement technological advances as early as possible.
- ◆ Producers should develop a network of consultants and R&D organizations familiar with Alaskan coal mining, preparation, transportation and utilization to assist potential new end users.

State Restructuring to Support the Coal Industry

- ◆ State agencies, especially ADEC and ADNRC should work more closely with industry in promulgating regulations that demonstrate the state's willingness to support responsible natural resource and industrial development.
- ◆ The state should make every effort to obtain and retain primacy in permitting issues ranging from surface mining to wetlands.
- ◆ The Department of Community and Regional Affairs (DCRA) should refocus on a directive that is part of the Power Cost Equalization legislation and the Raven Commission's Report, to develop and demonstrate reliable, low-cost alternatives to diesel fuel for power generation using indigenous energy resources in rural Alaska. If a coal-fired alternative to diesel generation is to succeed, it must be commercial technology, not advanced DOE Clean Coal Technology, make economic sense and have the enthusiastic support of one or more of the villages where it will be demonstrated.
- ◆ State agencies should work closely with potential coal producers and help market coal in Japan, Korea and Taiwan. This will require trade specialists located in these key countries who will work closely with their ADCEI counterparts in Alaska to mount a concerted effort to locate and obtain commitments from potential clients to participate in the coal testing program and invest in new coal ventures.
- ◆ The state should ensure that the University of Alaska continues to provide a quality education in Environmental, Geological and Mining Engineering, and in technical training opportunities for careers in the Alaskan coal industries.

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Chapter VIII

Agriculture in Alaska

SUBMITTED BY:

ALASKA RESOURCE METHODS
AGRIBUSINESS ASSISTANCE
AGRICULTURAL AND RESOURCE DEVELOPMENT CONSULTING
FAIRBANKS, ALASKA

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Introduction

Alaska will mark the 100th anniversary of the agricultural experimentation stations in 1998. This continuing government commitment has provided a fundamental foundation for the growth and sustainability of agriculture in the North. As the Russians learned in the early 1800's, agriculture in Alaska is marginal geographically. It is remote from large sustaining commercial markets and distant from the biologically richer mid-latitude biomes¹.

Government research and new technologies have provided the basis for a continually modernizing agricultural industry. Alternatively, governmental policies have fluctuated dramatically from highly overoptimistic plans and projections to somber, negative, assessments. Through all this, a baseline of support has continued as part of long-term federal and state supported agricultural research, instruction, outreach/extension education, and essential agricultural service programs such as inspection, marketing, and loan program assistance.

Where, then, does agriculture stand in Alaska today? Is it a viable industry and is continued government support justified? This report addresses these issues.

Admittedly, federal and state programs to stimulate agriculture in Alaska have been supported by projections and promises that agriculture would become a major Alaskan industry. In short, there has been a mythology that accompanied the policies. More recently, there is the myth that agriculture in Alaska is a dead industry, having "failed" in the Delta and Pt. MacKenzie projects of the 1970s and early 1980s². In fact, agriculture has expanded in

the 1990s, albeit not in the manner envisioned by planners of the two projects. Nevertheless, the net result is a very modest agricultural industry.

Today, Alaskan agriculture supplies approximately 10% of the state's food needs. That number might reasonably be expanded. The small population base, approximately 600,000, limits the in-state market. Without an appropriate infrastructure, Alaskan producers and processors cannot enter the unprocessed product export stream. Without this opportunity, agriculture is not likely to become a major industrial factor in the near future. In 1995, all traditional agricultural products constituted less than one percent of the state's revenues from resource industries.

Despite impediments, Alaska's agricultural producers continue to look to the future. Much of Alaska's agriculture has nothing to do with production of food and fiber for traditional markets. Entrepreneurs derive income from agricultural tourism, raising and stabling horses for pleasure and show, dog racing, revegetation, seed production, and subsistence agriculture. In turn, these enterprises generate a demand for supplies and infrastructure to support their endeavors, supplementing demand from traditional producers.

State and federal baseline support for research, instruction, extension education/outreach and basic services will ensure that agriculture will remain a sustaining Alaskan industry. Injections of significant capital from either the state or federal government will not result in massive expansion despite efforts of planners. State government support has shown itself historically ephemeral toward agriculture. Federal policy no longer emphasizes expansion. State support will assure sustaining growth of the industry if political leaders begin to understand the definition of agriculture in Alaska and assume a leadership role in shaping policy to provide fiscal baseline support.

Historical Background

A brief historical discussion will provide background for what has happened to Alaska's agricultural industry from the beginning of this treatise: statehood. Agriculture has never been considered a basic industry in Alaska. Thus, large, sustained investments have not been part of its institutional history.

During the first half of this century, the stimulus for agricultural development was the lack of adequate transportation facilities and the need to provide food for local settlers. At the turn of the century, agricultural research stations were established, (the first in Sitka in 1898), to provide information on farming in Alaska and support advancement of the frontier. During the gold booms in interior Alaska in the earlier 1900s, farmers supplied food to the miners. In the 1920s, farms supplied food to workers building the Alaska Railroad. In the 1930s the Matanuska Colony, a federal agricultural project, was established to provide relief for depression farmers from the north-central United States.

The stimulus for agricultural development in Alaska changed rapidly after World War II. The War brought infrastructural improvements. Shipping costs were reduced as a result of construction of the Alaska Highway during the 1940s. In the 1950s, refrigeration made it possible to bring perishable goods into the territory. Despite this, federal homesteading was revived in Alaska in the 1950s, and a state homesteading program was put in place in the late 1960s. Both intended to expand land in production and encourage food production. Improved harbors, airports, and less expensive fuels, a result of new oil refineries in southcentral and interior Alaska, came with oil development in the 1970s and 1980s. With the onset of oil revenues, the state of Alaska promoted agricultural projects in Delta in interior Alaska and Pt. MacKenzie in southcentral Alaska (Figure 1)¹. Agricultural resources were seen as alternative income for the future as oil resources declined.

The timing of these latter agricultural development efforts was ironic. The infrastructure that had reduced costs of shipping value-added food and fiber products into Alaska was not designed to move raw products within and outside the state. The Delta and Pt. MacKenzie agricultural projects came to fruition during the U.S. farm crises in the mid 1980s. This occurred simultaneously as oil revenues were declining in Alaska, the U.S. held excess grain surpluses, and world grain prices were falling. These situations and events had adverse affects on state government's attitude toward agricultural expansion. State aid promised for the infrastructure to support the Delta and Pt. MacKenzie projects was not sustained or sufficient to change the configuration of the infrastructure. Recovery of grain prices came too late to rejuvenate the state's interest in supporting the production of commodity crops.

Although the cash value of Alaska's traditional agricultural products dropped in the early 1990s, by 1996 value had risen to near the highs of the mid 1980s. The mix of products produced in Alaska changed. The shift was toward in-state demand. The result has been expanding interest by producers in products that can add value or be sold in niche markets.

Definition and Scope of Agriculture in Alaska

The traditional definition of agriculture is "the production of food and fiber."³ This restrictive definition has broadened as agriculture has evolved and more emphasis placed on diversification, niche markets, and value-added processing. Webster's Third New International Dictionary defines agriculture as "the science or art of the production of plants and animals useful to man and in varying degrees the preparation of these products for man's use and their disposal (as by marketing)."

Much of Alaska's agriculture has nothing to do with production of food and fiber. While some Alaska farmers may produce traditional products such as vegetables and potatoes, barley, small grains and hay, beef cattle, and swine, others may gain a significant source of income from production of such non-traditional products as grass seed for revegetation in oil fields, gold mines, and along roadsides. Entrepreneurs may also derive income from agricultural tourism or raising and stabling horses and dogs for recreational purposes. A greenhouse operator may grow tomatoes, cucumbers, and other vegetables for the fresh market, a part of traditional agriculture, but a far greater source of income may be from bedding plants, flower baskets, cut flowers, compost, potting soil, and landscape materials.

Alaska's agricultural industry has unique advantages. The state's isolation from other agricultural areas and its severe winters reduce the hazard of insect and disease infestation in crops. The state is a regime ideal for the propagation of disease free seed stock for export. Alaska has also been designated as disease-free for hog production. These same reasons contribute to limited use of agricultural pesticides; a pristine environment ideal for production of 'safe' food. Another advantage of the Alaskan climate is the effect of cool temperatures and long daylength on increasing the sugar content of vegetables and enhancing the color intensity of flowers. Alaska's farmers also take advantage of the climate to supply products that enhance the environment. Soils disturbed by road construction, military operations, oil field development, and mining must, by federal and state law, be revegetated with plant species adapted to the area. Plant seeds and propagation materials must be grown in the environment in which they will be used. Finally, production of agricultural products offers an efficient solution for the disposal of waste products. Shell and finfish wastes are used as protein supplements in animal feeds. Municipal sewage and shell and fin fish waste are used as soil amendments in agricultural operations; a desirable alternative to ocean dumping, incineration, or shipping wastes out of Alaska.

Alaska's Agriculture as a Part of U.S. Agriculture

Agriculture is the largest industry in the United States. The value of U.S. agricultural products sold in 1992 was \$162 billion. Fiscal 1995 agricultural exports set a record at \$54.7 billion exceeding 1994 by \$10.7 billion. The mix of unprocessed to manufactured products exported by the United States is changing. In 1995, approximately half of U.S. agricultural exports were manufactured. Historically, the United States has held the world's largest surplus supply of feed grains. This began to change in the early 1990s as South American countries accelerated production and displaced U.S. products in export markets. The United States, however, continues to be a leader in the world's food supply chain. There were slightly over 2 million farms in 1995 with 4.5 million people residing on them. Each U.S. farmer supplied food and fiber for 129 people.

Alaska's agricultural industry is minuscule when compared to that of the United States. Alaska farm product value of \$25.7 million in 1992 represented less than 0.02% of the U.S. total. Its approximately 500 farms have supplied less than 10% of the food and fiber for its residents over the past decade. The industry exports few products and these, such as honey, syrups, jellies and jams, herb vinegars, and specialty potatoes, into niche markets.

This does not mean that Alaska's agricultural industry is unimportant to Alaskans and the circumpolar north. While Alaska's contribution to U.S. agriculture is not significant, its contribution to agriculture in the circumpolar north can be. In addition to its isolation and climate, Alaska has access to the technologically advanced research base of the United States. Its researchers and educators have taken advantage of this base and have added their knowledge of production of food and fiber in the north where Alaska is recognized as a leader. The industry has the opportunity to contribute to the diversity of the economic base of the state and to the knowledge base of the circumpolar north.

Statistical Overview

Land surveys in Alaska during 1897-1898 were initiated by the federal government in part to determine the territory's agricultural potential. There have been several estimates of potential agricultural lands in Alaska since that time. A 1951 survey by Kellogg and Nygard⁴ using existing economic conditions, concluded that the total area available for cropping was under 1 million acres. A 1973 survey by the U.S. Soil Conservation Service suggested that 15 million acres of land, not considering accessibility, were capable of growing crops. State analysis of lands in the 1970s estimated that 5 million acres could be used to produce cultivated crops, but that only 500,000 were close to existing transportation corridors. For the most part, those lands included the Tanana Valley (Fairbanks and Delta), the Matanuska Valley (Palmer and Anchorage), and Point MacKenzie.

In 1960 (statehood was granted in 1959), total agricultural cash value were slightly above \$3.5 million. In 1996 cash value totaled \$29.3 million, near the 1988 peak of \$30.1 million (Figure 2). Milk cash value dominated Alaska's agricultural industry in the 1960s and early 1970s (Table 1). By the 1980s, the cash receipt share of potatoes and hay approximated that of milk. This mix has remained relatively constant to 1996^{5,6}.

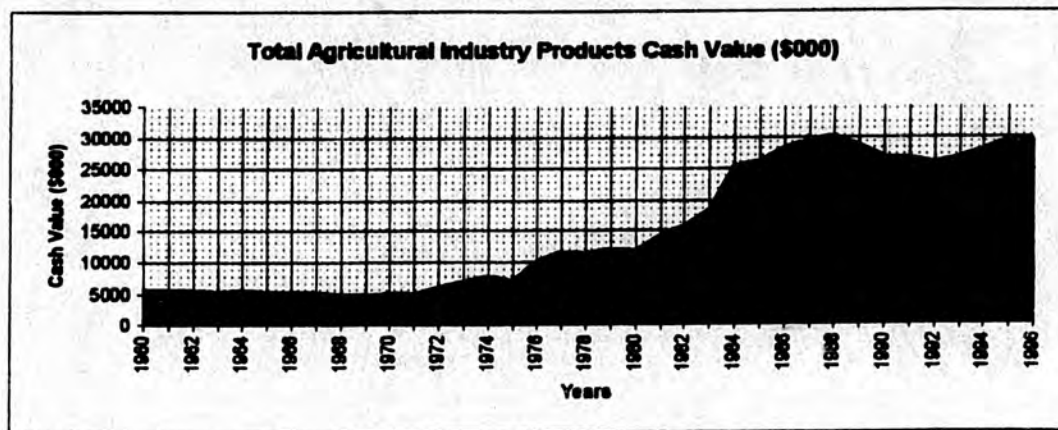


Figure 1. The cash value of all products produced in Alaska from statehood to the present time.

There were 2 million acres in farms and ranches in 1960⁷. This dropped to half by 1996. The total crop acres harvested peaked in 1985. Increases coincided with activity in the Delta and Pt. MacKenzie agricultural projects. The total number of farms and ranches rose from 420 in 1960 to a peak of 670 in 1986 settling in the mid 500s in the 1990s.

Table 1. Alaska's agricultural industry profile (as a percent of total cash value of major products excluding greenhouses and nurseries. (each year totals 100%.)².

YEAR	RED MEAT	BARLEY	MILK	POTATOES	VEGETABLES	HAY
1960	4.6	4.3	53.4	16.1	4.4	17.2
1970	13.2	2.0	47.1	16.0	5.8	16.0
1980	12.3	11.8	26.1	18.2	7.2	24.4
1990	13.5	3.8	28.9	23.1	7.4	23.2
1996	17.1	7.4	22.3	20.0	11.1	22.0

The greenhouse and nursery sector is an often overlooked segment of the agricultural industry in Alaska. Although the Alaska Agricultural Statistics Service began tracking the industry in 1977, detailed statistics were reported only in 1987 and 1991. Reporting for this sector includes cut flowers, nursery stock, greenhouses, retail florists, landscape firms, local garden centers, and floral/garden supply departments in national chains⁸. Rising economic indicators and perhaps increased activity in other agricultural sectors contributed to the rapid increases in cash value from 1981 to 1985 (Figure 3). Rising economic indicators particularly affect sales of flowers and bedding plants. From 1986 to 1990, cash value in the horticulture sector responded to a rising economy with increases in cut flowers (98%), potted flowers (45%), and bedding plants (10%). By 1996, cash value in the greenhouse and nursery sector had risen to \$18.0 million.

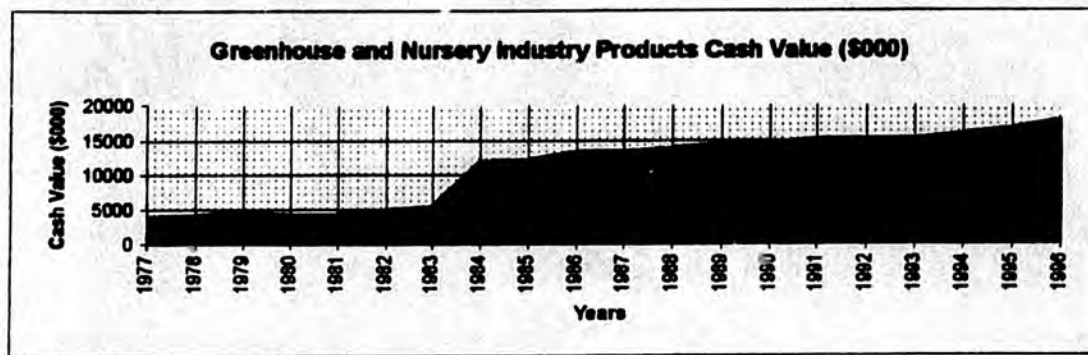


Figure 2. Cash value of all products produced in the greenhouse and nursery sector of Alaska's agricultural industry from 1977 to the present time.

The agricultural industry provides both year-round and seasonal jobs. Job availability in the industry has been relatively flat since statehood. In 1962, 1,200 people were employed, 775 were family laborers. In 1995, the last year statistics were reported, 1,000 people were employed excluding those by greenhouses and nurseries; 600 were family members now defined as unpaid farm labor. Except in the dairy sector, most labor is seasonal. Average wage rates for seasonal and full-time workers rose from approximately \$2.00 per hour in 1960 to \$7.40 in 1996. Labor statistics for the greenhouse and nursery sector indicate there were 1,575 workers in 1986, and 1,825 in 1990, the only years labor statistics were reported.

The Alaska Agricultural Statistics Service has supplied comprehensive data on traditional crops and livestock since 1953 and the greenhouse and nursery industry since 1977. This information is invaluable to planners and industry watchers. There is, however, a paucity of data on nontraditional products.

Cash value of non-traditional agricultural products and services in Alaska can only be estimated. This information is not reported by the Alaska Agricultural Statistics Service. Subsistence agriculture is very important in Alaska. Gardens and livestock in rural areas both on and off the road system have a value of approximately \$700 to a family⁹. Oil company estimates indicate revegetation research has resulted in savings of \$20 million per year. Local farmers supply seeds to this industry but there is no public record of sales volume. Seed producers in Delta have been selling grass seed to Japan since the mid 1980s. Estimates indicate sales have reached \$500,000 to \$1,000,000 annually. Unfortunately, farmers are not always willing to provide sales information because they consider it proprietary in an area of specialty where there are few producers. There have been substantial savings to meat producers and dairy farmers from the use of fish waste in feed rations. There has been no consistent tracking of the savings or the amount of fish meal used in Alaska for this purpose. There is definitely a need for more detailed information to show the extent and impact of non-traditional agricultural products and services.

Role of Government

As the agricultural industry in Alaska matures, it does so in a world of sophisticated technology. Transportation systems bring a wide variety of fresh and processed products to markets far from points of production. In Alaska and the circumpolar north where agricultural industries are small when compared to major agricultural production areas, there is not a major interest in expansion as long as there is no break in the food supply chain in either quantity or quality. This reflects an economy that is stable and dependent on income from

other sources; in Alaska, oil. If there is an interest in agricultural expansion, it is to diversify the economy.

Federal government support is a major reason why U.S. agriculture has led the world in supply of commodity¹⁰ crops. Federal support for construction of transportation systems, homestead programs, and water access during frontier development were instrumental in U.S. agricultural development. Farm policy in 1933 provided price supports to farmers for commodity crop production. These supports were continued and expanded in 1949 farm legislation, the basis for all farm bills to date.

Beginning in 1985, the federal farm bills shifted support from program crops¹¹ to manufactured products and new export crops. Federal support for new transportation infrastructure is no longer available and the need for food production in areas physically remote from existing core land transportation networks is not deemed necessary to meet national goals. This change of policy is significant for Alaska where federal support for agricultural infrastructure historically has been quite limited and the agricultural economy has been weakly developed. This begs the question "What is the proper role of state government in supporting agriculture in Alaska?"¹²

The Models

Previous work¹³ analyzed the response of agriculture to various levels of government involvement since statehood to answer the question about state support for agriculture. Three models developed in 1986 describe the degree of investment in agriculture by federal, state, and private interests. The models were based on amount and source of capitalization of infrastructure and farms. They assumed baseline support for research, instruction, outreach/extension education and basic services such as inspection, land sales, loan services, and marketing assistance were in place. They did not take into account the influences of farmer/owner abilities to operate highly mechanized and sophisticated enterprises, problems with land ownership, or changes in political directions. The models included only the traditional crops and livestock: barley, red meat (beef cattle and hogs), milk, vegetables, potatoes, and hay. Data for these products can be tracked in detail from statehood. All identified positive directions and significant pitfalls.

