

KODIAK

OUTER CONT.

SHELF IMPACT

STUDY

VOL. 2

# **VOLUME TWO**

▪ **COMMUNITY INVENTORY**

prepared by

**SIMPSON USHER JONES, INC.**

ARCHITECTS / PLANNERS

ANCHORAGE ALASKA

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**\*\*PLEASE NOTE\*\***

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DESCRIPTION:

THIS VOLUME CONTAINS AN INSERTED MAP. "NATURAL FEATURE MAP" MAP 11  
KODIAK ISLAND BOROUGH. PREPARED BY SIMPSON USHER JONES, INC.  
FOR KODIAK ISLAND BOROUGH.

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## I N T R O D U C T I O N

An Outer Continental Shelf lease sale of up to 3.2 million acres of land, located on the Kodiak Shelf east of Kodiak Island, has been tentatively scheduled for November, 1977 (Map 1). The oil industry originally nominated 12.8 million acres in this area as having strong potential for developable oil deposits, and it is expected that initial exploration for oil will begin shortly following the lease sale.

Offshore oil development on the Kodiak Shelf will generate substantial onshore development. During the initial exploration stage the onshore facilities will be relatively minor since the oil companies will avoid substantial capital expenditures until the existence of economically viable oil deposits is verified. However, once oil is discovered, developing the oil fields will occur. Consequently, onshore facilities will swell in size and their activities will intensify to the point that their presence will severely impact the surrounding communities. The impacts will involve both air and marine transportation activity; population increases; demands on housing, community facilities and infrastructural services as well as economic impacts and changes in the basic lifestyle of the surrounding residents. Because of Kodiak Island's proximity to this area, it is inevitable that the Kodiak area will thus be affected. The estimated level of oil industry activity and the impacts of that activity are described in Volume I of this study.

For years Kodiak has been a relatively self-sufficient community. As the largest city on the island, it has functioned as a regional economic and cultural center as well as a base for the fishing industry. Both the City and Island of Kodiak have experienced a steady trend of growth and anticipate a continuation of growth in the foreseeable future. Now, with the advent of oil exploration and possible production, the Kodiak area is faced with the possibility of major changes. The importance of planning for these changes is emphasized by the following quote from the Draft Environmental Impact Statement for the OCS Lease Sale in the northern Gulf of Alaska.

"As the development of offshore oil and gas proceeds from the initial exploratory phase through drilling, production, and transport, substantial onshore activity will be generated, from which both positive and negative impacts can be expected.

"The degree to which . . . these effects are positive is related to the ability of public officials to plan for and direct the onshore development that is integral to OCS development and to plan for the growth that onshore facilities generate throughout the region. OCS operations will result in massive development in areas where there is little or no experience in land use planning or regulatory activities. Unless this capability is quickly developed in such areas, the result could be permanent degradation of the environment and unnecessary disruption of traditional values and lifestyles for those living there now." (CEQ 1974)

In order to gauge the impact OCS oil will have on Kodiak, it is necessary to have an overall perspective of the community as it exists prior to OCS development. The following Community Inventory, compiled primarily from existing sources, provides a summary of facilities, utilities and services.

The Community Inventory consists of seven sections: Community Facilities, Utilities and Services; Village Inventory; Housing Inventory; Economic Inventory; Demographic Inventory; Land Status/Capability; and Summary Profile. Information is presented concerning which of these community components will be directly and/or indirectly impacted by potential OCS development.

In addition to providing a background for gauging the impact of OCS development, the Community Inventory may be suitable for other uses. Care has been taken to present the information in a format compatible for use by governmental agencies for comprehensive community planning, economic planning and projections. It may also serve local businesses and individual residents of the Borough.



WESTERN GULF OF ALASKA  
OIL LEASE SALE AREAS

This map was prepared by Simpson Usher Jones Inc. for the Kodiak Island Borough. It is based on the Alaska Department of Fish and Game's map of the Kodiak Island Borough, Alaska, published in 1978. The map shows the Kodiak Island Borough's boundary and the location of the Kodiak Island Borough's oil lease sale areas. The map is not to scale and is for informational purposes only. It is not intended to be used for navigation or other purposes. The map is the property of Simpson Usher Jones Inc. and is not to be reproduced without the written consent of Simpson Usher Jones Inc.

0 50 100 MILES

## OIL LEASE SALE LOCATION MAP

Prepared by Simpson Usher Jones Inc. for Kodiak Island Borough.

## COMMUNITY FACILITIES, UTILITIES, AND SERVICES

The infrastructure of a community consists primarily of its basic utilities (water, sewer, electricity and telephone) as well as its basic transportation system. A community's growth and development patterns are determined to a great extent by its infrastructure. For instance, expansion of the infrastructure in a community will facilitate population growth and allow greater density in development. On the other hand, limiting the infrastructure can be used to deter population growth, restrict the density of development, and determine which areas of town will grow and which will not. Infrastructure limitations may cause serious problems however, if the population grows regardless of a restricted infrastructure.

The infrastructure is essential to a community's growth capability; therefore, it is important for policy makers to know the condition and capacity of their community facilities, utilities, and services. The following inventory is provided to assist in considering Kodiak's potential for growth. Since the impacts of OCS oil development will be more intensely felt in the largest population center; the facilities, utilities, and services that serve the urban area around the City of Kodiak and those that are provided area-wide throughout the Borough are described separately from those serving the individual outlying villages (See Village Inventory).

## POWER AND UTILITY SERVICES

### WATER SYSTEM

The largest public water system within the Borough is operated by the City of Kodiak. The area within which water is provided through this system is primarily the city limits of Kodiak; however, there is an eight inch transmission line that extends out to the end of Mill Bay Road. It also serves the Loran Station on Spruce Cape. Water service also goes out to the southwest of downtown Kodiak as far as Gibson Cove.

Currently the water system is being utilized to its practical capacity and any substantial population growth within the Kodiak area will require expansion of the water system facilities. According to engineering studies, expansion of the water facilities would require construction of a dam at Monashka Creek. Engineering has been completed for this project and a 24-inch transmission line has been installed. However, the Uuzinkie Village Native Corporation has claimed the Monashka Creek drainage area and until the question of property ownership can be resolved, a dam and reservoir cannot be constructed.

Assuming the land ownership problems are solved and construction can begin on the Monashka Creek dam, this first phase of the expansion would increase the storage capacity by over ten times the current amount and would make the total capacity of the water system over 500 million gallons. In addition, the dam could later be expanded to store up to seven billion gallons of water depending on the growth of the Kodiak area.

At the present time, the Kodiak water system does not have the capacity to handle additional large consumers. As demand increases, water lines are being excavated and replaced with larger lines to increase service capacity of the system, and this practice will continue until the storage capacity and supply system is increased. The downtown area is most seriously affected by the inadequate water system. This is because most of the canneries are located in the downtown area and they are all major water users. A 20-inch line from the water tank, as shown on Map 2, to the upper reservoir will eventually provide interim relief for getting water from the reservoir to the downtown area. Eventually, the City will have to provide more transmission lines in order to cope with anticipated growth at the present rate.

If growth were to occur on an accelerated basis, the present water system would be totally inadequate. OCS development and an ensuing population increase would completely over-tax the system to the point of causing some potential water shortages as well as a great deal of expense to the community in trying to upgrade an already over-taxed system.(1)

## SEWER SYSTEM

The sewer system for the Kodiak urban area is also operated by the City of Kodiak. The area serviced by the sewer system is shown on Map 3. As can be seen, the sewer system is primarily within the city limits of Kodiak with the exception of a small area along Mission Road to the northeast of Potatoe Patch Lake. The capacity of the system at the present time is adequate, and a new 2.3 million gallons per day sewage treatment plant is currently nearing completion. All interceptor lines have been completed for the service area and there should be no problem in providing service to the rest of the community under the normal growth pattern.

If there is an increase in population and housing construction within the area, it will be necessary to provide additional sewer lines in order to serve those areas. It may also be necessary to increase the size of the line in some portions of the downstream end of the system.

A sewage expansion feasibility study is currently being prepared for the Island Lakes area to the north and northeast of the city. This area is considered the most likely available property for residential development should a rapid expansion of the economy occur. Some low density residential development has begun in this area. Since public sewer service is not available, residents are building on-site disposal systems. As a result, some environmental problems are now occurring in the lakes. Additional building in that area has been stopped until the full extent of the environmental problems have been determined. Should additional building pressure be placed on this area, it would be necessary to serve it with public sewer.

In summary, with the exception of the Island Lakes area, the sewer system is adequate to handle the existing situation. The system has capacity for substantial expansion based on the new sewer treatment plant capabilities.(2)

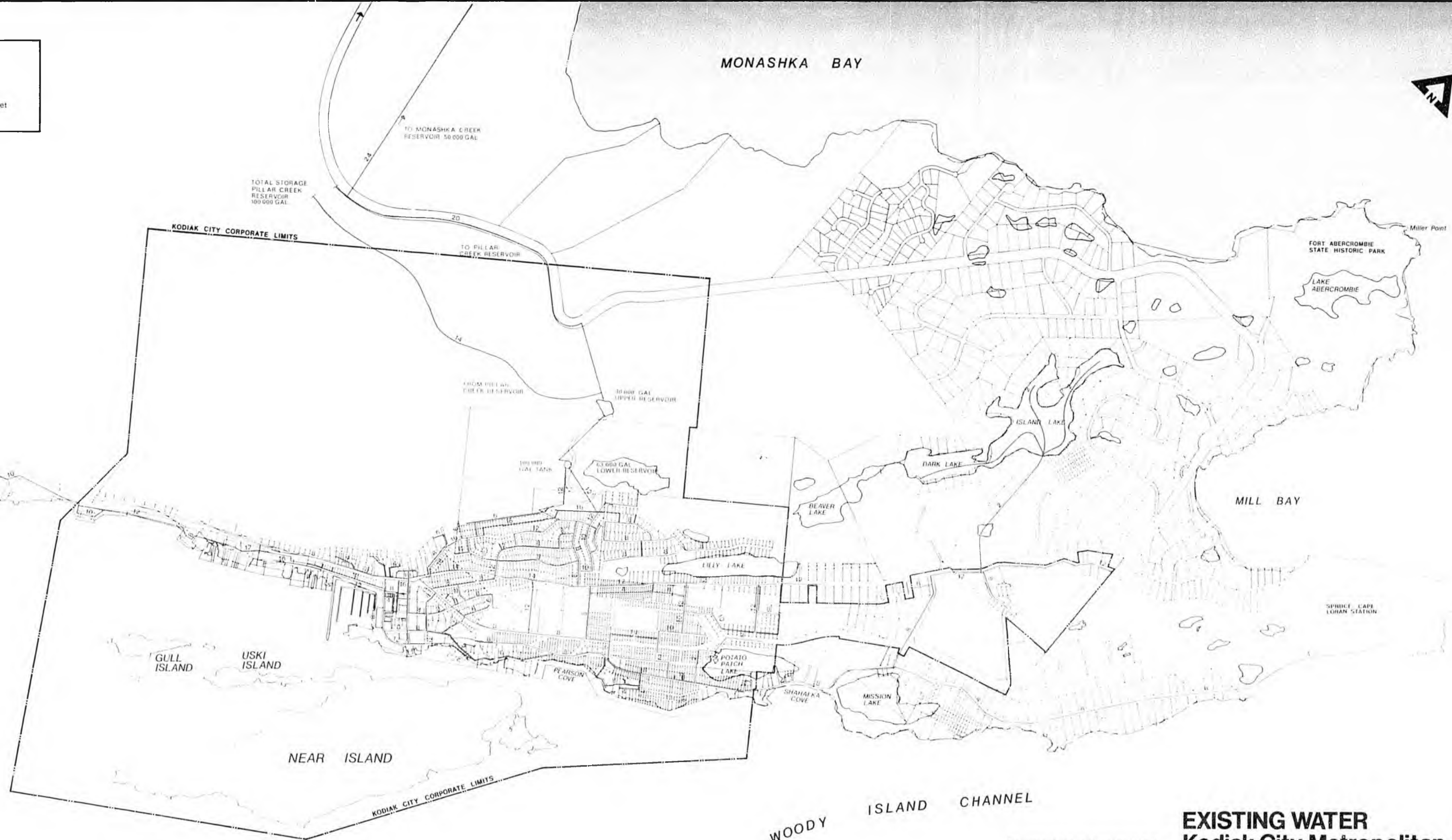
## ELECTRICAL SERVICE

Electrical energy is provided to the Kodiak area by the Kodiak Electrical Association. KEA is a cooperative corporation organized under the laws of the State of Alaska to provide electrical energy to a service area covering the City of Kodiak, its environs and the Port Lions area. Members of KEA receive their electrical energy needs from KEA and participate in the management of the organization through voting privileges on basic association issues and in the election of the board of directors which is nominated from the membership. KEA is a non-profit organization as defined by the Rural Electrification Association of the federal government. As of January 1, 1976, there were 2,382 members in the association.(3)

KEA's distribution facilities extend throughout the Kodiak area as well as to the outlying road system. New generating facilities have recently been completed in Kodiak which make the KEA plant the largest diesel-

**8 Pipe Diameter**  
**Water Line**

0 1000 2000 3000 Feet  
 Base prepared by Tryck Nyman & Hayes



**EXISTING WATER**  
**Kodiak City Metropolitan Area**

The preparation of this map was financed in part by funds from the Alaska Coastal Management Program and the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration, U. S. Department of Commerce, administered by the Division of Community Planning, Alaska Department of Community and Regional Affairs.

Prepared by Simpson Usher Jones Inc. for Kodiak Island Borough

powered electrification plant in the State of Alaska. The new plant consists of two 5,270 KW diesel generators and one 2,500 KW diesel generator, which adds a total of 13,040 kilowatts of power to KEA's existing capacity of 11,878 kilowatts for a total generating capacity of 24,918 kilowatts. It is estimated that this capacity will be adequate to meet Kodiak's power requirements through the early 1980's.(4)

Further expansion of the diesel generating capacity over the designed expansion capacity now available is currently in question. Fuel costs for the diesel generators has increased dramatically in the last few years and additional increases are anticipated (in June 1973 diesel fuel cost 14.09 cents per gallon, and in 1976 it cost 35.2 cents per gallon). These increases in fuel costs have made diesel-generated power extremely expensive and have made other types of power, such as hydro-electric sources, more attractive.

KEA is currently investigating the feasibility of a hydro-electric generating facility at Terror Lake, located 25 miles southwest of Kodiak. The site was originally considered for such a facility during World War II by the Army Corps of Engineers. KEA became interested in the early 1960's. At present, the Terror Lake project is projected to produce approximately 30,000 kilowatts and 175 million kilowatt hours annually. KEA has filed permit applications with the Federal Power Commission to investigate the feasibility of developing the project. If the Terror Lake facility is approved, financed and constructed, KEA will be able to provide a relatively inexpensive power source to the entire Kodiak Island for the foreseeable future.(5)

## COMMUNICATION FACILITIES

The Kodiak area is served by a relatively wide range of communication facilities in both the public and private fields. There are services available and under construction that are, for the most part, adequate to handle communication needs.

### TELEPHONE SERVICE

Telephone service is provided to the City of Kodiak and surrounding metropolitan areas by the Glacier State Telephone Company. This service also extends along the road system and to Port Lions. Telephone rates for the Kodiak area are found in Figure 1.

A total of 3,804 telephone numbers are currently in use in Kodiak, excluding extensions. Of those 1,591 are residential phones and 2,213 are commercial or business phones. The telephone subscription rate has shown a steady rate of growth over the past few years. The 1976 rate for instance, is between four and five percent higher than in 1975. In order to meet demand projections for 1979/80, Glacier State Telephone is currently expanding its facilities in Kodiak. When completed, it should then have the capacity to meet the currently projected needs of the community until 1980. A dramatic increase in population growth during this period would necessitate further expansion of the Kodiak facilities.(6)

Fig. 1: Telephone Service & Costs\*

<u>Type</u>	<u>Monthly Rate</u>	<u>Installation</u>
Residential:		
Private Line	\$ 13.35	\$ 30.00
Two-Party Line	10.00	30.00
Extensions	3.00/ea.	17.00
Commercial:		
Per Line	\$ 30.00	\$ 60.00
Extensions	4.50/ea.	27.00
Also available:	3-, 6-, and 12-line phone systems, hold buttons, intercom, PABX switchboard equipment, radio and other lease lines.	

\* The above rates are charged within the City Limits of Kodiak. Outside the City Limits there is an additional monthly charge of \$1.00 per 1/4 air mile for a private line; and \$.80 per 1/4 air mile for a party-line. These rates are for September, 1976.

## LONG DISTANCE COMMUNICATIONS

RCA Alascom provides long distance communications to the City of Kodiak through the White Alice Communications System (WACS). The White Alice System is an extensive and elaborate system of troposcatter and microwave facilities serving the military and the public. WACS is owned by the Air Force but is leased and operated by RCA Alascom.

Long distance calls from Kodiak travel on a microwave system to Pillar Mountain directly behind the city. The White Alice System then transmits them to Diamond Ridge on the Kenai Peninsula. From there, calls travel over another microwave system into Anchorage for switching. RCA Alascom plans to replace many of the White Alice facilities with major earth stations. Kodiak is scheduled to receive a major earth station in the next few years. Long distance calls will then travel via satellite.

RCA Alascom, in cooperation with the State of Alaska, has embarked on a plan to provide rural areas with improved communications through the network of smaller earth stations. Under this project the villages involved will initially receive one telephone for normal long distance communications and one for emergency medical communications. On Kodiak Island, earth stations have been constructed in Larsen Bay, Old Harbor, Ahkiok, and Karluk. Health aides in these villages have also been supplied with special medical telephones which will be linked via satellite to the Kodiak Island Hospital in Kodiak. Health aides are able to use these special telephones 24 hours a day to obtain diagnostic assistance and to order supplies.

The bush earth stations and medical systems on Kodiak Island are expected to be operational by the end of 1976. In addition, Old Harbor and Larsen Bay have been selected to receive live color television under a television demonstration project funded by the State. Under this experimental program, television signals will travel via the RCA satellite and will be received by the village earth stations. About 42 hours of programming will be shown in the villages each week. This project is scheduled to be operational in early 1977.(7)

## RADIO AND TELEVISION STATIONS

There are two private radio stations in Kodiak. KVOK, an AM station, is located at 560 on the AM dial, and broadcasts with a power of 1000 watts. They estimate their range to be between 800 and 1000 miles. An FM station, KMXT, is located at 100.1 on the FM dial, and broadcasts with the power of approximately 3000 watts. Its range is approximately 30 miles.

The only television service available to Kodiak at the present time is cable television. Provided by KOTV, Inc., this station provides two program channels to the City of Kodiak. Channel 2 operates from approximately 10 a.m. to 2 a.m., and Channel 4 operates from approximately 4 p.m. to 2 a.m. KOTV is not a network station and can choose the programs

they want to air from all three networks. In addition, KOTV, Inc. operates two advertising channels which show local advertising on printed cards. Cable TV in Kodiak costs \$17 per month for cable service.

With the upgraded long distance facilities that are currently planned, Kodiak's communication system can adequately handle any increase in population resulting from OCS development as well as meet the specialized needs of the oil industry for their communication purposes. It may be necessary, if OCS development occurs rapidly, to accelerate the RCA satellite program to help provide additional long distance capabilities within the next year.

## TRANSPORTATION FACILITIES

A community's transportation system is important to its vitality and livability. The fact that Kodiak is an island makes its transportation facilities doubly important. Kodiak's transportation facilities include marine services, general and commercial air carrier facilities, and state and local roads and highways. This portion of the study will briefly discuss these transportation facilities.

### HIGHWAYS - STATE DEPARTMENT OF HIGHWAYS

The State Department of Highways has two maintenance facilities in the Kodiak area. The main shop facility is located near downtown Kodiak, and a small maintenance facility is at Kalsin Bay.

Personnel within the Kodiak area include two equipment operators at the Kalsin Bay facility, seven equipment operators at the Kodiak maintenance facility, one secretary and one foreman.

There is a total of 120 miles of roads under state jurisdiction in the Kodiak Borough -- 12 miles of which are paved. The roads within the Kodiak metropolitan area that are maintained by the Highway Department are shown on Map 4. The remainder of the state maintained roads are shown on Map 9. The State Department of Highways performs the general maintenance on these roads. This includes patching, snow removal, cleaning ditches and grading unpaved roads. According to the personnel at the Kodiak maintenance facility, the equipment utilized in these functions is in good working order and is adequate to handle the maintenance functions in Kodiak.

All new road construction in the Kodiak area is handled by the Southcentral office of the Department of Highways in Anchorage. This office handles the design and construction of new roads with little or no involvement of the Kodiak office.

An increase in traffic on the Kodiak highways resulting from OCS development would require some upgrading of roads. If the road to Chiniak were utilized by heavy industrial traffic, it would be necessary to widen the road to at least 28 feet and straighten the roadway in some areas. The Department of Highways does not feel it would be necessary to pave the road, but it would have to be maintained at a level consistent with the increase of traffic generated. No estimates can be given as to percent increase without detailed information on vehicular traffic increase.(8)

## HIGHWAYS - CITY OF KODIAK PUBLIC WORKS DEPARTMENT

The City Public Works Department is responsible for street construction and maintenance within the city limits. (See Map 4.) At the present time, they are in the process of a major paving project in the Aleutian Homes area. This paving project is being financed through a five-year grant program of HUD entitlement funds authorized under the Housing and Community Development Act of 1974.

The majority of the streets within the City of Kodiak are unpaved, and the City maintains them as either gravel or seal-coated roadways.

In most cases, the streets maintained by the City of Kodiak are designed to carry low-volume traffic. Should there be a sudden and rapid increase in population due to OCS development, it would be extremely difficult for the City to maintain the streets adequately due to increased traffic loads.