The **hands-on model**¹⁴ (in this report: "**high support**") depicts an industry segment dependent on state support for land sales, loans, and appropriations to support an infrastructure including transportation, processing, and transfer facilities at port and inland. This infrastructure was to enhance a virtually non-existent grain and red-meat sector. The **moderate-support model**¹⁵ (in this report also, "**moderate support**") describes an industry dependent on funding from a mix of primarily state, and federal loans, in a few cases loans from private sources. The model focused on a single industry, dairying, and increasing production of raw milk and sales of milk products in Alaska. The **hands-off model** (in this report, "**baseline support**") describes farms supported by a mix of private funds and private, state and federal loans. In this market-based model, there was never a plan to increase number of farms, land in farms, product production or sales to meet a specific goal. Production on farms simply continued to supply demand in state markets.

The major pitfall of the high support and moderate support models is the ephemeral nature of state government support. As administrations have changed, so has the attitude toward agriculture. Agriculture does not contribute substantially to the state's coffers. Thus, when income from more lucrative resource development begins to decrease, capital formerly targeted for aggressive agricultural development is diverted elsewhere. Alaska's economy has typically been single-resource dependent, leaving it the victim of supply and demand for that resource. Federal policy is no longer emphasizing expansion in production of program crops. The baseline support model is seen as that most likely to sustain growth in Alaska's

agricultural industry because it depends on a mix of private, federal and state funding, thus not as directly on state income.

On the positive side, state intervention with capital and positive policy and regulations did make a difference in Alaska's agricultural industry. The surge in barley, livestock, and milk production generated by this intervention was short but it had an impact. Some of the suppliers who began or expanded their businesses to meet the demands of the early and mid 1980s stayed in place. Growth in the baseline support model has been steady as long as product quality has been competitive with or better than imported products, and consumers have been willing to pay slightly higher prices. Farms in the high support model have continued to develop though not as planners thought they would. Dairy farms that reverted to the state are being sold. The short-term intervention piqued interest in agriculture. Agriculture was in the public eye in Alaska, albeit at times negatively, and further development of the industry remains a topic of discussion today.

Support for Agriculture

In all three models, research, instruction, technology transfer and outreach/extension education and general service functions such as, inspection land sales, loan services, and marketing support programs were considered essential. There was a very important reason for this consideration. Climatic conditions in Alaska differ greatly from other agricultural areas of North America. Therefore, direct transfer of technology is usually not practical. Since Alaskan agriculture is a relatively small and developing industry, there is a continuous influx of newcomers, both producers and regulators. Many of these newcomers not only lack the knowledge and skills to succeed in the North, but they must also be convinced that techniques learned "back home" don't necessarily work in Alaska. The Alaskan climate is unforgiving; the growing season is short, the temperatures are extreme, and agricultural operations must be performed correctly and in a timely manner or they fail.

The private sector has never played an important role in providing financial support for agricultural research, technology transfer, or marketing in Alaska. The agricultural industry is not large enough to attract private sector investments. Thus, financial support has come from federal and state governments.

Federal Government

The United States Department of Agriculture (USDA) was established in 1862 to acquire and disseminate information pertinent to national agriculture issues. The Agricultural Research Service (ARS), a branch of USDA, was instrumental in establishing agricultural experiment stations in Alaska during the early 1900s. The purpose of ARS is to conduct agricultural research of national interest while the experiment stations address problems at the local level. Funding for the ARS was withdrawn from Alaska in 1993. However, USDA is still represented by the Natural Resources Conservation Service and the Farm Service Agency. These agencies oversee soil and water conservation programs, government support programs, and farm loans. Although these federal agencies provide some technological assistance to the farm community, their primary functions are to enforce federal policies and to service federal loan and incentive programs.

Federal support is provided to the University of Alaska, the state's land grant university, through federal formula funds. The formulas include such variables as state population, number of acres in agriculture, and farm gate receipts. Federal formula funds received in Alaska are from the Hatch Act (1887) for agricultural research, the McIntyre-Stennis Act (1962) for forestry research, and the Smith-Lever Act (1914) for cooperative extension

services. To receive these funds, states are required to provide matching money to their agricultural experiment stations, forestry research programs and cooperative extension services.

State Government

State government support for agriculture in Alaska has two components. The most direct support is to the Department of Natural Resources, Division of Agriculture. Less direct state funding is to the University of Alaska. Part of the state funding to the university is a required match to receive federal formula funds.

The Alaska Department of Natural Resources, Division of Agriculture

The Division of Agriculture is both an advocacy and a regulatory agency in state government. It advocates agricultural development and provides crop inspection services and marketing assistance to farmers, and maintains seed and plant material collections. The Division was instrumental in establishing the "Alaska Grown" program to promote high quality Alaskan agricultural products. The Division facilitates and conducts sales of state lands for agricultural purposes and administers land contracts. It also manages the Agricultural Revolving Loan Fund (ARLF) established in the 1950s as a 'bank of last resort' for farmers. The Plant Materials Center (PMC) maintains foundation seed blocks to ensure purity of released varieties and to ensure that plant propagation materials are available to meet needs within the state. The state seed laboratory is a part of the PMC. The laboratory determines concentrations of noxious weeds, seed germination, and performs other tests essential for seed certification. Funding for the Division of Agriculture has historically come from state general funds, but for the past two years, approximately \$600,000 for partial operation of the PMC and the Division has been taken from the ARLF; in FY98 that number is closer to \$1 million.

University of Alaska

As a land grant university, the University of Alaska is responsible for providing agricultural research, instruction, technology transfer and outreach/education extension services to the citizens of Alaska. The School of Agriculture and Land Resources Management (SALRM) provides instructional services, the Agricultural and Forestry Experiment Station (AFES) research, and the Alaska Cooperative Extension (ACE) outreach/extension education. All are a part of the University of Alaska Fairbanks (UAF).

SALRM's instruction program offers B.S. and M.S. degrees in Natural Resources Management (NRM). Approximately 1/3 of the students are interested in nontraditional agriculture such as revegetation of minelands and other disturbed soils or bioremediation of oil contaminated soils and superfund sites. Others are interested in horticulture and greenhouse management; and a few are interested in animal science, mainly as a prerequisite for a veterinary medicine degree. Approximately 70 percent of the AFES research budget is for agriculture. This research, with the exception of economics, marketing, and management is carried out predominantly by faculty in the Department of Plant, Animal & Soil Sciences. An estimated 1/3 of the total budget in ACE is spent on agricultural activities. The ACE technology transfer and outreach/extension education programs are delivered in both rural and urban Alaska. The staff of extension agents and program directors provide publications, workshops, and one on one consultation for their clientele.

The three UAF units have non-agricultural as well as agricultural responsibilities. For example, in addition to agriculture, SALRM and AFES faculty conduct research and teach in such areas as forestry, geographic information systems, general resource economics, fisheries economics, natural resources management, recreation management, environmental and wilderness education and management, environmental law, wildlife policy, and resource planning and conflict resolution. Approximately 2/3 of ACE's activities involve social programs and address community, youth and family needs.

Private Sector

The Alaska Farm Bureau is the focus of agricultural promotion and cooperation within the private sector. Its functions are promotion and outreach among rural communities and lobbying at the state and federal level for the agricultural industry. The Alaska Seed Growers Association is also an active farm organization. It promotes certified seed production in Alaska. The Association writes and adopts the seed standards that are enforced by the Division of Agriculture in the seed certification process. The Alaska Horticultural Producers Association advocates for the industry and includes greenhouse and nursery producers as well as others interested in this aspect of agriculture. Garden clubs in urban areas around the state provide beautification but are also strong lobbyists for agriculture. There are numerous groups and associations in Alaska that are specific to animals and products such as sheep, wool, goats, and poultry. Some are affiliated with national organizations. These associations provide specific information to their members and also serve as affective supporters of agriculture in Alaska. Farmers' markets are also an important segment of the private sector. The Tanana Valley Farmers' Market in Fairbanks is the oldest and the only market with a permanent structure. All of these groups operate with minimal funds, in most cases only sufficient to provide operating expenses. There is not a producer tax by farmer organizations in Alaska as there is in other states where agricultural is dominating in the economy.

Implications of State and Federal Investments in Agricultural Services

Of the total \$11.7 million federal and state FY98 budget for the Division of Agriculture, SALRM, AFES, and ACE, 54% (\$6.4 million) is spent for agriculture, and 46% (\$5.3 million) is spent for other human and natural resource related activities (Table 2). The state will contribute \$4.45 million of the 54% and the federal government \$1.91 million to agriculture. The state portion has decreased during the past five years as income was allocated elsewhere. Unrealistically projecting no increase in agricultural cash receipts in 1997-1998, for every dollar in cash value generated by agricultural products (\$26.7 million traditional and \$27.2 million non-traditional¹⁶), the state will spend 8.3 cents and the federal government (including grants and contracts) 3.5 cents; a weighted average of 6.9 cents.

Table 2. FY98 budgets and distribution for state entities involved in agriculture (\$000).						
	University of Alaska Fairbanks		Division of Agriculture			TOTAL
	SALRM	ACE	Division*	ARLF	PMC	
FUNDING SOURCE						
USDA formula funds	1,325	1,000				3,325
Other federal			98		352	449
State general fund	322	2,500				2,822
Interagency receipts†			98		66	164
ARLF			381	538	509	1,428
ASTF	2,650					2,650
Grants & Contracts	1,170					1,170
Program receipts‡			218		14	232
Sales*	450					450
TOTAL	5,897	3,500	795	538	941	11,671
FUNDING DISTRIBUTION						
Agricultural						
Research	2,003					2,003
Instruction	183					183
Outreach/Extension Education	671	1,225			941	2,827
General Services			795			795
Loans				538		538
Total Agricultural	2,851	1,225	795	538	941	6,356
Non-Agricultural						
Research	2,003					2,003
Instruction	367					367
Outreach/Extension Education	671	2,275				2,946
Total Non-Agricultural	3,041	2,275				5,316
TOTAL	5,897	3,500	795	538	941	11,671

- The Division includes the director, inspection programs, land program, contract management, and Natural Resources Conservation (soil and water subdistricts). Federal funding is for inspection programs.
- † Funds received for work completed for other state agencies.
- ‡ Interest for land loans.
- * 1/3 of sales are milk, if milk sales end reduce to \$300,000; remainder are animals, rentals, and miscellaneous.

Alaskan Agriculture—1960 to 1996

Alaskan agriculture from the beginning of statehood to the present is best understood in the context of the three models. Each describes predominant sectors in the agricultural industry in Alaska. Farmers in the baseline support model tend to produce the horticultural crops, hay and potatoes. The high support model depicts the small grain and red meat sectors, the moderate support model the dairy industry (Table 4).

As state financial support decreased substantially in the late 1980s and 1990s, the high support model began to blend with the baseline support model. Farmers began using their

own capital and private and federal loans in addition to state support. In the future, this may also be the case with the moderate support model since land title questions have been resolved. The state continues to release lands for agricultural production. It also continues to provide baseline support services. The ARLF remains the major source of loans for capital investments and operating expenses for farmers in Alaska.

Although the models did not take farm management into consideration, it is significant in influencing successful development in the agricultural industry. Farmers, of course, must remain at the cutting edge of technology to produce crops in the circumpolar north. However, if they cannot manage their farms and their capital investment, technological ability is immaterial. As production becomes more capital and less labor intensive, the management factor will become more important.

Table 4. Percentage of Cash Value by Model and Units in Production

Years	HIGH SUPPORT				MODERATE SUPPORT		BASELINE SUPPORT			
	% of Cash Value	Beef Cattle Nos.	Hog Nos.	Acres in Barley	% of Cash Value	Dairy Cattle Nos.	% of Cash Value	Acres in Hay	Acres in Potatoes	Acres in Vegetables
1960	8.9				53.4		37.9			
1970	15.2				47.1		37.8			
1980	24.1				26.1		49.8			
1990	17.3	2,600	700	5,400	28.9	1,400	53.7	15,100	590	264
1996	24.5	3,100	2,000	6,900	22.3	800	53.1	20,200	630	332
Average	18.0				35.6		46.5			

The High Support Model

Increases in small grain prices contributed to the optimistic outlook in the early 1970s for growth in barley and red meat production. There were substantial state funds from oil development and a desire to diversify the economy to provide some economic support from industries other than oil. The Delta Agricultural Project was conceived to utilize some of this income to expand agriculture in Alaska².

Barley and red meat production began to increase and peaked in 1984 at \$3.6 million (Figure 3). With falling grain prices during the agricultural crises in the mid 1980s and declining state

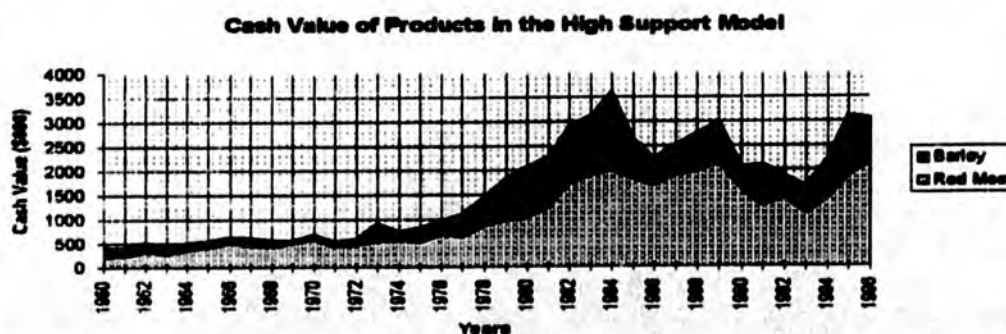


Figure 3. The cash value of barley and red meat from statehood to the present time.

revenues from petroleum, government support for the Delta Agricultural Project collapsed. Funding for infrastructure necessary to move grain efficiently in state and into markets

outside the state was stopped by a state administrative directive in 1984¹⁷. As a result, grain could only move by costly truck transport thus minimizing possibilities for sustained exports.

From 1984 to 1986, the amount of barley produced and its value dropped approximately 68% as farmers left the industry. Some remained, producing for in-state markets. Red meat value only fell 15% and quantity dropped 23% during this period. Falling international prices made it cost effective to import feed grains keeping animal numbers up somewhat. A factor in the drop in red meat was bankruptcy of the Palmer slaughter plant in 1985. It was taken over by the state in 1986 to supply institutional markets. It now supplies some selective markets in the private sector.

There has been relatively steady production of barley since 1976, the year Delta Agricultural Project planning began. Yields per acre have increased as farmers adopted varieties and production practices recommended by researchers. Red meat quality has also improved and feeds now incorporate fishmeal and oilseeds produced in Alaska using diets developed by Alaska's researchers. Beef cattle numbers have increased paralleling increases in barley production. The state has begun to sell and lease lands it owns in the Delta Project. The new farmers have more experience and are better capitalized. Most have adopted the best management practices recommended by researchers for grain production in the circumpolar north. Farmers have also diversified into grass for seed, oilseed crops, and hay, and there are several feedlots for beef cattle. The grain market is still limited to consumption in the state because of limitations in the infrastructure. Because of the potential for expansion in marketing local red meat in the state, a new, private slaughter plant is under construction in Delta.

The positive direction of the model was to bring large blocks of land into production rapidly (over a three- to five-year period), give farmers access to export grain markets, and increase the in-state grain and red meat supply. A major pitfall was the dependence on state administrative policy and legislative action.

The Moderate Support Model

The focus of this model was the dairy industry. Prior to the onset of the Point MacKenzie Agricultural Project², most milk was produced near Palmer and processed by Matanuska Maid in Anchorage. The exception was one private producer/processor near Delta who left the industry in 1978, and one private producer/processor, Northern Lights, in Delta who began operations in 1979. This creamery is now supported by five herds.

State support for the Point MacKenzie Project was in the form of state land sales, capital and operating loans for new farms, and purchase of Matanuska Maid to maintain its operating status¹⁵. As new dairy farms were brought into production at Point MacKenzie, milk production increased. At the peak of production in 1986, Matanuska Maid was still importing milk to meet capacity, however. Northern Lights was operating near capacity with local milk from herds in Delta.

Between 1985 and 1990, milk production far exceeded that in the early 1960s (Figure 5). From 1984 to 1986, the value of milk increased 114%. In 1986, local milk held about 38% of the road and railbelt market. By 1994, this had dropped to 20%, the historic low for the milk industry in Alaska. The cash value of dairy products in 1992-1996 was approximately equal to that in 1960-1965. While state support resulted in a brief spurt of increased milk production, questionable land title resulted in new dairy farmers leaving the industry with the concomitant fall in production of raw milk.

The positive direction of the moderate support model was to bring agricultural lands into production. Capital was also provided to the Anchorage creamery to keep it operating. The

pitfall was questionable land title causing problems for farmers with lending agencies including the state.



Figure 4. The cash value of milk from statehood to the present time.

The Baseline Support Model

This model is represented by the vegetable, potato, and hay segments of Alaska's agricultural industry. There has been little state or federal capital invested in infrastructure with the exception of loans to private entrepreneurs for small scale, specialized operations. State and federal loan programs in combination with private sector financing and personal capital have been used by farmers.

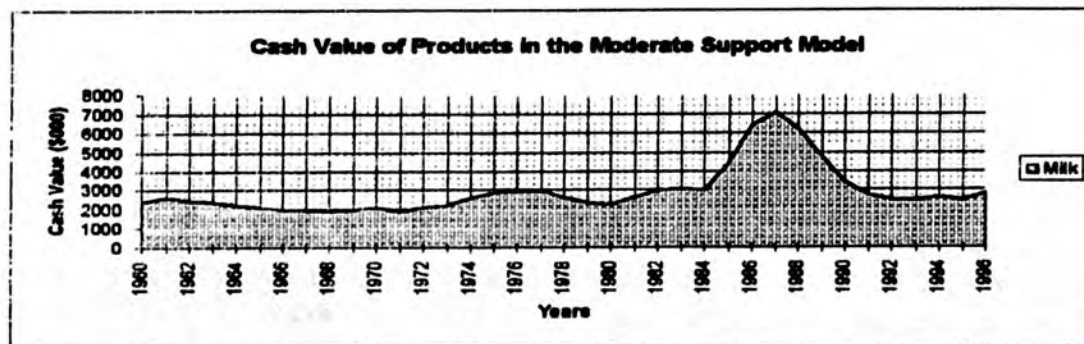


Figure 5. The cash value of hay, vegetables and potatoes from statehood to the present time.

Vegetables

Almost all Alaskan vegetables and potatoes are marketed fresh. The Alaska market is limited by population. There is a lack of infrastructure to export bulk or even container quantities of fresh products although there have been exports of premium priced products in limited quantity into niche markets. In early years, producers tended to react to higher prices and insufficient supply of imported vegetables in the previous year. This resulted in over production and decreased quality. Processing was not feasible in the highly competitive, manufactured food products arena¹⁸. The state Division of Agriculture put substantial effort into the "Alaska Grown" program in the 1980s. This marketing strategy and advertising campaign to promote high quality Alaska agricultural products has had continuing success¹⁹. Increases in cash value continue to follow increases in demand for Alaska vegetables (Figure

6). Improved quality is reflected in increasing prices. Additionally, consumers are willing to pay 10 to 15% more for high quality "Alaska Grown" vegetables²⁰ now available in supermarket chains, specialty stores, and farmers' markets.