Roads within the metropolitan area that are not within the city limits and that are not part of the state road system are maintained privately. These roads have been constructed to varying standards and in many cases are designed to provide access to only a few property owners. A significant increase in traffic brought on by OCS development would seriously impact these areas. In preparing for OCS development, assessment of the local road situation is critical in order to plan for and alleviate any potential access problems that could be expected to arise.(9)

## AIRPORTS AND AIR CARRIERS

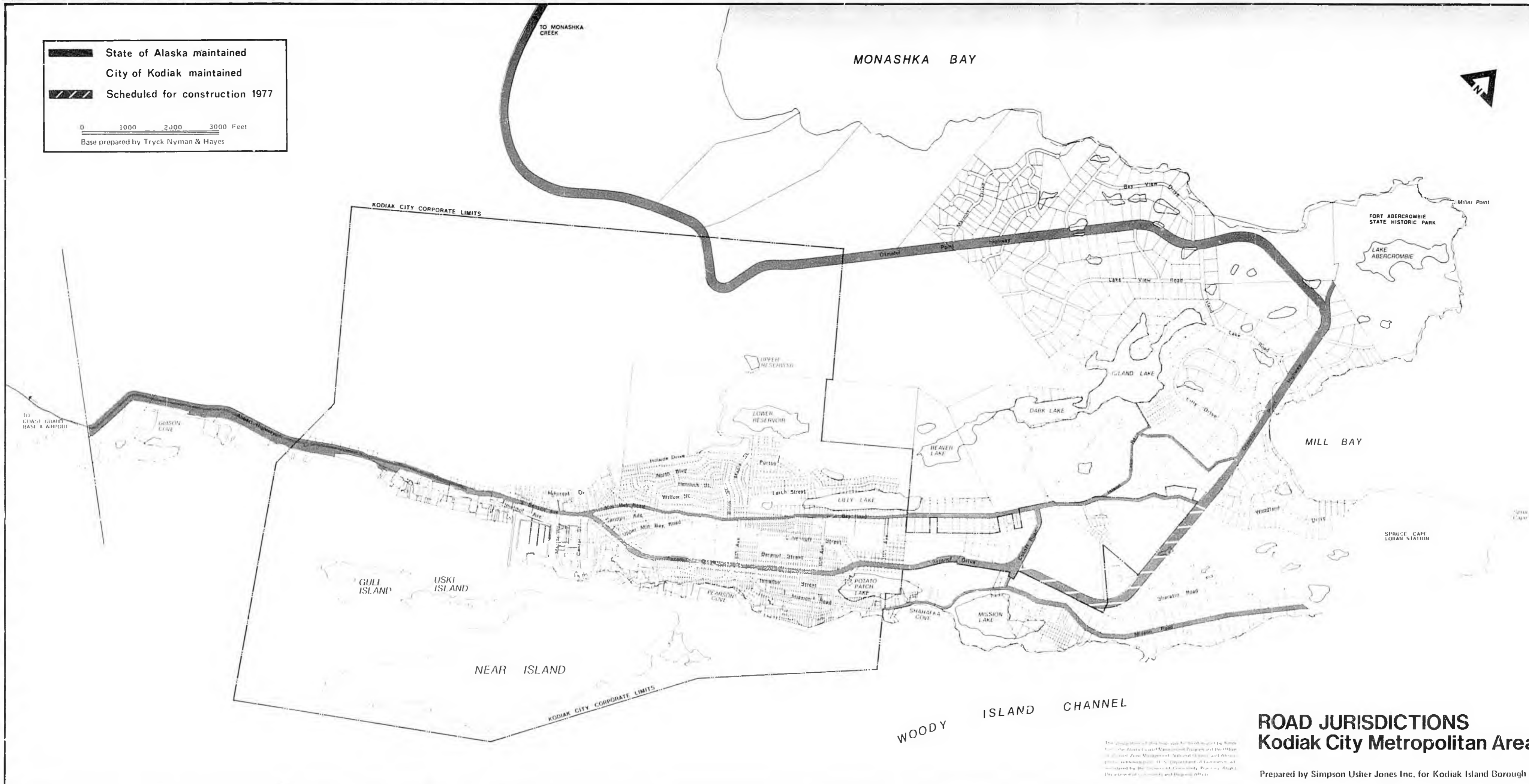
Kodiak's major airport is located on the Coast Guard Base and is owned and operated by the State of Alaska, Division of Aviation. The civilian runway is 7500 feet long and paved with asphaltic compound. It is served by terminal facilities, owned by Wien Air Alaska, that include ticket counters, security waiting area, car rental agencies, indoor baggage facilities, and aircraft fueling facilities. (See Map 5.) There is no food service at the airport at the present time other than a number of vending machines; however, there is space available within the terminal facility to accommodate a snack bar or restaurant as soon as the demand warrants.(10)

The airport is used primarily by two major commercial air carriers. Wien Air Alaska operates the busiest schedule in and out of Kodiak's airport. In the winter, Wien makes two flights per day between Anchorage and Kodiak on Monday through Friday, and one flight daily on Saturday and Sunday. During the summer months (June 1, through September 15), they conduct two flights daily seven days a week between Anchorage and Kodiak. Wien generally flies Boeing 737 fan-jet aircraft between Anchorage and Kodiak, although, it also uses Fairchild F27 prop-jet aircraft on a limited basis.

Western Airlines provides jet service between Kodiak and Seattle during the summer months (April through October). During the summer of 1976,

 State of Alaska maintained  
 City of Kodiak maintained  
 Scheduled for construction 1977

0 1000 2000 3000 Feet  
 Base prepared by Tryck Nyman & Hayes



## ROAD JURISDICTIONS Kodiak City Metropolitan Area

The jurisdiction of this map was determined by the Office of the Alaska State Engineer, the Office of the Alaska State Land Management Program, and the Office of the Alaska State Department of Transportation, and the Alaska Department of Transportation, U.S. Department of Commerce, and the Alaska Department of Community and Regional Affairs.

Prepared by Simpson Usher Jones Inc. for Kodiak Island Borough



LAKE  
LOUISE

APPROXIMATE  
FUTURE FENCE  
LOCATION

CLEAR ZONE  
NO APPROACH

NO APPROACH

FUTURE  
APPROACH

FUTURE VASE

ALLIANCE

LIGHTING  
VAULT

BAY

CHINIAX

LEGEND

<p>APPROXIMATE FUTURE FENCE LOCATION</p> <p>FUTURE APPROACH</p> <p>FUTURE VASE</p> <p>ALLIANCE</p> <p>LIGHTING VAULT</p> <p>CLEAR ZONE NO APPROACH</p> <p>NO APPROACH</p> <p>APPROXIMATE FUTURE FENCE LOCATION</p>	
--	--

The location of the runway  
shown is not to scale from  
the Alaska Coastal Management  
Program and the Office of General  
Investigation and Administration  
Division of the Department of  
Commerce, Administration for the  
State of Alaska, Division of  
Community and Economic  
Development Affairs.

KODIAK AIRPORT LAYOUT PLAN

Western offered this flight two times per week. It is anticipated that Western will provide Kodiak/Seattle service again in 1977, although the new schedule has not yet been determined. The Western flights utilize Boeing 720B fan-jets exclusively.

Air transportation is also available through Kodiak Western Alaska Airlines, Inc. This local flight service provides transportation to all of the nearby villages on a regularly scheduled basis from the downtown area. An example of its winter and summer schedule is shown in Figure 2.

Fig. 2: Schedule - Kodiak Western Alaska Airlines, Inc. - Winter 1976/77

Winter Schedule								Summer Schedule						
Location	Mon	Tues	Weds	Thurs	Fri	Sat	Sun	Mon	Tues	Weds	Thurs	Fri	Sat	Sun
Akhiok		X		X					X		X		X	
Alitak		X							X		X		X	
Amook					X			X						
Karluk	X		X		X			X		X		X		
Kitoi Bay		X									X		X	
Larsen Bay	X		X		X			X		X		X		
Moser Bay				X					X		X		X	
Old Harbor	X	X	X	X	X			XX	XX	XX	XX	XX	XX	
Olga Bay				X					X					
Ouzinkie	XX	X	XX	X	XX			XX	XX	XX	XX	XX	XX	
Parks	X							X		X		X		
Port Bailey		X						X	X	X	X	X	X	
Port Lions	XX	X	XX	X	XX			XX	XX	XX	XX	XX	XX	
Port Williams		X									X		X	
Sitkinak	X			X				X		X		X		
Terror Bay			X					X		X		X		
Uganik					X			X		X		X		
West Point			X					X						
Zachar Bay	X							X						

This schedule may be revised from season to season. In addition to the flights shown, Kodiak Western Alaska Airlines, Inc. also services Bristol Bay in the summer with flights coordinated with Western's jet service to and from Seattle.

In addition to these scheduled commercial airlines, Kodiak is also served by a number of smaller air charter operations. The air charter operations provide on-call transportation services to all parts of the Kodiak Island area throughout the year. These air charter services are also utilized for hunting and fishing guide services.

In spite of what is often considered a high incidence of inclement weather, the Kodiak Airport has a relatively good record of dependability. As an example, over the last three years Wien Air Alaska has completed 94.7% of its scheduled flights to and from Kodiak. The 5.3% that were not able to be flown includes both mechanical and weather cancellation. Consequently, it is assumed that closure of the airport due to weather affected less than 5% of those flights.(11)

The City of Kodiak operates a small general aviation airport within the city limits. It is located on the northwest side of Mill Bay road at

the end of Lilly Lake. The runway is oriented in a NE/SW direction and is gravel-surfaced. Its length is 2,750 feet and it is 100 feet wide. There is no formal city-maintained apron area, however several private entities have developed adjacent gravel, aircraft parking areas. The southwest end of the runway ends immediately at the northeast end of Lilly Lake, which is utilized for float planes.

There are no air or ground traffic control activities associated with this airport, however the FAA does offer an air traffic advisory service from their tower on the Coast Guard Base. No records are kept concerning the number of operations at the City Airport.

Recent population growth and residential development have taken place near the airport. This has reduced the future potential capacity of that facility, although it is impossible to quantify that reduction of capacity without historical records on operations.

#### MARINE TRANSPORTATION SERVICES

Marine transportation service is essential to the viability of Kodiak since it is the only mode of surface transportation from the mainland possible. The City Dock operated by the City of Kodiak is the center of shipping activity. See Map 6. Its facilities include a 21,600 square foot warehouse and two piers, one of which is 360 feet long and one which is 350 feet long. During the past year, 165 vessels utilized the City Dock facilities and 205,000 tons of freight were moved across the dock in and out of Kodiak. Reports indicate that this year's activity will greatly surpass last year's. At present there is very little dock storage space available; however, the City of Kodiak is attempting to negotiate for additional space from the Coast Guard.(12)

Sea-Land Service Company is the major freight supplier to Kodiak. The City of Kodiak provides dock facilities to Sea-Land under a contractual agreement. This contract, which extends another 16 years, provides that Sea-Land is allowed 104 berthings per year. Goods are delivered to the Kodiak area on container ships. Because of the lack of storage area, the vans are then loaded on trucks and delivered to the destined business location where they are left until the ship arrives on its return trip.

If OCS development were to occur, the increased demand for goods and industrial equipment likely to accompany such development would place a significant increase in demand on dock facilities. Should this situation occur it would be necessary to increase the capacity and storage spaces of these facilities significantly. This will be discussed in more detail in Phase II of this study.

#### STATE OF ALASKA FERRY SYSTEM

Kodiak is served on a seasonal basis by the Tustumena, a 269 foot long ferry operated by the State of Alaska Division of Marine Transportation.

The Tustumena serves Kodiak twice a week during the winter (January 10 through April 30) on a loop going from Seward to Kodiak, from Kodiak to Homer, from Homer to Kodiak, and from Kodiak to Seward. During the summer (May 1 through mid-October) the ferry makes three trips to Kodiak per week following the same route as the winter schedule, with the addition of a Valdez/Seward run on the weekends. Between October 14 and January 9 each year, the Tustumena undergoes its annual repairs in accordance with Coast Guard regulations, and during this period there is no ferry service available to Kodiak. The State Ferry Terminal is located in downtown Kodiak (see Map 6).

Costs for ferry service are as follows:

	<u>Winter Rates</u>	
Seward to Kodiak	\$16/passenger	\$54/vehicle
Kodiak to Homer	\$14/passenger	\$42/vehicle

Summer rates for the 1977 season have not yet been determined; however, it is anticipated that these will be 20 to 25 percent higher than the winter rates.

The Tustumena can carry 200 passengers and 45 cars (figured at 8' x 20' space per car). Vans of 40 feet maximum length can be transported on this vessel. There are 26 staterooms available, two of which are four-bed units and the others are two-bed units.

The Tustumena uses an elevator system to load vehicles. Two cars or one van at a time are lowered into the Tustumena onto a roundtable which turns to position the vehicle for placement in the ferry.(23)

As population pressures increase in Kodiak, either through normal growth or through OCS development, it may be necessary to increase the frequency and consistency of ferry service to the Kodiak area both in winter and summer. The ferry is the only vehicular link between Kodiak Island and the mainland, and thus will be important to people who must travel between Kodiak and other areas in Alaska by vehicle.

## PUBLIC SAFETY FACILITIES

This section will discuss the public safety facilities available in Kodiak. These services include law enforcement, fire protection and emergency services. In addition, the court system and Division of Corrections facilities will be described here since they relate closely to law enforcement.

### DEPARTMENT OF PUBLIC SAFETY, DIVISION OF ALASKA STATE TROOPERS

Kodiak is the headquarters for the "E" Detachment of the Alaska State Troopers. The "E" Detachment covers an area including Kodiak, Dillingham, Naknek, Sand Point, Saint Paul and most of the Aleutian Chain. The Detachment employs 18 people, eight of whom are stationed in Kodiak. Kodiak personnel include five troopers, two clerks and one pilot who works for both the Division of Alaska State Troopers and the Division of Fish and Wildlife Protection.

The State Troopers are charged with enforcing the laws of the State of Alaska. This entails a variety of tasks, the most time consuming of which are criminal investigations, search and rescue functions, crash site investigations, and driver's license administration and testing. In addition, the Troopers assist the Fish and Wildlife Protection Division on an as-needed basis.

Offenses reported to the State Troopers in Kodiak increased in the early 1970's but have decreased since 1974. While available statistics summarize enforcement activities throughout the "E" Detachment jurisdiction, general trends determined by this information are directly applicable to the Kodiak area. For example, Figure 3 lists a breakdown of offenses reported within the "E" Detachment from 1969 to 1975. Troopers in the Kodiak area have carried a work load proportionate to the figures shown.

At present, the State Troopers in Kodiak have a staff level that is barely able to handle the case load. According to estimates made by "E" Detachment Headquarters, it takes a minimum of five men to provide a 24-hour shift for Kodiak Island. This does not include man-days required for travel, vacation, administration, and court duties. In order to adequately handle a 24-hour shift and all the ancillary duties assigned to the the Trooper detachment, a minimum of eight troopers and two supervisors should be provided according to the Division representative in Kodiak.

In addition, the State Troopers and the Fish and Wildlife Protection Division need another airplane. At present, the only plane available for use by both the divisions is a Grumman Goose. While the Goose is adequate for certain types of aerial work, it does not meet the full

range of needs for the two divisions. It is recommended that another, more modern aircraft be added to the divisions so that travel time can be reduced and larger areas can be covered in search and rescue functions. It is also felt that the Troopers need a boat approximately 40 feet in length to provide better coverage in search and rescue missions.(14)

If full OCS development were to occur, the case load of the Troopers would be expected to increase substantially. A rapid increase in population would be accompanied by an increase in criminal and misdemeanor offenses in a rate higher than expected. This is because boom-type economies create social pressures resulting in social and economic problems not normally found in stable communities. The State Troopers, therefore, anticipate a need for a larger work force in "E" Detachment to handle an increase in population due to OCS development.

Fig. 3: Offenses Reported - Alaska State Troopers

<u>Offenses</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Homicide	5	4	2	2	7	4	5
Rape	1	1	--	1	6	2	--
Robbery	1	1	2	1	1	--	--
Assault with Deadly Weapon	8	6	13	25	23	22	15
Burglary	14	12	15	37	40	36	19
Larceny	8	14	19	45	83	53	27
Auto Theft	3	4	5	7	15	17	6
Assault	21	21	16	22	38	35	16
Narcotics	--	3	20	13	7	10	12
Liquor Laws	9	9	25	8	16	5	6
Drunkenness	41	34	36	15	2	2	--
Disorderly Conduct	23	27	29	10	20	8	5
Driving While Intoxicated	6	9	17	15	16	16	11
Other	20	42	53	60	143	67	11
<b>TOTAL</b>	<b>160</b>	<b>187</b>	<b>252</b>	<b>267</b>	<b>417</b>	<b>277</b>	<b>133</b>

Source: Alaska Department of Public Safety

## CITY OF KODIAK POLICE DEPARTMENT

The City of Kodiak Police Department provides police services within the City Limits. The Police Department headquarters are located near downtown Kodiak on Mill Bay Road. (See Map 6.)

The Department is organized in three divisions. The Administrative Division consists of the Chief of Police and one secretary. The Patrol Division consists of one Sargent of Police and nine police officers. The Service Division consists of one sargent, five desk officers, one cook, and one humane officer. The Service Division provides support services to the Department including clerical, dispatching and record maintenance. The humane officer is responsible for animal control.

The Police Department maintains four radio-equipped patrol cars, one four-wheel drive vehicle, one pickup truck with canopy (humane truck) and one 1-1/2 ton van.

The City of Kodiak's jail facility is also located in the Police Department headquarters. At present that facility will detain 20 prisoners. It does not, however, have cells separated for the detention of women and juveniles, and the City is not allowed to detain prisoners for more than 120 days after sentencing because of the limited jail space. As indicated in the Social Services Section of this report, the Police Department is also responsible for administering the Alcoholic Sleep-Off Center which is located behind the jail.

A study of the historical crime rate in Kodiak reveals some extraordinary findings that give a relatively accurate indication of the effects that OCS development on criminal activity in Kodiak. Figure 4 shows the number of persons charged with Part I and Part II offenses from 1970 through 1976, and the percentage of increase or decrease in criminal acts that occurred during this period. The information utilized for this figure is condensed from reports sent to the Federal Bureau of Investigation by the City of Kodiak Police Department. A description of the offenses included in Part I and Part II categories is also found in Figure 4.

There has, in recent years, been a fluctuation in criminal activity in Kodiak. This is probably due to flucuations in the economy. Such economic flucuations can cause changes in the crime rate due to social tensions, economic hardships of individuals and increases in the number of transient workers.

The most significant statistic within Figure 4 is the increase in the crime rate shown between 1975 and 1976. The major portion of that increase in 1976 occurred in Part I offenses, which are considered far more serious than the Part II offenses. This is primarily because Part I offenses normally represent a criminal act that is eminently dangerous to the life and/or physical well being of the victim.

Fig. 4: Criminal Offenses City Of Kodiak

Year	Part I Offenses <sup>1</sup>	% ±	Part II <sup>2</sup> Offenses	% ±	TOTAL	TOTAL % ±
1970	4	---	501	---	505	---
1971 <sup>3</sup>	1	---	352	---	353	---
1972	47	+ 15%	504	+ .05%	551	+ 2.0%
1973	40	- 15%	229	- 55%	269	- 39%
1974	50	+ 25%	503	+ 120%	553	+ 63%
1975	53	+ 6%	450	- 10.5%	503	- 10%
1976	91	+ 72%	551	+ 22%	642	+ 28%

1. Part I Offenses: Criminal Homicide (Murder & Nonnegligent Manslaughter) Forcible Rape, Robbery, Aggravated Assault, Burglary, Larceny, Motor Vehicle Theft.
2. Part II Offenses: Other Assaults, Arson, Forgery & Counterfeiting, Fraud, Embezzlement, Stolen Property, Vandalism, Weapons, Prostitution & Commercialized Vice, Other Sex Offenses, Narcotic Drug Laws, Gambling, Offenses Against Family and Children, Driving Under the Influence, Liquor Laws, Drunkenness, Disorderly Conduct, Vagrancy, All other Offenses (except traffic).
3. Incomplete data for 1971.

Source: City of Kodiak Police Department information reported to FBI. Simpson Usher Jones, Inc. (1976).

Often times an increase such as this is not representative of the actual increase in crimes, but rather is reflective of an increase in efficiency of reporting or an increased level of service on the part of the agency involved. However, this not the case of the Kodiak Police Department. There have been no significant changes in the reporting requirements or standards, and the level of service of the department in terms of its personnel and equipment, was not appreciably changed between 1975 and 1976. Thus there is no reason to believe that the statistics shown in the table are influenced by external factors.

The increase in Part I offenses within the last year could be explained by any one, or all, of a number of changes that are occurring in Kodiak. Most of these changes are directly or indirectly related to economics. In recent years, the processing industry has been expanding rapidly and has encountered shortages in the available work force. Consequently, there has been a high degree of reliance on imported laborers that are either

migrant and/or transient. The majority of these workers are from cultural backgrounds different than the residents of Kodiak and have no hereditary roots within the community. According to the Police Department, a relatively high percentage of the criminal offenders reported in Figure 4 come from this group. Also, Kodiak is experiencing a much higher than normal incidence of unemployed transients from other major cities within Alaska. Again, according to the Police Department, there has been a high incidence of criminal offenses by transient persons from Anchorage, Fairbanks and Valdez within the last year. This would correspond with the completion of the Trans Alaska Pipeline project and the desire of the persons who were employed on that project to either seek new employment in other towns or simply explore other parts of the state. For the most part, the people within these groups are law abiding and have no intention of becoming involved with illicit activities. However, statistically there is a higher incidence of criminal offenders in these groups than is found in the indigenous population. A relatively high percentage of offenders in Kodiak tend not to have any type of cultural or economic attachment to the community.

There is an obvious correlation between this recent increase in criminal activity and the potential effects of rapid industrialization due to OCS development. A large portion of the labor force involved in oil development in Kodiak will have to be imported because the lack of required skills that are available in Kodiak as well as the general lack of work force available. Also, as industrialization occurs, Kodiak will experience an influx of "camp followers". These people have traditionally followed economic booms in hopes of either finding high paying jobs or establishing illicit operations, such as gambling and prostitution, to "cash in" on the boom. In most cases the jobs are not available and, unfortunately, there is normally a market for the illicit operations.

In order to cope with this situation, police services within the City of Kodiak will have to be increased. In discussions with the Police Department, a number of needs were identified that would help reduce these adverse impacts. One unfortunate, however necessary, priority would be an increase in the size of the jail facility. Since the city jail is the only detention facility on Kodiak Island it is already operating at or above its capacity. A continued increase in crime will make its expansion or the construction of a new facility imperative.

An increase in criminal activity will obviously require an increase in police departmental activity. A dramatic increase will require additional personnel. An increase in personnel will require an increase in the size of the Police Department facility. Currently, the department estimates that there is a need for additional personnel in the jail to handle bookings and releases on the work-release program, as well as to administer the Sleep-Off Center. The department is also in need of a juvenile officer to work with delinquent, dependent and neglected children. It is estimated that by the addition of this officer, 75% of the children that are now sentenced could be kept out of court. In addition, the department is in need of two more positions for traffic control. An increase in the criminal rate will require a much higher percentage of

individual police officer's time to be spent in the handling of criminal cases. Consequently, traffic control would be one of the first areas of police work that would receive less attention.

The present needs of the Department, based on the increased crime rate in 1976, would require the addition of five people to the department along with appropriate equipment and vehicles. If the crime continues to increase as can be expected during OCS development, the City of Kodiak should be prepared to expand the department even further.

#### THE ALASKA STATE COURT SYSTEM

The court system is housed in the state court building in downtown Kodiak. (See Map 6.) In addition to the administrative offices this building includes a law library with an inventory of approximately 5,000 legal books and documents. The law library is open to the public during the normal hours of operation of the state office.

At the present time court personnel include one Superior Court judge who presides over both the Superior and District Courts; one in-court deputy clerk who also functions as the judge's secretary; one magistrate who handles the administration of the court system and the small claims and arraignment function; a clerk of the court/acting magistrate; and a recording clerk, for a total of five employees.

The court's workload in Kodiak has shown a fluctuating increase over the past few years (Figure 5). The following charts provide a summary of Kodiak Superior Court's case load indicating the number of cases filed, the number of dispositions made, and the number of cases still pending during the years 1973, 1974 and 1975. Figure 6 provides an indication of the number and types of felony and misdemeanor charges filed in Kodiak during 1975.

Fig. 5: Kodiak Superior Court Total Caseload

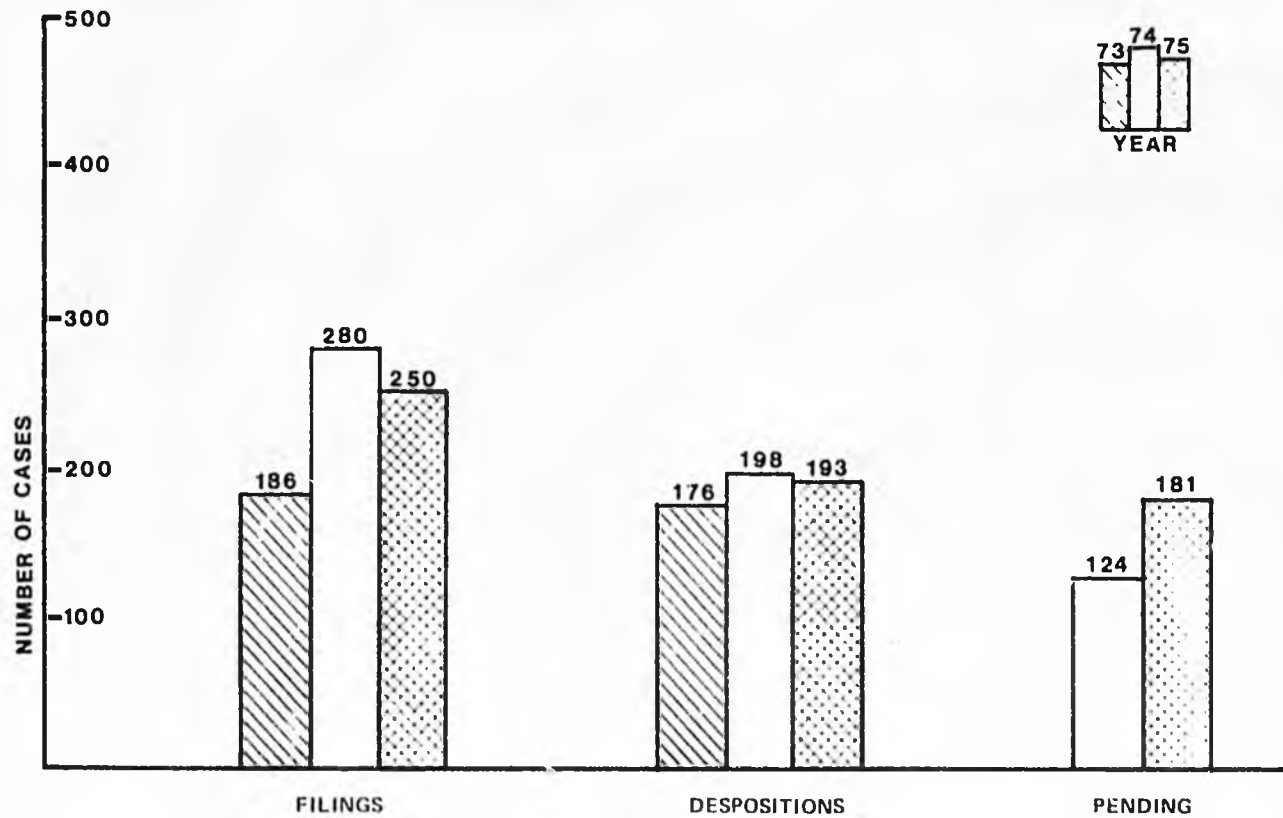


Fig. 6: 1975 Filings -- Kodiak

<u>Felony</u>		<u>Misdemeanor</u>	
Violence	41	Violence	66
Property	49	Theft/Travel	82
Travel	10	Environmental	127
Drugs	13	Nuisance	110
Resisting the Law	0	Alcohol/Drugs	70
Other	<u>0</u>	Vice	3
TOTAL	119	Resisting the Law	15
		Traffic	193
		Other	<u>19</u>
		TOTAL	685

Source: State of Alaska Court System

The first year Kodiak had both a Superior Court Judge and Public Defender was 1976. (See "Health and Social Services" for information regarding the Public Defender.) Consequently, the workload of the court system has increased dramatically. It is estimated that two additional personnel are needed to adequately handle the existing court administration workload. In addition, a law clerk is needed to assist the Superior Court Judge.