Potatoes

Research results have contributed to continuing increases in quality and the varieties of potatoes that can be grown in Alaska. These factors contributed to an overall increase in their appeal to consumers and were a factor in the price paid to producers. After 1986, sharp rises and falls in the potato crop cash value reflect producers entering and leaving the industry. The increasing demand and prices paid for Alaska potatoes were enticing to some farmers looking for new crops and seeking to diversify. In recent years, table potatoes and potato seed have been exported. Those who could not meet the exacting grade standards and continuing consumer demands for a high quality product discontinued production. This trend appears to be reversing (Figure 6) as markets become more stable and producers take more advantage of new varieties and research and extension education efforts.

There is an increasing desire by some farmers to enter the processing arena to realize value-added benefits. At the present time, there is room for expansion in the fresh market particularly in the restaurant and industrial segments. If the restaurant market is to be entered, owners and chefs will have to learn how to use the Alaska potato with its relatively high sugar content. The successful production of a russet adapted to Alaska may also aid market entry. There is a wide array of well-established processed potato products imported into Alaska's retail outlets. To enter this market, Alaskan products would have to command premium prices to cover processing costs unless quantities increase substantially. Aggressive marketing is essential. Premium prices can be obtained, however, in specialty markets where products are differentiated²¹.

Hay

Hay production occupies the largest percentage of land devoted to agricultural crops in Alaska. The average historical yield since statehood is slightly under 1 ton per acre. This compares to an average for dryland production in the northern plains states of 3 - 5 tons per acre depending on variety. Yields in Alaska vary widely by year and are very weather dependent. Dry springs and wet falls contribute to the high risk associated with hay production. The 1996 year provides an example of the dependence of hay on weather. A dry spring and wet fall affected hay harvests. Average hay yields in that year were 0.71 tons per acre. Brome and timothy are the prevalent hay grasses produced in the state. Research is continuing to bring a legume such as alfalfa into the commercial market.

Hay is grown statewide for a variety of markets. It is not an export crop at the present time nor in the near future. On-farm uses include dry hay for animal feed and bedding, and haylage for dairy cattle. Horse owners provide a major off-farm market for Alaskan hay. This market is increasing as quality (consistency in moisture, color, and protein content) improves. The Alaska Agricultural Statistics Service does not report hay sales by market segment nor does it report the number of horses in the state. Estimates available indicate there are more than 10,000 horses. Horse owners import hay. Alfalfa, the hay preferred, is not grown commercially in Alaska and some horse owners portend the quality of Alaska hay is not equal to that produced outside Alaska. Owners of sheep, goats, poultry, and the exotics such as llamas, elk, and buffalo use hay for feed and bedding. Alaska's dog mushers use hay for bedding. Hay and exotic grasses are gaining favor with crafters and weavers.

Hay has made an important contribution to cash value in the baseline support model. From 1960 to the early 1970s, cash value was approximately equal to potatoes (Figure 5). During

the "expansion years" from the mid-1970s through the late 1980s, when red meat production and dairy were promoted, hay cash value exceeded those of potatoes.

Summary and Conclusions

Alaska's agricultural industry has overcome the twin myths that it is alternatively a dead industry and a potential major industry in the state. It is an industry that is sustaining and enjoying modest growth.

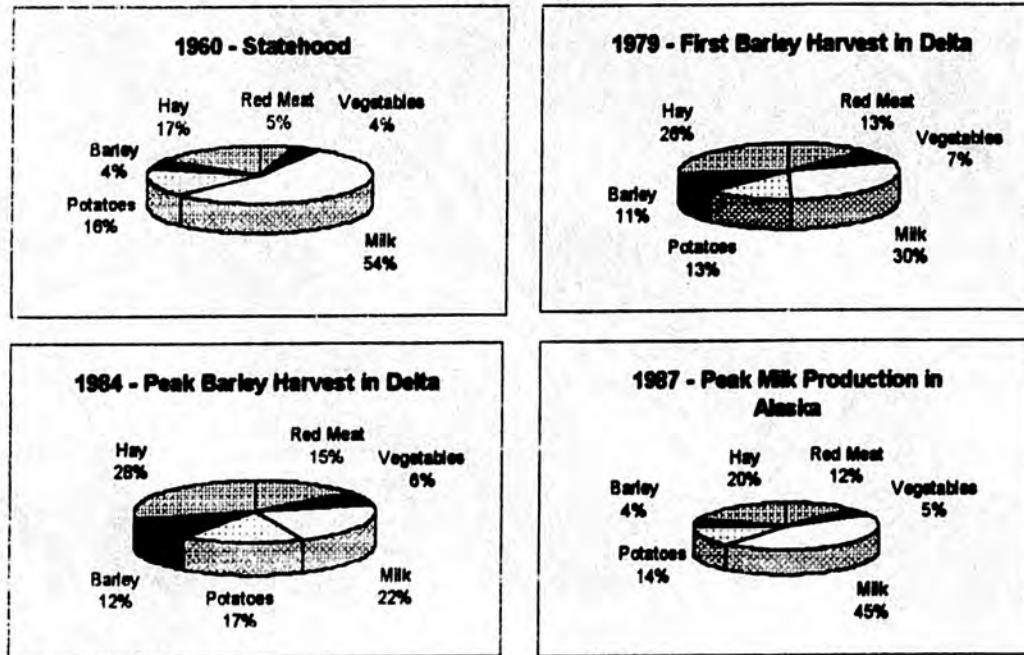
Summary

Alaska's agricultural industry is maturing despite the infrastructural impediment restricting it to regional (Alaska) markets. Farmers and other entrepreneurs have taken advantage of its unique isolation and climate to produce a wide range of products. It has moved from an industry dominated by milk production, typical of circumpolar, isolated regions to one that exhibits diversity in its product mix (Figure 7). This diversity is beyond the traditional perception of agriculture.

Much of Alaska's agricultural industry has nothing to do with production of food and fiber. Alaskan farmers do produce traditional farm products, but they are also involved in seed production, tourism, and raising horses and dogs for work and pleasure. Agriculture in Alaska is also helping improve the environment with research, demonstration, and technology transfer to aid in revegetation and use of waste products.

The high support model drew major attention to agriculture in Alaska. It provided a catalyst for private investment in farms and symbiotic suppliers and processors. It also provided the impetus, voiced by citizens of Alaska, for the state to release more land for agricultural production. Additionally, it made opportunities available for private entrepreneurs that had not existed in the red meat and small grain segments. At the moderate support level, the state was able to keep Matanuska Maid in operation and resolve land title problems. Consequently, the infrastructure is now in place for future expansion in the dairy industry. Given the kick start of the high and moderate support models, the baseline support model now dominates Alaska's agricultural industry.

Federal and state governments provide support to agricultural producers and processors in Alaska. Farmers are eligible for federal support programs and federal loan guarantees. The state of Alaska, Department of Natural Resources, Division of Agriculture provides substantial support in marketing, inspection services, loan programs and outreach and demonstration activities. Farmers still depend heavily on the ARLF for capitalization and operating expenses.



The federal government and the state support the near century old experiment stations in Alaska. They have benefitted Alaska's farmers and provided them with information about the best management practices in traditional and non-traditional agriculture in the circumpolar north. The extension programs in Alaska continue to support this effort. Producers have used the flow of information from the experiment stations to improve production, management and marketing since 1898. Individual farmers do not have the time or the impetus to design or test new technology. There is presently no private infrastructure to provide this support.

Conclusions

The three models, while they do not provide a 'road map' do indicate a trend in the development of Alaska's agricultural industry. They provide a direction for the most effective support. Baseline support for Alaska's agricultural industry is necessary for it to maintain moderate growth that will contribute to the economy of the state and provide a higher percentage of food and fiber for Alaskans.

Figure 6. Alaska's maturing agricultural industry is evident in a changing product mix.

There is no agricultural industry on the planet that is supported totally by private capital. Additionally, because Alaska is a part of the highly industrialized and increasingly service oriented industry of the United States, there is no reason to expect increasing support from the federal government for the expansion of agriculture in the state. Therefore, it is left to the state of Alaska to provide support for its sustaining and moderately expanding agricultural industry.

Role of State Government

There are services that the federal government and the private sector cannot and should not provide. These must be provided by the state of Alaska to Alaska's agricultural industry if it is to sustain moderate growth. The baseline support model is the best example of their effectiveness.

Support for a Sustaining, Moderate Growth Industry

- ◆ If Alaska's industry is to survive, **inspection and aggressive marketing** will be a key factor. The Division of Agriculture must continue to provide marketing assistance and inspection services and continue to work with the Alaska Department of Environmental Conservation to make certain Alaska's food products are safe for consumers and that regulations imposed by the Department of Environmental Conservation allow farmers to continue to operate and market their products in a cost effective and appropriate manner.
- ◆ The Alaska Division of Lands and the Alaska Division of Agriculture have accelerated their **agricultural land sales and lease** program. This must continue. Interest in agriculture is beginning to increase. There is a core of farmers now on the land. Numbers of farms and acreage in farms have to increase to support the necessary infrastructure (transportation, distribution, and manufacturing) to move products efficiently in Alaska and out of Alaska and allow farmers to add value to their products.
- ◆ The **Agricultural Revolving Loan Fund is necessary** and its administration by the Alaska Division of Agriculture insures that the nuances of farm loans are understood. The industry in Alaska is not yet without risk although Alaskan farmers and processors are becoming more sophisticated in their farm, business, and capital management skills. Guarantees of private loans by the U.S. federal farm credit system will provide some risk assurance. Unfortunately, the private banking industry in Alaska does not yet understand the agricultural industry.
- ◆ The **Plant Materials Center is essential** to the industry and must be continued. The PMC in the Alaska Division of Agriculture provides demonstrations and increases and propagates plant materials appropriate for the environment of Alaska and the circumpolar north.
- ◆ The **Agricultural Statistics Service in Alaska should be expanded** to provide more detail about the greenhouse and nursery industry and non-traditional segments of the agricultural industry including subsistence agriculture.
- ◆ **Research, education, technology transfer, and outreach/extension education services must be continued and should be expanded** to include all components of the agricultural industry. The University of Alaska is the states' land grant university. SALRM, AFES and ACE carry out the land grant mission. Both receive formula funds from the U.S. government that are matched by the state government to provide information to the agricultural community of Alaska. Therefore, state support must continue. The information provided by the three UAF units is critical for the agricultural industry and cannot be transferred from the more temperate states.

The services listed above are necessary to sustain a moderate level of expansion in the agricultural industry in Alaska. They are not sufficient to accelerate expansion, however. Should the state of Alaska again become more aggressive in pursuing the expansion of agriculture in Alaska, there is a role it can play. This role is not necessarily as major as that attempted in the high support or moderate support models. It is, interestingly, one the state has not pursued during the time period spanned by the three models.

Support for an Accelerated Growth Industry

- ◆ Provide **preferential rail rates** on the Alaska Railroad for the movement of agricultural products.
- ◆ Provide **preferential highway tax rates** on the Alaska road system for the movement of agricultural products.
- ◆ Expand the Division of Agriculture and formally support "**Alaska Grown**" as a '**state brand**' in Alaska and in a nationwide marketing campaign.
- ◆ **Expand the role of the Agricultural Revolving Loan Fund** by increasing capitalization of the fund, increasing loan limits, and expanding the definition of agriculture to allow processors and non-traditional producers to take advantage of state loans.
- ◆ Encourage communities in the state to provide a **user-friendly environment for agricultural processors**. This could include tax and zoning incentives.

ADDENDUM

Federal and State Support for Alaska's Agricultural Industry

To the uninformed, the phrase "Alaska agriculture" may seem to be an oxymoron. Certainly the Russian colonial agricultural experience in Alaska was not highly successful. On the other hand, a century ago, the U.S. government, continuing a tradition of support for agriculture in the westward expansion of the country, began establishing agricultural experiment stations in Alaska. The first such station was started in Sitka in 1898.

Without question, agricultural expansion in the Territory was fraught with difficulties and the industry witnessed only modest growth. The year following statehood, 1960, saw an industry that recorded only \$3.5 million in cash value of all agricultural products. By 1996, while accounting for less than one percent of the state's revenue resources, agriculture, nevertheless, accounted for \$53.9 million in cash value including reported tradition products and estimated non-traditional products. During that time, the focus of the industry also changed. Whereas milk dominated in the 1960's, today a variety of crops and livestock and non-traditional products (e.g., seed production and revegetation) characterize a market-oriented, diverse industry.

The federal government, later joined by the state government, provided fundamental baseline support for agriculture continuing a 100 year tradition in Alaska. This baseline support includes research, instruction, extension education/outreach and a range of services from inspection to marketing to land sales. Funding for support is primarily to the Alaska Division of Agriculture in the Department of Natural Resources and the University of Alaska Fairbanks. All activities in the Division are related to agriculture. The University carries out other human and resources related activities (47 percent of these funds) pursuant to its land grant mission, as well as agricultural activities (53 percent of these funds).

Has the government investment been justified? One positive indicator is the significant growth of the industry since statehood. Today agriculture is a small, but sustaining, industry providing additional economic diversification to Alaska's economy.

TOTAL FY98 STATE AND FEDERAL BUDGET FOR UAF AND THE DIVISION OF AGRICULTURE*

	UAF**		Division of Agriculture***			TOTAL
	SALRM	ACE	Division	ARLF	PMC	
USDA formula funds	1,325	1,000				2,325
Other federal			98		352	449
State general fund	322	2,500				2,822
Interagency receipts ¹			98		66	164
ARLF			381	538	509	1,428
ASTF	2,650					2,650
Grants & Contracts	1,170					1,170
Program receipts ²			218		14	232
Sales ³	450					450
Total	5,897	3,500	795	538	941	11,671

AGRICULTURAL PORTION OF THE FY98 STATE AND FEDERAL BUDGET

	UAF		Division of Agriculture			TOTAL
	SALRM	ACE	Division*	ARLF	PMC	
Research	2,140					2,003
Instruction	183					183
Outreach/Extension	780	1,225			941	2,827
General Services			795			795
Loans				538		538
Total Agricultural	3,303	1,225	795	538	941	6,356

- * Amounts are in \$,000
- ** School of Agriculture and Land Resource Management (SALRM), Agricultural and Forestry Experiment Station (AFES), and Alaska Cooperative Extension (ACE).
- *** Division Activities, Agricultural Revolving Loan Fund (ARLF), and Plant Materials Center (PMC)

The total state (\$4.45 million) and federal (\$1.91 million) contributions in FY98 are counterbalanced by \$53.9 million in cash value of agricultural products (\$26.7 million in traditional and \$27.2 in nontraditional) assuming, unrealistically no increase in agricultural cash value from 1996. Stated differently, for every dollar of agricultural value generated, the state spends 8.3 cents and the federal government 3.5 cents, a weighted average of 6.9 cents. To wit: less than a dime of government investment yields a dollar cash value in Alaska's agricultural industry.

NOTES

- 1 Gibson, J.R. 1976. *Imperial Russia in Frontier America*. New York, Oxford University Press.
- 2 Planning for the Delta Project began in 1976 (Faris, J.E., and R.J. Hildreth. 1977. Considerations for development - Alaska's agricultural potential. Federal-State Land Use Planning Commission for Alaska, Anchorage. Report 14; Thomas. W.C. 1977. An assessment of Alaska agricultural development. Federal-State Land Use Planning Commission for Alaska, Anchorage. Report 13; and Thomas W.C., C.E. Lewis, F.J. Wooding, D.L. Carney, A.E. Epps, and E.D. Kern. 1977. Potential barley production in the Delta-Clearwater area of interior Alaska. Report to the Legislature, Office of the Governor, State of Alaska.). The first land sale took place in 1978. Parcels ranged in size from 1,800 acres to 3,200 acres, deemed efficient for dry-land grain production by planners. The project was targeted at expanding the red meat and grain industry in the state. The initial 50,000 acres sold was sufficient to export grain and increase the red-meat supply in Alaska to 40% of the total railbelt market.

Planning for Point MacKenzie was completed in 1980 (Lewis, C.E., J.M. Harker, E.L. Arobio, and W.C. Thomas. 1980. Potential milk production in the Point MacKenzie area of southcentral Alaska. Agricultural Experiment Station, University of Alaska, Fairbanks. Bulletin 59). Nineteen parcels targeted for dairy farms were sold in 1983. The idea behind the project was to bolster milk production in south-central Alaska that was decreasing because of the sale of dairy farms at an expanding urban fringe. The objective was to add 3,000 milking cows to the industry supplying up to 60% of the demand of the Matanuska Maid creamery in Anchorage.
- 3 Alaska Rural Development Council. 1974. *Alaska's Agricultural Potential*. University of Alaska Fairbanks, Publication No. 1.
- 4 Kellogg, C.E., and I.J. Nygard. 1951. Exploratory study of the principal soil groups in Alaska. Agricultural Research Administration, USDA, Agriculture Monograph No. 8.
- 5 Statistical information is from the Alaska Agricultural Statistics Service. Agricultural statistics for Alaska have been compiled since 1953 by the Service, a part of the USDA, located in Palmer, Alaska, and funded in part by the Alaska Division of Agriculture, the Alaska Cooperative Extension, and the Agricultural and Forestry Experiment Station.
- 6 The major crops in Alaska's agricultural industry are red-meat (beef and pork), barley, milk, potatoes, vegetables, and hay, and those crops associated with the greenhouse and nursery industry. Minor crops, some listed but most grouped under miscellaneous by the Alaska Statistical Reporting Service include sheep and lamb, poultry and eggs, wool, oats, aquiculture, equine, goats, honey, musk ox, reindeer, other livestock (such as buffalo and elk), forest products, berries, grass seed and other field crops (such as oilseeds). Greenhouse and nursery crops totaled \$18.0 million in 1996. This industry segment has made up approximately 50% of Alaskan agricultural cash value at least since 1977, the first year they were included as a separate item in the agricultural statistics. Miscellaneous products totaled \$2.7 million in 1996. The major products excluding greenhouses and nurseries totaled \$8.9 million in 1996.
- 7 The agricultural statistics do not differentiate between farms and ranches. The two million acres includes a number of large grazing holdings on the Kenai Peninsula

and Kodiak not all of which are used extensively for grazing but rather are used for 'gentlemanly recreation'. From 1955 to 1974, farms and ranches were defined as 10 or more acres and \$50 or more in sales, or \$250 or more in sales. From 1975 to the present, farms and ranches were redefined as those with annual sales of \$1,000 or more to duplicate the definition used by the USDA.

- 8 Brown, D.M., P.S. Holloway, and C.A. Kirts. 1986. A survey of the Alaska greenhouse industry and related enterprises: results and analysis. Agricultural and Forestry Experiment Station, School of Agriculture and Land Resources Management, University of Alaska Fairbanks, Circular 57.
- 9 Information obtained from the Alaska Cooperative Extension, survey 1996.
- 10 The 1933 farm bill defined only wheat as a commodity crop. This list was expanded in 1949 to include feed grains, corn, and sorghum. Commodity crops are defined in each farm bill which began to be considered every 5 years in the late 1950s.
- 11 Program crops are defined by the U.S. farm bills and are those for which farmers receive support and deficiency payments.
- 12 There has not been a nationwide, in-depth assessment of policy in states where the cash value of agricultural products is decreasing and/or the industry has never been an important part of the economy.
- 13 Lewis, C.E., and R.W. Pearson. 1990. Three development models for Alaska's agricultural industry. *Association of Pacific Coast Geographers Yearbook* 52; Pearson, R.W., and C.E. Lewis. 1989. Alaskan Agribusiness: A Post-Statehood Review. *Agribusiness: An International Journal*, 5(4):367-384; Pearson, R.W. and C.E. Lewis. 1990. Transportation and infrastructure: key to successful agricultural development in Alaska. Proceedings of the Western Soil Science Association Conference, Fairbanks, Alaska.
- 14 Lewis, C.E., and W.C. Thomas. 1982. Expanding subarctic agriculture: social, political and economic aspects in Alaska. *Interdisciplinary Science Review*, 7(3):178-187; Thomas W.C. and C.E. Lewis, 1986. Alaska's delta agricultural project: A review and analysis, *Agricultural Administration*, 8, 357; Lewis, C.E., and F.J. Wooding. 1978. Barley production in the Delta-Clearwater area of interior Alaska. Agricultural Experiment Station, University of Alaska. Bulletin 49. Harker, J.M. 1981. *Economic interrelationships within Alaska's developing agricultural industry*. Fairbanks, University of Alaska, Cooperative Extension Service, Report P-42.
- 15 Lewis, C.E., J.M. Harker, E.L. Arobio, and W.C. Thomas. 1980. Potential milk production in the Point MacKenzie area of southcentral Alaska. Agricultural Experiment Station, University of Alaska, Fairbanks. Bulletin 59; Fugelstadt, P., W. Thomas, B. Buxton, and O. Schock. 1985. An economic analysis of fluid milk processing in Alaska. Agricultural and Forestry Experiment Station, University of Alaska, Fairbanks. Bulletin 65.
- 16 The Alaska Agricultural Statistics Service does not report the value for all non-traditional agricultural products. Using only available information on cash values estimated and not reported in the agricultural statistics (conservatively \$20 million for revegetation, \$1 million for the seed industry, and \$700 for 1000 subsistence operations), the total cash value of nontraditional agricultural products in Alaska in 1996 was \$24.6 million.

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- 17 Engelbrecht C.R. and W.C. Thomas, 1987. Agricultural policy implementation in Alaska, *Agricultural Administration and Extension* (26): 75 (1986).
- 18 Little Goldstream Associates. 1981. Vegetable Industry Report, City of Nenana. Contract No. AG - 103; Hayden, A.J. 1983. Accessing the potential for northern latitude vegetable processing. in *Proceedings of the Alaska Agricultural Symposium*, Alaska Division of Agriculture and Cooperative Extension Service, University of Alaska Fairbanks.
- 19 Arobio, E.L. 1989. Alaska grown program. Paper presented at *Buy Alaska* seminar, sponsored by Alaska Department of Commerce and Economic Development, Fairbanks, April 1989; Swanson, R.B., C.E. Lewis, and F.G. Mielke. 1992. Alaska grown: implementation of a positive agricultural policy. *Agroborealis*, 23(1): 54-55.
- 20 Swanson, R.B., C.E. Lewis, and F.G. Mielke. 1992. Alaska grown: implementation of a positive agricultural policy. *Agroborealis*, 23(1): 54-55.
- 21 Swanson, R.B. and C.E. Lewis. 1991. Food acquisition, availability, and allocation in Urban Alaska. *Home Economics Research Journal*, 19 (4): 303-314.

Chapter VIII

Tourism

Tourism has grown in Alaska's economy over the past two decades. As the largest component of foreign exchange in the world (surpassing petroleum) and the largest growing nonessential service sector in the United States, tourism has the potential to add additional wealth to the Alaskan economy in the future.

Visitor expenditures on the way to, from and within Alaska total over 1.6 billion dollars annually. An estimated 72% of direct visitor expenditures in-state and vendor payments in support of prepaid cruise and tour activity enters and circulates within the state. In addition, an unknown percent of profits, capital, taxes and fees circulate in the state.

What Alaskans Want from a Visitor Industry

Alaska residents hold diverse views about the preferred future of the state, and this includes how they feel about the kind of tourism the state should encourage. Some see an opportunity to develop part of the vast lands in Alaska as a mass tourism destination, with several resort communities, and intensive use of some areas for large scale tour products. Others see Alaska as an opportunity to develop small scale, back country adventure tourism, but want to avoid larger scale tourism.

The dynamics of the industry suggests that both types of tourism contribute substantially to the state and that visitors are attracted to both types of experiences. In fact, a hybrid of the two approaches is developing.

Alaskans want to make intelligent decisions in areas where they can guide the direction of tourism growth and benefit from its wealth. This requires us to become smarter about the visitor industry; how it works, how to participate. Unlike many vertical industries, tourism activities are distributed throughout our communities—where we work and where we play. Much information is missing as to the economic, social and environmental impacts of tourism, and the pieces that are available are often fragmented. Individuals who see the entrepreneurial successes in tourism need mentors to show them the way.

How should the State think about the visitor industry? At a minimum, any tourism activity should provide a net benefit to the state or its residents whether that be in income, profit, taxes or social benefits. Economic measures like multiplier effects and leakage are not available in Alaska, but the multiplier for tourism expenditures is likely in the range of 1.2 to 1.7 times. In other states, visitor taxes generated from state-funded promotions return as much as 10-20 times the tax money spent—including only visitors motivated by the promotions.

Visitor spending arrives in the state directly from visitor in-state spending and indirectly from industry payments in support of in-state operations. We need to measure the economic impact of different visitor types accurately. Owner-employee income generated by tourism businesses is not known, but is likely to be significant given the small business structure of the visitor industry.

In a growth mode, the influx of capital may exceed profits that leave the state. Better information is needed before strategic decisions can be made as to where the best return on investment can be made with the state's resources.

Visitor Industry Benefits and Costs

Tourism, like other industries within Alaska, brings a variety of benefits and costs to the State. The most measurable of these is its economic benefits. Tourism contributes to the wealth of Alaska in several ways:

- ♦ through the importation of outside capital in the building of infrastructure (i.e., hotels, lodges, boats, railcars, retail shops, restaurants, visitor attractions, etc.);
- ♦ through the creation of jobs and employee income;
- ♦ through the creation of in-state company profits;
- ♦ through the creation of small businesses which provides owner income, including businesses serving visitors directly and vendors supplying other companies (owner income is not reported to the Department of Labor as wages); and,
- ♦ through the generation of state and local taxes and fees.

Other benefits are less measurable, yet important. Diversified opportunities throughout every region of the state, including rural communities, a clean industry with relatively low environmental pollution, new amenities available to Alaska residents, enhanced transportation networks, and advocacy for environmental protection are important benefits.

Costs associated with the industry include increased maintenance and operating costs of public facilities and utilities. Tourism may also compete with other industries for use of public lands. Social costs include overcrowding, and competition for certain recreational areas. Fortunately, the industry has one of the lowest percentages of nonresident employment in the basic sector—an important factor for many Alaska residents.

How the Alaska Tourism Product is Promoted

Benefits by Visitor Type. The amount of benefit the State enjoys comes from both direct and indirect in-state expenditures made on behalf of each visitor type. Unfortunately, data exists only for direct visitor expenditures by visitor type. For example, the cruise-only visitor has one of the lowest in-state expenditures, while the cruise-tour visitor has one of the highest. Both types are the target of the same campaigns. Many Southeast and Southcentral retail and day-tour businesses are dependent upon the cruise-only visitor, and the tens of millions of direct labor and contractual dollars spent by the cruise ships in support of cruise-only visitors must be counted.

Overall, package tourists account for 57% of all vacationers and contribute 50% of in-state visitor expenditures. How much of package tourist's prepaid expenses enter the state in the form of payments is substantial, but not known. These two figures would have to be added together to see the entire picture.

Independent visitors who buy an in-state tour contribute the highest in-state expenditures. They arrive by air, ferry or highway and cruise ship. Each visitor type has unique spending patterns impacting different locations and each are important to a variety of businesses. Independent visitors who buy tours are 15% of all vacationers but spend 28% of all in-state spending. Pure independent vacationers spend about equal to their numbers, 28% and 24% respectively.

Dependence on Promotion. As a long-haul destination, removed from its major markets, Alaska needs promotion to create and maintain market demand. Without promotion, visitor arrivals would decline significantly, and at a relatively faster and greater rate than say, Washington or Oregon, which are located closer to their primary markets. The private sector invests the majority of promotional dollars in the North American marketplace, which constitutes 93% of Alaska's visitor business. Taking into account only the top two cruise lines and the State ad budgets, the state contributes about one-third of the promotional dollars. Add in the remaining private sector advertising, and the state's share would drop to less than half that amount.

Alaska then, is dependent upon private sector marketing for attracting the majority of its visitors, and the bulk of this spending currently comes from outside cruise lines doing business in the state. Because most companies emphasize the destination rather than their product, their ads convert a substantial number of visitors who buy products other than their own. By way of contrast, the state's campaign is designed to attract all types of visitors equally, as a matter of fairness to taxpayers, and to retain the interest of its diverse, private sector marketing partners.

Future Promotion. It is unlikely that cruise promotions will go away anytime soon. Average annual growth in North American cruise berth capacity has been 7.6% since 1981. Growth outlook for contracted (with shipyards) and planned berths through 1999 is 7.0%. It is likely some existing ships will be replaced by these new ships, but there will still be an increase in capacity. Princess Cruises plans to add a 1,950 berth ship in 1997 and a 2,600 berth ship in 1998. Holland America plans to add a 1,266 berth ship in 1996 and a 1,318 berth ship in 1997. Both lines will maintain their current share of berths in the North American marketplace with these additions.

Season Expansion. Like many other destinations with dramatic seasonal changes, Alaska's visitor industry is seasonal in nature. The distinctions between Summer and non-Summer visitor volumes is a clear one. Likewise, there are differences between the industry "delivery system" that accommodates visitors.

The industry in the summer is geared to handle large numbers of visitors which are delivered primarily by air or cruise ship. Tour companies have large investments in equipment and personnel. Summer products are well-developed and fine-tuned. Products and services of various companies are coordinated into one or more packages available to the visitor. Managers and employees are experienced in providing summer product. Large firms have the capacity to handle volume tourism. A large number of small business products and services depend on the delivery of visitors by large tour companies. Demand often exceeds supply. The visitor experience is often visual, passive and place oriented, and the market is familiar with the product offered.

The traditional summer season is expanding. Through the combined efforts of the cruise lines, who advanced their summer schedules, and the shoreside tour operators who opened early, May has become a significant contributor to the year's visitor count. The best opportunity for expansion of the summer visitor season is to extend the season further into the early part of May, and later into September and early October. Through extended use of basic facilities and personnel, greater revenue will justify the addition of facilities which can be used in the peak of summer.

Contrasting summer, the "off-season" months receive far fewer tourists. The lumping of the fall and spring with winter clouds important distinctions among them. Many Fall and Spring visitors can be attributed to the same motivators as Summer visitors. Fall and Spring offer the opportunity for Summer-type vacations, with some modifications. Winter-oriented tourism is different in kind, and may be available in the more northern latitudes as early as September

and as late as May. Winter tourism will depend on how quickly industry coordination starts providing consistent and reliable product.

Winter tourism can be described as geared to handle independent travelers and small tour groups by air, such as the Japanese Aurora-watchers. Capacity is greater than demand, although attraction and activity products and services are infrequent, new, and often unreliable. Products of individual companies are marketed separately, and not coordinated into a full experience. Managers and staff are inexperienced in providing cold-weather activities on a scheduled basis because of low volume. Innovation and product development will occur through trial and error and growth will depend upon risk-taking. Marketing is more difficult due to the independent nature of the visitor, and the smaller potential market. Importantly, the winter visitor experience is more active and activity-oriented. Alaska's unique winter features offer the greatest opportunity to compete with more developed winter destinations closer to market.

How the Alaska Tourism Product is Sold

The tourism product is sold a variety of ways; prior to arrival by out-of-state firms or by Alaska-based firms, in-state by out-of-state firms, and in-state by Alaska-based firms.

The two highest direct expenditure visitor types include one tour package type—Cruise/Tour visitors, and one independent type—Independents who buy a tour in-state. These two types alone contribute half of all visitor dollars and have the highest per-person per-trip average spending of any travel type in Alaska. Marketing strategies directed toward these visitors should generate additional wealth. These two groups seem to be merging, as cruise passengers are beginning to stay longer in Alaska and buy tours on their own, before going home.

Trends. Visitors are spending more of their trip dollars directly, in-state than ever before, about 42%. A substantial portion is spent on transportation to the State and package visitors buy components before arriving. Visitors are also spending more per trip, even after inflation is taken into account. The largest in-state spending increase is in day and overnight tours. This is encouraging new business development in the tour field.

Competitive cruise and air fares have made it cheaper to get to Alaska. This competitive trend is likely to continue and should benefit the volume of all visitor types.

A high percentage of Alaska promotion is taken up by the private sector's large outside firms, and there is significant conversion of independent visitors by these promotions. It would be difficult to replace these substantial promotional dollars from within the smaller tourism businesses within the state.

Native corporations are developing an increased interest in entering the visitor industry. They are an important potential resource for the expansion of tourism development in Alaska. Native corporations possess major land-holdings throughout the state and have the potential for making additional land selections or trades which could have characteristics which meet the criteria for tourism development. Many of these lands are adjacent to National and State Parks and Preserves. Use of these lands would provide investment opportunities both for the corporations themselves, and to co-venturing developers and operators.

A Need for Access to Public Lands

Two key issues affecting the visitor industry in Alaska are the lack of sufficient mobility within the state, and lack of commercial access to public lands.

The limited highway network, limited capacity of the ferry system, and reliance on air travel represent a constraint on the full enjoyment of Alaska's tourism resources. A reliable transportation network is crucial to successful tourism development of Alaska's 367.7 million acres of land area, 105.2 million are managed by the state, 43.7 million by native interests, and 216.5 divided by federal agencies.

A perception is held that with vast areas of land managed by agencies in the interest of state or national residents, the very public is restrained from the enjoyment these public lands represent.

Each of the land agencies has a different mandate for managing the resources entrusted to it. Federal agencies are slow to open up the state's recreation resources for commercial use. On the other hand, these agencies are successful in funding projects that state government could not address. While some agencies have a mandate to provide for recreational pursuits, others limit them in order to protect aspects of the natural environment. Considering the extent of the land area each of these agencies manage in Alaska, it is inconceivable that the same management principles must apply to all of their lands, and that certain areas could not be opened up for commercial tourism use under certain conditions.

Some of the state's recreational resources are already crowded and could expand their capacities only at considerable cost. Industry and government will have to invest more for each new activity-hour added to the state's present capacity.

At peak season, tourism already strains some ports-of-call, transportation systems, and visitor-serving facilities. Future expansion of visitation will require continued expansion of the season, a parallel expansion of the state's infrastructure, and the development of new visitor destinations and attractions. This added demand for private investment to facilitate steady growth in tourism suggests exploration of visitor markets that would be less capital intensive. Such as the more labor-intensive travel markets with emphasis on soft-adventure and ecoadventures. It might also require the further consolidation of visitors and more intensive use of certain resources.

Wherever tourism requires the expenditure of public funds resistance can be remedied by planning for public improvements that serve both visitors and the resident community.

Criteria for Successful Tourism

All successful visitor destinations have some basic qualities. If Alaska is to expand its tourism, it must meet some basic criteria and criteria that are particular to its own position in the market place, its resources and its life style. In charting a path for the industry, the following criteria will have to be kept in mind.

- ◆ Vacation experiences in Alaska must be responsive to the expectations of the market. For example, independent travelers who buy in-state tours appear to be of highest value. However they comprise only 15% of the current market. This market segment has growth potential and should be expanded. The cruise tour market is almost of the same value on a per trip basis. It too should be expanded. A portion of the cruise-only segment is beginning to add on in-state tours. This trend should be encouraged.

- ◆ The industry must remain competitive in both the experience and in price. It is essentially up to the industry to ensure a quality product, and remain price competitive with alternative destinations, however certain public infrastructure such as roads, airports, and other public services must be upgraded and maintained to handle the traffic.
- ◆ There must be an effective collaboration of public and private interests. Both marketing and product development will require cooperation. The state cannot take on the private sector's ability to promote the destination, but it can provide the structure for cooperative ventures, and some products will require reasonable access to state lands.
- ◆ Tourism must provide significant net benefits to the state's economy and it must complement the state's other industries.
- ◆ Growth in the industry will require that public agencies develop the ability to provide, maintain, and manage facilities, services and systems that tourism needs for success.
- ◆ Alaska will have to offer both the security and comforts of pre-planned (supervised) vacations, and the freedom and flexibility associated with independent travel.
- ◆ Alaska will have to adopt hospitality as a potential livelihood for many of its residents. Hospitality is an attitude that starts with education at several levels. Native corporations might find it beneficial to work with shareholders in developing small business opportunities, loans, or training for local and rural tourism developments. Schools should include a knowledge of the industry and its opportunities in its curricula.
- ◆ Residents must learn to think about tourists as guests, and to think of themselves as their hosts.
- ◆ Local and state agencies must learn to welcome and accommodate visitors as important contributors to Alaska's economy.
- ◆ Federal agencies must learn to identify with the state's interests while carrying out their national responsibilities in Alaska.

Competitive Product Opportunities

Alaska is a relatively remote destination. It is far from major population concentrations, and it takes some planning and means to spend a vacation in the 49th state. But Alaska also has some qualities that provide it with a competitive edge. The state has a rich native heritage, it has an abundance of unique wildlife, it includes vast virgin territories, and it offers true wildland experiences. Increasing worldwide interest in learning about native cultures and the natural environment, and the fascination with wildland experiences, can be the basis for additional wealth.

Wildlife Viewing. It is evident that the visitor industry has a primary interest in preserving and expanding opportunities for wildlife viewing in Alaska. The Provinces of British Columbia and Alberta are way ahead of the 49th state in this regard, and Alaska must make an effort to catch up with its neighbor competitors for the wildlife viewing visitor dollar. The industry

can do something about this in three specific ways: by working with public agencies in making wildlife viewing more accessible; through added funding of the Watchable Wildlife Program in Alaska, and by helping protect wildlife and their habitats.

Wildland Touring. Often called natural history tourism, adventure travel, soft adventure, ecotourism, or specialty travel, wildland tours are of growing interest among an increasingly urbanized U.S., European, and Asian population. The visitor industry will benefit economically it expands and improves the commercial potential of wildland touring. The characteristics of wildland touring make it especially appealing as an option for Alaska.

- ◆ It is labor intensive, requiring higher ratios of employees to clients than do urban and mid-country tours.
- ◆ Revenues are high relative to the volume of visitors accommodated.
- ◆ It effects extensive rather than intensive use of the environment, consisting of small groups in response to environmental and aesthetic concerns.
- ◆ Start up costs are relatively low and allow for many small, entrepreneurial businesses, which are conducive to rural resident lifestyle and temperament.
- ◆ Economies of scale in marketing will require coordination among several specialty tour firms in creating a full vacation experience.
- ◆ It fosters coordination with larger companies who can efficiently deliver clients and who stand to gain from the addition of experiences they are not prepared to operate.

Increasing Alaska's capacity for added outdoor recreation through "ecotourism" will require more coordination and collaboration between public agencies and the visitor-serving business community. To serve its clients, these businesses will require extensive use of public lands which may encroach upon the recreational lands of residents. More land will be needed to keep small groups from imposing upon each others wilderness experiences.

Another opportunity is to appeal to those visitors wish to explore Alaska's treasure of native culture and art. This is generally an urban based activity, and its success will depend on organizing the vast wealth of artifacts, art, and history and in developing the quality of the presentation in a manner in which the visitor can absorb it.