If full OCS development were to occur, it is anticipated that felony and misdemeanor offenses will increase significantly. Consequently, the court system's case load will also increase. Since the current staff level is overtaxed by its present workload, it is felt that the court system could not handle the additional burden brought on by OCS development without increasing its personnel.

#### STATE DEPARTMENT OF LAW

The District Attorney's office is the only representative of the State Department of Law in Kodiak. This office employs one attorney and one secretary. The function of the District Attorney's office is to prosecute all violations of state law within its service area which includes Kodiak, the Alaska Peninsula, the Aleutian Chain, and portions of Southwestern Alaska.

A full-time District Attorney has been employed in Kodiak since the fall of 1975. Prior to that, those functions were served by an Assistant District Attorney from the Anchorage office on a part-time basis.

In addition to the normal case load, the Kodiak District Attorney is responsible for prosecuting violations of fishing and hunting regulations for the Division of Fish and Wildlife. These cases include everything from illegal commercial fishing to complaints against sport fishermen for snagging salmon. Fish and Wildlife Protection cases account for approximately 25 percent of the District Attorney's time.

The District Attorney also handles divorce and paternity-related non-support complaints from other states through cooperative agreements. This is done on a time-available basis.

As previously mentioned, the District Attorney's office is responsible for the Kodiak area, the Aleutian Chain and the Alaska Peninsula. The greatest proportion of its time (approximately 70 to 75 percent) however, is spent on Kodiak cases. The District Attorney's office estimates that at least one additional attorney and one secretary are needed to adequately handle the present case load. The advent of OCS development would necessitate an even larger staff because of the problems anticipated to accompany population growth.(15)

## DIVISION OF CORRECTIONS (Department of Social Services)

The Division of Corrections Office in Kodiak is also located in the state court building. It is staffed by two corrections officers and one secretary. The Division of Corrections is primarily in charge of correctional institutions and field services. However, since there is no state jail in the Kodiak area, the Kodiak office is totally involved in field services. The programs administered are as follows:

Juvenile Intake - Under this program the Division of Corrections reviews juvenile offenders to determine if they should be taken to court or handled in some other manner. This is a discretionary decision rendered by the corrections officer in Kodiak.

Convicted Offenders - Reports are required on convicted juvenile and adult offenders. In the case of adults, presentencing reports are prepared for the court on convicted felony offenders. These reports are reviewed by the court in the process of sentencing adult felons.

Predisposition reports are required by the court on juvenile offenders. These reports include complete background studies of the juvenile offenders. The court uses these reports to determine the disposition of the juvenile offender after sentencing.

Probation Supervision - This program directs the counseling and supervision of persons who have been convicted of crimes and placed on probation. It is the duty of the corrections officer to see that the terms and conditions of probations are met by the offenders.

Parole Supervision - This program administers probation supervision to previously convicted persons who are now on parole. Parole is also normally granted with attached conditions or terms, and it is the duty of the corrections officer to insure that those conditions are met by the parolee.

Interstate Compact - Under this program the Division of Corrections assumes courtesy supervision of parolees from other states. While it is required that correction officers must be notified by the state of origin when a parolee requests permission to move into his district, this procedure is seldom followed. Frequently parolees simply appear before the correction officer and request parole supervision.

Approximately 95 percent of the correction officer's case load in Kodiak involves probation supervision. Of that, 60 percent relates to adult offenders and 40 percent with juveniles. The remaining 5 percent of the time is spent preparing reports for both the department and the court.

The Division of Corrections handles a heavy work load and additional personnel could currently be justified according to the Division repre-

sentative in Kodiak. If full OCS development were to occur, the case load would increase significantly, and so would the need for additional personnel and support facilities.(16)

#### EMERGENCY MEDICAL SERVICES

Emergency medical services in Kodiak are insufficient at the present time on a regional basis. While the City of Kodiak provides ambulance service to military personnel and their dependants at the Coast Guard Base, the remainder of the Island, including the villages, is without such service. When emergency medical help is needed, the villages receive verbal medical assistance from Kodiak physicians and nurses until the patient can be evacuated from the village. Medically, this is a very unsatisfactory system further complicated by unreliable communication and transportation difficulties due to unfavorable geographical and weather conditions.

The Coast Guard provides search and rescue service for the entire island.

**EDUCATION FACILITIES**

- 1 Alcutin Regional High School
- 2 East Elementary School
- 3 Main Elementary & Junior High Schools
- 4 Kodiak Community College
- 5 St. Herman's Pastoral School
- 6 St. Mary's Elementary School

**PARKS AND RECREATION**

- 7 Abercrombie State Park
- 8 Baranof Park
- 9 Hillside Mini-Park
- 10 Little League Fieldpark
- 11 Spruce Street Playground
- 12 Larch Street Playground
- 13 Swimming Pool
- 14 Cry of the Wild Ram Site (outdoor theatre)
- 16 VFW Rifle Range, Beach & Lodge
- 16 Boy Scout Campground
- 17 Girl Scout Campground
- 18 Casino Bowling Lanes
- 19 Orpheum Theatre
- 20 Teen Center

**HEALTH FACILITIES**

- 21 Hope House
- 22 Kodiak Council on Alcoholism
- 23 Kodiak Island Borough Hospital
- 24 Island Medical Center
- 25 Holmes Johnson Clinic
- 26 Kodiak Professional Building

**POINTS OF INTEREST**

- 27 Old City Cemetery
- 28 New City Cemetery & Catholic Cemetery
- 29 Kodiak Electric Association
- 30 Museum - Baranof House
- 31 Old Russian Cemeteries

**FEDERAL GOVERNMENT FACILITIES**

- 32 Coast Guard Base
- Base Elementary School
- Marine Fisheries Center
- Airport (State operated)
- 33 Loran Station
- 34 National Marine Fisheries
- 35 Post Office (old)
- 36 Post Office (new)

**BOROUGH GOVERNMENT BUILDINGS**

- 37 Kodiak Island Borough

**STATE GOVERNMENT FACILITIES**

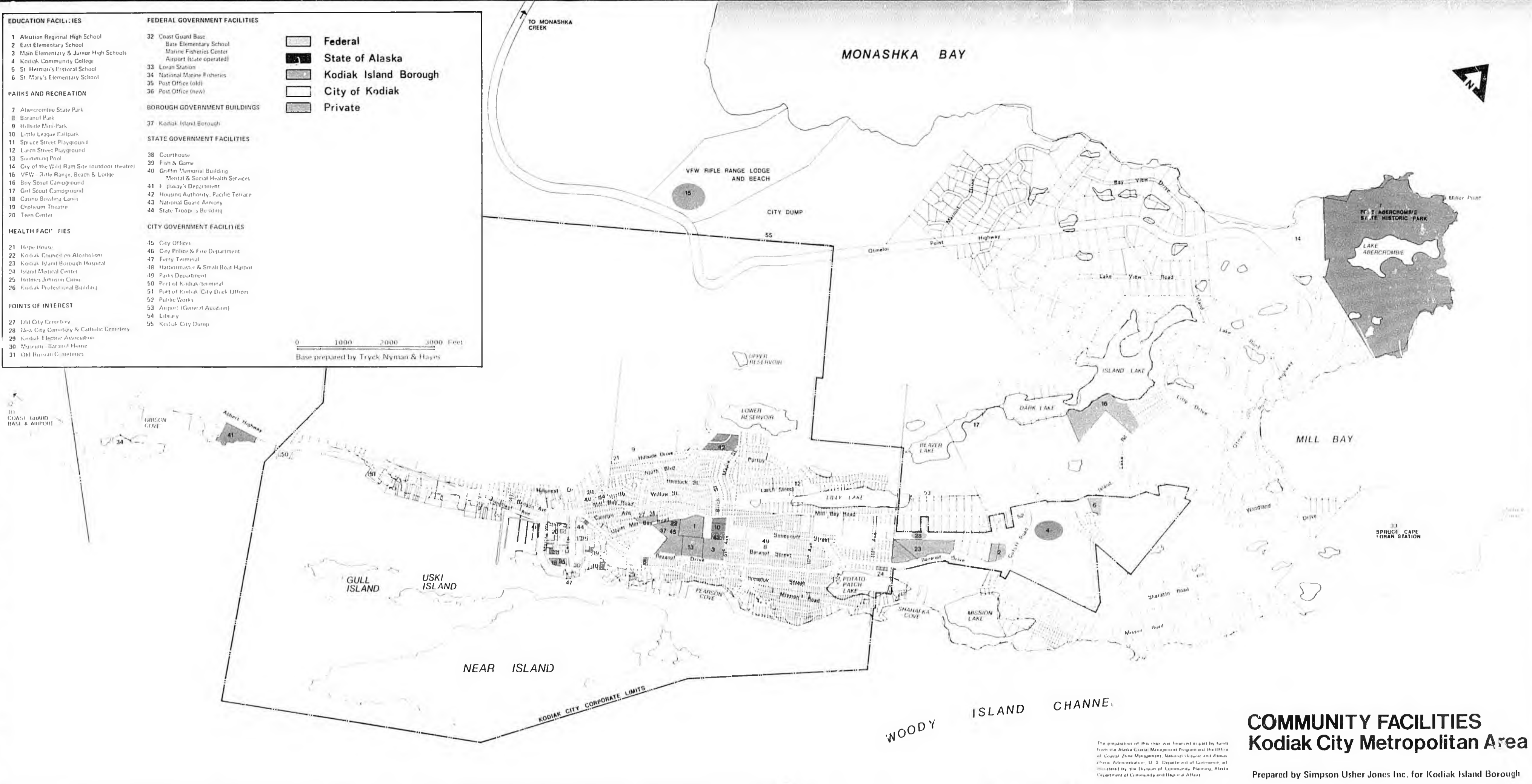
- 38 Courthouse
- 39 Fish & Game
- 40 Griffin Memorial Building
- Mental & Social Health Services
- 41 Highway's Department
- 42 Housing Authority, Pacific Terrace
- 43 National Guard Armory
- 44 State Troop's Building

**CITY GOVERNMENT FACILITIES**

- 45 City Offices
- 46 City Police & Fire Department
- 47 Ferry Terminal
- 48 Harbor Master & Small Boat Harbor
- 49 Parks Department
- 50 Port of Kodiak/Terminal
- 51 Port of Kodiak City Dock Offices
- 52 Public Works
- 53 Airport (General Aviation)
- 54 Library
- 55 Kodiak City Dump

Federal  
 State of Alaska  
 Kodiak Island Borough  
 City of Kodiak  
 Private

0 1000 2000 3000 Feet  
 Base prepared by Tryck Nyman & Hayes



**COMMUNITY FACILITIES  
 Kodiak City Metropolitan Area**

The preparation of this map was financed in part by funds from the Alaska Coastal Management Program and the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, administered by the Bureau of Community Planning, Alaska Department of Community and Regional Affairs.

Prepared by Simpson Usher Jones Inc. for Kodiak Island Borough

## HEALTH AND SOCIAL SERVICES

The following is a review of health and social services available in the Kodiak area. More specifically, the services discussed are public assistance and welfare programs primarily directed toward persons with financial and sociological problems. Most of these services are based in the City of Kodiak or the immediately surrounding metropolitan area, although many services are provided to the outlying villages on a visitation basis. These will be noted where applicable.

The importance of health and social services within a community is often underestimated. The need for such services, however, may be particularly acute during an economic boom. Should Kodiak experience rapid population growth and industrialization due to OCS development, problems may arise such as overcrowding, cost of living increases, a rise in unemployment, housing shortages, traffic congestion, and more community health problems. Such changes may result in a significant degree social disruption since current residents of Kodiak have been accustomed to a stable, homogenous community with a steady growth rate.

Relatively speaking there have been few serious social conflicts and no serious community-wide health problems. It is possible, however, that conflicts between the life styles of the existing residents and the newcomers may occur. Resentment and other psychological pressures may build as a result of a population increase. In addition, since unemployment can be expected to rise due to an influx of job seekers who want to participate in the "boom", public assistance and welfare programs will be impacted.

To help avoid these problems or lessen their consequences, the health and social services available in Kodiak will be of valuable assistance.

### HEALTH FACILITIES AND SERVICES

#### Kodiak Island Borough Hospital

The Kodiak Island Borough Hospital is located within the City of Kodiak and is owned by the Borough. (See Map 6.) It is operated by the Grey Nuns of Sacred Heart, Incorporated. This non-profit corporation has an operating agreement with the Borough and takes full responsibility for the day-to-day operation of the hospital.

The Kodiak Island Borough Hospital has a 44-bed capacity including a two-bed, intensive coronary care unit. Other departments within the hospital include obstetrics, surgery and emergency care. The hospital is equipped with X-ray equipment, two remote heart monitors, complete

kitchen facilities medical laboratory, EKG equipment and a variety of surgical equipment and monitoring facilities. At present the only additional equipment needed by the hospital is another stretcher for the emergency room, a backup EKG machine, microfilm equipment and additional up-dated surgical equipment.

The staff totals 55 full-time and part-time personnel, including medical and administrative positions. There are four full-time doctors on the staff and eight doctors on a courtesy staff. The yearly budget is approximately one million dollars.

Construction of a new intensive care wing is underway with occupancy expected in 1977. This 19-bed facility will require less equipment and staff personnel than the acute care facilities currently being used. In addition, it will increase the versatility and capacity of the hospital.

Full OCS development should not adversely affect the hospital. Upon completion of the current construction program, the hospital will be operating at 60 to 70 percent of full capacity. With the addition of the new wing and the purchase of equipment mentioned previously, the hospital should be able to accommodate the needs of a substantially large population.(17)

OCS development can be expected to bring a significant increase in industrial accidents. The hospital is also capable of handling that situation. The heliport at the City Airport is located near the hospital and provides fast transportation to offshore facilities. It would be necessary, however, to upgrade the roads between the hospital and heliport to allow for faster ground transport of emergency cases.

### Health Care Agencies and Facilities

The following is a list of the various entities that provide health services in Kodiak in addition to the Kodiak Island Borough Hospital.

#### Kodiak Health Center

The Kodiak Health Center is operated by the Alaska Department of Health and Social Services, Division of Public Health. It is located in the Griffin Building (see map 6) and is open from 8:00 a.m. to 4:30 p.m., Monday through Friday. The center is staffed by three registered nurses and one clerk/receptionist. The following services are provided by the Kodiak Health Center: (18)

1. Public Health Nursing Service - Services available through the Public Health Nursing Service include physical examinations, house call visits, limited direct nursing care, follow-up on communicable diseases including tuberculosis and venereal disease, services related to mother and child care, evaluation of health problems and needs, health education, and health care consultation.

## 2. Clinics

Well Baby Clinic - Examinations and immunizations.

Immunization Clinics - Routine childhood and adult, international travel, exposure to a contagious disease, tuberculin skin testing.

Family Planning Clinic - Education, health exam and provision of desired birth control method.

Chest and X-ray Clinics - For tuberculosis and other respiratory problems.

### Kodiak Island Borough School District

The School District provides health services through a registered school nurse whose office is located at the Kodiak High School. She provides general health screening, vision and hearing testing, health counseling and assistance to community agencies regarding child health matters.(19)

Physical Therapy - Physical therapy is provided by a traveling physical therapist who works out of the Kodiak Island Borough Hospital one or two times a month. The services provided by the physical therapist are offered to the community free of charge through the financial support of the Elks Lodge. The services offered are:

1. Teaching the patient or family to carry out an exercise program as needed.
2. Going into the home, if necessary, to help modify living arrangements to enable handicapped persons to increase their independence.
3. Evaluations of any persons with problems relating to physical therapy.
4. Specific physical therapy evaluation procedures (i.e. range of motion, muscle testing, electrical stimulation, functional evaluation).
5. School scoliosis screening. Also evaluations of children requested by the school nurse or teacher.
6. Motor development evaluations of infants and young children.

### Kodiak Analytical Laboratories

Kodiak Analytical Laboratories is the only independent laboratory facility on the Island. It is located in the Kodiak Island Professional

Building (see Map 6). A full range of laboratory work can be provided upon physician's request. In addition, the laboratory will perform pregnancy and premarital blood tests for private individuals.

#### Private Physicians and Dentists

The City of Kodiak has several dentists and general medical practitioners. In addition there is a clinical psychologist and an optometrist. Specialists in the fields of dermatology; urology; orthopedics; ophthalmology; orthodontics; and ear, nose and throat; travel to Kodiak from Anchorage and Fairbanks at various frequencies throughout the year to treat patients needing special care. A family practitioner is located at Port Lions.

The current needs for professional medical services in Kodiak are being adequately met. OCS development would undoubtedly mean a greater need for medical services, especially in the area of emergency services due to the hazardous nature of the work involved in oil field development. As mentioned previously, however, the Kodiak Island Hospital should be able to accommodate these needs both in physical capacity and technical facilities. More private physicians and dentists may be needed as the population grows.

#### Mental Health Assistance

The Kodiak Aleutian Mental Health Center (KAMHC), established in 1970, provides most of the mental health assistance in Kodiak. The Center, which is located in the Griffin Memorial Building (Map 6), has a full range of services including 24-hour crisis intervention and emergency psychiatric hospitalization. The staff includes two social workers, one psychologist, and one native mental health worker. Local medical consultation is available at all times, and psychiatric consultation is scheduled on a monthly basis. Services are provided at the schools, the Alcoholism Council, the Kodiak Baptist Mission Program for Adolescents, and all other agencies in the community. The Center has also recently begun to provide mental health services to the surrounding native villages.

The purpose of the Kodiak Aleutian Center is to provide quality mental services to all residents of Kodiak Island regardless of income.

Its staff evaluates and treats various emotional disturbances such as behavior problems of children and adolescents, learning disabilities, school adjustment problems, and delinquent behavior, marital problems, disturbances in family living, alcohol and drug related problems, neuroses, and psychoses.

According to personnel at the Mental Health Center, many residents of Kodiak feel isolated because they live on an island. These feelings of isolation coupled with the seasonality of the fishing industry bring a variety of mental health problems.

Total state funding for the Kodiak Mental Health Center for fiscal year 1976 was \$98,500. That figure will increase by \$14,200 in 1977 for a total state funding of \$112,700.

Four basic services are offered by the center. They are described as follows:

1. Outpatient care - This includes services for persons who require ongoing therapy, such as psychotherapy, marital counseling, family counseling, and group therapy.
2. Inpatient care - The Center utilizes the Kodiak Island Hospital for persons who require short-term psychiatric hospitalization, usually no more than ten days. Long-term hospitalization is provided by referral to Alaska Psychiatric Institute in Anchorage or other inpatient facilities outside the community.
3. Partial hospitalization - This is for patients who do not need complete hospitalization. These patients are engaged in part-time programs provided by the Center.
4. Education and consultation - This is a preventative service, intended to assist the community to better understand the problems of mental health and to offer training to staff members of other agencies.

Full OCS development would undoubtedly create a need for additional clinical staff due to social pressures generated by conflicting life styles and economic problems.(20)

#### Alcoholism and Alcohol Related Programs

Alcoholism is an extremely serious problem in Kodiak. It was identified in the Kodiak Island Borough Health Resources Council Report of August 1975 as Kodiak's number one health problem and a priority issue. Statistics reinforce this statement. For instance, of the total number of admissions to the Kodiak Island Hospital for 1975-76, 14 percent were alcohol related. Of the total number of ambulance responses by the Kodiak Fire Department, 22.6 percent were alcohol related. In addition, the court system reported that 33 percent of the District Court cases were alcohol related, and 44.8 percent of the Superior and District Court cases combined were alcohol related.

Most of the alcoholism programs in Kodiak are handled through the Kodiak Council on Alcoholism which is a chartered chapter of the National Council on Alcoholism - Alaska Region. Its offices are located in the Borough office building (Map 6). It is a private nonprofit corporation funded by state and local governments, and it provides three main facilities. They are Hope House, the Sleep-Off Center, and the Information and Education Center. All of these facilities are located in the City of Kodiak.

Hope House Alcoholism Treatment Center - Hope House is located at 319 Hillside Drive in Kodiak. It provides a four-week residential treatment program, extending into a 60-day half-way house program with after-care. It can accommodate nine men and two women. The clients who enter the program generally do so on a voluntary basis and are free to leave treatment at their own request. During the fiscal year 1975-76, a total of 61 persons were admitted to the Hope House and 54 were discharged.

Sleep-Off Center - The Sleep-Off Center is located at 217 Benson Avenue behind the City Police Department (Map 6). It includes beds for ten individuals, free coffee, tea and hot chocolate, shower and laundry facilities. Trained personnel are on duty to provide continual care. Referrals may be made to the Sleep-Off Center by police officers, the Kodiak Council on Alcoholism, medical clinics, ministers, and other agencies. Walk-in patients are also accepted. The desk officer at the City Police Department checks in all referrals and walk-ins before they are turned over for care at the Sleep-off Center. This does not mean the patients are incarcerated, however. They accept treatment on a voluntary basis and may leave when they wish. No fees are charged for the services rendered. During 1975-76, 244 persons utilized the Sleep-Off Center, with a total of 61 of those being referred by other agencies.

Information and Education Center - The Kodiak Council on Alcoholism Information and Education Center is located on the second floor of the Harbor Master Building (Map 6) at 403 Marine Way. The Center has a library which offers films, tapes, and literature on alcoholism. There is also a lounge area for clients and the general public which furnishes free coffee, tea and hot chocolate. Referral and consultation services with the staff and executive director of the Council are available on a scheduled and non-scheduled bases. In addition, films are shown on Monday, Wednesday and Friday at 1:30 p.m. for anyone who wishes to attend. Alcoholics Anonymous and a team on drug/alcohol use meet regularly at the center.(21)

#### District Sanitarian

The State Department of Health and Social Services provides the only sanitarian services in Kodiak. The Office of the District Sanitarian is located in the Griffin Memorial Building (Map 6) and is staffed by two sanitarians and one secretary. It is entrusted with enforcing all state, borough and local health regulations for the Kodiak area as well as the Alaska Peninsula and the Aleutian Chain. The duties of the District Sanitarian include inspection and enforcement of the sanitation requirements for food services, seafood processors, barber shops, beauty shops, schools, grocery stores and on-site septic systems in residential areas. In addition it must investigate complaints by the public.