Modern History of the Alaska Visitor Industry

The Early Years. The tourism industry is not a new industry in Alaska. Sightseers have been coming to Alaska for over 100 years. Travelers discovered Alaska soon after it became a United States possession. Explorer/naturalist John Muir, and missionary/government agent Sheldon Jackson promoted the region in their written accounts, inspiring visitors northward. The Gold Rush of 1889 and the Harriman Expedition of 1899 provided a big break for Alaska tourism. With completion of the White Pass & Yukon Route, tourists could travel more comfortably into the North Country.

The Turn of the Century. The early 1900s brought competition among steamship companies and itineraries began to feature Southcentral Alaska and Nome. Completion of the Richardson Highway and the Alaska Railroad brought new tour options for the traveler.

Few independent travelers were among these early travelers. Leaving the tour risked losing a berth on a Seattle-bound steamship.

The Great Depression/ WWII. The Great depression resulted in a sharp downturn tourism to Alaska however by 1933 the industry recovered and began making strong gains. Interest was rekindled in steamer travel to Nome and the Bering Sea during these years, and the introduction of air travel proved popular for flightseeing. The highway to Alaska originally proposed by tourism boosters in the late 1920s was built to meet a military need.

The Post War Years. In 1945 the Alaska Development Board was created. Governor Gruening announced, "The tourism industry will be bigger than the \$50 million salmon industry. Our job is to prepare for tourists, and not turn them away with the excuse that we have no accommodations. If necessary, we must take visitors into our home and make them feel welcome..."

Entrepreneurs were instrumental in restarting the tourism industry after the war, building the basis for large package tour operators in Alaska today. A shortage of lodging facilities prompted the development of new hotels.

Attitudes towards tourism were mixed in these early post-war years. Many old-timers didn't see the value in the tourism industry and really didn't care. In 1950 the Alaska Visitors Association was established to act as an industry trade association and create positive public awareness of the value of the visitor industry.

The Alaska Highway replaced the Yukon River as a means to reach interior Alaska. Air travel increased, and tour packages began including air transportation to and from Alaska. In 1957 the first ship since the early part of the century to cater exclusively to tourists sailed the inside passage and the modern cruise industry was born.

Alaska Statehood. Independent travelers began to show up in ever-increasing numbers. The formation of the Alaska Marine Highway System in 1963 did much to attract the independent traveler. The Division of Tourism was formed in 1959. By 1972, Westours had become the largest vertically-integrated tour operator in Alaska. Princess Cruises and the television show "Love Boat" popularized cruising and helped launch the growth of the cruise industry worldwide. In 1975 the Alaska Visitors Association and the Division of Tourism formed the cooperative marketing program.

The 1980s Boom. By the 1980s Alaska had become a premier vacation destination, competing with Europe and Hawaii for visitors. The 1980s saw strong growth, fueled by television advertising on a national scale and increases in cruise ship and hotel capacity. Niche markets brought about the introduction of small cruise ship travel, which visited more remote locations. Restructuring of the airline industry resulted in Alaska being well-served by four major domestic carriers and a few domestic charter operators. Several international carriers used Anchorage as a refueling stop, but available seats to Alaska limited the growth of the international market. Independent travelers had more choices and saw improved opportunities, including the paving of the Alaska Highway.

Tourism Today. Today, the tourism industry is marked by diversity. Travel choices range from completely independent itineraries arranged by the traveler to highly structured package tours. Product offerings include everything from the luxury of a cruise to adventure travel such as kayaking, sport fishing, and wildlife safaris. Salmon bakes, flightseeing, riverboat cruises, train rides, canoe trips, river rafting, horse trekking and much more tempt the visitor. The industry remains seasonal, with over two-thirds of all visitors arriving in the state during the peak season months of May through September.

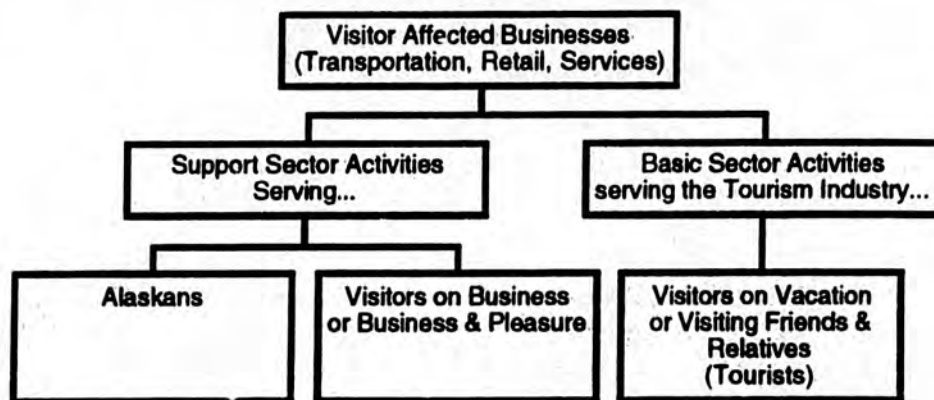
Tourism as a Part of the Basic Sector

Alaska's economy is a composite of government and industry activities which generate income for the state's residents and others. Tourism is one component of the basic sector of the economy that includes the production of seafood, oil and gas, minerals and timber, military activity and management of federal interests in Alaska.

A basic industry is one that sells goods and services to markets outside the local area (Alaska), drawing income from outside the community. The oil industry is an example of a basic industry. A support industry is one that meets local needs, such as the health care industry.

Not all the visitor industry is basic industry, but the tourism industry is. Tourism in Alaska is a basic industry because it sells a commodity, Alaska's scenery, wildlife, and heritage, to a nonresident market. This distinction is important because although the visitor industry is larger than the tourism industry, only the tourism industry can be compared with other basic industries, such as seafood, oil, and federal government.

Tourism's Role In The Visitor Industry and Alaska's Economy



The tourism industry is that part of the visitor industry which serves nonresident pleasure visitors, more commonly known as tourists. Not all visitors are tourists—the visitor industry serves all kinds of visitors, including those traveling on business. Basic industries like seafood, oil, and government are responsible for most of the business travel to Alaska. For business visitors, the visitor industry is fulfilling a support sector function, not a basic industry function. The tourism industry serves only those traveling for pleasure—primarily vacationers and those visiting friends and relatives. The tourism industry is a basic industry because it exports both a product (the Alaska mystique) and a service (the means to experience Alaska) to the outside world.

Tourism's Place in the Alaskan Economy

Tourism is often unrecognized as a basic industry because it is largely composed of support sector businesses: providers of transportation services, retail businesses, hotels and restaurants, and others. These businesses serve residents and visitors alike, so employment in the transportation sector for example cannot all be attributed to tourism. No government agency measures employment or payroll in the tourism industry, only in its component parts.

It is the interindustry relationship that prevents inclusion of the visitor industry in most economic analysis of Alaska. What is not collected is how much of the employment is due to tourists. A 1991 Alaska Visitor Industry Business made it possible to estimate how much of their employment is due to nonresident visitors and more specifically, due to tourists.

Tourists account for about three quarters of the nonresident sales in the transportation sector, about two-thirds in the retail sector and eighty-five percent in the service sector.

Alaska's Visitor Industry and Tourism Related Employment and Payroll By Economic Sector (1990)				
Economic Sector	Visitor Industry Employment	Tourism Employment	Visitor Industry Payroll (\$millions)	Tourism Payroll (\$millions)
Transportation	3,518	2,667	\$103	\$78
Retail	4,993	3,341	69	46
Services	5,011	4,280	72	62
Total	13,522	10,288	\$244	\$186

Jobs, Income, and Taxes

Number of Jobs. The annual equivalent of 13,500 workers were employed in 1991 in Alaska's visitor industry earning an estimated \$244 million in annual payroll. These totals do not include the approximately 10,000 cruise ship or employment generated by traveling Alaskans. Employment as a result of intra-state travel was estimated in 1991 as approximately 8,200 jobs statewide. Tourism generated an estimated annual equivalent of 10,300 jobs for a 1991 annual payroll of \$186 million.

Based on employment, tourism is Alaska's second largest basic industry in the private sector, after the seafood industry. Among all basic industries in Alaska tourism is the third largest following the seafood industry and the military.

Nonresident Component. In Alaska's private sector over one quarter of all workers are nonresident (27%). The nonresident component in the visitor industry, is less than 20%. Visitor-related industries are responsible for proportionately less economic leakage than Alaska's other basic industries.

The tourism industry is indirectly responsible for economic activity—employment and income in Alaska's infrastructure and support sectors. The Alaska economy as a whole has to date not been modeled accurately enough to make estimates of indirect impacts for any basic industry in Alaska.

Taxes, Fees and Other Revenues

Tax revenues from tourists are lower than they otherwise might be since tax bases are fewer, and tax rates are lower in Alaska than U. S. norms. Alaska collects no personal income or statewide sales tax. Some municipalities collect sales taxes, but Anchorage and Fairbanks, two of the most visited communities in Alaska, do not.

In 1994-1995 visitors directly and indirectly generated approximately \$124 million in state and local government revenues. On average, every visitor to Alaska generated \$110 in taxes,

fees and other revenues, including \$62 in state revenues and \$48 in local government revenue. Tourists comprised 75% of the total, generating \$93 million in government revenues.

Visitors account for a wide variety of tax and user fee revenues. At the state level, these revenues include:

- ♦ corporate income taxes paid by visitor industry businesses
- ♦ Alaska Marine Highway revenues
- ♦ gas and aviation fuel taxes
- ♦ a variety of fees including business license fees, museum admission fees, hunting and fishing permit fees and others.

Local government revenues from visitor spending include:

- ♦ sales taxes on visitor spending
- ♦ property tax revenues
- ♦ bed tax revenues
- ♦ cruise ship moorage fees

Alaska State Taxes, Fees & Other Revenues Generated by the Visitor Industry 1992 vs 1995			
Revenue Item	1992 Estimate	1995 Estimate	Percent Change
Fees	8,288,000	13,461,800	62%
Taxes	6,727,000	13,401,200	99%
Other Revenues	36,954,000	39,230,600	6%
Total	51,969,000	66,093,600	27%

Alaska State Taxes, Fees & Other Revenues Per Visitor 1992 vs 1995		
	1992 Per Visitor Total	1995 Per Visitor Total
Fees	\$8.64	\$11.91
Taxes	7.01	11.85
Other Revenues	38.54	34.71
Total	\$54.19	\$58.47

Visitor revenues to the state are growing faster than visitor arrivals. Comparing the same revenue sources, visitor arrivals have increased 18%, fees have increased 62%, taxes have increased 99% and other revenues have increased 6% over the three year period.

The Competitive Environment

Alaska's Ranking Among Top Visitor Destinations. An important indicator of any destination's tourism potential is its ranking by consumers as a desirable place to visit. On a variety of scales, Alaska performs well against its major competitors—Europe, Hawaii, Australia, and the Caribbean. The *Travel Industry Association of America's* survey shows Alaska in the top ten preferred summer destinations on a consistent basis. A *New York Times* poll recently ranked Alaska fifth in all destinations for a fantasy vacation. And a

Longwoods Travel USA survey in 1994 showed Top-of-Mind awareness of Alaska at 21% among America's 150 million traveling households. This is compared with other destinations like Florida at 27%, Hawaii at 25%, the Caribbean at 28%, Europe at 37% and Asia Pacific destinations at 23%.

Alaska's biggest challenge is to convert that awareness into visits. Consumer intentions to visit within two years falls dramatically short of the 21% awareness levels to 7% who intend to visit in two years. This drop is more severe than for Alaska's most important competitors, even those further away from the U.S. market. The state must focus its efforts on closing the sales with these predisposed travelers. Presently, it does so through cooperation with the private sector who have product to sell. The generation of names for industry direct-marketing has been very successful, but mostly with the larger firms that use direct mail successfully. A way must be found for the small operator to efficiently reach these predisposed travelers.

Promotional Expenditures. Alaska's competing destinations take tourism seriously, if investing in promotion is any indication. Aside from the millions of dollars spent by the private sector, European government agencies spend over \$770 million annually attracting visitors. Twenty-three Caribbean nations spend over \$165 million annually, and remote but exotic Australia spends \$100 million in the United States annually attracting about one-third the number of tourists Alaska receives. Closer to home, Hawaii spends over \$25 million, and Canada's combined national and provincial spending is close to \$100 million. Alaska spends \$3.9 million through ATMC and \$2.9 million through the Division of Tourism for a total of almost \$7 million.

Alaska's Division of Tourism. The Division of Tourism within DCED is the state agency primarily responsible for tourism development. DOT promotes in international markets (approximately six percent of total tourists), fulfills more than 170,000 requests for information annually, and represents Alaska at consumer and trade shows in the U.S. and overseas. The Division also compiles visitor research, provides assistance to tourism businesses, and markets Alaska as a film production location. The DOT places emphasis on the development of rural tourism and travel by the Alaska Highway.

Alaska Tourism Marketing Council. The Alaska Tourism Marketing Council is a public corporation created through a cooperative agreement between the State and the private sector and governed by a 21-member Board of Directors. ATMC's primary goal is to attract visitors from the U.S. and Canada through a targeted national advertising and public relations program. Alaska is promoted in its entirety. Concentrating promotion on a single message helps penetrate the clutter of advertising messages that bombard people daily. This focus is important as Alaska strives to keep pace with competing destinations. A key element of success in executing Alaska's 20 year-old cooperative marketing program is ATMC's focus on creating opportunities for specific regions of the state, market segments, and private businesses to participate in the program, financially, editorially, and with proprietary advertising that reaches millions of viewers, and hundreds of thousands of high potential visitors.

Other Tourism Agencies. In addition to the DOT and ATMC, other public and private agencies focus on developing the tourism industry. The Alaska Visitors Association is a statewide nonprofit trade association with a broad spectrum of industry members. AVA provides a unifying voice for the industry on policy issues, lobbying, and cooperative marketing. AVA is a partner in the formation of the ATMC and raises the private sector cooperative marketing funds. AVA's four goals are to attract visitors, educate the industry and public on tourism, encourage business development, and support its members.

There are several Destination Marketing Organizations that focus on a specific region of Alaska or market segment. They include Tourism North, Alaska's Southwest, Kenai Peninsula Tourism Marketing Council, Alaska Native Tourism Council, Prince William Sound Tourism Coalition, Southeast Alaska Tourism Council and the Alaska Wilderness Recreation and Tourism Association. They are typically funded through membership dues, government grants and cooperative marketing ventures.

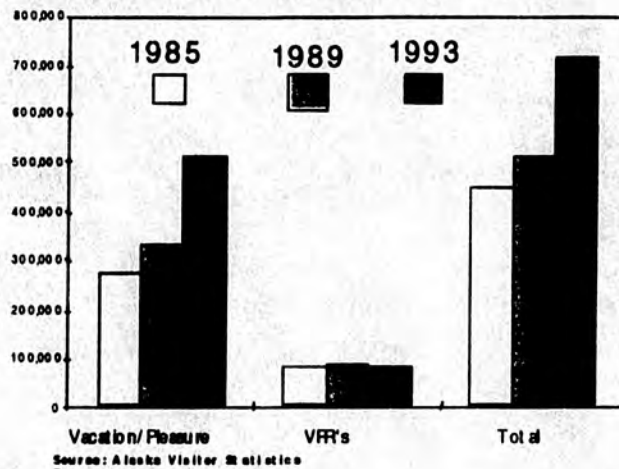
There are also local visitor organizations which focus on a single location in Alaska. They promote, operate visitor centers, and attract meetings and conventions. They usually take the form of a Chamber of Commerce or Convention and Visitors Bureau and are typically funded through accommodation taxes or other local sales taxes. A 1990 survey by DOT found that 17 convention and visitor bureaus employed 95 workers, and had annual budgets totaling \$7.4 million.

Alaska's Visitor Profile

Mode of Travel. Cruise ship visitor volumes have increase most dramatically since 1989, as a result of increased vessel capacity and new cruise line entries into the market. Domestic air visitors had the second largest overall increase. International air visitor arrivals have decreased steadily since 1990, and Marine Highway traffic has remained stable due to a consistent fleet capacity. Highway traffic has been somewhat volatile, but posted a 5.3% annual increase since 1989.

Full-year Visitor Arrivals Summary By Economic Sector & Trip Purpose (sampled arrivals only) Summer 1993 and Fall/Winter 1993-1994		
Trip Purpose	Full Year 1993-94	Full Year % Change 1989-90 to 1993-94*
Basic Sector (Tourists)		
Vacation/Pleasure	622,400	+73.4%
Visiting Friends & Relatives	129,600	-6.9
Support Sector (Other Visitors)		
Business & Pleasure	74,800	+1.9
Business Only	175,800	+27.1
Seasonal Worker	17,800	-52.5
*Full-year sample for 1989-90 was June 1989 to May 1990. The full-year sample for 1993-1994 was May 1993 to April 1994. Source—Alaska Visitor Statistics Program FWS Arrivals 1993-94.		

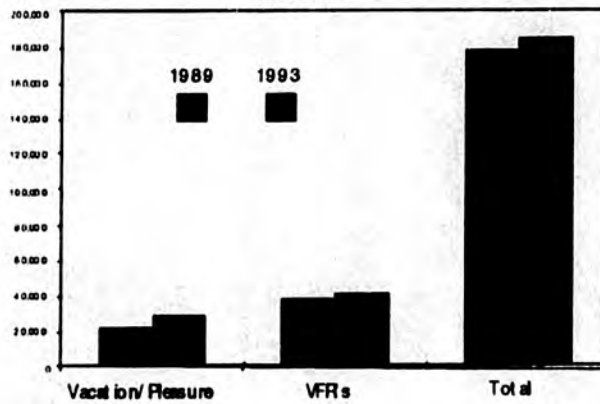
Summer Tourist and Total Visitor Growth 1985 to



Trip Purpose. In Summer (June-September) 1995, 82% of visitors were tourists, that is, vacationing or visiting friends and relatives. The vacation market increased about 66% since 1989, an average of 9% per year. Visiting friends and relatives increased only 2.1% since 1989.

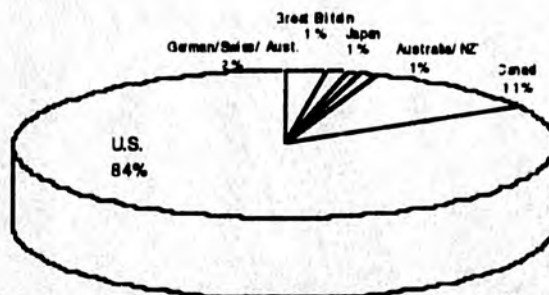
In the Fall, Winter, and Spring season, only 38% of visitors were tourists, with 15% being vacationers, and 23% visiting friends and relatives. The vacation market increased 31% since 1989-90, an average of 5.6% annually. Visiting friends and relatives grew by 15% or about 3% annually.

Fall-Winter-Spring Tourist and Total Visitor 1989 to



Visitor Expenditures.

Vacationers represented 71% of all Summer visitors and account for 78% of all spending in Summer, 1993. They account for just 13% of spending in the Fall, Winter and Spring season. Visiting friends & relatives account for 12% of visitor arrivals in Summer and contributed 8% of all spending. VFR's contribute 9% of spending in FWS. Combined, tourists accounted for 83% of visitors and 86% of visitor spending in summer and just 22% of spending in Fall, Winter and Spring. Vacationers are the driving force behind the volume and growth of the tourist market.

Basic Sector "Tourist" Volume by Origin
Full Year 1993-94

Source: Alaska Visitor Statistics Program

Visitor Origins. Eight out of ten visitors to Alaska came from the United States in 1993—unchanged since 1989. The international market share is unchanged at six percent. In spite of direct efforts by the Division of Tourism, the overseas markets have not increased their share. Industry has less interest in overseas markets because of the larger expense in promoting to them, and the instability of direct air lift into Alaska from Asia and Europe.