Due to the tremendous volume of work assigned to the District Sanitarian, the office is understaffed with three employees. It is felt that three additional sanitarians assigned to seafood processors plus two more

sanitarians and one aid to assist with the other areas of responsibility could easily be justified. In addition it is recommended that the City and Borough hire their own sanitarians to enforce local regulations.

Because of the limited staff, the District Sanitarian's Office has had to expend most of its effort attending to emergency situations. Normal day-to-day responsibilities have suffered from lack of attention and some problems are still unresolved as a consequence. As an example, the City of Kodiak has been faced with a large rat population in recent years. While it is a potentially serious problem, the District Sanitarian has been unable to devote enough time to the extermination of these animals. With proper staffing, however, this kind of problem could be handled on a continuous basis.

### PUBLIC ASSISTANCE PROGRAMS

The public assistance services addressed in this portion of the report will primarily include programs designed to meet the needs of persons and households requiring financial assistance, medical aid, or vocational training.

#### Housing Assistance

Housing is a major problem in the Kodiak area. As the Housing Inventory demonstrates, the current housing supply is short and rents are correspondingly high. This situation has created a need by many Kodiak residents for housing assistance.

Several programs are available to provide such help. One project, operated by the Alaska State Housing Authority, provides low cost housing to families in the City of Kodiak. Forty apartment units, ranging from one to four bedrooms and collectively known as Pacific Terrace (Map 6), are available to families who qualify under a formula based on the relationship between the family's size and its income. As an example, a family of three qualifies for this housing if it earns \$7900 or less per year. Once they become residents, the family may increase its income without jeopardizing its tenancy. However, rent will increase in accordance with the raise in salary.

The housing provisions of Pacific Terrace require that a family must consist of either (1) two or more persons related by blood, marriage or adoption, and who live regularly together in the same dwelling unit; or (2) a single person who is disabled; or (3) a person who is 62 years of age or older.

Public demand for low cost housing at Pacific Terrace is high. It is estimated that vacancies occur only once every six months, and there is currently a two-year waiting list for qualified applicants.(23)

Another program providing housing assistance is offered by the Department of Health and Social Services, Division of Public Assistance. This

program, otherwise known as Income Maintenance, is moderately used in Kodiak. It provides rent and utility assistance as part of a general relief program. In 1975, the Division of Public Assistance expended \$514,503 on 144 cases in Kodiak, an average of \$3,572.94 per case.

Construction of 90 housing units in outlying villages is planned for the near future. These houses will be built by the Kodiak Area Native Housing Authority (KANA), an organization recently established by the Kodiak Area Native Association (KANA). Assistance by the Indian Health Service, and a 3.6 million dollar grant from HUD, aid this housing project.(24) All of the units will be located in villages around Kodiak Island. Old Harbor will receive 45 units. Ahkiok, Larsen Bay, and Karluk will receive 15 units each. At present, the funds for this program are held up by HUD because a new set of guidelines has been adopted for the Indian Housing Program and the cost structure of this project must be modified to meet those guidelines. There is no estimate as to when the funds will be available.

In a separate application to HUD, funds are being requested under Section 8 of the Housing and Community Development Act of 1974, for a 55-unit complex for the elderly. These funds would not cover construction costs, but would provide housing assistance payments to qualified households. A simultaneous application for HUD mortgage insurance has been made to finance the construction of these units. Both applications are pending due to lack of funds.

The programs mentioned above can be valuable in providing housing to low and middle income people in Kodiak. In the future they will become even more important. Maintaining the funding for these programs will be vital to the success in meeting the housing needs in Kodiak.

As with other social services and public assistance programs, the housing program will be strongly impacted by full OCS development. As economic development occurs and population increases, housing will become more scarce and rents will become higher. Consequently, housing assistance will be needed by a larger percentage of the community. It follows, therefore, that funds for housing assistance programs must also increase in proportion to rising housing costs and population growth.

### Social Services

The State Division of Social Services has an office in the Griffin Memorial Building in Kodiak (Map 6) to assist people in the Kodiak area, the Aleutian Islands, and the Alaska Peninsula. The staff, which consists of one full-time and one half-time employee, devote their time to counseling, child protection, regulation of daycare services, information dispersal, referrals to other agencies, and administrative functions.

There is an average of 130 cases continuously in progress. Of these about 50 are routine management jobs such as licensing, certifications, etc.; 30 are long-term assistance cases for families; and 50 are crisis cases requiring immediate, intensive attention. In addition to these

cases, about 50 families wait for social service assistance but cannot be helped until the present case load subsides.

Crisis situations demand most of the staff's time. Due to the lack of personnel, however, only the most serious of these cases can be investigated immediately. Alcohol-related incidents frequently account for the most serious problems. Unintentional child abuse is a common alcohol-related problem, although such cases generally involve neglect rather than malice.

The Division of Social Services estimates that to adequately handle its present workload it needs an additional professional plus four para-professional; two of whom should be located in outlying villages. Should OCS development occur, the anticipated social tensions would further increase the need for assistance by the Division. Quite obviously, such needs could not be met by current staff levels.(25)

### Subsistence Programs

Several programs designed to increase the income of families living below subsistence level are available in Kodiak.

The Office of the State Division of Public Assistance, located in the Griffin Memorial Building (Map 6), offers grant programs to assist families with dependent children, the aged (65 and over), the blind, and the disabled. In addition, it furnishes utility, rent and medical assistance under a general relief program. Food is provided through the Food Stamp Program. The Division's authority for administering assistance under these programs extends to all qualified residents of Kodiak Island.

The response to these programs has been high. As an example, there were 200 recipients of these assistance plans in August, 1976. This figure did not include applications which were denied or pending.

The most actively used plan is the Food Stamp Program, which provides subsistence aid based upon a ratio of family income to family size. In general, recipients of that program are new to the Kodiak area and are unemployed.

The next two most frequently used programs are Aid to Dependent Children and Aid to the Aged, in that order. These programs are generally used by residents of Kodiak who have lived in the community for longer periods of time.

In addition to the services mentioned above, the State Division of Assistance provides informal counseling and referral services to new applicants who are searching for employment and/or shelter.

The current staff at the Division consists of one full-time employee. The workload, however, warrants at least one additional employee to assist with the clerical tasks. If full OCS development were to occur, the staff and facility requirements would increase substantially since

economic booms historically bring large numbers of people who need welfare services while trying to find work. Such a situation could not be handled by the current staff level.(26)

The Social Security Administration's Supplemental Security Income Program provides additional subsistence income to a total of 76 households in Kodiak. On a monthly basis this income supplement ranges from \$39 to \$580 per month, with a mean of \$145.50.

The Kodiak Area Native Association will also be providing subsistence programs in the near future. KANA is in the process of contracting with the Federal Department of Health, Education and Welfare to provide assistance funds and care to natives who do not qualify for other social service programs. These programs have been administered through the Bureau of Indian Affairs in the past, from their office in Anchorage. For additional information see the KANA Annual Report.

### Employment Assistance

The State of Alaska, Department of Labor, provides the only employment assistance program in Kodiak through the Kodiak Job Service Center. This Center has three permanent and two temporary employees. As in many other state departments, the area of responsibility for the Kodiak Job Service Center includes the Alaska Peninsula and the Aleutian Chain.

The services provided by the Kodiak Job Service Center are listed below in order of the amount of time spent on each function.

1. Job placement/employment security
2. Unemployment Insurance
3. General administration
4. Selection, referral, testing, placement and follow-up for job training programs
5. Food Stamp Program (all food stamp applicants are automatically on file with ESC)
6. Promotional employer visits
7. Community breaking engagements
8. Immigration processing to ascertain if U.S. citizens are available to take jobs being sought by immigrants

The Job Service Center's most active period is approximately May 15 through July 15, when the fishing season is relatively slow. The unemployment insurance and job placement activities also increase at this time. Throughout the rest of the year, assuming the fishing season is average to good, unemployment insurance activity is lower.

Full OCS development will have an impact on the Kodiak Job Service Center similar to the effect described above on the Department of Health and Social Services, Division of Public Assistance. It can be expected that with a boom-type industrial situation, there would be an abnormal increase in unemployment insurance claims as well as requests for job placement. Until hiring policies of the industries involved are known, it is impossible to determine the exact extent of the increase in work load on the Kodiak Job Service Center.(27)

#### LEGAL ASSISTANCE PROGRAMS

##### Office of the Governor - Public Defender

The Public Defender's office is located in the State Court Building in downtown Kodiak. The primary purpose of this office is to provide legal representation in criminal matters for persons who cannot afford to retain a private attorney. Currently there is only one employee in this office and that employee is paid on a three-quarter salary basis. The office space is donated.

In addition to providing legal services to the Kodiak area, the Public Defender is also responsible for the Aleutian Chain and the Alaska Peninsula. The Public Defender's office was opened in Kodiak on February 1, 1976. By August, 1976, the Public Defender was handling 15 felony cases and 45 misdemeanor cases throughout the service district. The great majority of the cases involving the Public Defender are alcohol related, and the most common felony crimes are assault, burglary and breaking and entering.

Based on the current workload and the capability of the court system to handle cases, the Kodiak Public Defender's office estimates that one full-time attorney and one full-time legal secretary could adequately handle the work. If the case load were to increase due to OCS development and resultant social pressures, the office staff would have to be increased accordingly.(28)

##### Alaska Legal Services

Alaska Legal Services opened its office in Kodiak in September, 1975. Prior to that it provided services to the Kodiak area on a visitation basis.

While Alaska Legal Services will not handle criminal cases, it does provide civil representation to qualified people on Kodiak Island in matters such as divorces, contracts, native land laws, civil disputes, etc. It cannot accept cases which could result in cash settlements large enough to provide fees for private attorneys.

Staff at the Alaska Legal Services includes one attorney, one paralegal, one secretary/paralegal, one secretary/clerk, and a summer

intern. Alaska Legal Services is a private, nonprofit corporation, funded through state and federal monies. It is also supported by private foundations including KANA and CETA.

#### MISCELLANEOUS SOCIAL SERVICE ORGANIZATIONS

In addition to the agencies and entities already described, there are a number of special interest groups which provide various social services. They include the following organizations.(29)

##### American Red Cross

The Red Cross has two offices in Kodiak. One is on the Coast Guard Base where their services are primarily directed toward Coast Guard personnel. They provide two-way communications between service personnel and their families, and in emergencies they provide financial assistance for military personnel and their families. In addition, they teach health and safety to military personnel and their families, provide aid to veterans, and furnish volunteer workers for the base hospital.

The other Red Cross office in Kodiak serves the civilian population. It provides occasional volunteer services to public institutions and disaster services for the community when needed. In addition it offers classes in first aid and water safety to residents.

##### Kodiak Association for Retarded Citizens

The Kodiak Association for Retarded Citizens is a volunteer group dedicated to helping meet the special needs of retarded individuals. This group is affiliated with the Alaska State National Association for Retarded Children. Their services include instructional courses, counseling and information services.

Presently the association is involved with a City-sponsored six-week summer recreational program for retarded children and also with the local and state Special Olympics. To be able to handle these programs at the present level of service, the Association has identified the need for funding for transportation of participants from Kodiak to the site of the Special Olympics and for daily transportation to the summer recreational sessions.

Additionally, the Association sees the need for a sheltered workshop for retarded individuals to be trained and employed in jobs fitting their abilities. The workshop would function as both trainer and employer; producing goods or services for consumption by the local community.

Additional needs include a recreational program for adults, a cottage home program to provide independent living accommodations for retarded

citizens, and an expanded public information program to improve public awareness of the retarded citizen and his or her problems.

#### Kodiak Island Youth Center, Incorporated

The Youth Center is open to teenagers for educational and recreational purposes. Their hours are 6 p.m. through 9 p.m., Monday through Wednesday, and 7 p.m. through 10 p.m. on Friday and Saturday. The facility may be used by any group or program on a continuing or one-time basis, depending on scheduling.

#### Kodiak LaLeche League

The LaLeche League is an international organization which promotes breastfeeding of babies. A series of four monthly meetings cover breastfeeding, childbirth, and infant care topics. Personal counseling is also available through telephone contacts and hospital visits.

#### Senior Citizens of Kodiak

The Senior Citizens of Kodiak is an active organization with a full-time director and staff. Monthly meetings are scheduled for civic and recreational activities. Senior Citizens provide a hot meal program and transportation for the elderly to the hospital, clinics, meetings, grocery stores, and to families for visits. In addition, the staff provides information and referral services regarding local, state and federal programs. A satellite program for Port Lions is also sponsored by this organization.

#### Koniag Incorporated

Koniag Incorporated is Kodiak's regional native corporation. Its primary objective is the implementation of the Alaska Native Claims Act. In fulfilling this function it has assisted villages in organizing their corporate structures as required by the Alaska Native Claims Settlement Act. They have also provided resource surveys for determining land values for villages and regional selections, and have furnished a variety of other assistance programs to the native community.

#### Child Care Services

The following organizations provide child care in the Kodiak area:

Headstart - Following pre-school structure, Headstart provides nutrition, health and education to children in families of limited income. It also provides career development for staff members and serves parents by referring them to other organizations and services for additional help. The Headstart Program operates from 9 a.m. to 4 p.m. daily.

The Kodiak Baptist Mission - The Kodiak Baptist Mission is the most extensive child care organization in Kodiak. Its primary purpose is to provide care and treatment to children whose families cannot support them. The facilities at the Kodiak Baptist Mission include two group homes which can accommodate 12 boys and girls between the ages of six and sixteen on a long-term basis. They have a third cottage which is equipped to provide temporary emergency care for a maximum of 14 children ranging in age from infancy to age 16. The maximum stay allowed at this temporary care facility is 90 days. The Mission also provide a second-hand clothing and household goods store.

Kodiak Child Daycare Center - The Daycare Center is a comprehensive facility which furnishes child care for children two to ten years old. It is open Monday through Friday from 7:30 a.m. to 5:30 p.m., and it offers a preschool program, activities, lunches and snacks.

## EDUCATIONAL FACILITIES

Kodiak has a wide range of educational programs including public and private institutions, vocational schools and higher education facilities. The following is a review of these educational programs.

### PUBLIC SCHOOLS - ELEMENTARY AND SECONDARY

By far the largest operator of schools in Kodiak is the Kodiak Island Borough. The Kodiak Island Borough School District provides basic education facilities to the residents of the City of Kodiak and its environs as well as the villages on Kodiak Island. For the purposes of this study, a statistical review of their facilities, enrollment, staff, and locations is most appropriate. Figures 7 and 8 indicate the enrollment by grade and location in each of the schools, and an inventory of the facilities, staff, and programs offered by each. See Map 6 for location of all schools in the Kodiak metropolitan area.

In addition to the facilities shown on Figures 7 and 8, the Kodiak Island Borough School District also offers speech and hearing therapy to grades Kindergarten (K) through 12 for all of the schools.

Fig. 7: Enrollment By Grade & School - October 28, 1975\*

Grade	Total	High School	Junior High	Base	East	Main	Akhiok	Chiniak	Kariuk	Larsen Bay	Old Harbor	Ouzinkie	Port Lions
K	197	N/A	N/A	63	48	56	-0-	3	3	5	13	-0-	6
1	183	"	"	54	44	58	5	1	2	-0-	9	6	4
2	175	"	"	53	51	41	4	2	4	2	10	-0-	8
3	185	"	"	53	48	60	1	1	1	4	9	3	5
4	171	"	"	39	38	60	5	2	1	2	9	7	8
5	147	"	"	36	44	45	2	-0-	2	1	5	3	9
6	180	"	"	35	56	56	3	1	2	1	12	9	5
7	175	"	146	N/A	N/A	N/A	4	1	3	5	7	2	7
8	179	"	157	"	"	"	3	2	2	-0-	8	3	4
9	217	194	N/A	"	"	"	N/A	N/A	N/A	N/A	8	5	10
10	145	145	"	"	"	"	"	"	"	"	N/A	N/A	N/A
11	134	134	"	"	"	"	"	"	"	"	"	"	"
12	99	99	"	"	"	"	"	"	"	"	"	"	"
TOTAL	2187	572	303	333	329	376	27	13	20	20	90	38	66

\* 1976-77 Enrollment estimated to be the same except for shift from High School to Secondary Programs in villages.

Source: Kodiak Island Borough School District

Fig. 8: Kodiak Island Borough Educational Facilities Inventory

	Grades	Rooms	Year Constructed	Most Recently Renovated	Recreation Facilities	Number of Teachers	Classroom Teacher/Pupil Ratio	Career Education	Special Education	Vocational Education	Lunch	Athletic Programs
<u>URBAN SCHOOLS</u>												
High School	9-12	41	1973	--	Pool, Gym, Library	18.5 Classroom	20.61	Yes	Yes	Yes	Yes	Basketball Wrestling Track Cross-Country
Junior High	7-8	75	1954	1964	Gym, Library, Playground	15.0 Classroom 1.0 Counselor 1.0 Special Ed. .5 Librarian	20.13	Yes	Yes	No	Yes	Basketball Wrestling Track Cross-Country
Main Elementary (Share facilities with Junior High)	K-6	75	1954	1964	Same as Junior High	15.8 Classroom 3.0 Special Ed. .5 Librarian	23.62		Yes	No	Yes	Extra-Murals
East Elementary	K-6	20	1967	--	Multi-purpose room, Playground	12.7 Classroom 5.0 Special Ed. .5 Counselor	25.7	Yes	Yes	No.	Yes	Extra-Murals
Base Elementary	K-6	25	1954	1967	Gym, Multi-purpose Room, Library, Playground	13.7 Classroom 2.0 Special Ed.	21.8	Yes	Yes	No	Yes	Extra-Murals
<u>VILLAGE SCHOOLS</u>												
Akhtok	K-9	4	1968	--	Playground	2.0 Classroom	14.5	Yes	Yes	No	Yes	Extra-Murals
Chiniak	K-8	2	1970	--	Playground	1.0 Classroom	13.0	Yes	Yes	No	Yes	Extra-Murals
Karluk	K-8	2	Unknown	--	Playground	1.0 Classroom	23.0	Yes	Yes	No	Yes	Extra-Murals
Larsen Bay	K-8	2	Unknown	1968	Playground	1.0 Classroom	23.0	Yes	Yes	No	Yes	Extra-Murals
Old Harbor	K-10	4	1966	1974	Playground	6.0 Classroom	16.17	Yes	Yes	Yes	Yes	Extra-Murals
Ouzinki	K-10	4	1972	--	Playground, Multi-purpose room	3.0 Classroom	14.0	Yes	Yes	No	Yes	Extra-Murals
Port Lions	K-10	4	1964	--	Playground	4.0 Classroom	18.25	Yes	Yes	Yes	Yes	Extra-Murals

## Village Schools

Currently, the school district is attempting to bring secondary education programs to the village schools along with the necessary physical facilities needed to support these programs. Possibilities for funding these programs and the associated facilities include local bonds, direct legislative action on the part of the State and Borough, and federal funds available under Public Law 815 for construction. It may also be possible to gain more State support for vocational capital improvements. The following is a review of the specific requirements for each village in order to obtain secondary education.

### Old Harbor

In Old Harbor it will be necessary to provide additional facilities, probably adjacent to the existing grade school, to house high school facilities. It will also be necessary to construct housing for the extra teaching staff required to run a secondary school.

### Ouzinkie

An expanded secondary program has already begun and has required the use of a previously unused old school facility. At the present time, there are three teachers sharing two apartments. Plans have been made to provide additional classroom space plus living accommodations for the teachers on a new school site in Ouzinkie.

### Port Lions

In Port Lions a secondary school program has already caused a need for additional classroom space, plus recreation and career-oriented areas. These needs are currently being investigated by the School District.

### Akhiok

School enrollment in Akhiok has dropped 50 percent within the last five years. The school is housed in a modular structure originally intended for 10 years of use; however, according to the School District, the building should last much longer than that if it is properly cared for. A one-teacher school facility may be adequate in the future.

### Karluk

Karluk has also lost enrollment in the last few years and has dropped from a two-teacher school to a single-teacher school. The only capital efforts the School District is currently investigating are: upgrading the school building to include an adequate water supply, furnishing a restroom for the main building and providing a dependable power supply.

### Larsen Bay

The Borough is currently investigating alternate school sites for this community. The existing site is marshy on two sides; and thus does not allow for significant growth. It is conceivable that a new school facility could be required in Larsen Bay in the next few years due to the community's potential for growth.

### Chiniak

The future of the Chiniak School is questionable. With the closing of the Chiniak Tracking Station, the future of the school looked bleak. However, enrollment is now beginning to increase gradually. The school has a new generator facility and one classroom has been remodeled into teacher housing. An additional portable classroom is currently used for storage. If the population continues to grow it may be necessary to use this classroom for teaching purposes.

### Afognak

Afognak does not have a school at present; however, it is anticipated that one will be needed within the next few years because of the growth of the logging community (about 400 families). School facilities in Afognak will have to be started from scratch.

Plans for upgrading educational facilities and services in the villages are based on existing growth patterns. Should any of these villages be chosen as a site for OCS on-shore facilities, the impact on the school system would be tremendous. It would probably be necessary to greatly expand the facilities.

### Kodiak Urban Area Schools

The following is a review of the status of schools in the Kodiak urban area operated by the Kodiak Island Borough, and a discussion of their deficiencies and needs as indicated in the School District's Capital Improvement Program.

#### Base Elementary School

During fiscal year 1975/76, an independent heating system was being completed for the school. Two new boilers, new distribution lines and fin tubes were installed in the old wing, and domestic water lines were replaced. Some construction complications still exist, but they are being remedied.

The office of Health, Education and Welfare in Seattle is currently working on bids to renovate wiring and lighting in the building.

Because of the anticipated increase in base population, due to enforcement of the 200 mile fishing limit, it is imperative that planning begin immediately for expansion of the elementary facility there.

### Main Elementary School

Main Elementary needs improvements to bring it up to operating standards. These improvements include:

1. Complete renovation of all bathrooms, locker rooms, and gym facilities; including replacement of the gym floor within two years.
2. Replacement of the domestic water supply system throughout the building.
3. Complete replacement of black iron heat distribution system with copper pipes - (Junior High).
4. Continuing classroom renovation throughout the building to include: Lowered ceilings, fluorescent lighting, and carpeting.
5. Installation of a clock/intercom system.

A facility for mentally retarded children should also be incorporated in the Main School complex.

Ideally, the facility should be remodeled to simulate a home setting with complete bathroom washing facilities, clothes drying equipment, cooking appliances, etc.

### Kodiak High School

Even though a major building project at the high school was recently completed, there are still some needs which have not been considered. They include:

1. A need for a home economics (cooking) facility in the high school. The present facility is located in the Junior High and is not suited to the development of a large scale program.
2. Expansion of the metals shop to give adequate space for the development of projects. This may be accomplished by reorganizing existing space.
3. Renovation of the Chem-Physics laboratory for more teaching (instructional) stations. The present laboratory can handle only 12 students per chemistry class, which is an inefficient use of teacher time. Perhaps the high school is no longer large enough to offer chemistry every year and should offer it every other year alternating with physics. This approach would require classroom facilities accommodating 25 plus student stations.

In conjunction with the high school needs, an auditorium may be necessary for community-wide use. Music instruction facilities, such as were included in the original high school construction design, should also be considered.

For purposes of crowd control, the entrance doors to the gym in the high school need to be redesigned.

Prime consideration should be given to developing the high school parking lot to serve both Main School and the high school. In formulating this project, the extensive use of these two buildings during evening hours should be considered. The ordinance prohibiting parking at any time in front of Main School cannot be realistically enforced until the Borough provides adequate off-street parking adjacent to these schools. Until such time as these improvements are made and the parking ban is enforced, a pedestrian hazard will exist.

#### Junior High School

There has been discussion of relocating the Junior High School to the East Elementary building. Should that occur, a plan of remodeling the elementary facilities would have to be developed.

#### East Elementary School

Additional room is necessary in the parking lot. Some landfill will be required to do this.

### PRIVATE EDUCATIONAL INSTITUTIONS

#### Saint Mary's Parochial School

Saint Mary's School is located in Kodiak and offers elementary education for grades one through eight. St. Mary's uses a system of double grades, small classes, and modified individual instruction.

### HIGHER EDUCATION(31)

#### Kodiak Community College

The Kodiak Community College is operated by the State of Alaska. It is part of the University of Alaska Community College system and is governed by the Board of Regents and the President of the University of Alaska. Administrative, technical, logistical, and certain other functions are provided by the University of Alaska system. The Community College is fully accredited by the Northwest Association of Secondary and Higher School through its relationship with the University of Alaska.

Figure 9 lists a cumulative head-count for the Kodiak Community College for the last eight years. The figures indicate the Community College has shown a steady growth in all of its educational fields.

Fig. 9: Student Head-Count - Kodiak Community College

\* Year includes summer, fall and spring semesters

\*\* The figure in parenthesis is an estimated trimester average

	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75
EC	62	195	0	119	145	252	205
LD	120 (76)	151 (151)	332 (276)	273 (240)	258 (154)	493 (270)	817 (375)
UD	44	108	178	293	44	33	37
GR	<u>1</u>	<u>0</u>	<u>66</u>	<u>34</u>	<u>14</u>	<u>31</u>	<u>65</u>
TOTAL	227	454 + 100%	576 + 26.9%	719 + 24.8%	461 + 35.9%	809 + 75.5%	1124 + 38.9%

THIRD WEEK FIGURES

EC - Equiv. Cr.  
LD - Lower Division  
UD - Under Graduate  
GR - Graduate

THIS INFORMATION WAS OBTAINED FROM THE  
UNIVERSITY OF ALASKA, ANCHORAGE  
OFFICE OF INSTITUTIONAL STUDIES

The programs offered by the Community College are as follows:

General Education Development Tests

Adults who have not completed their complete high school education and wish to earn a diploma may do so by passing the GED Test given by the Community College.

Certificate Program

A Certificate Program is offered for completion of classes in the clerical cluster. This program takes 30 weeks to complete, and is offered on a yearly basis.

Degree Programs

General Degree Program - To receive a degree from the U of A, students must satisfy (1) general university requirements; (2) Degree requirements; (3) Program (Major) requirements.

Associate Degree Programs - Associate Degree Programs are offered in the following areas: (1) Associate in Arts (Accounting, Biology, Business Administration, Humanities, Natural Science, Police Administration); and (2) Associate in Applied Science (Business, Business Administration, Commercial Fishing, Home Economics, Seafood Processing).

### Bachelor Degree Programs

These programs are available with study in Kodiak, but coordinated by the Anchorage Senior College; at present, degree programs are available in Business Administration and Public Administration.

### Master Degree Programs

Masters Degrees are available in Kodiak but are coordinated by the Anchorage Senior College. At present, degree programs are available in Business Administration and Public Administration.

### Miscellaneous Programs

Short courses, seminars, workshops, community service courses (non-credit), and arts and crafts laboratories are available upon request and minimum, economically feasible enrollment of students. Subjects are too numerous to list.

The budget of the Community College totals approximately \$1,020,000 per year. Sources of funding include local, state and federal programs. The staffing of Community College is as follows:

1. 2 administrators
2. 7 clerical and support personnel
3. 8 full-time instructors
4. 2 half-time instructors
5. 40 part-time instructors

There are a number of factors within the community that will generate a demand for expanded facilities at the Community College in the near future. They are outlined as follows:

Fishing Industry - The 200 mile limit, increased technological complexity, regulatory pressures, and foreign competition increase the need for formal education/training in this industry.

U.S. Coast Guard in the Kodiak area - Oil development, enforcement of the 200 mile limit law, increased search and rescue needs, and construction and renovation of facilities will bring more Coast Guard personnel and their dependents to Kodiak. Traditionally, Coast Guard personnel create a demand for educational opportunities in the technical and post-secondary education system.

Native Communities - The responsibilities promulgated by the Native Land Claims Act and the desire for more capabilities and opportunities have increased the need for formal education at the post-secondary school level, particularly in the area of business and corporate management.

Cultural and Artistic Awareness - Support for all forms of art is growing in Kodiak.

Need for Young Talent in Alaska - Economic expansion and natural resource development make it mandatory for leadership to have a primary interest in Alaska.

New Programs - New programs are contemplated in the following areas: theater, computer science (a computer has recently been installed and is now operational), fisheries enforcement, health sciences, carpentry.

Greater demand for the Community College's educational services is anticipated should OCS development occur. In addition, needs for transportation to and from the college, student housing close to campus, and additional college facilities may be expected. These needs are further described below:

Transportation - Transportation is needed in the following areas:

1. From the downtown City of Kodiak area to the Community College for students without cars who live beyond walking distance from the college.
2. From the Coast Guard Base for Coast Guard personnel and their dependents who desire to take courses not offered on Base.
3. Ultimately, transportation from on-shore oil development support bases, if on the road system, to serve the needs of employees and their dependents.

Student Housing - Student housing will be needed near the Community College campus in order to:

1. Meet the needs of full-time native students from the outlying villages.
2. Meet the needs of students from other coastal Alaskan communities who come to Kodiak to obtain Associate Degrees in the Fisheries Technology Programs (the University of Alaska established the Fisheries Technology Program in Kodiak because of the proximity to major fisheries, processing efforts and major law enforcement headquarters).

Theatre/Auditorium/Classroom/Library Complex - A new complex will be needed to meet the expanding needs of the College and the community.

The current library area, for instance, does not have enough student study space, a factor which discourages greater use of the library facilities. Nor is there presently enough classroom space, as evidenced by the strain on facilities under the present class schedules. In addition to more room for the existing facilities, the College should have a theater and auditorium. There are no such facilities in Kodiak at the present. Consequently, it has been very difficult to stage concerts and plays and to provide meeting areas for large workshops, seminars, etc. Private fraternal organizations have been called upon time after time to supply their meeting rooms for such purposes.

#### VOCATIONAL SCHOOLS

In addition to the training offered by the Community College, Kodiak residents can obtain a wide range of vocational training through the Kodiak Aleutian Vocational High School. A boarding home program is available for students from outlying areas who wish to attend the school. Students and their parents may also take advantage of the counseling services offered. School staff work closely with community agencies such as medical clinics, the Mental Health Center and the police department concerning the welfare of their students.

As with other educational facilities, it is anticipated that demands for vocational programs, both at the high school and the Community College, will be significantly increased as a result of OCS development.

## PARKS, RECREATION AND OPEN SPACE FACILITIES

Opportunities for outdoor recreation play a large part in determining the quality of life within a given community. Parks and open space allow people to escape some of the pressures of everyday life and to appreciate their natural settings. These factors are especially important in Kodiak where travel is limited because the community is located on an island.

Parks, recreation and open space facilities can also contribute to the economy of a community. In Kodiak for instance, the possibilities for attracting a strong tourism market are great due to the outstanding natural beauty of the area and the abundant wildlife. Development of campgrounds and other outdoor facilities would attract tourism and spur the local economy.

The advent of OCS development will further increase the demand for recreation and open space facilities. As the population increases and social pressures become more prevalent, the role of outdoor recreation facilities will become more important.

The following is a review of the existing facilities and lands that are available for outdoor recreation and open space uses in the Kodiak area (see Map 6). Since almost all parks and outdoor recreation facilities are provided through a governmental agency, the information in this section is categorized by governmental entity.

### CITY OF KODIAK

The City of Kodiak has an active Parks and Recreation Department which provides several programs and facilities for residents of the Kodiak area.(32) This Department is funded through the City of Kodiak General Fund, and it utilizes general fund monies and state and federal grants. The 1976-77 budget includes \$97,1016 for the Parks and Recreation Department. At present, the department has three permanent employees -- the Director, the Assistant Director, and a part-time Teen Center manager. In addition, there are a number of volunteer and temporary employees including pool checkers, high school gym superintendants, swimming instructors, gymnastic instructors, exercise instructors, and park maintenance and janitorial personnel through the Neighborhood Youth Corps or CETA Programs.

An inventory of all the City's park and recreation facilities follows:

### Baranof Park

This is a seven acre park which was completed in September of 1973. It includes: a football field, a baseball field, a track, a wooded picnic area, a children's playground area, four color-coated tennis courts, three volleyball courts, and a basketball court.

### Teen Center

This is a building which is 40 feet wide and 60 feet long. It includes: a large dance floor, a kitchen, two bathrooms, some storage space, and a small office. It has the following equipment: a pool table, a ping pong table, a foosball table, a television, and a reel-to-reel tape recorder.

### School District Facilities

The following are the school district facilities utilized by the City of Kodiak.

1. High School Gym - This facility is comprised of a large gym floor with side baskets and a middle curtain which will accommodate two full-court basketball games at one time. It also has a combination gymnastics and wrestling area as well as a weight training room.
2. Swimming Pool - This is a six-lane, aluminum pool, 25 yards long with a diving board. The swimming pool and high school gym are part of the same complex and share the same locker room facilities.
3. Junior High School Gym and Stage - For many years this was the only facility of its type in town. It includes: a stage, two locker rooms, some storage space and office space, and a gymnasium.
4. East Elementary - The facilities which are used by the City are the multi-purpose room and a class room. The multi-purpose room is a small gymnasium-type facility with a tile floor.
5. Room 106 of the Junior High School - This is a double room used by the junior high school as a wrestling room. It has enough mats to cover the entire floor.

An inventory of all the City's park and recreation programs and their level of usage follows:

### Basketball Programs

City League - This takes place in the junior high school gym from November through February, three nights a week and approximately 80 players and officials participate.

Junior High Basketball - This league also runs November through February. They play two nights a week. It is composed of four girls teams and nine boys teams. About 100 kids participate. It takes place in the junior high gym.

Little Dribbler Basketball - This is a basketball league for boys and girls ages nine to twelve. The league runs two four-hour sessions a week in the high school gym from October through March. Approximately 150 children participate. There is also a lot of spectator participation by parents.

Slow Break Basketball - This is a slowed down version of basketball for older men. This league plays twice a week in the junior high gym. Approximately 40 men participate from November through March.

### Volleyball

Ladies' Volleyball - They meet in the fall and spring in the junior high gym. They play one night a week and about a dozen women show up each night. In winter they play at East Elementary.

City League - This is a men's league which meets twice a week from February through May in the junior high gym. Approximately 50 men take part.

### Boy's Boxing

This is supervised on a volunteer basis. It runs two to three times a week at East Elementary School. Approximately ten boys take part on a regular basis. The program runs about four months a year.

### Women's Exercise

This program is divided into five four week sessions with anywhere from six to thirty women participating. It is held in room 106 of the junior high.

### Swimming Programs

Open Swim - These are two hour sessions on week nights and weekend afternoons. Thirty to sixty people attend each session.

Adult and Family Swim - These are one hour sessions, three times a week. Twenty to forty people attend each session.

Lap Swim - These are one hour sessions on weekday mornings and early evenings. Six to twelve usually attend.

Lessons - The City offers lessons at the rate of six six-week sessions per year. Classes range from tiny-tot to water safety instructor. Approximately 80 students enroll each session.

### Open Gym

These are three hour sessions on week nights and weekend afternoons. It is held in the high school gym in conjunction with the open swim program and approximately thirty to sixty people attend each session.

### Girl's Gymnastics

This is held during "ladies' night" which is part of the open gym program. Eighty to 100 girls participate in these once a week two-hour sessions. This program ran five weeks in 1976.

### Mountaineering and Backpacking

This program includes lectures and outings. It met twice a week for six weeks in 1976. Approximately twelve people took part.

### Badminton

This program includes four tournaments a year and free play sessions in the junior high gym on Wednesday evenings. About a dozen people attend these sessions regularly.

### Tennis

Lessons - Two sessions of lessons by the City and two sessions of lessons co-sponsored with the Community College. About thirty people take part.

Tournaments - Two or three tournaments a summer are offered with about 15 people participating in each.

Free Play - The courts receive heavy usage every day of the week. There is especially heavy usage in the evening.

### Crab Festival Games

These include: youth races, tennis tournaments, a badminton tournament, illar Mountain climb, a volleyball tournament, and predicated mile race. In most of these events participation depends upon the weather. From six to thirty people take part in each event.

### Softball and Baseball Programs

The City maintains and prepares fields for: five Babe Ruth teams, one American Legion team, five women's softball teams, and eight men's softball teams. A total of more than 200 are involved.

### Arts and Crafts

Three and one half hour sessions a week for ages three to fourteen are held at East Elementary School in June and August.

### Special Recreation

This is recreation for the mentally handicapped. The City runs one six week program per year and help with the Special Olympics program. Approximately a dozen children take part.

### Day Hikes

This program is offered for ages five and up every Friday in the summer. Each hike lasts two to four hours.

### Teen Center

Open Center - During these sessions the center is available for teenagers to use the equipment and facilities at their discretion. The number of teenagers who take advantage of these open sessions varies from zero to thirty.

Dances - These are either record dances or dances with a live band. Dances with live music draw between 250 and 300 teenagers. About 100 teenagers come to dances with recorded music.

Special Events - These include: the haunted house, Halloween party, Christmas party, Thanksgiving party, joint Base-Town parties, swimming parties, movies, etc. The average participation is approximately one hundred.

The programs described above are well used throughout the year. The indoor programs and facilities are particularly important in Kodiak because inclement weather frequently precludes outdoor recreation.

The City is presently attempting to acquire three additional mini-parks within the city limits. These mini-parks, funded through the Housing and Community Development Act of 1974, are scheduled to have recreation facilities completed by the summer of 1977. An additional four-acre park in the east addition of Kodiak will be constructed next summer. Its facilities will include playground equipment and softball field.

### KODIAK ISLAND BOROUGH

In the fall of 1976, the residents of the Borough elected to provide area-wide parks and recreation powers; this program is just now getting under way. Within the next year a parks program should be developed and

a set of priorities prepared to determine the types and locations of park facilities and programs to be provided by the Borough under this new area-wide power.

## STATE OF ALASKA

### Fort Abercrombie

The State of Alaska has only one park facility on Kodiak Island - the Fort Abercrombie Historical Site which is located on 780 acres at Miller Point, north of the City of Kodiak. This fort was built on the top of high cliffs overlooking the Pacific Ocean during World War II as a look-out point against Japanese invaders. Later it was transformed into a gun emplacement as the level of war activity in the Northern Pacific increased. Records show that it was probably actively manned in the summer of 1942 and the spring of 1944. At the peak of military activity this installation may have included up to 200 men. In the late 1940s, the gun emplacements were destroyed and the fort was abandoned. (Map 7)

Fort Abercrombie is now a tourist and recreation site. Many of the old military structures are still standing, although they are in poor condition from weathering and vandalism. Nevertheless, the site is popular for its historical interest and recreational opportunities. Swimming, fishing and camping are popular here. The State has furnished seven camp sites, five picnic sites and several restrooms. General maintenance of these facilities is poor, however, and the roads within the park are inadequately maintained.

Fort Abercrombie could play a larger role in providing recreational and tourist facilities, however, more attention and maintenance must be directed toward this site to accommodate increased use.

## FEDERAL GOVERNMENT

The two park areas in the Kodiak Island Borough under the federal government's jurisdiction are the Kodiak National Wildlife Refuge and the Chugach National Forest. See Map 7.

### Kodiak National Wildlife Refuge

The Kodiak National Wildlife Refuge is located on the main Kodiak Island. It consists of over 2800 square miles on both Kodiak Island and Uganik Island. On Kodiak Island alone, the National Wildlife Refuge accounts for almost 80 percent of the Island.

The refuge was established in 1941 to preserve the natural habitat of the famed Kodiak bear and other wildlife. Unlike many refuges that were

established to restore natural habitats destroyed by man, this refuge remains unchanged. Mammals that live within the Kodiak National Wildlife Refuge include the Kodiak bear, red fox, land otter, weasel, tundra voala, and the little brown bat. Whales, porpoises, seals, and sea lions frequent the estuaries along the coast of the refuge where they feed on the large quantities of marine foods. A number of mammal species have been transplanted to the refuge since the 1920s. These include the black tailed deer, snowshoe hare, beaver, muskrat, reindeer, mountain goat, mink, red squirrel, and martin. Except for the mink and martin, these introductions have been generally successful. Recently, dahl sheep and moose have also been brought in.

The Kodiak National Wildlife Refuge is rich with hunting and fishing opportunities. Kodiak bear can be hunted within the refuge under the Alaska Department of Fish and Game regulations, and an annual take of between 150 and 200 bears is permitted. This harvest borders the maximum that may be killed without threatening the population. Currently 2400 bears are estimated to inhabit the Island. Other game species may also be taken in accordance with state regulations.

Sport fishing is allowed in the Refuge, and the lakes and streams are abundant with rainbow and dolly varden trout, grayling, salmon and steelhead.

Since special permits are not required to enter the refuge, it is impossible to determine the level of usage. There are a number of bush pilots and one local airline which furnish transportation to almost any part of the refuge. In addition commercial fishing boats can be chartered for excursions around the islands. There is no road access to the refuge.

### Chugach National Forest

The Chugach National Forest was established by President Benjamin Harris in 1892 when he proclaimed Afognak Island was to be set aside as a forest and fish culture reserve. Since then the reserve area has been enlarged to include 4,726,000 in Southcentral Alaska. This study, however, is only concerned with the Afognak portion of the Chugach National Forest since it is the closest to Kodiak. This unit comprises 458,000 acres of the total. (Map 7)

The Afognak reserve is, for the most part, undeveloped. Currently, only five National Forest Service cabins are on the reserve with another under construction. These cabins are available for hunters, fishermen, and campers. It is anticipated that the National Forest Service will upgrade and increase its facilities as the demand for recreational outlets grows.

Big game hunting, particularly for brown bear and elk, is the main recreational attraction on the island. Trout fishing is another favorite sport and so is hiking. There are nine miles of wilderness trails maintained by the Forest Service. Photography, fishing and hunting excursions are currently offered on Afognak Island by four commercial

outfitter/guide operations.

Lack of easy access to Afognak Island is the main deterrent to more recreational use of the island. Currently transportation is limited to float-equipped aircraft, helicopters or boats.

While the areas described above encompass a great deal of potentially useful recreation land, very little of this land has been so developed. Camping facilities, with the exception of those units available at Fort Abercrombie, are almost nonexistent. Trail systems for hiking and backpacking are also minimal. More of these areas must be developed as the population increases. It will be particularly difficult to accommodate recreational needs resulting from OCS development unless plans are formulated now to handle that contingency.

## CULTURAL FACILITIES

### MUSEUM

The only major museum facility in Kodiak is the Erskine House, which is the home of the Baranof Museum. The building was originally constructed between 1792 and 1799 by Alexander Baranof; it is the oldest wooden structure in the western United States and the oldest Russian structure in Alaska. It was originally used as a warehouse. It had been designated as a "site of national and historic significance" by the National Park Service, and is one of the few places where the public can see remnants of Russian occupation of the United States. (See Map 6.)

Erskine House, now owned by the City of Kodiak, is currently being renovated. The museum contains exhibits ranging from ancient Indian artifacts and old Russian antiques to modern day items. The history of the Kodiak area is vividly reconstructed through the well-preserved artifacts and pictures displayed in the museum.

Erskine House is open Monday through Friday from 11:00 a.m. to 3:00 p.m.; Saturday and Sunday from 1:00 p.m. to 4:00 p.m. Admission is free.(33)

### LIBRARY

The City of Kodiak operates the Kodiak Public Library. (See Map 6.) It is the only public library in the Kodiak urban area. There are approximately 25,000 books, 1,418 records and 402 cassettes in the library. In addition, the library subscribes to 98 periodicals. Circulation is considered very high. During the 1975/76 fiscal year, circulation totaled 40,434 books.

The library staff consists of four full-time librarians, one permanent part-time assistant, one CETA employee, and two summer employees. The building was originally built in 1968 and consists of 5,820 square feet. A 1,952 square foot addition to the building is currently under construction.

The library conducts a Story Hour twice weekly that reaches approximately 40 children. There are also voluntary reading programs for all ages in which a number of books are assigned to be read and reported on by the participants.

In addition to providing library services to the Kodiak metropolitan area, the library also provides services to village libraries. Approximately 500 books are sent out quarterly to various village libraries. These books are normally duplicates of those within the library and are surplus to local needs.(34)

## CRY OF THE WILD RAM

Kodiak's most unique cultural attraction is not so much a facility as it is an event. The Cry of the Wild Ram is a play written by Frank Brink that depicts the story of the first Russian settlement on Kodiak Island. Lord Alexander Baranof first arrived on Kodiak in June of 1791 and shortly thereafter established a colony at the present site of the City of Kodiak. This was also the first Russian colony in America.

The play premiered in 1966 and has been produced annually (except 1974) on the last weekend in July and the first two weekends in August. It is staged by Kodiak Baranof Productions, Incorporated. Approximately 200 people are involved annually in the production, half of whom are in the cast. All but the director of the play are volunteers.

In the past, funds to cover the cost of production have been made available through the State of Alaska, Division of Tourism, the Alaska Council on the Arts, the Alaska Bicentennial Committee and the National Endowment of the Arts.

The "Ram", as it is often called, is held in a natural outdoor amphitheater overlooking Monashka Bay (see Map 6), four miles from the center of Kodiak. The play has gained a wide reputation as a tourist attraction and draws people from many places. Approximately 2,000 spectators see it annually, many from the lower 48 states.

One of the most significant factor about the "Ram", aside from its entertainment value, is its relevance to the history and heritage of Kodiak. Many of the aspects of Russian culture that were introduced by that first settlement still exist in Kodiak today. Preserving that heritage should be important to the community. It is an intangible asset that can never be regained once lost.

## GOVERNMENTAL BODIES

The following section will describe the basic organizational characteristics and functions of the governmental units existing within the boundaries of the Kodiak Island Borough. The specific governmental bodies to be discussed are the City of Kodiak, the Kodiak Island Borough, the State of Alaska, and the Federal Government. Five second-class cities -- Akhiok, Larsen Bay, Ouzinkie, Port Lions, and Old Harbor -- will be each discussed separately in the Village Inventory section of this report.

### LOCAL GOVERNMENT

There are a total of seven incorporated local governments within the boundaries of the Kodiak Island Borough. These include the Borough itself, the City of Kodiak, and five second-class cities located around the Island. This inventory of local government will focus its attention on the Borough and City of Kodiak since they are the largest and most active governments within the study area. The second-class cities will be discussed in the Village Inventory.

#### Kodiak Island Borough(35)

The Kodiak Island Borough encompasses the entire geologic formation known as the Kodiak Archipelago. It includes all land within the Kodiak Island group from the Trinity Islands on the south to the Barren Islands on the north. The estimated size of the Kodiak Island Borough is 4,500 square miles.

The Borough was incorporated September 24, 1963. It is a second-class borough with a manager form of government. The powers assumed by the Borough include parks and recreation, assessment, taxation, education, health, and planning and zoning.

The administrative arm of the Borough is divided into three departments which include general government, assessing, and planning and zoning. The Borough administrative staff consists of 13 full-time employees. In addition, a half-time employee serves as the OCS program coordinator. Legal and engineering services are provided to the Borough through contractual agreements.

#### General Government

The administrative arm of the Borough includes the Borough Manager, the clerk/treasurer, the cashier and bookkeeper. In addition to the

functions performed by these officers, general government handles the publications for public hearing, repair and maintenance of machines, transportation and travel expenses, office supplies and other miscellaneous operating activities.

### The Assessing Department

The Assessing Department is responsible for assessment of all real and personal property within the Borough. The present mill levy assessed by the Borough is 5.80. The Borough is currently divided into four taxing districts described as follows:

- TCA 1      The area within the city limits of the City of Kodiak
- TCA 8      The fire service district encompassing all land outside the City of Kodiak extending to Spruce Cape and the end of Monashka Bay Road
- TCA 9      Road service district including the area designated as Bell Flat Subdivision and Russian Creek Subdivision and ADL 72-11, located in the Bell Flat area approximately seven miles from the City of Kodiak
- TCA 5      That area not included in the three districts listed above -- all the surveys along the road system to Anton Larsen Bay, all the villages etc.

The Assessing Department is increasing its appraisal capabilities. Upon completion of a training program currently underway, the department will have two assessors qualified to appraise real property, leasehold property, and possessory interest property. The latter two skills will be particularly helpful in relation to native land claims, oil interests and the possible annexation of the Coast Guard Base. Through such added expertise the Borough can establish vital statistics and information to be used by the Planning and Zoning Department, property owners, and special interest groups.

### Planning and Zoning Department

The Planning and Zoning Department provides advisory services to the Planning and Zoning Commission relating to land use, comprehensive planning, subdivision review, and building inspection. In addition, the Planning and Zoning Department oversees engineering services, snow removal, mapping, and planning for local service roads and trails.