National Travel Trends

There are specific national market trends and visitor motivators— fundamentals that drive the U.S. pleasure travel market now and in the near future.

Some trends will benefit travel to Alaska:

- ◆ Travelers want "life-enriching vacations"—educational, historical, outdoor or natural. Ecological vacations are the fastest growing travel segment.
- ◆ America is getting older. The over 50 population account for 80% of all leisure travel. Grandparent travel with children is up.
- ◆ Travelers today are more stressed out. Almost 50% just want to sleep.
- ◆ In-bound International travel is booming.
- ◆ Overnight trips are increasing as a percent of market share.
- ◆ Travelers are going where they expect their values to be met.
- ◆ Travelers are trying to slow down their exposure to change.

Other trends present a challenge to Alaska travel:

- ◆ More frequent, short vacations, closer to home will be popular to save time and money.
- ◆ More Americans travel by car—80% of domestic travel is by car.
- ◆ Several trends present opportunities to Alaska depending on our actions:
- ◆ By the year 2012, 70% of all Americans may be self-employed.
- ◆ Total air travel will double by the year 2005 if it continues at the current rate.
- ◆ Interactive home shopping is expected to become a major source of travel bookings before the end of the century according to the travel trade.
- ◆ The fax and Internet are now effective marketing tools.
- ◆ Loyalty programs work harder than ever.
- ◆ Travel is the largest and fastest growing nonsurvival retail industry in the U.S.
- ◆ Visits with family and friends are increasing share of market.
- ◆ Family travel is increasing share of market.
- ◆ Families are looking for "bonded leisure."
- ◆ Travelers are looking for good value for their money.

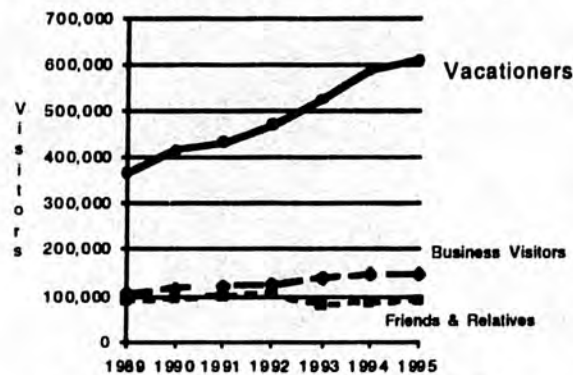
Alaska's Visitor Trends

Clearly, the vacationer contributes the bulk of growth to the tourism industry with a growth rate of 66% since 1989. Friends and relatives grew by 2.1% during the same period. There was a 26% increase in per-person per-trip expenditures and a 73% increase in total expenditures from Summer 1989 to Summer 1993.

Alaska visitor trip planning time lines are stable.

Length of stay for vacationers is stable but friend-and-relative stays are getting shorter.

Summer Visitor Arrivals by Type 1989-95



Source: Alaska Visitor Statistics Program - Summer is June through September

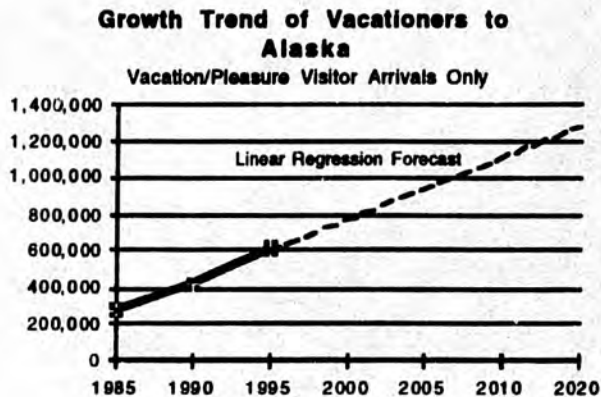
As the industry grows, each region of Alaska captures a similar share of the market with the exception of the Interior/Far North, which is losing share in spite of steady growth.

Visitor satisfaction and value for the money ratings are very high, although they recently declined slightly. Evidence points to the more critical scoring by baby-boomers whose expectations are different from their parents who dominate the visitor population. To address these different expectations product changes are being undertaken by the industry.

Growth Projections—Population & Visitors to 2000

Vacationers to 2000. Assuming the trends shown in the chart below continue, a sizable future increase in the number of U.S. vacationing households can be projected throughout the turn of the century.

Number of U.S. Vacationing Householders (for all households and selected types, in thousands)			
	Number of HHs in 1993	Number of HHs in 2000	% Change 1993-2000
All U.S. Householders	96,391.00	110,143.00	13.60
-Domestic Vacationers	33,777.00	38,845.00	15.00
- 5+ nights away	13,484.00	15,596.00	15.70
- Travel by car	23,963.00	27,391.00	14.30
- Travel by air	11,842.00	13,920.00	17.20
-Foreign Vacationers	11,882.00	13,920.00	17.20
Source—Data by Mediarnark Research Inc.; projections by American Demographics— from ATMC Marketing Plan 1995-2000, October 14, 1994.			



Visitor Arrival Growth Projections.

While total visitor arrivals have already passed the 1.1 million mark, the dynamic component of the tourism industry—vacationers, has yet to reach 700,000. If growth of these visitors continues, we can expect to break one million in the year 2006. Visitor expenditures are likely to grow faster based on recent trends explained above.

Conclusion

Alaskans have available to them a growing visitor industry that can provide jobs and careers while maintaining a pleasant lifestyle, but much of the knowledge and training that can make it happen is missing or hard to find. The entrepreneurial nature of the business tends to reward the self-taught and self-motivated.

Visitors of several types come to Alaska and contribute to the economy in different ways and in different sectors of the industry. Cruise/tour visitors and Independents who buy tours instate are among the most valuable and should be cultivated. The state depends heavily on private sector promotions to bring visitors to Alaska yet provides a vital role in structuring cooperative promotions.

The future of tourism as a contributor to the basic sector of Alaska's economy will depend on additional access to public land resources. Expansion of tourism will require both intensive and extensive use of public lands.

Tourism growth will require substantial capital, both from outside, and in-state, principally from the diversification of native-held investments. In many cases, public infrastructure development in the form of roads, ports, and other public amenities will need to find funding.

Talented practitioners are a critical element to the success of tourism in Alaska. Corporate skills will be needed to craft resort developments that cater to the cruise/tour market. Entrepreneurial talent will be especially in demand to develop new in-state tours for the independent market.

Recommendations

A number of first steps should be taken at once.

6. The state should measure the economic impact of different visitor types to Alaska, including direct visitor spending, industry spending in support of visitors, owner-employee income generated by tourism businesses, the investment of outside capital, and the retention of profits within the state. [The state needs to find out which travelers are contributing the most to Alaska, and devise strategies to increase their numbers.]
7. The state should maintain a business environment that encourages strong private sector marketing of the Alaska product and keeps the state government's

contribution to marketing proportionately low. The state should facilitate public private cooperative marketing which creates efficiencies for the marketing partners. [The state should make sure the large players stay in the game or it will have to make up the difference in overall destination marketing to insure a growing visitor count.]

8. The visitor industry must work harder to extend the summer season an additional four to six weeks, and create a measurable increase in the winter niche market in order to justify investment in new facilities needed for the summer.
9. The state should establish an assistance program for winter tourism business development.
10. Native corporations should aggressively enter the tourism business by making strategic alliances with existing tour operators and by opening up their land holdings for new tourism infrastructure.
11. The state should review their capital investment and operating budgets with a view toward including infrastructure construction and maintenance strategically needed to facilitate the movement of visitors throughout the state.
12. Education in the state should inform students about the jobs and career opportunities that are available in the visitor industry. Technical and academic courses should lead toward entry level management positions in the industry and inspire entrepreneurship.
13. The industry should preserve and expand wildlife viewing opportunities by working with public agencies to make wildlife view more accessible, by funding of watchable wildlife programs, and by protecting wildlife and their habitats.
14. The state should inventory and zone tourism areas on state lands which will be made available for both extensive use by small group tourism and intensive use by large group tourism.

Source Notes

"Modern History of Alaska Tourism," "Tourism as a Part of the Basic Sector," "Tourism's Place in the Alaskan Economy," "Number of Jobs" and "Nonresident Component" sections are adapted from "Alaska's Visitor Industry—An Economic Profile," prepared for the Alaska State Division of Tourism by McDowell Group, July 1991.

"Taxes, Fees and Other Revenues" section adapted from "Taxes and Fees Paid by Alaska's Visitor Industry." Prepared for the Alaska Visitors Association by McDowell Group, March, 1996

"Competition and Promotion" section adapted from OATMC Marketing Plan 1995-2000 prepared by the Alaska Tourism Marketing Council, October 1994.

"Alaska's Visitor Markets," "Visitor Expenditures," and "Visitor Origins" section statistics are drawn from the Alaska Visitor Statistics Program reports, prepared annually since 1985 by The McDowell Group for the Alaska State Division of Tourism.

"National Travel Trends" section is adapted from: Travel Industry Association of America Presentation, October 18, 1995, by Jane Mass, Chairman Emeritus, Earle Palmer Brown

Advertising and, "Directions" Travel Intelligence System Database, D.K. Shifflet & Associates, Ltd.

"Alaska's Visitor Trends" section statistics are drawn from the Alaska Visitor Statistics Program reports, prepared annually since 1985 by The McDowell Group for the Alaska State Division of Tourism.

"Vacationers to 2000" section is adapted from "ATMC Marketing Plan 1995-2000" prepared by the Alaska Tourism Marketing Council, October 1994.

"Access to Land Resources," "Seasonality" and "Recommendations" sections are adapted from "Destination: Alaska—Strategies for the Visitor Industry" prepared by International Tourism and Resort Advisors for the Alaska Visitors Association, 1993.

Competitive Market Awareness figures are from a 1995 Market Study by Longwoods International for Princess Cruises & Tours.



Fund properties to help promote Alaska

Goods, services to be sold Outside

By PATRICIA JONES
Staff Writer

Most people see only rental income and possible market appreciation when they look at financial benefits provided by the 90 real estate properties owned by the Alaska Permanent Fund Corp.

But managers of Alaska's oil-backed savings account see opportunity for state tourism businesses, for local artists and for organizations that make products out of the state's many natural resources.

Celebrate Alaska, a marketing program for state businesses, was formally approved Wednesday at a luncheon held as part of a permanent fund board meeting held in Fairbanks this week.

The program calls for using any of the Lower 48 apartment buildings, office space and shopping centers owned partially or entirely by the permanent fund as a place to promote Alaska.

"I think it's a wonderful opportunity to sell Alaska's goods and services throughout the world," said Debby Sedwick, commissioner of the Alaska Department of Commerce and Economic Development.

Her staff will work with managers of the permanent fund real estate assets to tailor appropriate marketing strategies for each property.

For example, shopping malls

in both Washington, D.C. and Phoenix are sending representatives to Alaska later this month to look at artwork and performing artists. The artwork and artists will be featured in week-long promotions at the malls later this year.

Each mall management office has committed to a \$20,000 budget they will spend on the Alaska promotion in their mall, Sedwick added.

"This will let people learn about all that Alaska has to offer," she said. "Alaska is still a mystical place, and this will help sell Alaska as open and ready for business."

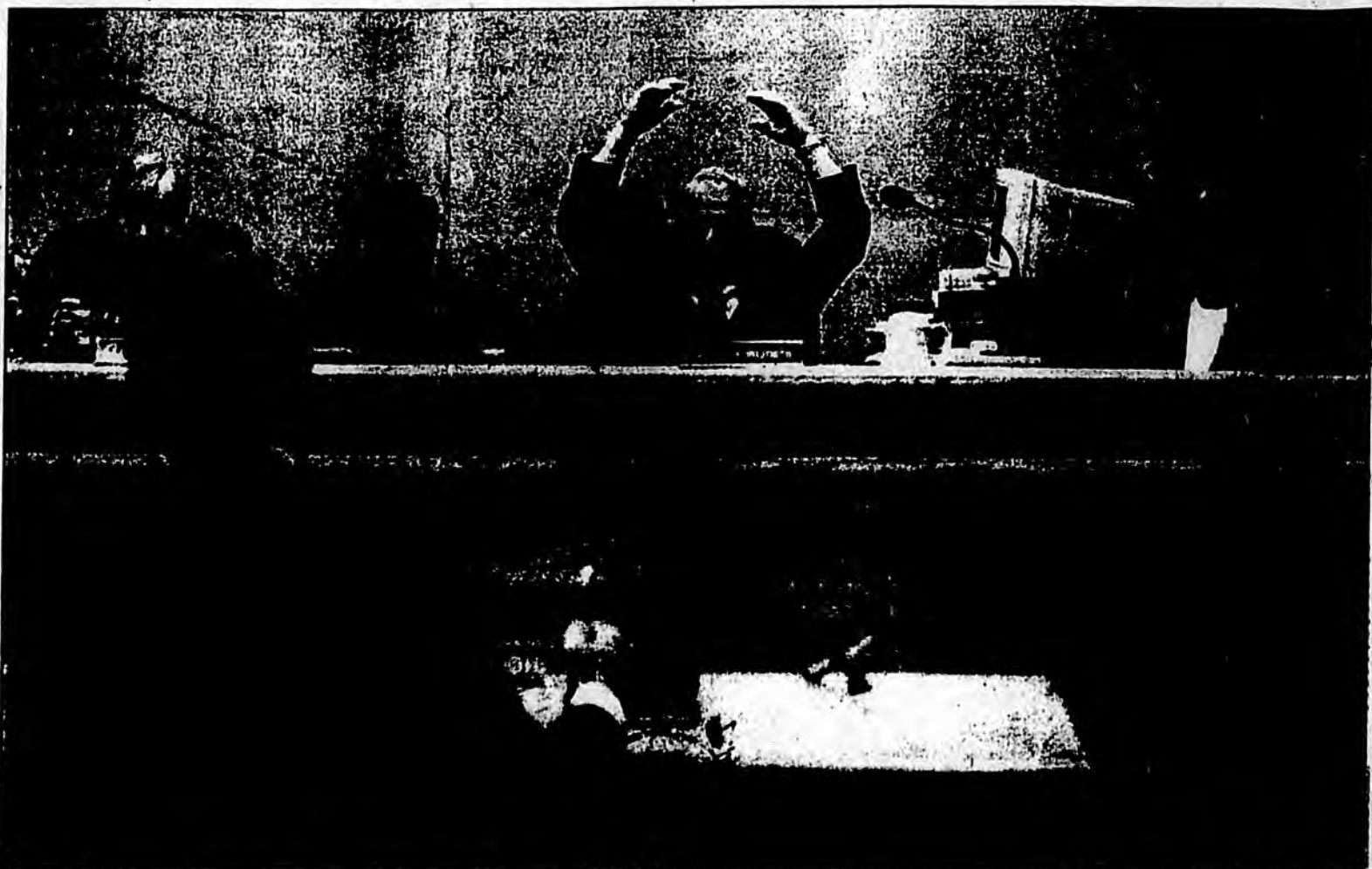
The program involves more networking and making contacts than it does spending money, both Sedwick and permanent fund managers said.

Permanent fund property managers say the program will not cost earnings generated by the savings account's real estate assets, currently worth about \$1.6 billion.

"The intent is to try to leverage the value of the permanent fund for the benefit of Alaskans without compromising its integrity and earnings," said Peter Naoroz, permanent fund real estate investment officer.

The largest portion of real estate investment is in office space, with 17 properties valued at \$432

See FUND, Page A-11



MONEY TALK—Peter Bushre, foreground, chief financial officer for the Alaska Permanent Fund, addresses the Permanent Fund Board, including members (from left) Clark Gruening, Chairman Eric Wohlforth and Melphine Evans in the borough assembly chambers Wednesday afternoon. Bushre was updating the board on operations during a regular board meeting held in Fairbanks Tuesday and Wednesday.

Mike Mathers/News-Miner

FUND: Properties

Continued from Page A-1

million. Those office property managers, as well as people overseeing the fund's 37 apartment complexes, will be asked to buy artwork produced by Alaska artists when redecorating common areas and foyers.

"It's a cooperative partnership for the promotions," Naoroz said. "There's not going to be any strong-arming of tenants or property managers."

Welcome baskets placed in

some of the 15,000 apartment units will contain Alaska-made products such as canned or smoked salmon and tourism brochures about the Last Frontier.

"I think this could become a trend nationwide for institutional investments," said Jim Kelly, permanent fund spokesman. "The mall in Phoenix has 55,000 people pass through it every day, so it has very big benefits."

SCOMM

113:3



Official Business

Alaska State Legislature

ECONOMIC DEVELOPMENT & TOURISM COMMITTEE

Representative Gail Phillips, Chair
State Capitol, Room 411
Juneau, Alaska 99801-1182

(907) 465-2689; (800) 665-2689

FAX: (907) 465-3472

Email: Representative_Gail_Phillip@legis.state.ak.us

April 21, 1999

April 28, 1999 – 5:00 p.m.

Joint Meeting

Economic Development & Tourism Committee
Fisheries Committee
World Trade Committee

Tlingit and Haida Central Council – job partnerships; local hire preferences to create jobs for rural Alaska (5 to 6:00 p.m.)

Alaska Seafood International Manufacturing Plant – innovative concept for Alaska; presentation on value-added products (6 to 7:00 p.m.)

Meeting to take place in House Finance Committee (Room 519)

GP:ps

Modifying State Policies

Alaska Natives might benefit if the state government tightened its definition of who is a "local resident" under the local hire statute for public projects.

State law gives hiring preference for public construction projects to local residents, but anyone who lives in an area for 30 days is considered a local resident. Under such a liberal definition, workers could move to an area just to get specific jobs. Other agencies require longer residence. For instance, when the National Park Service hires rural residents under its local-hire authority, it typically requires one year's residence. *AK-10-1066*

Restoring matching state funding for the federal Rural Development Assistance program would help poor rural communities.

This federal program is one of the few that provides grants for projects to improve economic or social conditions in small rural places. Between 1989 and 1998 the program distributed \$12.6 million to Alaska communities, and federal and state officials consider it very effective. But the program has been hurt by the state legislature's decision two years ago to cut matching state funding—leaving only \$165,000 in annual federal funds.

STATE BUDGET CUTS

Rewarding Managers Who Meet Native Hiring Goals

Rewarding state and federal managers who meet or exceed Native hiring goals could boost Native hire.

The federal and state governments are major employers in Alaska. Alaska Natives make up only about 6.5 percent of the more than 13,000 state employees. We don't know the overall percentage of Native workers among the federal government's 10,000 civilian employees. We do know that the percentage of Native workers holding federal jobs varies considerably by agency, but that apparently in no agency do Native workers make up the same proportion as in the Alaska work force—about 14 percent. Although government agencies can't recruit Alaska Natives at the expense of other groups, they can take a number of steps to make sure Alaska Natives know about jobs and to help them apply for jobs.

Private industry successfully uses cash awards as an incentive for managers who meet or exceed minority hiring targets. We believe rewarding federal and state managers who meet or exceed hiring goals or targets for Alaska Natives would also be an incentive.

Interim Report

MEMORANDUM OF UNDERSTANDING
BETWEEN
THE ALASKA NATIVE COALITION ON EMPLOYMENT AND TRAINING
AND
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DEPARTMENT OF COMMUNITY AND REGIONAL AFFAIRS

Whereas, this Memorandum of Understanding is being entered into, in good faith, by the Alaska Native Coalition on Employment and Training (ANCET), which includes approximately 75,000 Native Americans and approximately 200 Native villages within its service area, and the State of Alaska Department of Transportation and Public Facilities (DOT/PF), Department of Environmental Conservation (DEC), and Department of Community and Regional Affairs (DCRA) for the purposes of improving opportunities for qualified Alaska Natives applying for employment by State agencies in Alaska and for employment on projects and programs sponsored by the State.

Whereas, the ANCET and the DOT/PF, DEC and DCRA are in agreement that it is a desirable and mutually beneficial goal to increase the employment and training opportunities of its rural residents, including its Native citizens and to remove any barriers which may impede qualified Alaska Natives from obtaining State employment.

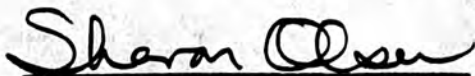
Whereas, the ANCET and the State of Alaska Division of Personnel/Office of Equal Employment Opportunity have jointly signed a voluntary cooperation agreement to work together in a mutual goal of increasing rural resident employment opportunities; including employment opportunities for Alaska Natives.

Therefore, the ANCET, DOT/PF, DEC and DCRA, jointly agree to the following good faith efforts:

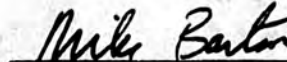
- (1) Continue to meet quarterly to coordinate progress towards a common goal of work force percentage equivalency for Alaskan Native hire within DOT/PF, DEC and DCRA and to work to expand this goal to other State agencies.
- (2) And further, at these quarterly meetings, the state agencies will report on progress made towards the above goal and will identify potential solutions for remaining problem areas.

This document, by date shown, is continuously in effect until changed by date of signature.

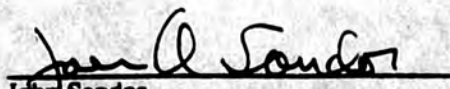
APPROVED AND DATED: 10-31-94



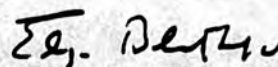
Sharon Olsen
Chairperson
Alaska Native Coalition on
Employment and Training



Michael Barton
Commissioner
Alaska Department of Transportation
and Public Facilities



John Sandor
Commissioner
Alaska Department of Environmental Conservation



Edgar Blatchford
Commissioner
Alaska Department of
Community and Regional Affairs

STATE OF ALASKA

DEPARTMENT OF LAW
OFFICE OF THE ATTORNEY GENERAL

TONY KNOWLES, GOVERNOR

P.O. BOX 110300
JUNEAU, ALASKA 99811-0300
PHONE: (907) 465-3600
FAX: (907) 465-2075

RECEIVED AUG 17 1998

August 12, 1998

Joe Williams, President
Organized Village of Saxman
Route 2, Box 2 - Saxman
Ketchikan, AK 99901

Dear Joe:

Barbara Ritchie and I want to thank you for hosting the meeting held last Wednesday in Saxman on issues related to tribal employment rights ordinances.

As I stated last week, I believe that we share a common objective: to secure the benefits of training and employment for local residents through public construction contracts. The apparent barrier to state recognition of TERO provisions in state-administered contracts is the Alaska Constitution. Our constitution may prohibit the implementation by the state of TERO employment preference provisions, even though such provisions are generally permissive under federal law.

I have asked my staff to reevaluate the Department of Law's 1995 opinion on the subject. It would be of immeasurable assistance to me if the organizations represented at our meeting could bring their legal resources to bear on this issue. Toward that end, I would be pleased to schedule a briefing between legal counsel to identify the specific legal impediments we must overcome.

Sincerely,



Bruce M. Botelho
Attorney General

BMB:kh

STATE OF ALASKA

DEPARTMENT OF LAW

OFFICE OF THE ATTORNEY GENERAL

TONY KNOWLES, GOVERNOR

P.O. BOX 110300
JUNEAU, ALASKA 99811-0300
PHONE: (907) 465-3600
FAX: (907) 465-2075

November 27, 1998

Joe Williams, President
Organized Village of Saxman
Route 2, Box 2 - Saxman
Ketchikan, AK 99901

Teresa Germain
Tlingit & Haida Central Council
320 W. Willoughby
Juneau, AK 99801

Dear Joe and Teresa:

This is to follow-up on Attorney General Botelho's letter of August 12, 1998, concerning issues relating to tribal employment rights ordinances. As stated in that letter, the Attorney General has assigned staff to review the Department of Law's 1995 opinion on the subject. That work is now underway. The purpose of this letter is to state once again that it would be of significant assistance to the Attorney General in his consideration these issues if your organizations could bring their legal resources to bear on the matter. We would be pleased to schedule a briefing between legal counsel to identify the specific legal impediments that we must overcome.

Sincerely,

BRUCE M. BOTELHO
ATTORNEY GENERAL

By:



Barbara J. Ritchie
Deputy Attorney General

MEMORANDUM

State of Alaska
Department of Law

TO: The Honorable Joseph Perkins
Commissioner
Department of Transportation
and Public Facilities

DATE: July 11, 1995
FILE NO: 663-95-0291
TEL NO: 465-3600
SUBJECT: Indian Employment
Preference

FROM: 
William F. Cummings
Assistant Attorney General
Transportation Section-Juneau

I. Introduction

Your predecessor requested an opinion on whether the Department of Transportation and Public Facilities can legally establish an employment preference for Alaska Natives for highway projects, funded by federal aid, constructed on or near ANCSA corporation land.¹ The Federal Highway Administration takes the position that the establishment of an Indian employment preference is consistent with federal law, but the decision to do so is discretionary with the states.

II. Short Answer

We have considered this question in light of the Alaska Constitution. We conclude that, even though federal law may permit the state to include an Indian employment preference requirement in federally funded state highway construction contracts, such a requirement would violate the equal protection provisions of the state constitution.

III. Analysis

A. Indian preference under federal law

Congress has the exclusive right to regulate relations with the Indian tribes. U.S. Const. art. I, § 8, cl. 3. As an incident of that power, Congress may pass legislation that grants preferences or special rights to Native Americans not enjoyed by other Americans. Under federal Indian law, the special rights and privileges are not a matter of a racial determination, but are

¹ This issue arose out of meetings between the previous administration and the Alaska Native Coalition on Employment and Training (ANCET). In late 1994, a draft administrative order was prepared by the state's EEO office which would establish a Native hire preference on all federally funded state public works projects, not just highway projects.

Honorable Joseph Perkins, Commissioner
A.G. No. 663-95-0291

July 11, 1995
Page 2

instead a product of the political relationship between the United States and Indian tribes.²

States are in a much different relationship with Indian tribes and tribal members than the federal government. A state is obligated to conduct its operations consistent with principles of equal protection, i.e., all of its citizens who are similarly situated are entitled to equal treatment.³ Under federal law, if a state acts in a manner authorized by Congress which accords special treatment to Indian tribes and members of Indian tribes, the state's action is permissible under the federal constitution.⁴

Recent amendments to federal law which authorize an Indian hire preference on federally funded highway construction projects illustrate this point quite clearly. States receiving federal funding are required to assure that "employment in connection with proposed projects will be provided without regard to race, color, creed, national origin, or sex." 23 U.S.C. § 140(a). However, in regard to Indians, Congress provided:

(d) Indian employment and contracting. Consistent with section 703(i) of the Civil Rights Act of 1964 (42 U.S.C. 2000e-2(i)), nothing in this section shall preclude the preferential employment of Indians living on or near a reservation on projects and contracts on Indian reservation roads. States may implement a preference for employment of Indians on projects carried out under this title near Indian reservations. The Secretary shall cooperate with Indian tribal governments States to implement this subsection.

23 U.S.C. § 140(d) (emphasized language added in 1991). The Federal Highway Administration (FHWA) interprets this section to mean that an Indian employment preference is permissible on all

² Morton v. Mancari, 417 U.S. 535, 551 (1974).

³ Washington v. Confederated Bands and Tribes of the Yakima Indian Nation, 439 U.S. 463, 761 (1979), and Queets Band of Indians v. Washington, 765 F.2d 1399, 1404 (9th Cir. 1985). However, the operations of state government are circumscribed by requirements for equal protection found in the state's constitution as well as the federal constitution.

⁴ Washington v. Confederated Bands and Tribes of the Yakima Indian Nation, 439 U.S. at 500.

July 11, 1995
Page 3

federally funded highway projects near Indian reservations.' However, whether the Indian employment preference is included in federally funded state construction contracts is discretionary with the states.

B. The proposed Indian employment preference

A draft administrative order was prepared by the state EEO office in 1994 which addresses the matter of an Indian employment preference on federally funded state construction projects. It also sets out administrative details for the operation of the program.

The draft administrative order would require the following language be inserted into each federally funded state construction contract or grant:

The contractor [grantee] agrees to give preference to Alaska Natives and American Indians who can perform the work required regardless of age, gender, religion, mental or physical disability, or tribal affiliation for training and employment opportunities under this contract and, to the extent feasible consistent with efficient performance of this agreement, training and employment preferences and opportunities shall be provided to Alaska Natives and American Indians regardless of age, gender, religion, mental or physical disability, or tribal affiliation who are not fully qualified to perform under this agreement.

Under the draft administrative order, the state and its grantees are required to set employment and training goals for Alaska

3 See attached opinion of the chief counsel of the FHWA dated July 12, 1994. In 1987 the FHWA had a much narrower interpretation of 23 U.S.C. § 140(d). At that time it interpreted the Indian employment preference as applicable only to roads within an Indian reservation or leading to an Indian reservation. In 1991 Congress amended 23 U.S.C. § 140(b), (c), and (d), as well as the term "Indian reservation road" defined in 23 U.S.C. § 101(a). The FHWA's chief counsel reviewed the legislative history of these amendments and came to the conclusion that Congress intended a broader Indian employment preference.

⁶ See attached draft administrative order, page 2 at paragraph V.

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A.G. No. 663-95-0291

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Page 4

Natives and American Indians for each project and include those goals as a part of the contract.⁷ The administrative order envisions that there would be reporting requirements imposed on the contractor to enable the state to monitor compliance with the employment and training goals.⁸ It also requires the inclusion of penalties in each contract, including contract termination, for not reaching the employment and training goals set out in the contract.⁹

C. The Alaska Constitution precludes the establishment of an Indian employment preference for state construction contracts

The Alaska Constitution provides in article 1, section 1:

This constitution is dedicated to the principles that all persons have a natural right to life, liberty, the pursuit of happiness, and the enjoyment of the rewards of their own industry; that all persons are equal and entitled to equal rights, opportunities, and protection under the law; and that all persons have corresponding obligations to the people and to the State.

(Emphasis added.)

Equal protection analysis under the Alaska Constitution turns first upon the nature of the state interest which the state is attempting to further by its actions and the rights of individuals which the state action will impact.¹⁰ It is essentially a balancing of the competing interests: the more important or fundamental the individual rights at stake, the more compelling the state interest must be to justify the state's

⁷ See attached draft Administrative Order, page 2 at paragraph VI.

⁸ See attached draft Administrative Order, page 3 at paragraph VIII.

⁹ See attached draft Administrative Order, page 3 at paragraph XI.

¹⁰ Our review of the suggested Indian employment preference will focus on the Alaska Constitution. Because implementation of the proposed Indian employment preference is discretionary with the state, our analysis turns on state law and does not reach the issue of equal protection under the federal constitution.

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has reviewed similar restrictions and concluded that the right to enter an economic endeavor is an "important right."¹³

Because the individual interest is, we believe, an "important right" rather than merely an economic right, rationality of the means and legitimacy of the goal to address the particular evil are not sufficient justification.¹⁴ Instead, its purpose and the goal it seeks to achieve must be "closely scrutinized."¹⁵ There must be a close fit between the means selected and the goal the specific policy seeks to accomplish.¹⁶

¹³ State v. Enseach Alaska Constr., Inc., 787 P.2d 624, 631 (Alaska 1989) (an employment preference designed to benefit unemployed workers in an economically distressed area); and Commercial Fisheries Entry Comm'n v. Apokadak, 606 P.2d 1255 at 1266 (Alaska 1980) (the right to participate as a gear license holder in commercial fisheries).

¹⁴ Under state law, the proposed Indian employment preference is a racial classification scheme. The Alaska Constitution provides in article I, section 3 that

No person is to be denied the enjoyment of any civil or political right because of race, color, creed sex, or national origin. The legislature shall implement this section.

Equal protection analysis under this section is the same as used under article I, section 1. The analysis is an examination in which the "[i]mportance of the asserted right and the suspectness of the classification scheme determine the end-means scrutiny that is to be applied." State v. Cosio, 858 P.2d 621, 629 (Alaska 1993). Because the classification scheme involves a racial determination, the means to end fit is subject to "strict scrutiny." Our review has focused on equal protection (article I, section 1), which results in close scrutiny of the ends and means because the individual interest is an "important right." Because the preference plan fails to meet the standard of close scrutiny, it would also fail to meet the more rigorous standard of strict scrutiny.

¹⁵ Patrick v. Lynden Transport, 765 P.2d 1375, 1379 (Alaska 1988) (the important right was access to the judicial system); State v. Enseach, 787 P.2d at 631; and Apokadak, 606 P.2d at 1265-1267.

¹⁶ Keyes v. Humana Hospital of Alaska, Inc., 750 P.2d at 357-358. See also State v. Ostrovsky, 667 P.2d 1184, 1193 (Alaska 1983), (continued...)

Honorable Joseph Perkins, Commissioner
A.G. No. 663-95-0291

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Page 7

The proposed administrative order provides a broad preference for the hiring of Native Alaskans or American Indians without further delineation of the class receiving the preference.¹⁷ However, the federal legislation, 23 U.S.C. § 140(d), which governs highway projects subject to the proposed order, permits an employment preference for Indians living on or near an Indian reservation for construction projects by a state near an Indian reservation.¹⁸

We have not previously addressed the issue of Indian employment preferences in the context of federally funded state construction contracts. There are, however, opinions that address the validity of tribal employment rights ordinances enacted by the Northway traditional council and the tribal government of the Metlakatla Indian Community.¹⁹ The result of the application of those ordinances, if valid, would be the establishment of a Native employment preference in specific localities. These opinions consider the validity of the particular ordinances under federal

¹⁶ (...continued)
where the court said:

As the level of scrutiny selected is higher . . . , we require that the asserted governmental interests be relatively more compelling and that the . . . means-to-end fit be correspondingly closer. On the other hand, if relaxed scrutiny is indicated, less important governmental objectives will suffice and a greater degree of over/or under inclusiveness in the means-to-ends fit will be tolerated.

(Citations and footnotes omitted.)

¹⁷ See attached draft Administrative Order, page 2 at paragraph V.

¹⁸ The FHWA Chief Counsel's opinion concludes, consistent with other federal statutes, that for the purposes of 23 U.S.C. § 140(d) lands held by ANCSA corporations are within the definition of the term "reservation." Thus, Alaska Natives living on or near lands held by ANCSA corporations would be eligible for the employment preference for projects constructed on or near lands held by ANCSA corporations.

¹⁹ See 1986 Inf. Op. Att'y Gen. (May 6; 663-86-0476) (Northway Village Council Ordinance); and 1985 Inf. Op. Att'y Gen. (Feb. 4; 366-287-85) (Metlakatla Ordinance).

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A.G. No. 663-95-0291

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Indian law and particularly the concept of Indian country. We concluded that the tribal employment rights ordinance enacted by the Northway traditional council was invalid. We reached the opposite conclusion regarding the Metlakatla ordinance because it was enacted by the tribal government of an Indian reservation. We advised the Department of Transportation and Public Facilities that the state's contractors should comply with the ordinance for projects within the Annette Island Reserve unless it placed an unreasonable burden on the projects. If unreasonable burdens were placed on a particular project, we advised that the state should not proceed forward with the project. Neither of these opinions address the relationship of the ordinances and equal protection under the state constitution.

The Alaska Supreme Court has considered the issue of employment preferences for state construction projects. In State v. Ensearch Constr., Inc., 787 P.2d 624 (Alaska 1989), the court addressed an employment preference, created by statute, that was crafted to provide employment on state funded public works projects for unemployed workers living in economically distressed regions of the state. While the goal of furthering the employment opportunities of unemployed workers in general is a legitimate state goal, the court opined that close scrutiny requires "the state's interest underlying the enactment be not only legitimate, but important, and that the nexus between the enactment and the important interest that it serves be close." Id. at 633. The court concluded that "the disparate treatment of unemployed workers in order to confer an economic benefit upon similarly situated workers in another region is not a legitimate legislative goal." Id. at 634.

An Indian employment preference plan meeting the criteria of 23 U.S.C. § 140(d) has similar difficulties under the state constitution. Alaska Natives and American Indians, living on or near land owned by an ANCSA corporation, would be granted an employment preference for a project constructed on or near ANCSA corporation land. Non-natives living on or near land owned by an ANCSA corporation would be denied employment on a project constructed on or near ANCSA corporation land until the hiring goals for Alaska Natives had been met. Similarly, Alaska Natives and American Indians (as well as non-natives), not living on or near land owned by an ANCSA corporation would also be denied employment until the hiring goals for Alaska Natives who lived on or near ANCSA corporation land had been met.

The goal of the federal statute is to enhance employment opportunities for Indians through the application of an employment preference. The means selected, a preference based in part upon where a person lives, does not treat all Alaska Natives and

Honorable Joseph Perkins, Commissioner
A.G. No. 663-95-0291

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Page 9

American Indians the same. Those living on or near ANCSA corporation land would enjoy the preference, while those not living on or near ANCSA corporation land would not enjoy the preference. Similarly, non-natives who do not live on or near ANCSA corporation lands would not receive the benefit of the preference. The classification of workers eligible for the preference based upon where they live "does not have rest upon some ground of difference having a fair and substantial relationship to that purpose."²⁰

For these reasons we conclude that the Indian employment preference set out in 23 U.S.C. § 140(d), if implemented by the State as a requirement in federally funded state highway construction projects, would violate the equal protection provisions of the Alaska Constitution. We do not believe that such a requirement, implicating "important" individual interests, would pass muster under the "close scrutiny" test.²¹

Please let us know if you have any further questions.

²⁰ Keyes v. Humana Hospital, 750 P.2d at 357.

²¹ As discussed in n.15, we have not focused on the racial classification aspects of the Indian employment preference. Our state constitution requires that a racially based scheme be reviewed under a standard of "strict scrutiny." Because we do not believe the Indian employment preference passes the "close scrutiny" test, it is not necessary to review it under the strict scrutiny standard.

ALASKA TERO'S
LEGISLATIVE PRESENTATION

April 28, 1999

5:00 p.m. - 6:00 p.m.

House Finance Committee Room - Capital Building

Co-Sponsored by:

Central Council Tlingit & Haida Indian Tribes of Alaska (CCTHITA) and the
Alaska Native Coalition on Employment and Training (ANCET)

*12 Regions
9 Central Council
like ANSCA*

PURPOSE: To inform Alaska Legislators about Regional Non-Profit Organizations TERO activities in implementing "local hire" preferences that enhance economic development at the local level. We have the infrastructure to provide the outreach and the knowledge of local community economics and in partnership with state agencies we can orchestrate employment and training opportunities for local residents. Welfare Reform is the driving force for developing partnerships between the state and the non-profit organizations.

GOAL: To ask the Legislature to adopt a resolution for the development of partnership agreements between Regional Non-Profit Organizations and all State Government Agencies to implement "local hire." These partnerships will reduce the over 70,000 jobs lost to non-residents.