The Planning Department was formally established by ordinance in February, 1976. The department is currently embarking on accomplishing its major objective -- a new Regional Development Plan.

Apart from the departmental functions discussed above, the Borough exercises health power. This is accomplished in a number of ways. The Borough owns the Kodiak Island Borough Hospital (see Community Facilities, Utilities, and Services). Financial support is also provided to the Comprehensive Health Board, the Senior Citizens, a halfway house, the Kodiak Island Health Clinic, the Kodiak Aleutian Mental Health Center, a daycare program, a drug abuse program, a detoxification center, and sanitation ordinance enforcement. The 1976-77 budget includes \$160,650 for health programs. Of that figure, the Mental Health Center was budgeted \$108,000. Funding for the health and sanitation budget comes mainly from State and Federal Grants.

The Borough also administers several other municipal programs for the Island. They include the following:

Local Service Roads Program - This program is funded by the State of Alaska. The Borough, at present, does not have road power; however, the Borough Mayor and the Assembly do establish priorities on road plans. Through state bond issues, money is available to each district for road construction. Once constructed, the roads are then maintained under the state highways system.

Land Fills in the Villages - Through a HUD Discretionary Grant under the Housing and Community Development Act of 1974, the Borough is providing land fill facilities in seven villages around the Island, i.e., Port Lions, Chiniak, Old Harbor, Ouzinkie, Larsen Bay, Akhiok, and Karluk.

Extended Care Unit for the Kodiak Island Borough Hospital - Construction is underway on an addition to the Kodiak Island Borough Hospital. This addition will provide 20 beds for extended or long-term care.

Water System for Old Harbor - Also under the Housing and Community Development Act of 1974, the Borough has obtained a grant for engineering of a new water system for Old Harbor. It is anticipated that when the engineering work is completed, additional grant money will become available for construction of the system.

OCS Program - An Outer Continental Shelf Advisory Council has been formed to study the possible impact of oil exploration on the Kodiak Shelf. Grant monies were obtained for this purpose, and a portion of these funds have been used for the preparation of this report. Additional uses of the funds include travel, advertising, staff services, printing, and office space.

Parks and Recreation - The Kodiak Island Borough currently exercises an area-wide parks and recreation power. This power was approved by the voters in the October, 1976 elections. The Borough is authorized to create a parks and recreation department. Funds will be utilized from various sources to develop parks and recreation facilities needed in the Borough. Such facilities will include picnic areas, camper parks, boat launching ramps, recreation areas, and open space complexes.

## City of Kodiak(36)

The City of Kodiak was incorporated on September 11, 1940. It is a "home-rule" city under the laws of Alaska and has adopted a Council/Manager form of government.

The City of Kodiak is located on the northeastern end of Kodiak Island (see Map 1). Municipal services are provided from four basic city-owned facilities which include water, sewer, a deep water port, and a small boat harbor. These are described in detail under the Community Facilities, Utilities and Services portion of this report.

An organization chart of the City of Kodiak is shown in Figure 10. The City is divided into eight basic departments: Public Works, Finance, City Engineering, Parks and Recreation, the Library, the Fire Department, the Police Department, and the Cargo Dock/Boat Harbor.

The City has a total of 71 employees, not including the Mayor and City Council members. The following is a list of the number of employees per department:

City Manager	1
City Clerk	2
Finance	6
Public Works	15
Engineer	3
Police	21
Fire	8
Library	5.5
Parks & Recreation	2.5
Boat Harbor/Cargo Dock	10
<hr/>	
TOTAL	74

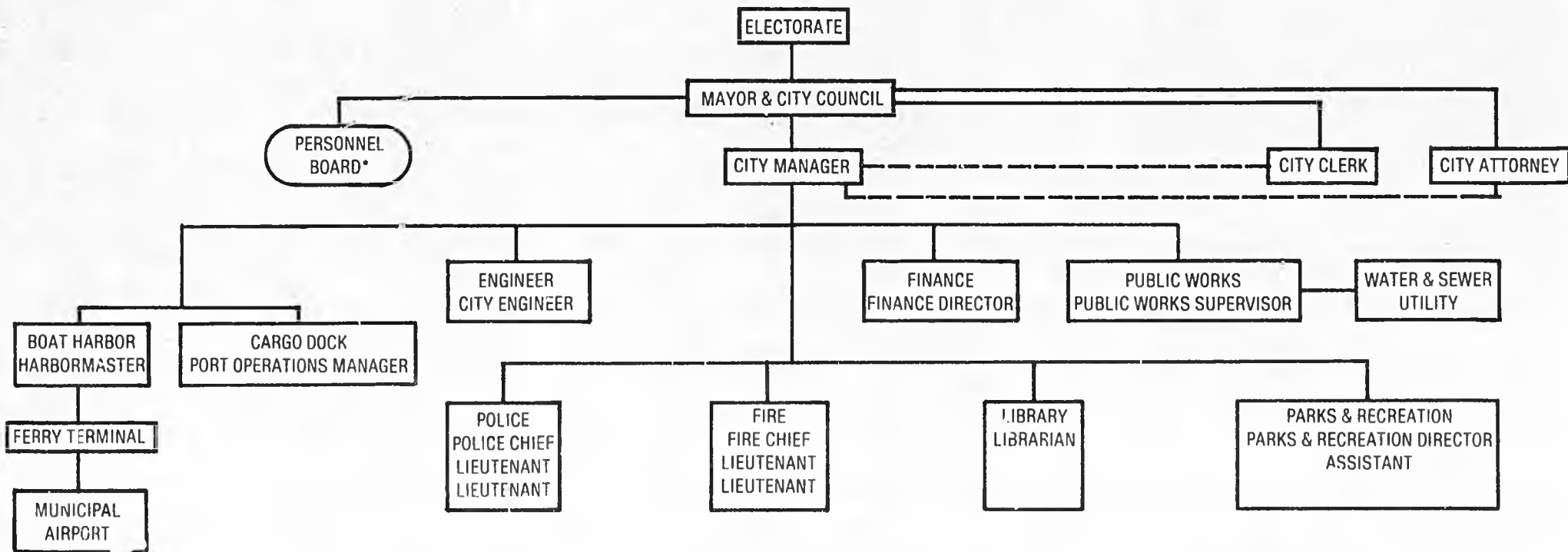
Source: City of Kodiak Budget - 1975/76

### Police Department

As indicated above, the Police Department is the largest department within the City. A detailed description of that Department can be found in the Public Safety portion of the Community Facilities, Utilities and Services Inventory.

### Public Works Department

Public Works Department is responsible for water, sewer, and street maintenance within the City. See the Power and Utilities portion of the Community Inventory for further description of sewer and water utilities.



\*NOTE: APPOINTED BY CITY COUNCIL

Fig.10: City of Kodiak Organization Chart

The City maintains 13.65 miles of street within the City of Kodiak. A paving program for the Aleutian Homes area is currently underway and will provide residents with curbs, gutters, storm sewers and blacktop surface paving. Funds for this five-year program are being obtained from the HUD Entitlement Program authorized under the Housing and Community Development Act of 1974.

In addition to these functions mentioned above, the Public Works Department is also responsible for engineering, building inspection, and maintenance of dock facilities, city equipment, the City Dock, municipal buildings, and the Municipal Airport. It also assists with maintenance in the Parks and Recreation Department.

The remainder of the city departments and services are described under the Community Utilities, Facilities and Services Inventory.

It may be noted here that City personnel are concerned with the potential effects of OCS development, particularly as they relate to city functions. The main worry expressed in interviews was whether the City could maintain the level of its services, utilities, and facilities under the current funding methods if rapid development occurs. In all probability, no. Additional fund sources would probably be necessary to alleviate the growth-associated demands and problems.

#### STATE GOVERNMENT

The State government is divided into three major sections -- the executive, legislative and judicial branches. The executive branch is further divided into 15 departments. An organizational chart outlining this state structure is shown in Figure 11. Functions and responsibilities of the various departments are listed in Figure 12. Many of these departments have branch offices in Kodiak and are designated with asterisks on Figure 11.

Most of the state offices in Kodiak have been described previously under sections relating to the services these offices provide. For the sake of brevity they will not be discussed again under this section.

#### State Department of Fish and Game(37)

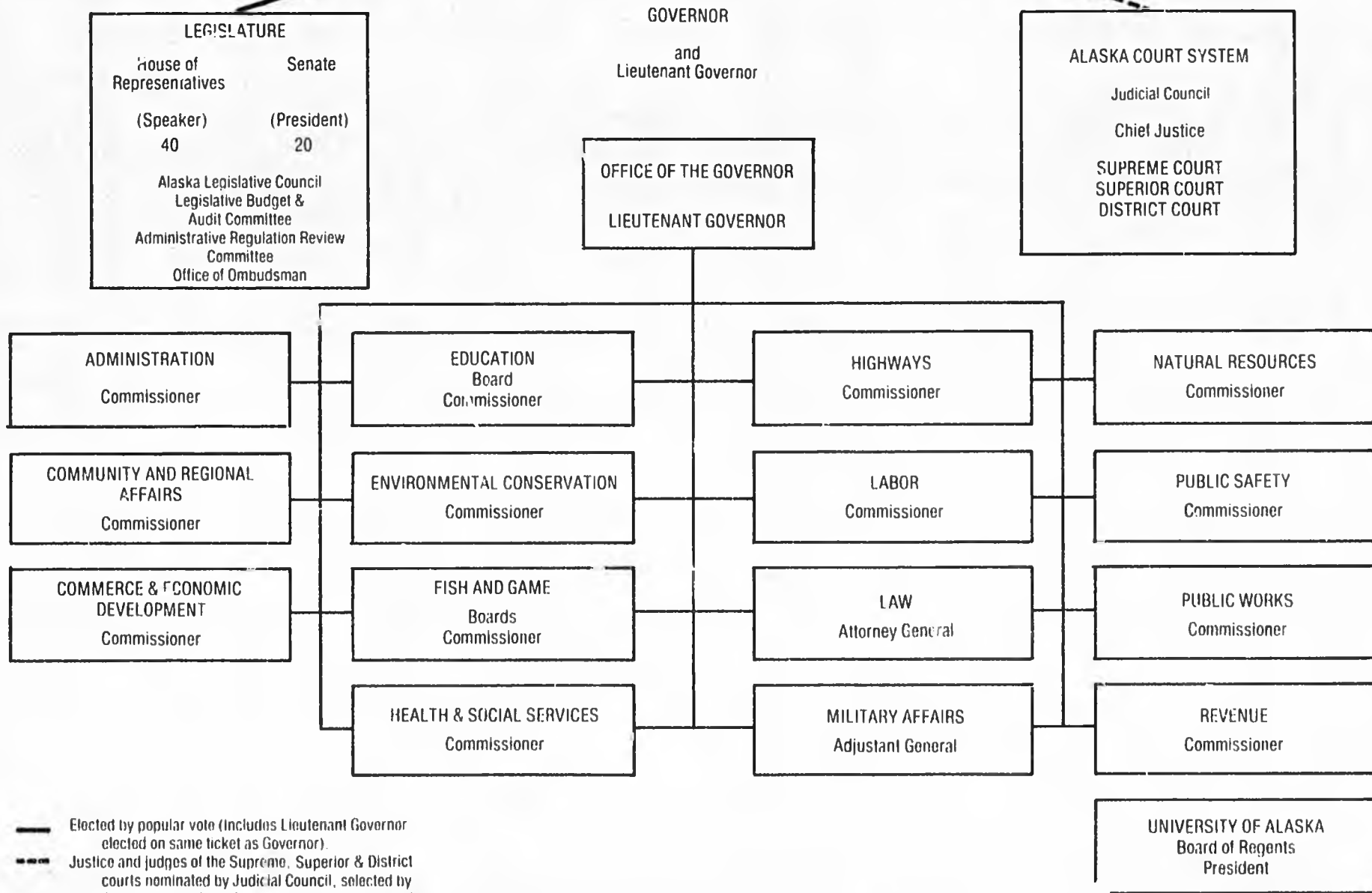
One state department having offices in Kodiak, but not mentioned previously, is the Department of Fish and Game. It is the largest of all state departments in Kodiak and is composed primarily of the Western Region of the Commercial Fisheries Division. (See Map 6) The offices for this division are located in a new state office building in downtown Kodiak. In addition the Western Region has field offices at Chignik, Sand Point, Cold Bay and Dutch Harbor.

# VOTERS OF ALASKA

## LEGISLATIVE

## EXECUTIVE

## JUDICIAL



- Elected by popular vote (Includes Lieutenant Governor elected on same ticket as Governor).
- - - Justice and judges of the Supreme, Superior & District courts nominated by Judicial Council, selected by Governor, and thereafter subject to voter approval
- Department heads appointed by Governor and confirmed by Legislature

PREPARED BY LEGISLATIVE AFFAIRS AGENCY  
August 1975  
August 1976

Fig.11: State Organization Chart

The Kodiak Commercial Fisheries Regional Office is responsible for the management of Alaska's commercial fisheries in that portion of Alaska west and south of Cape Douglas and Cape Menchikof, including all shell fisheries in the Bering Sea. The total salmon and shellfish products in this area are valued at nearly 110 million dollars. Presently over 50 canneries and floating processors operate within this area. They process all five species of salmon plus herring, bottom fish, razor clams, shrimp, scallops and king, tanner and dungeness crab.

Management of these resources is divided into shellfish and salmon areas. Shellfish areas are comprized of Kodiak, Chignik South Peninsula, Unalaska, Adak, and the Bering Sea. The salmon management areas are Kodiak, Chignik, Alaska Peninsula, and the Aleutian Islands.

The Western Region Commercial Fisheries has a staff of 36 permanent employees including 26 biologists, one biometrician, a statistical technician, a boat officer, a statistical clerk, a fisheries technician, and seven clerical positions. In addition, approximately 75 temporary fishery biologists and fishery technicians are hired annually. Constant monitoring of the resources through statistical biological investigations and conservation functions is the major function of this division. To obtain necessary data to manage the salmon resource, counting towers and weirs are located on important red and pink salmon systems. A general sampling of commercial harvests plus biological data necessary to delineate age and size of composition are collected at these locations. Extensive aerial and foot surveys provide escapement data upon which chum and pink salmon management is partially achieved.

The shellfish resource is monitored through frequent field trips to fishing vessels and processing plants to determine conditions of catches and to gather biological information for proper management. Cruises aboard commercial and research vessels, as observers, are often a necessity. Extensive research programs on shrimp, razor clams, and tanner and king crab are conducted to determine their life histories, age composition, fishing mortality estimates, and allowable harvest levels. Approximately 250 vessel days are spent at sea conducting annual population studies.

The Western Region contributes over 90 percent to the state-wide commercial shellfish harvest and approximately 30 percent to the annual state-wide salmon harvest. The 1975 shellfish landings were estimated to range from 225 to 250 million. Salmon production is expected to total 13 to 15 million fish for this region in 1976.

The Commercial Fisheries Division expends approximately two million dollars annually to provide research and fishery management in the Western Region. This amounts to approximately one-third of the Department of Fish and Game's budget. In addition, funds designated as administrative support are allowed for a 32-foot gill net type vessel and a 90-foot fishing vessel for king and shrimp research.

Fig. 12: Functions of State Government

**OFFICE OF THE GOVERNOR**

Lieutenant Governor (Elections and other duties)	Public Defender Agency Office of Child Advocacy Policy Development & Planning
Other agencies and commissions	

**ADMINISTRATION**

Centralized services: Personnel (classification, pay, retirement), accounts and disbursements; purchase and supply, distribution and mail; space allotment; executive budget preparation and execution, pioneers' homes.

**FISH AND GAME**

Administration of state program for the conservation, development, and regulation of fish and game resources (commercial and sport); research; Fish and Game Boards.

**MILITARY AFFAIRS**

Administers state program for the Alaska National Guard (Army and Air); and organizes state militia if the National Guard is called into federal service; Alaska Disaster Office.

**COMMERCE & ECONOMIC DEVELOPMENT**

Regulates banking, securities, insurance, professional licensing boards; corporations; veterans; weights/measures; Public Transportation Commission; Public Utilities Commission; Pipeline Commission; Housing Authority. Promotion for economic development of state resources including tourism, through collection, analysis, and reporting of data and advertising.

**HEALTH AND SOCIAL SERVICES**

Administration of state and federal aid programs; comprehensive health planning; sanitation; vital statistics; juveniles; probation and parole; mental health; alcoholism.

**NATURAL RESOURCES**

Administers the state program for the conservation and development of natural resources; forests, lands, water, minerals, oil and gas, agriculture, parks, historical sites, and soil conservation.

**COMMUNITY AND REGIONAL AFFAIRS**

State assistance to government at the community and regional level, including incorporation, organization, planning, finance, federal program participation, and management; Local Boundary Commission.

**HIGHWAYS**

Administration of the state program for the construction, maintenance, and operation of state highways, roads, bridges, traffic signs and signals, and related facilities.

**PUBLIC SAFETY**

Administers state program for law enforcement and protection of life, property and fish and wildlife; motor vehicle registration; state police, fire prevention, and watercraft safety program.

**EDUCATION**

State Board of Education. Administers state program for school administration, instruction and construction; state library and library services; Alaska State Museum.

**LABOR**

Administration of state programs governing employer-employee relations; wages, hours, safety, workmen's compensation, unemployment compensation; statistics.

**PUBLIC WORKS**

Administers the state program for construction, maintenance and operation of state-owned buildings, docks, floats, and airports; operation of the state ferry system; general equipment maintenance.

**ENVIRONMENTAL CONSERVATION**

Responsible for coordinating and developing policies, programs and planning regarding the environment, and enforcing and setting standards for prevention and abatement of water, land and air pollution.

**LAW**

Legal services for all state agencies; opinions and instruments, legislative drafting and review; civil actions, all prosecutions of violations of state law; Commission on Uniform State Laws.

**REVENUE**

Administration and enforcement of tax laws; collection, investment and management of state revenues; log and cattle brand registration; nonprofit gambling laws; Alcoholic Beverage Control Board.

## FEDERAL GOVERNMENT

With the exception of the U. S. Coast Guard, the federal government is probably the least conspicuous governing entity in Kodiak. Compared to state and local governments, the federal government has less direct contact with the public; it provides services to individuals; it has less enforcement activities; and, in general it is not involved in activities drawing much day-to-day public interest. Regardless of this low profile, the federal government greatly affects life in Kodiak through its policies.

While this report will not attempt to describe the total involvement of the federal government in Kodiak, it will describe the federal offices located in Kodiak and their functions. An organizational chart of the United States Government is provided in Figure 13 to assist the reader in determining how the Kodiak offices fit into the total scheme of the federal government.

### United States Coast Guard

The largest and most well known federal facility in Kodiak today is the Coast Guard base, located approximately six miles to the southeast of the City of Kodiak. (See Map 9) The base was originally a naval station, but was taken over by the Coast Guard in 1972. Activities at the Kodiak Coast Guard base are carried out under two divisions. They are the Support Center Kodiak and the Air Station Kodiak. The Support Center is primarily responsible for logistical support of permanent and visiting personnel and equipment at the Coast Guard base. The Air Station provides search and rescue services, maritime law enforcement and logistical services in both the Gulf of Alaska and the Bering Sea. There is also a communications station in Kodiak which provides support for Coast Guard units in the North Pacific area.

The Kodiak Coast Guard base contains over 30,000 acres of land, making it physically the largest base in the entire Coast Guard system. It is the second largest base in terms of its personnel. There are 96 officers, 719 enlisted personnel, 185 civilian employees, and 120 exchange program employees for a total of 1,120 personnel. The salaries and expenditures generated by the base are in excess of \$15 million per year. (39)

Coast Guard vessels in Kodiak include the 210-foot cutter "Confidence", the 205-foot "Storis", and the 180-foot buoy tender "Citris". The "Confidence" and the "Storis" are responsible for search and rescue, law enforcement and logistical services in the North Pacific. The "Citris" is primarily used to maintain navigational aid. The Coast Guard base also serves as a temporary facility for other Alaska Patrol (ALPAT) cutters during their missions in the North Pacific.

Aircraft currently stationed at the Kodiak Support Center include four C130 aircraft, four H3 helicopters, and three H52 helicopters. Coast Guard aircraft use a base runway which is part of a three-runway complex once belonging to a Naval Air Station. One runway is now operated by

# THE GOVERNMENT OF THE UNITED STATES

This chart seeks to show only the more important agencies of the Government. See text for other agencies.

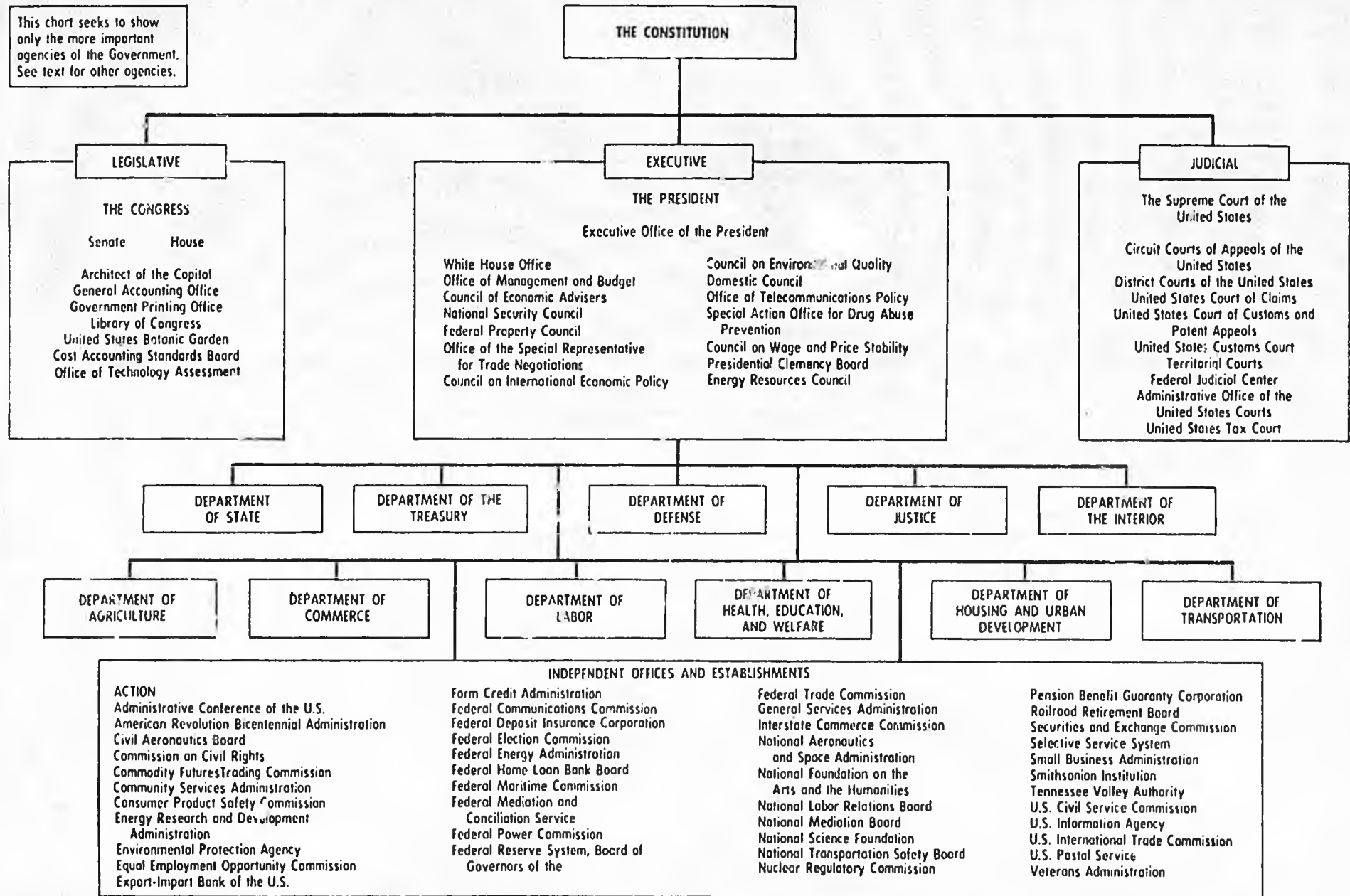


Fig. 13: Organization of U.S. Government

the State of Alaska as a commercial and general airport. That runway is approximately 3,000 feet long and is oriented in an east/west direction. The Coast Guard still utilizes the 5,000 foot north/south runway for its operations. The third runway is seldom used.