PRESENTERS:

- 1) Sharon Olsen, ANCET Co-Chair, Director Employment & Training, CCTHITA
- 2) Danny Moreno, TERO, Sitka Tribe of Alaska, CTER AK. Rep., ITA AK. Rep.
- 3) Joseph Mounts, TERO Intern, Ketchikan Indian Corporation
- 4) Teresa Germain, Job Developer/TERO, Central Council Tlingit and Haida

*Good
Jobs!*

Alaska Native Coalition on Employment and Training (ANCET) is a statewide organization, formed in 1982, which is comprised of representatives from the regional non-profit Alaska Native organizations and tribes. ANCET acts from a statewide perspective on education, welfare reform, employment, training and economic development issues and concerns specific to Native people. The Alaska Native TERO's organized to implement "local hire" preference provisions that eliminate barriers that allowed for the under-utilization of Alaska Native people.

- Alaska Natives make up only about 6.5 % of the more than 13,000 state employees (see page S-6 of the Interim Report prepared by AFN on January 6, 1999) which includes seasonal jobs.
- ANCET had several meetings with the Governor's Office and his cabinet to discuss TERO in order to develop a MOA (see MOA 10-31-94 between DOT/PF, DEC and DCRA) that would improve opportunities for qualified Alaska Natives applying for employment by State agencies.
- Southeast Transportation Committee successfully obtained a commitment from the Attorney General's office to re-write the July 11, 1995 Indian Employment Preference opinion (see letters dated August 12, 1998 and November 27, 1998 from Attorney General's Office).
- Welfare Reform - Agreements with the Department of Health and Social Services to provide rural communities with case management of ATAP clients.

*make up about 36%
of folks on welfare
native folks =
across the State*

- MOA's with Federal Agencies and Local Municipalities – Development of signed MOA's between these agencies throughout the state implements local hire preferences.
- Labor Agreements – Development of labor agreements between non-profit organizations and unions to implement local hire training and employment opportunities on projects in the public and private sector. Offer more apprenticeship opportunities in Rural Alaska.

Examples of Successful Local Hire Projects

Sitka Tribe of Alaska, Danny Moreno:

- Mt. Edgecumb High School renovation project 20,000,000 - School was taken over by State government. As a result of Native Preference requirements, 93% Native hire occurred. State DOT/PF had a Compliance Officer, on the project that enforced the Indian Preference provisions outlined in the contract.
- In cooperation through a moa with the USFS, has placed local individuals on the AMHS to fulfill the positions of the Interpretive program.
- US Coast Guard Airstation renovation projects, have local hire provisions through a MOA with the Dept. of Defense and the Tribe and have been successful at placing local people on these projects.
- Through MOA, the tribe and the Municipality of Sitka will work to implement local hire on road projects.
- HUD – Through agreement with the Baranof Island Housing Authority we provided the workforce to complete two housing subdivisions.
- National Park Service – Local hire was implemented in youth programs and other meaningful employment opportunities.
- SEARHC – Employs over 400 community members through partnerships with the non-profit organization.

Ketchikan Indian Corporation, Joseph Mounts:

- Ketchikan Indian Health Clinic – 115 trained members and 86% local hire.
- Through utilizing training funds KIC has been successful at implementing local hire for the Alaska Marine Highway System, Tribal Hatchery and Gift Shop, longshoring, seafood, and other tourist businesses to assist in the Economic Development of the community.

Central Council Tlingit and Haida Indian Tribes, Teresa Germain:

- Housing Authority Projects – Juneau, Yakutat, Petersburg, Klawock, Kake housing projects employed local residents to construct HUD homes and utilized training dollars to provide on-the-job training opportunities for local residents.
- Berner's Bay Consortium – Goldbelt, Kake, and Klukwan worked with Tlingit and Haida to prepare local workforce for jobs with the Kensington mine.
- Indian Health Service Clinics – Haines and Ketchikan Health clinics trained local residents to provide opportunities for employment in the medical professions.
- Sealaska Corporation – The Silviculture project will prepare local residents for tree thinning, pruning and planting on corporate lands and developed a program to train shareholders in surveying.
- Vocational Training & Resource Center – Local residents were trained on steel building erecting and this workforce was used to construct the facility. The VTRC has also developed training programs in the following areas: small business development, computer skills, life

198 *Corleone*

*\$250,000 @ UAK
Joseph
are you taking classes?*

Community - trained / 16 trained workers or 100 - jobs?

skills, visitor industry, construction skills, oil/furnace technician, mining, Northwest Indian Arts, surveying. All VTRC classes are designed to meet the specific needs of employers and through a MOA with the UofAK S.E. all students receive college credits.

Angoon Community Association:

- Angoon Road Project – 65% local hire was achieved as a result of cooperative efforts between ACA, the City of Angoon, Bureau of Indian Affairs Roads, and the DOT/PF.

Organized Village of Saxman:

- Saxman Road Project – With cooperative agreements between the City Council, the Tribal council, the BIA and State DOT/PF, local residents were hired to perform the work on this project.

Cook Inlet Tribal Council - Anchorage:

- Alaska Native Medical Center – Residents statewide successfully constructed the ANMC through the coordinated efforts of the TERO's to identify the qualified Native workforce.

Kawerak, Inc.:

- With the help of local Union and TERO representatives, International Technology negotiated and implemented a project-specific Union agreement and initiated an aggressive local hiring process at each of the primary work areas. Since project inception, 100% of all craft employees were local and Native Alaskans from the communities where the sites are located including: Nome, Teller, Elim, Wales, and Brevig Mission. As of 1996, local hires accounted for 64% of the project's workforce. Out of 118 total employees utilized on the Nome Project, 75 were hired locally, accounting for over \$2 million in payroll.

Association of Village Council Presidents

- AVCP's TERO activities regarding local hire have been projects let by two federal agencies. The two agencies HUD and HIS provides for Indian Preference on new construction and housing improvement projects under P.L. 93-638, Indian Self-Determination and Education Assistance Act, Section 7(b). As a result we have had over 1,000 local village residents employed as laborers or skilled craftspeople during each construction season. The TERO has played an important role in insuring that the contractors are in compliance to the Indian Preference requirements.

Recommendations For the State Legislature:

The State Legislature adopt a resolution that endorses the following:

- MOA's - Require DOT/PF and other state agencies to develop MOA's and initiate contact with regional non-profit organizations to discuss projects within their respective regions in a timely fashion to identify and prepare the local workforce.
- State Funded Projects - Require a sliding scale based on experience and training to develop reasonable wages when state agencies are implementing projects.
- State Policies & Procedures - Require all state agencies to develop standard policies and procedures that are equitably implemented with regional non-profits.
- TEA21 – Offers an opportunity for DOT/PF, BIA and the regional non-profit organizations to develop partnerships to implement local hire preferences on federal highway assisted road projects.
- 1999 National TERO Conference – Encourage state agencies to attend the National TERO Conference in Minnesota at Mystic Lake Casino on 6/6/99 – 6/9/99 and learn how other

*Davis
Bacon
or
Little
Davis
Bacon
Wage
scale?*

states have benefited by utilizing TEROs to get local hire on federal and state funded projects.

- Rural Governance Commission – Recommends, for example, that the state do more contracting with tribes and involving them more in managing natural resources.
- Support SB 80 and HB 98 which will give eligible Native non-profits a “state match” to operate their own regional TANF programs. The Alaska State Legislature is the key decision makers on state implementation of welfare reform.
- Support Legislative Resolution to implement partnerships with Alaska TEROs and State agencies (DOT, DEC, DCRA, DCED and ADMIN.) to promote local hire for Rural Alaska.
- The Denali Commission needs to join in the Commission on Rural Governance and Employment in supporting recommendations that will ensure local hire and support a government to government relationship between the tribes and the state.
- Support Senator Murkowski’s Legislation to “win more jobs for Native Alaskans in running National Parks in Alaska.”

In closing, Governor Knowles states in his letter, dated October 20, 1998, to Roy Kenick, TERO, Association of Village Council Presidents, “I agree with your concern it is now more important than ever local residents have first crack at projects in their communities and receive the training they need to allow them to work on them. . . . letters I sent to contractors and prospective bidders on projects in your area this summer urging them to use the local work force and informing them of tax credits available to employers who help us move Alaskans from welfare to work. My Jobs Cabinet will continue to urge contractors on state projects to hire local workers rather than import workers.

DRAFT Resolution

TITLE: Partnership Agreements with State Agencies and Regional Non-Profit Organizations

WHEREAS, the State of Alaska recognizes the need for economic development in every community; and

WHEREAS, the State of Alaska understands that the declining oil revenues has caused a budget shortfall that impacted the assistance to communities; and

WHEREAS, the State of Alaska also understands that the MOA's between federal agencies and regional non-profit organizations to implement and provide local hire preference provisions have proven to be beneficial to the economic development at the community level.

NOW THEREFORE BE IT RESOLVED, the Alaska State Legislature supports the development of MOA's between State government agencies and regional non-profit organizations to develop a partnering relationship to implement local hire provisions that will provide opportunities and assist in economic development; and

BE IT FURTHER RESOLVED, the Alaska State Legislature hereby mandates that all State Government agencies develop MOA's that identifies procedures that will develop partnerships with all Non-Profit Organizations to implement local hire preferences which will create and enhance economic development at the community level.

WHO IS ALASKA SEAFOOD INTERNATIONAL?

Alaska Seafood International, LLC, is a state-of-the-art, value-added seafood manufacturer located in Anchorage, Alaska. ASI is designed to meet increasing demands for a reliable and consistent supply of great tasting fresh and frozen seafood that is easy to prepare.



WHAT DOES ASI PRODUCE?

Every ASI product starts with the best seafood in the world: Alaskan-caught salmon, halibut, cod, pollock, and other fish. We add value to these raw products by portioning, shaping, and adding sauces or other coatings. These value-added seafood products are then packaged as either heat-and-eat entrees or as part of complete table-ready meals (including side dishes). ASI can produce a wide variety of high-quality, delicious products - everything from steaks and fillets, to noodle and pasta bowls, to soups and chowders.



WHO ARE ASI'S CUSTOMERS?

ASI partners with a small number of high-volume customers in long-term relationships. We provide our retail and warehouse wholesale customers with signature products in custom-designed, private-label packaging. This allows ASI's customers to extend their well-known, quality brands into the emerging value-added seafood category. We also produce value-added seafood products for institutional foodservice and contract feeders.

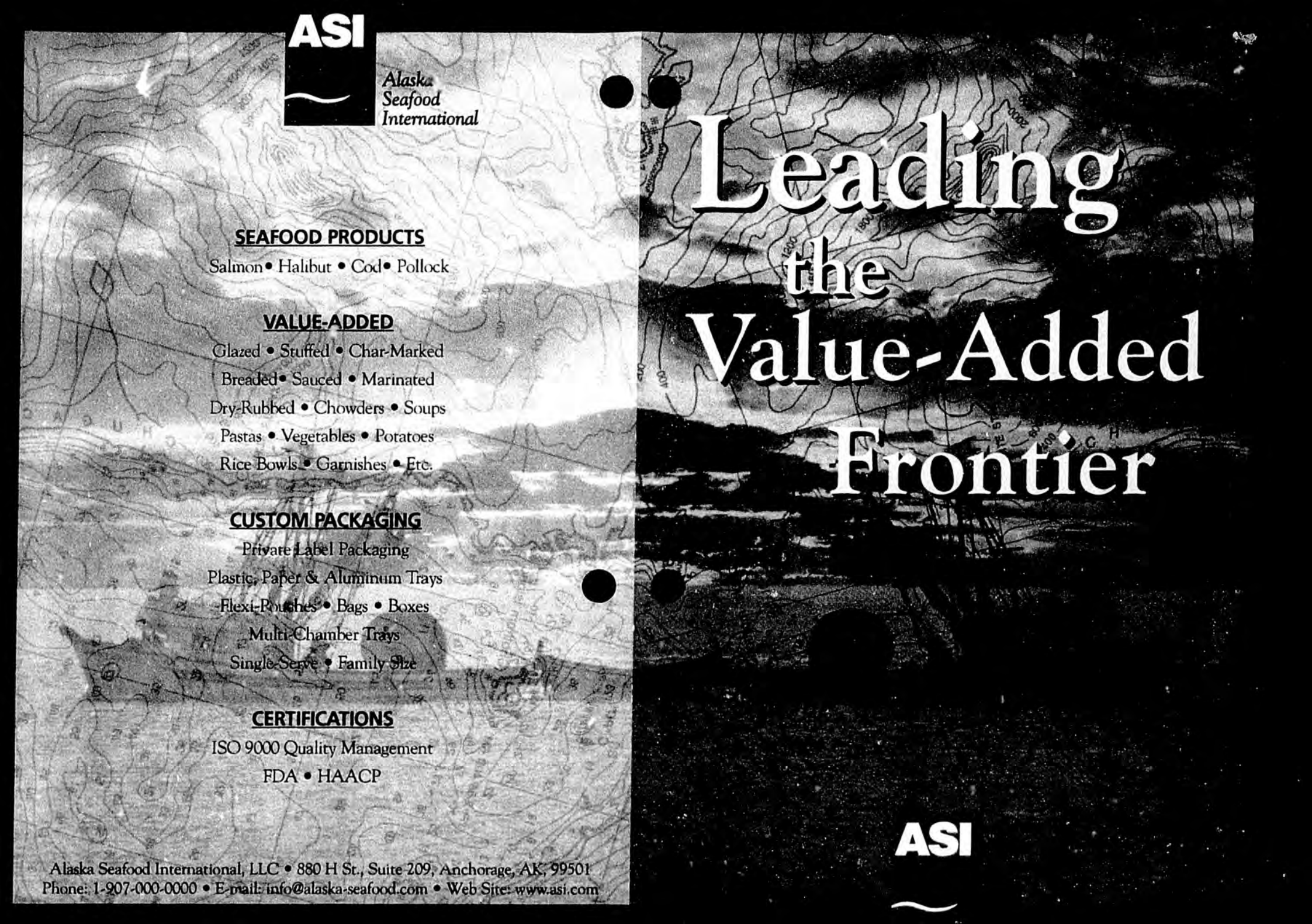


THE ASI FACILITY

ASI's 202,000 square foot high-volume, state-of-the-art facility is the largest value-added seafood operation in North America.

Our manufacturing operations are adjacent to a 65,000 square foot, 30 million-pound cold storage production warehouse, ideal for holding inventories of completed product. ASI's close proximity to Anchorage International Airport, one of the largest cargo airports in the world, allows us to ship fresh and frozen seafood to any market in the United States, Asia, and Europe within hours and at competitive pricing.



The background of the entire advertisement is a detailed topographic map. The left side shows a lighter, more detailed map with contour lines and labels like 'KODIAK' and 'KODIAK ISLAND'. The right side is a darker, more abstract representation of the same or a different map area, with prominent contour lines and labels like 'KODIAK', 'KODIAK ISLAND', and 'KODIAK'.

ASI

*Alaska
Seafood
International*

SEAFOOD PRODUCTS

Salmon • Halibut • Cod • Pollock

VALUE-ADDED

Glazed • Stuffed • Char-Marked
Breaded • Sauced • Marinated
Dry-Rubbed • Chowders • Soups
Pastas • Vegetables • Potatoes
Rice Bowls • Garnishes • Etc.

CUSTOM PACKAGING

Private Label Packaging
Plastic, Paper & Aluminum Trays
Flexi-Pouches • Bags • Boxes
Multi-Chamber Trays
Single-Serve • Family Size

CERTIFICATIONS

ISO 9000 Quality Management
FDA • HACCP

Leading the Value-Added Frontier

ASI

Alaska Seafood International, LLC • 880 H St., Suite 209, Anchorage, AK, 99501
Phone: 1-907-000-0000 • E-mail: info@alaska-seafood.com • Web Site: www.asi.com



(2-99)

FOR IMMEDIATE RELEASE

Gregory Galik
(907) 561-2009
Release Date: 1/4/99

ALASKA SEAFOOD INTERNATIONAL – AT A GLANCE

Alaska Seafood International, LLC. (ASI) is building a 202,103 square foot seafood manufacturing facility in Anchorage, Alaska. This state-of-the-art facility, the largest of its kind in North America, will produce fresh and frozen value-added, private label products made from Alaska salmon, halibut, cod, pollock and flatfish. These unique products are being developed for food service and retail markets in the U.S.A., Asia and Europe. The company objective is to deliver the highest quality seafood products available on a reliable and cost-efficient basis.

- There are no major value-added seafood manufacturing facilities in Alaska. ASI will be the first to add value to Alaska fish by portioning and shaping products as well as adding sauces, marinades, coatings and packaging to meet the growing demand for "table-ready" seafood meals.
- ASI will be an innovative manufacturer utilizing the most modern processing techniques and equipment to preserve and enhance the fresh quality of the raw seafood available in Alaska.
- ASI will NOT compete with existing Alaska processors, but will be a large, new, in-state customer for their products. To that end, ASI is currently developing long-term relationships with Alaska harvesters and processors to assure an ample supply of top quality raw materials.
- ASI has partnered with Geneva Lakes Cold Storage Company of Darien, Wisconsin to build and operate an 84,000 square foot cold storage warehouse adjacent to the ASI facility. It will have a capacity to handle approximately 30 million pounds. Geneva Lakes will also provide logistic and transportation services for ASI customers throughout the U.S.

-More-

ASI At A Glance

Alaska Seafood International, LLC 880 H St., Suite 209 • Anchorage, Alaska 99501
Email: info@alaska-seafood.com • Web Site: www.alaska-seafood.com



(1-99)

FOR IMMEDIATE RELEASEContact: Gregory Galik
(907) 561-2009**ALASKA SEAFOOD INTERNATIONAL FACILITY SET FOR COMPLETION
MID-SUMMER 1999**

(Anchorage, Alaska) Construction of an ultra modern, value-added seafood manufacturing facility near Anchorage International airport, is nearing 70% completion. The \$125 million operation is a joint venture of Anchorage-based Alaska Seafood International (ASI) and Central Investment Holding Company of Taiwan.

Keld Andersen, Chief Operating Officer, reports the design phase is complete and construction is proceeding on schedule. The multi-million dollar facility, which has been in development for eight years, is scheduled for completion in mid-June, 1999 with the first product shipping later that month.

The ASI concept is to provide a consistent supply of value-added seafood through the addition of coatings of herbs, sauces, marinades and other ingredients resulting in table-ready items needing only heating and serving. When completed, the 202,000 square foot plant will begin ramping up production to ship more than 100 million pounds of high quality, fresh and frozen seafood each year to waiting markets worldwide.

-More-

CORRECTION

**THE FOLLOWING DOCUMENT(S)
HAVE BEEN REFILMED TO
ASSURE LEGIBILITY OR PAGINATION**



Rev. 6/98

Central Microfilm Services
Department of Education & Early Development
State of Alaska



(2-99)

FOR IMMEDIATE RELEASE

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-More-

ASI At A Glance

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Add 1

- In addition to being fully HACCP certified, the plant is being built to meet all applicable FDA and USDA standards. ASI has also made the strategic decision to operate the business in accordance with the rapidly growing international ISO 9000 Quality Management Standards and will seek formal ISO certification as soon as possible after startup.
- ASI will supply a small number of select customers with Alaska seafood products that are custom designed and produced under their private brand name. ASI's business concept is unique in the seafood industry as a competitively priced, high quality, customer-oriented supplier. ASI's business concept was developed in direct response to customers' needs after two years of market research that included the largest seafood users in the food industry.
- The Anchorage International Airport is the largest cargo airport in the U.S. with less than six days of downtime for weather per year. ASI has consulted with some of the largest airfreight companies in the world to develop a system utilizing ASI's chilled storage capacity to ship fresh, value-added products to any market in the U.S., Asia or Europe within hours at a competitive price.

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1-1/8/99 GJG