The Coast Guard base has a full range of community services and facilities including schools, library, recreational facilities, commercial services, housing, and utilities. At present there are approximately 2,500 personnel on base living in 557 family housing units and 250 single living units in barracks.

There are two major changes occurring at the Coast Guard base which will affect the Kodiak community. First, a recent Coast Guard policy requires civilian families who have lived on the Coast Guard base for more than two years to move off the base and find housing within the surrounding community. Consequently, 62 families will be moving from the base within the next year and a half. Because Coast Guard civilian salaries are relatively low, these families will be looking for moderately priced housing. This will severely impact Kodiak's housing supply.(39)

The second factor that will affect the Kodiak community will be the implementation and enforcement of the two hundred mile fishing limit. It is anticipated that the Coast Guard will need 125 additional personnel to carry out the work load generated by this new law. Such an increase in personnel would probably result in an overall gain in population for Kodiak of between four and five hundred people.

As a result of the new housing rule and the two hundred mile fishing limit, many Coast Guard personnel and their families will be seeking housing in the Kodiak area during the next two years. Should OCS development take place, it will likewise exert pressure on the community for housing needs during this same period.

The impact of the Coast Guard base in Kodiak is for the most part beneficial. Its local spending has helped to stabilize what historically has been a seasonally fluctuating economy. In addition it has provided a number of invaluable services to the fishing industry such as search and rescue and navigational aids. It is important, however, that the local governments and the Coast Guard work together to assure that the impact of OCS development is not aggravated by the impact of changes in Coast Guard base policies and Coast Guard growth in the area. The relationship between the local community and the Coast Guard base to date has been a healthy, mutually beneficial one. This spirit of cooperation should continue in the future to assure that both the local community and the Coast Guard base are not adversely affected by OCS development.

#### National Oceanic and Atmospheric Administration (Department of Commerce)

With the exception of the Coast Guard, the National Oceanic and Atmospheric Administration (NOAA) is the largest federal agency in Kodiak. NOAA was created on October 3, 1970, through a reorganization of various other federal agencies and departments. NOAA has a wide variety of functions

including responsibility for the National Weather Service, the National Ocean Survey, and the National Marine Fisheries Service. In addition, NOAA is in charge of executing portions of the Coastal Zone Management Act of 1972, the Marine Mammals Protection Act of 1972, the Marine Protection Research and Sanctuary Act of 1972, the Water Modification Reporting Act of 1972, the Endangered Species Act of 1973, and the Off-shore Shrimp Fisheries Act of 1973.

The following excerpt from the United States Government Manual is a brief description of the primary duties of the NOAA.

"The mission of NOAA is to explore, map, and chart the global ocean and its living resources, to manage, use and conserve those resources and to describe, monitor, and predict conditions in the atmosphere, ocean, sun, and space environment, issue warnings against impending destructive natural events, develop beneficial methods of environmental modification, and assess the consequences of inadvertent environmental modification over several scales of time."(40)

To simplify administration of these tasks, NOAA is divided into a number of smaller agencies. Those agencies having offices in Kodiak are listed and discussed below.

#### National Marine Fisheries Service (NMFS)

The National Marine Fisheries Service has three offices in Kodiak. These offices carry out extensive operations in the fields of ocean research, fish product utilizations, and enforcement and surveillance.

The Enforcement and Surveillance Section of NMFS is located in Gibson Cove near the City of Kodiak. Their facilities include offices, a warehouse for NOAA equipment, a darkroom facility and a conference room. This section is staffed by eight enforcement agents and one clerical employee.

Enforcement of oceanographic and fisheries treaties and agreements between the United States and foreign countries is the primary function of NMFS. In carrying out this enforcement role, NMFS service personnel work closely with the Coast Guard and utilize Coast Guard craft. NMFS enforcement agents have the power of arrest, search and seizure.

Their most time-consuming functions in Kodiak include the enforcement of the Marine Mammals Act and dockside halibut fishing regulation and enforcement. They must also review permits for construction work in tidal waters issued by the Corps of Engineers, and they have the authority to attach and enforce restrictions upon such work. Enforcement agents spend one-third of their time on field work or approximately 85 days per year at sea in Coast Guard cutters and 52 days per year in Coast Guard aircraft on patrol flights. The heaviest field season is between mid-April to October.

In addition to performing normal enforcement duties, NMFS serves as the landlord for the federal government over a 12-unit mobile home park on

the Coast Guard Base in Kodiak. This park provides trailer space for NMFS and other government employees; however, residents must provide their own mobile homes.

According to staff personnel in Kodiak, the effect of OCS development on the Enforcement and Surveillance Section of NMFS would be felt primarily in the enforcement of the National Marine Mammals Act. Large populations of marine mammals could be threatened by oil spills and the proposed development of the Cape Chiniak area. In addition to OCS impact, NMFS officials must plan for the enforcement of the 200 mile fisheries limit. If both of these developments take place, the staff believes the number of its enforcement agents in Kodiak will have to double to accommodate the additional workload.

The research section of NMFS operates the Fisheries Utilization Research Lab (FURL) which is located on the Coast Guard Base in Kodiak. This lab is the only research lab in the seafood utilization field in Alaska, and is one of only five under this program in the United States. Originally established in Ketchikan in 1940, FURL was moved to Kodiak in 1971 because of the expanding fishing industry in this area. The primary purpose of FURL is to find methods of utilizing both new and already available seafood products.

The lab is currently staffed with three chemists and one clerical employee. The information generated from research carried out at the lab is disseminated through informal contacts with local fishing industry personnel and through articles published in scientific and trade journals in the fisheries field.

The effect of OCS development on the research lab should be negligible. Likewise, the lab's research results should have no bearing on the operations of the oil companies in this area.

The third office of the National Marine Fisheries Service is the Northwest Fisheries Center (NWFC). NWFC is a research organization which gathers and analyzes data concerning stocks of fish (primarily shellfish) and formulates management plans for these species. At present, the bulk of the work carried out by NWFC is in the Bering Sea. However, NWFC will be more active in the Kodiak area as OCS development occurs.

There are a total of 15 people assigned to NWFC in Kodiak. Eight of the staff are professional biologists and mathematicians and the others are support personnel. Research projects frequently necessitate the use of the "Oregon", a 100-foot vessel owned by NWFC and based in Kodiak. In some cases however, NWFC uses up to four vessels at one time for research. The other vessels are based in Seattle and are operated under contract to the Bureau of Land Management.

The NWFC also send observers to Japanese fishing ships as provided under the terms of a treaty between the United States and Japan. While the Japanese fish in the North Pacific, the observers live aboard the ships and verify reported catches. They also collect biological information which is later added to the information collected by NWFC programs aboard its own ships.

The NWFC has also assigned three full-time people to Outer Continental Shelf research in Kodiak. Another seven people work in that field but are stationed in Seattle. Several bottom fish surveys have been carried out on the Kodiak Shelf through the NWFC in Seattle. Their findings will be helpful in monitoring the effects of OCS oil development on these species. Kodiak's research programs are mainly concerned with shrimp and crab. The objective of the shrimp studies is to "promote the maximum utilization of conservation of Alaska shrimp stocks by providing shrimp abundance, distribution, condition of stocks, and more effective harvesting techniques to industry and resource management agencies." With reference to crab, NWFC wants to "promote the effective use and conservation of king and tanner crab stocks in the eastern Bering Sea by providing a technical base of information to negotiating and managing agencies."

NWFC research will provide invaluable information on the fisheries and shellfish populations of the Outer Continental Shelf. This data, taken as a baseline, will enable scientists to monitor and evaluate the effects of oil development on marine life. It is essential, therefore, that such research be continued and stepped up if necessary, in order to provide the most up-to-date, comprehensive data possible before oil development takes place. It is unknown at the present whether more staff will be necessary to fulfill the NWFC's functions should OCS development occur.

#### National Weather Service (NWS)

The National Weather Service is the principle weather reporting agency for the United States and its possessions. It issues weather forecasts to the general public; provides warnings of destructive natural events such as hurricanes, floods, and tsunamis; and furnishes special services in support of aviation, marine activities, agriculture, forestry, urban air quality control and other weather sensitive activities.

In Kodiak the NWS is located on the Coast Guard Base in conjunction with the FAA facilities. It is primarily an observation station and data gathering center. The personnel include five meteorological technicians and one electrical technician. There are no clerical positions.

The primary duties of the NWS in Kodiak are to make service observations each hour, to make tsunamic observations each six hours, and to launch weather balloons twice a day. The balloons report information back to the weather stations from altitudes in excess of 100,000 feet. These upper air soundings provide the basis for weather forecasting. The Kodiak station also provides public service weather reporting to the local community through the mass media, including tapes on the telephone, television, radio, newspapers and shortwave broadcasting.

It is not anticipated that a population increase caused by OCS development would effect the operations of the National Weather Service in Kodiak. Their function as a weather forecasting station would probably gain importance as marine traffic associated with OCS development increased;

however, it is not anticipated that this would cause a need for increased personnel or facilities.

#### Federal Aviation Administration (Department of Transportation)

The Federal Aviation Administration (FAA) is responsible for regulating air commerce to insure aviation safety. Its primary functions include safety regulation, registration and recording of aircraft and aircraft components; research and development of safe and efficient air navigation systems and air traffic control procedures, air navigation facilities, air space and traffic management; and airport planning and development programs.

In Kodiak the FAA facility is located on the Coast Guard Base. It provides traffic control for the Kodiak Airport and advisory service to the downtown airstrip. At the present time the FAA is upgrading its equipment to upgrade the airport to a Category "I" rating. This will include installation of new instrument landing system equipment, an aircraft localizer, glide slope equipment, and various other technical devices designed to allow instrument landings in adverse weather.

At present, the FAA handles a total of 17,000 to 18,000 operations per year, which is one of the lowest levels of activity handled by any FAA tower in the United States. Half of those operations are military; the rest are commercial and general aviation.

The personnel assigned to the FAA in Kodiak include one manager, seven air traffic controllers, ten electrical technicians plus one supervisory technician, and one clerical position.

According to the manager of the FAA in Kodiak, an increase in aircraft activity due to OCS development will not over-burden the FAA facilities because they now have the capability to handle up to three times the current level of operation.(42)

#### United States Forest Service (Department of Agriculture)

The Forest Service is responsible for providing nationwide direction in the field of forestry. It manages all national forests and provides research programs in forest technology.

The prime responsibility of the Forest Service in Kodiak is to manage the national forest lands on the Island. It reviews and regulates land use and special use permits within the national forests; it maintains the national forest cabins; it maintains fish ladders in cooperation with the Alaska Department of Fish and Game; and monitors wildlife activity in the national forests. At present, there are six full-time personnel with the Forest Service in Kodiak. Five of those personnel spend 50 to 80 percent of their time in the field. The sixth is a clerical position.

One of the major concerns of the Forest Service is harvestable timber. It recently conducted the Perenosia timber sale on Afognak Island. It is estimated that there are 332 million board feet of lumber within that sale, an anticipated 36 to 40 million board feet to be harvested per year. The Forest Service is responsible for administration of that timber area to assure that the terms of the sale are complied with on a continuing basis.

Oil development of the Kodiak OCS could impact the Forest Service operations in two ways. One would be an increase in recreational demands placed on the national forests. At present, the Forest Service maintains five cabins within that national forest. They indicate that they would be able to increase the number of cabins commensurate with the increase in demand that might be placed on them. Another effect of OCS development might be a request by the oil industry to build on-shore service facilities on Afognak Island. Such a request would require a special use permit from the Forest Service, including a full environmental impact statement of the project. It is not anticipated that these events would increase the need for additional Forest Service personnel or facilities in Kodiak.

#### United States Postal Service

The Kodiak Post Office (see Map 6) is the distribution center for incoming and outgoing mail for all of the Kodiak Islands. Mail delivery is provided through 17,050 post office boxes and a general delivery box which can accommodate an additional 500 customers. The present facilities cannot accommodate all the requests for post office boxes - approximately 500 people are wait-listed for these boxes.

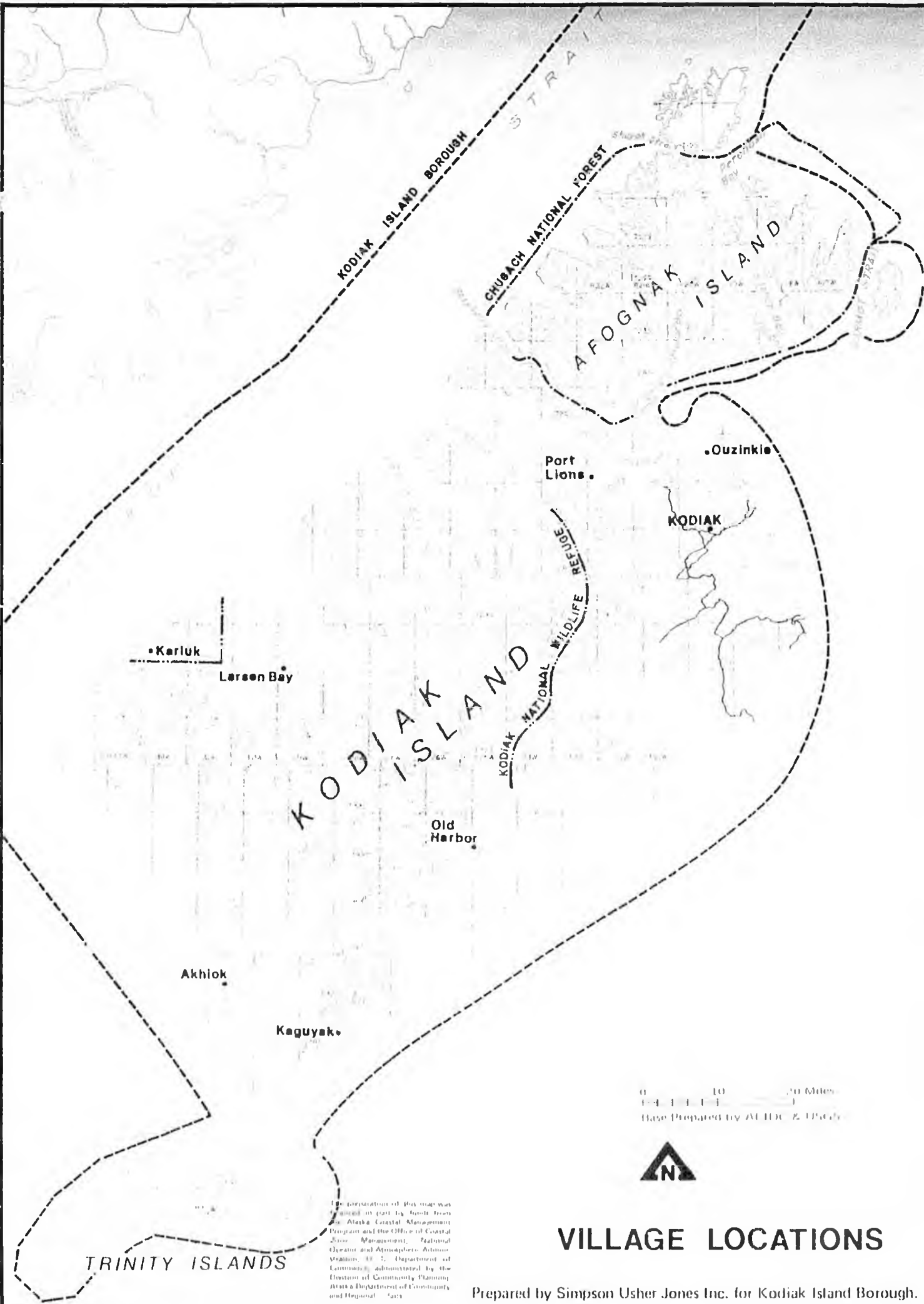
A new post office is scheduled for construction in 1977 and should be open in January, 1978. The new facility will be approximately three times the size of the existing facility with up to twice as many post office boxes.

Significant population increases generated by OCS development would severely impact post office operations. Based upon current growth patterns alone, it is estimated that nearly all of the post office boxes in the new post office will be assigned as soon as the facility is opened. A further increase in population due to OCS development would overburden the new facilities, in effect, bringing on another long wait-list situation for boxes and a heavy use of the general delivery service.

## VILLAGE INVENTORY

A number of the various community services and facilities described in the preceding sections are available in the larger outlying villages around Kodiak Island. In some cases the villages have their own utility systems. In order to get a more concise picture of the status of facilities, utilities and services in these communities, the following will review the information available for those villages with local governments. All but one (Karluk) of the villages discussed are second-class cities; all of them are generally the more significant settlements on Kodiak Island other than the City of Kodiak and its environs.

In most cases, the only existing information available is printed in the Community Profiles that are prepared by the State Department of Commerce and Economic Development. Every effort has been made to update that information. In the case of Port Lions and Old Harbor, specific reports and studies were available that allowed a more in-depth treatment of the communities. For the location of the villages on Kodiak Island see Map 7.



TRINITY ISLANDS

The preparation of this map was financed in part by funds from the Alaska Coastal Management Program and the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, administered by the Division of Community Planning, Alaska Department of Community and Regional Affairs.

0 10 20 Miles  
 Base Prepared by ALEDC & UFGA



# VILLAGE LOCATIONS

Prepared by Simpson Usher Jones Inc. for Kodiak Island Borough.

## AKHIOK

The village of Akhiok is located on Akhiok Bay west of Alitak Bay at the south end of Kodiak Island. It was incorporated as a second-class city in 1972. Akhiok is primarily a native community and its economy and employment are based entirely upon commercial fishing and cannery work. There is one telephone in Akhiok. It is located in the Community Hall and is operated by the City of Akhiok. Additional phone service is not considered feasible at this time. All other communications are through shortwave radio.

Akhiok is supplied with water through a water supply dam with a gravity feed distribution system. A 20,000 gallon water storage tank is located in the townsite but is currently unused. The Akhiok School has a well. Sewage disposal is through individual beach seepage pits with all homes being equipped with flush toilets and plumbing. Garbage disposal is currently handled through tide outflow. A sanitary landfill was built in Akhiok by the KIB with HUD grant funds in early 1977. The fill is not being used currently due to the lack of a vehicle to transport garbage to the fill site. The fill is located 1800 feet from the center of the village site. Electrical power is supplied to the homes within Akhiok by the school during its operation months. The rest of the year there is no power available. Some homes have individual generation. Until the late 1960's there was a central electrical system in Akhiok. However, in 1969 the generator broke down and has not been repaired.

There are no roads from Akhiok to other parts of the Island and none of the rural roads are maintained. There is a 1,600 foot gravel airstrip; however, it is not maintained. Kodiak Western Airlines serves Akhiok three times per week. Other transportation to the village is by air, via seaplanes, or by boat.

Akhiok has no police force and law enforcement services are provided by the State Troopers from Kodiak. The Fire Department consists of ten volunteer firemen although there is no firefighting equipment within the village. Mail service is provided through the post office in Akhiok and there are 25 subscribers.

The Akhiok Elementary School accommodates grades Kindergarten through nine and is operated by the Borough. There are two teachers and 29 students.

Health facilities are limited to one health aid. The Public Health Service provides a nurse from Kodiak on a visitation basis.

There is a total of 20 housing units within Akhiok, with one community hall, one church, a post office, and a library. An additional 15 houses are planned for construction this year through a BIA/HUD Indian Housing Program.

Like Karluk, Akhiok will probably not feel any direct affects as a result of OCS development. While it is closer to the lease sale area, Akhiok is almost totally void of the facilities necessary for an on-shore service facility. If the oil industry decides to build new service base facilities in a remote location, it seems likely that they will choose a site more convenient to the entire development area than Akhiok. However, the residents and city government in the community must be prepared for some indirect impacts. Again, similar to Karluk, Akhiok might find their community and its environs in demand for recreation uses and tourism. Preparation for those impacts should involve cohesive community goals and subsequent implementation policies through the City of Akhiok and the Kodiak Island Borough.

## KARLUK

The village of Karluk is located on the Karluk River, on the east coast of Kodiak Island. It is primarily a commercial fishing village, offering seasonal employment. The Karluk village is physically split in half by the Karluk Lagoon. Transportation between the two sides is either via skiff or by foot over a mile long sand and gravel spit that encloses the front of the lagoon. A foot bridge crosses the Karluk River at its outlet allowing access to the spit and the village store.

The water supply is provided mainly from surface water, and individual wells. There is a small dam that distributes water to 11 homes. Sewage disposal is through private septic tanks and privies. A city dump is used for solid waste disposal. Karluk has no central source of electricity; although many of the homes have individual generators. There is one telephone in Karluk located in the Community Hall.

There are no highway links to other parts of Alaska and no locally maintained roads. The state operates a 1,400 foot gravel airfield. Kodiak Western Airlines services the community with three flights a week with amphibious aircraft. The only other modes of transportation available are charter and private planes or boats. Transportation within the village is primarily via boardwalks. Many of the boardwalks are badly deteriorated and need replacing.

Karluk has no local police force; the State Troopers from Kodiak provide law enforcement. There are five volunteer firemen; and no firefighting equipment in the village other than fire extinguishers.

Karluk Elementary School accommodates Kindergarten through 8th grade, and is operated by the Kodiak Island Borough. There are two teachers and a student enrollment of 28. The school is currently in need of renovation including some structural repair.

Health needs are currently met by a clinic, staffed with one health aide. A public health nurse services Karluk on a visitation basis. Within the village is also a community hall, post office and a church.

Because of Karluk's location on the western side of Kodiak Island and its lack of community facilities, it is unlikely that it would be the site of any facilities directly related to OCS development. It could feel an impact in terms of increased tourism, hunting and fishing as a result of dramatic increases in population elsewhere in Kodiak Island Borough. Decisions need to be made concerning the degree to which these impacts are to be encouraged or discouraged. Implementation of land use regulations by the Kodiak Island Borough could have a significant effect on the availability of facilities to accommodate travelers and tourists. The involvement of the area residents is essential to this decision process. However, delays could result in unplanned and unwanted impacts.

## LARSEN BAY

The City of Larsen Bay is located 62 miles west-southwest of Kodiak near the mouth of Larsen Bay. It is situated on the west shore of Uyak Bay on the west coast of Kodiak Island. Larsen Bay was formally founded in 1911 when a cannery was constructed there, and Larsen Bay was incorporated as a second-class city in 1974. Prior to that, the area was inhabited for at least 2,000 years.

The economy of Larson Bay is primarily based on fishing and cannery work, although there is potential for recreation and tourist-oriented employment relating to fishing and hunting.

There are no local police in Larsen Bay, and law enforcement services are provided by the State Troopers from Kodiak. The volunteer fire department consists of 22 volunteers although there is no firefighting equipment other than fire extinguishers.

There are no roads to any other part of Kodiak Island from Larson Bay and none of the local roads are maintained. Several miles of new road is currently being built in Larsen Bay by the BIA. The roads are not being constructed to State Highway Department standards, consequently they will not be maintained by the state. This presents a problem since the City of Larsen Bay does not have street maintenance capability.

Transportation to and from the village is provided by Kodiak Western Airlines as well as private aircraft, boat, and charters. A new 4000 foot gravel runway has recently been completed. It is operated by the State Division of Aviation and is developed to standards that should be adequate for twin engine aircraft. There is also a 10,000 foot seaplane landing area in Larsen Bay.

Water is provided on an individual basis from wells and springs within the community. Sewage disposal is again provided on an individual basis. There are 24 privies and 12 septic tanks, all operated by individual owners. Electricity is provided by the individual home owner; solid waste is disposed by either burning it or piling it on the beach to be taken away by the tide.

Health facilities include a small clinic and one health aid. The services of a public health nurse from Kodiak are provided on a visitation basis. The school at Larsen Bay handles grades kindergarten through eight and is operated by the Borough. There is an enrollment of 18 students handled by one teacher. The community also has a community hall, two churches, and a post office.

There are a total of 31 housing units at Larsen Bay. Twenty-nine of those are single units, and there is one duplex.

As with other villages located on the western side of Kodiak Island, it is unlikely that Larsen Bay will be directly impacted by industrialization due to OCS development. However, the potential for secondary or indirect impact is quite high. Larsen Bay is an especially scenic community and already has a reputation as a popular hunting and fishing spot among residents of Kodiak, as well as the mainland. A dramatic population increase in Kodiak would undoubtedly bring a corresponding increase in tourism pressure in Larsen Bay. At present, the community does not have facilities such as hotels, restaurants, or camping grounds to handle a significant increase in tourist trade. A decision should be made by the community in the near future whether or not such an increase is desirable, and implementation of that decision should begin as soon as possible.

This is especially important in Larsen Bay since there are numerous archeological sites in the villages and the surrounding area. Well preserved artifacts are common. Their presence could easily attract amateur archeologists and artifact hunters. The result could be disastrous in terms of the loss of historical information and heritage as well as a severe impact on the lifestyles of the community if it is unprepared.

## OLD HARBOR

Old Harbor is situated on a rocky shelf on the west shore of Sitkalidak Strait, 56 miles southwest of Kodiak on Kodiak Island. The village fronts onto a long, narrow, sand and gravel beach. It was originally established in 1884. The City of Old Harbor was incorporated as a second class city in 1966. It has a population of approximately 315 people.

The economy of Old Harbor is based entirely upon commercial fishing and processing; although at the present time, the processing industry is closed down due to the lack of a usable industrial water supply. The Kodiak Island Borough has recently begun a project to provide a water supply through HUD grants made available under the Housing and Community Development Act of 1974.

Seafood around Old Harbor is plentiful including commercial quantities of king crab, tanner crab, shrimp and salmon. In fact, one of the best shrimp grounds in the Kodiak Island Group is located near Old Harbor. Also, the community is located near Alitak Bank which is consistently one of the highest producing king crab grounds in the islands. Other seafood species, such as scallops and clams, are available in potentially commercial quantities.

In March of 1975, the processing plant on the floating freezer ship "Sonya" burned. Due to the lack of an industrial water supply, no new processing facilities have been built. This has dealt a severe economic blow to the community since the work force of approximately 70 people, as well as 30 fishing vessels, have been idle. However, through the use of the available HUD funds, it is anticipated that the new water system will be completed within a year, thus allowing the processing industry to get reestablished.

Old Harbor has a barge dock which accommodates private boats and a 2,000 foot gravel runway and commercial air services are provided by Kodiak Western Airlines on a scheduled six flights per week basis. At this time Old Harbor has no road connections with other parts of Alaska and the roads within the community are maintained by the city. Old Harbor was served by the state ferry system at one time, however service was stopped when the Sonya was permanently moored at the dock. Now that the Sonya is gone, the dock is available and plans are being made for its expansion. This should provide adequate facilities to re-establish ferry service to the village.

Because of its location and physical confinement, Old Harbor has extremely limited potential of expansion of housing and community facilities. The 1968 the Kodiak Island Borough Comprehensive Development Plan indicated plans to build a bridge between two spits across a saltwater lagoon to

the northeast. That bridge is now completed and a road extends across the bridge to that area. This allows the development of new housing on the northeast side of the lagoon about one mile from the existing village. Topography is relatively gentle in this area, thus community expansion will be less difficult than is the case at the existing village site. Forty-five units of HUD/BIA housing will be constructed in this area during the summer and fall of 1977.

Water for the residents is currently provided through a dam and holding tank with a gravity system to the homes. Sewage disposal is provided through a public health service sewer system that operates on a community septic tank. Electrical power is provided to 58 consumers through diesel generation. The entire village is served with a phone system that was installed recently. It provides both local and long distance telephone capabilities to individual homes.

Fire protection is provided to the village by the City of Old Harbor. They have a volunteer fire department with a part-time firechief and one fire truck. The truck does need some repairs.

The community has a Russian Orthodox Church, a community building, a post office, library, theater, and two stores. The school in Old Harbor is operated by the Borough and serves grades Kindergarten through ten. There are 97 students enrolled and 6 teachers.

Old Harbor's location on the southeastern portion of Kodiak Island and the fact that it is protected from the open seas of the Gulf of Alaska make it a potential site for development of onshore facilities to serve OCS development. This potential is confirmed by the fact that the village corporation has already been approached by representatives of the oil industry in an attempt to buy property in the area.

The utilization of a site in or near Old Harbor for OCS related on-shore services facilities would result in major changes and/or disruptions of the current economy, life style and physical characteristics of the community. At present, Old Harbor does not have the necessary facilities that would be required for a service base facility. These include adequate water supply, port facilities, an adequate airport, housing and other utilities. The cost of providing these facilities would be extremely high and is beyond the fiscal capacity of the city. If a decision is made by the oil industry to attempt to develop a service base in Old Harbor, it should be reviewed with respect to the community goals, economic implementation and environmental impacts. The Borough, the City of Old Harbor, and the Regional and Village Native Corporations have the combined resources to negate such a decision or, if OCS facilities are deemed appropriate in Old Harbor, to control their development. This subject should receive immediate attention by all parties concerned.

## OUZINKIE

The City of Ouzinkie is located on the west coast of Spruce Island northeast of Kodiak Island. Spruce Island is separated from Kodiak Island by Narrow Strait. The City of Ouzinkie was incorporated as a second-class city in 1967. The economic base is primarily commercial fishing.

As with the other villages there is no local police in Ouzinkie. Law enforcement services are provided by the State Troopers from Kodiak. There are a total of 24 volunteer firefighters with no firefighting equipment other than individual fire extinguishers.

Ouzinkie has no highway link with other parts of Kodiak, and none of the local roads are maintained. There is no airstrip in Ouzinkie; although the State Division of Aviation has indicated plans to build a new airstrip on the north side of the village. The community is served on a scheduled basis by Kodiak Western Airlines from the City of Kodiak. There are six scheduled flights per week; in addition, charter flights are available to the village.

The City of Ouzinkie supplies water to the community through a central distribution system. Water is obtained from a small creek and piped into a 100,000 gallon storage tank. The system has deteriorated in recent years and is currently being upgraded by the Public Health Service. Sewage disposal is handled by two methods: either individual septic tanks or a number of small sewage disposal systems that accommodate from 2 to 6 houses. Electrical power is provided to the residents by the City of Ouzinkie. The distribution system is deteriorating and needs to be upgraded. Some electrical distribution lines are laying on the ground year round. This causes a "leakage" of power from the system. There are five large electrical generators in the village. They include a 50 KW plant, a 65 KW plant (in use), a 75 KW plant, an 85 KW plant and a 150 KW plant. Only the 65KW plant is currently operatable, although it is believed that all of the rest are repairable. The 65 KW plant is not adequate to serve the electrical power demand of the village.

Solid waste is disposed of either at the new landfill site built by the Kodiak Island Borough or through the traditional method of depositing garbage on the beach. The landfill is located approximately 1/2 mile from the village site and is used only by residents who have a means of hauling waste.

As in the previously described villages, health services are provided through a small clinic with one public health aide. Public health nursing services are provided on a visitation basis from Kodiak. The school in Ouzinkie is operated by the Borough and includes grades one through eight. There are three teachers who handle an enrollment of 42 students.

This community has a Community Center, two churches, and a post office. Total number of housing units in Ouzinkie is 41, including one duplex.

Ouzinkie is located near several OCS lease tracts that have been identified by the oil industry as areas of high interest. Consequently, there is a possibility that Ouzinkie could be affected by OCS development. If any oil related facilities or personnel were to be located there, a significant disruption of the community could result. While there is currently no seafood transportation to Ouzinkie other than fishing boats, road and ferry access is possible.

According to the Kodiak Island Borough Comprehensive Plan (Tryck Nyman and Hayes, 1968, p.135) there are long range plans to upgrade an existing trail to a road from Monashka Bay near Kodiak to Neve Cove opposite Ouzinkie. From there, either a vehicular or passenger ferry could be operated to the town site. Pressure and/or financing from the oil industry could conceivably make this a reality in the foreseeable future. Since Ouzinkie has a partially protected natural harbor, the construction of improved year-round surface transportation links could make it a prime candidate for on-shore service facilities related to OCS development. As in the case of other outlying villages on Kodiak Island, this eventuality should be given considerable attention, and plans should be made both by the City and the Kodiak Island Borough to either discourage or control any oil related activities.

Ouzinkie also has significant tourism and historical potential. Elk and deer hunting, as well as fishing, are good in the area. There is also a Russian Orthodox Mission Chapel located at the southern end of Spruce Island that has been almost continuously occupied since 1790. These attractions will bring tourists and sportsmen to the area in increasing numbers as OCS development occurs. Community goals and preparation are essential if these impacts are to be successfully dealt with.

## PORT LIONS

The City of Port Lions is located on Settler Cove near the mouth of Kizhuyak Bay, on the north coast of Kodiak Island. In comparison with the other communities around Kodiak Island, Port Lions is a relatively recent community. However its residents have been inhabitants of the Kodiak Islands for many years. Port Lions was located and built in Settler Cove in 1964 after the March 27th earthquake. The original people of Port Lions had formally been residents of the village of Afognak. They were forced to find a new townsite after the tidal waves and subsequent tidal action inundated Afognak with water. The site of the village had subsided five feet as a result of the earthquake. A complete new town was built in Settler Cove with the help of the U. S. Public Health Service, the Bureau of Indian Affairs, the Lions Club and various other public and private organizations. Initially 44 homes, one school, and a Community Hall were built and provided with water and sewer service. Since that time, Port Lions has become one of the fastest growing communities on Kodiak Island. It was incorporated as a second-class city in 1966.

The economy and employment in Port Lions is based primarily upon commercial fishing and seafood processing. A large Wakefield Processing Plant in Port Lions burned down in 1975 and has been replaced by a smaller floating processor. The cannery is located across Settler Cove from Port Lions on Peregebni Point. It is connected to the town via a gravel road around the cove. There is a small sawmill in Port Lions; however, it is not currently operating. Other commercial establishments in Port Lions include a cafe, a hotel or lodge, and a general store.

Port Lions is the only outlying village on Kodiak Island that has provided a local police force. At present, the city has budgeted for one paid police officer. Additional law enforcement services are provided by the Kodiak Headquarters of the State Troopers, 19 air-miles away. Fire protection is provided by 17 volunteer firemen and one fire truck.

Additional community facilities include the administrative offices of the City and Port Lions Native Corporation which are located in the Community Hall. It also serves as a public meeting hall and City Council chambers. Port Lions also has a public library which is operated through joint agreements with the Kodiak Public Library in the City of Kodiak.

The Port Lions telephone system is unique with respect to other outlying villages on Kodiak Island in that it serves the entire community, as well as providing direct dialing capabilities throughout the state and nation. There are currently 68 subscribers to the telephone service.

Cable television is also available to the residents of Port Lions. The television service costs \$30 per month and installation charge is \$75. Health facilities include a clinic with one doctor and one public health aide; a public health nurse is also dispatched from Kodiak on a visitation basis. Port Lions also has a post office with daily airmail service, although, like the City of Kodiak, there is no house-to-house delivery.

Utilities in Port Lions include a community water supply and distribution system that has recently been improved (1976) to provide adequate service to the existing community as well as the potential for future expansion. There is currently a 13.1 thousand gallon community sewer system that serves a large portion of the community; however, many of the residents still rely on individual septic systems. The community is in need of an adequate treatment plant in compliance with federal and state regulations. Electrical power is provided through the Kodiak Electrical Association. The offices of KEA are located in the City of Kodiak, however the generating plant is located in Port Lions.

Transportation facilities to and from Port Lions and within the community are also better than is found in other outlying villages on Kodiak Island. The community has a gravel-surfaced street system, slightly over one mile of which is maintained by the City. In addition, there is 4.2 miles of state roads in the area. Port Lions street system is the only village system in the Kodiak Islands that has street lights.

External transportation services are available through both air and marine carriers. Kodiak Western Airlines provides six flights per week to Port Lions. In addition, Klondike Airways utilizes a city-operated 2,600 foot gravel airstrip to the northeast of the community and provides flights on Monday, Wednesday and Friday between Anchorage and Port Lions. This service was begun in 1976.

Port Lions is also served by the Alaska Marine Highways System. The ferry "Tustumena" visits Port Lions weekly except for three months during the winter, at which time it undergoes yearly maintenance and repairs. Additional transportation services are provided to Port Lions from Kodiak via charter aircraft, as well as privately owned aircraft and boats.

Port Lions does not currently have a small boat harbor but an investigation of possible alternative sites has been done. It is conceivable, with cooperation between all levels of government, that a facility could be constructed in Settler Cove by the early 1980's.

The school in Port Lions is operated by the Kodiak Island Borough and handles Kindergarten through grade 10. The school was built in 1964 by the Bureau of Indian Affairs at the time the community was moved to its present location. The school includes four classrooms and four teachers. At present the additional classroom space as well as recreation and career facilities are being investigated by the school district. There are in excess of 70 students in the school at present. Housing in Port Lions consists of 67 single family units.

As is the case with most other villages on Kodiak Island, Port Lions offers excellent recreation opportunities that will undoubtedly draw the attention of increasing numbers of tourists as the population increases in Kodiak. Snowmobiling has become an active sport and the local snowmobile club has established a winter trail between Kodiak and Port Lions. Hunting and fishing are both good in the surrounding areas and the presence of both a lodge and restaurant make the potential for related tourism extremely high. This potential is heightened by the commercial transportation services as well as the fact that the community is only seven miles by water from Anton Larsen Bay where a boat launching ramp is located on the road system that leads to the City of Kodiak.

If Port Lions is to develop its recreational potential, action will have to be taken by the City, as well as the Kodiak Island Borough, to maintain and possibly expand tourist accommodations, encourage the expansion of marine highway service, and possibly engage in a public relations campaign to publicize the recreational and scenic assets of the community. Tourism offers a high potential for expanding and diversifying the Port Lions economy and can probably be developed on a continuing basis throughout the foreseeable future. However, this development should be encouraged only after the best interest of the community and the city are considered.

Like Ouzinkie, Port Lions is relatively close to OCS lease sale areas. While Settler Cove offers a semi-protected harbor and the community does have a number of the needed facilities and utilities, its situation is similar to that of Akhiok in that it is less than ideally suited from a locational standpoint for the site of onshore service facilities. Since much of the lease sale area is to the southeast of Kodiak Island, the distances traveled from Port Lions would be relatively high when compared with other sites that could be utilized for OCS service facilities. However, if oil discoveries were made primarily in the north end of the lease sale, Port Lions could potentially be impacted.

Port Lions is probably the best equipped of the outlying villages on Kodiak Island to handle such industrialization, due to its relatively high level of community facilities and utilities; however, the degree of impact created by such industrialization, if it were to occur in or near the City, would completely change the physical and socio-economic characteristics that currently exist. The possibility of this eventuality should be monitored closely and the community attitudes towards such industrialization should be determined. This would allow for the preparation of plans and implementation policies to either discourage or to direct the growth of OCS related oil facilities that might be proposed for Port Lions.

## HOUSING INVENTORY

The ability of the Kodiak community to keep pace with the demands for housing that will be generated by OCS development will determine to a significant degree what the impact that development will have. The following section of the report will describe the housing situation as it exists in Kodiak today.

The basis of the Housing Inventory is an actual count of housing conducted in Kodiak during the Summer and Fall of 1976. A "windshield" survey was carried out in August which involved driving all of the streets and roads on the road system from Monashka Bay to Chiniak, including all the streets within the urban area. Both base maps and aerial photos were used to augment the windshield survey. In addition to counting the number of units, the survey also noted the condition of each residential building within the area of road system. The condition categories were broken down as follows:

Good All new housing; housing in obvious excellent or above average and average condition; no major structural defects or deficiencies from an outward appearance.

Fair - Basically structurally sound from an outward appearance; no obvious wall or roof structural defects; possibly in need of minor repairs such as window or door frame repair or replacement, or roof repair or replacement; obviously livable and safe for habitation.

Poor - Structural integrity of the building is questionable as evidenced by sagging walls or roof or foundation defects or other problems that indicate that the dwelling is in need of major renovation.

Additional information was gathered concerning vacancies, rents, construction costs, and construction activity in Kodiak. Aerial photos were also sent to each of the remote villages and population centers. Each building on the photos was identified and residential buildings were noted by the number of units they contained. Where information was not available, estimates were made based on the 1970 census information. The housing information presented for villages does not include the condition of units. It does include the information gathered concerning total numbers of units. Since the great majority of population growth and economic activity generated by OCS development is expected to be within the area serviced by the road system, the scope of this study did not include detailed on-site surveys in each of the villages. However, the information gathered does provide data on total numbers of residential units, both in the urban area and the villages. Figure 14 shows the estimated total housing count for the Kodiak Island Borough.

Fig. 14 - Estimated Total Housing Count\*

<u>Area</u>	<u># Residential Units</u>
Road System Area	1,973
Coast Guard	557
Old Harbor	66
Port Lions	60
Ouzinkie	40
Larsen Bay	31
Ahkiok	25
Karluk	25
Remainder of KIB	20
<hr/>	
TOTAL	2,791

\*Does not count group quarters associated with Canneries or Coast Guard Barracks.

Source: Simpson Usher Jones, Inc., 1976.

## HOUSING SURVEY

The Housing Survey of the area serviced by the road system revealed several significant characteristics of the housing stock in Kodiak. One of the most interesting and encouraging facts is that the great majority of residential structures in that area are in fair to good condition. As can be seen by Figure 15, almost 75% of all the housing units are in fair to good condition. The number of units in poor condition (9.7%) is quite low and should not be considered a serious problem. Trailers were identified separately in the housing survey; however, there was no attempt to classify them as good, fair or poor since most have metal skins and it is difficult to determine their condition from an outward appearance.

Fig. 15: Housing By Condition Including Trailers

<u>Condition</u>	<u>Number</u>	<u>Percent</u>
Good	839	42.5%
Fair	625	31.7%
Poor	192	9.7%
Trailers	317	16.1%
<hr/>		
TOTALS	1973	100.0%

Source: Simpson Usher Jones, Inc., 1976

The distribution of residential structures by number units per building is also significant. This is shown in Figure 16. As can be seen by that table, almost 69% of all housing units are in single family dwellings. An extremely small percentage of units are in the medium sized apartments. A higher than expected number, almost 16%, are in the larger apartment buildings (nine units and up). Many of these larger apartment buildings have been built in recent years in response to the growing housing needs. The same characteristics are evident in Figure

Fig. 16: Standard Housing By Number Of Units Per Building

<u>Units Per Building</u>	<u>Number of Units</u>	<u>Percentage</u>
1	1141	68.9%
2 - 3	180	10.9%
4 - 8	88	5.3%
9 -	247	14.9%
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TOTALS	1656	100.0%

Source: Simpson Usher Jones, Inc., 1976

The same characteristics are evident in Figure 17 which shows the housing by density, type and condition. 87.9% of those units in buildings containing nine or more units are considered in good condition with only 12.1% in fair condition and none in poor condition. Also, almost half of all apartment units are in the larger buildings. This shows a definite trend toward more intensive use of residential land, which can be attributed to a relative scarcity of such land and subsequent higher cost.

Fig. 17: Standard Housing Type & Condition

Units per Building	Good		Fair		Poor		Total	
	#	%	#	%	#	%	#	%
1	479	42.0	487	42.0	175	15.3	1141	100
2 - 3	107	59.5	65	36.1	8	4.4	180	100
4 - 8	36	40.9	43	48.9	9	10.2	88	100
9 -	217	87.9	30	12.1	0	0	247	100
TOTALS	839	50.7%	625	37.7%	192	11.6%	1656	100%

Source: Simpson Usher Jones, Inc., 1976

The middle density apartment units fared substantially worse from a condition standpoint. Almost 49% were considered in fair condition with less than 4% in good condition and 10% in poor condition. The group with the highest number of poor units was the single family homes with 15.3% of the units in poor condition. The good and fair units split almost evenly at approximately 42% each.

In general, the condition of standard housing in Kodiak is quite good with 50.7% of the units (not including mobile homes) considered good and 37.7% considered fair with only 11.6% in poor condition. It must be remembered that these condition ratings consider only the outward appearance and apparent structural integrity. They do not consider such amenities as landscaping, trim paint, interiors, etc.

When the housing conditions and density are examined on a neighborhood basis some very definite characteristics begin to appear. For the purposes of this study the area with contiguous roads was divided into 12 different homogeneous neighborhoods. All the housing information was tabulated according to these areas. (See map 8 and 9.) The tables on that map show housing by condition for each of the 12 areas. A review of that information shows that the Baranof Heights area has by far the highest percentage of dwelling units in good shape. There are several reasons why this would be true. First of all it is a relatively new area with portions of it still being developed. Also because the property has both sewer and water as well as a view, the land within the Baranof Heights area is of relatively high value. Consequently, due to financing requirements, the value of the residential units tend to be higher.

**DOWNTOWN AREA**

	NUMBER OF BUILDINGS	DWELLING UNIT CONDITION			TRAILERS	TOTAL
		Good	Fair	Poor		
SINGLE FAMILY	76	25	25	26	0	76
2-3 UNITS	15	17	13	0	-	30
4-6 UNITS	3	12	6	0	-	18
OVER	4	109	30	-	-	139
<b>TOTAL</b>		<b>163</b>	<b>74</b>	<b>26</b>	<b>0</b>	<b>263</b>

**MISSION ROAD AREA WITHIN CITY**

	NUMBER OF BUILDINGS	DWELLING UNIT CONDITION			TRAILERS	TOTAL
		Good	Fair	Poor		
SINGLE FAMILY	224	73	92	59	3	227
2-3 UNITS	36	38	32	2	-	72
4-6 UNITS	3	4	4	5	-	13
OVER	0	0	0	0	-	0
<b>TOTAL</b>		<b>115</b>	<b>128</b>	<b>66</b>	<b>3</b>	<b>312</b>

**KADIAK SUBDIVISION AREA**

	NUMBER OF BUILDINGS	DWELLING UNIT CONDITION			TRAILERS	TOTAL
		Good	Fair	Poor		
SINGLE FAMILY	22	16	4	2	2	24
2-3 UNITS	3	4	2	0	-	6
4-6 UNITS	0	0	0	0	-	0
OVER	0	0	0	0	-	0
<b>TOTAL</b>		<b>20</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>30</b>

**MONASHKA BAY**



**ALEUTIAN HOMES AREA**

	NUMBER OF BUILDINGS	DWELLING UNIT CONDITION			TRAILERS	TOTAL
		Good	Fair	Poor		
SINGLE FAMILY	304	73	129	2	0	304
2-3 UNITS	2	5	2	0	-	4
4-6 UNITS	0	0	0	0	-	0
OVER	4	40	0	0	-	40
<b>TOTAL</b>		<b>115</b>	<b>231</b>	<b>2</b>	<b>0</b>	<b>348</b>

**MONASHKA BAY AREA**

	NUMBER OF BUILDINGS	DWELLING UNIT CONDITION			TRAILERS	TOTAL
		Good	Fair	Poor		
SINGLE FAMILY	10	14	1	3	14	32
2-3 UNITS	0	0	0	0	-	0
4-6 UNITS	0	0	0	0	-	0
OVER	0	0	0	0	-	0
<b>TOTAL</b>		<b>14</b>	<b>1</b>	<b>3</b>	<b>14</b>	<b>12</b>

**MISSION ROAD AREA OUTSIDE CITY**

	NUMBER OF BUILDINGS	DWELLING UNIT CONDITION			TRAILERS	TOTAL
		Good	Fair	Poor		
SINGLE FAMILY	85	29	33	23	151	246
2-3 UNITS	3	2	4	0	-	6
4-6 UNITS	1	0	4	0	-	4
OVER	0	0	0	0	-	0
<b>TOTAL</b>		<b>31</b>	<b>41</b>	<b>23</b>	<b>151</b>	<b>256</b>

**ERSKINE SUBDIVISION AREA**

	NUMBER OF BUILDINGS	DWELLING UNIT CONDITION			TRAILERS	TOTAL
		Good	Fair	Poor		
SINGLE FAMILY	52	15	22	0	0	57
2-3 UNITS	6	14	2	0	-	16
4-6 UNITS	3	10	13	0	-	23
OVER	0	0	0	0	-	0
<b>TOTAL</b>		<b>72</b>	<b>37</b>	<b>0</b>	<b>0</b>	<b>109</b>

**ISLAND LAKE AREA**

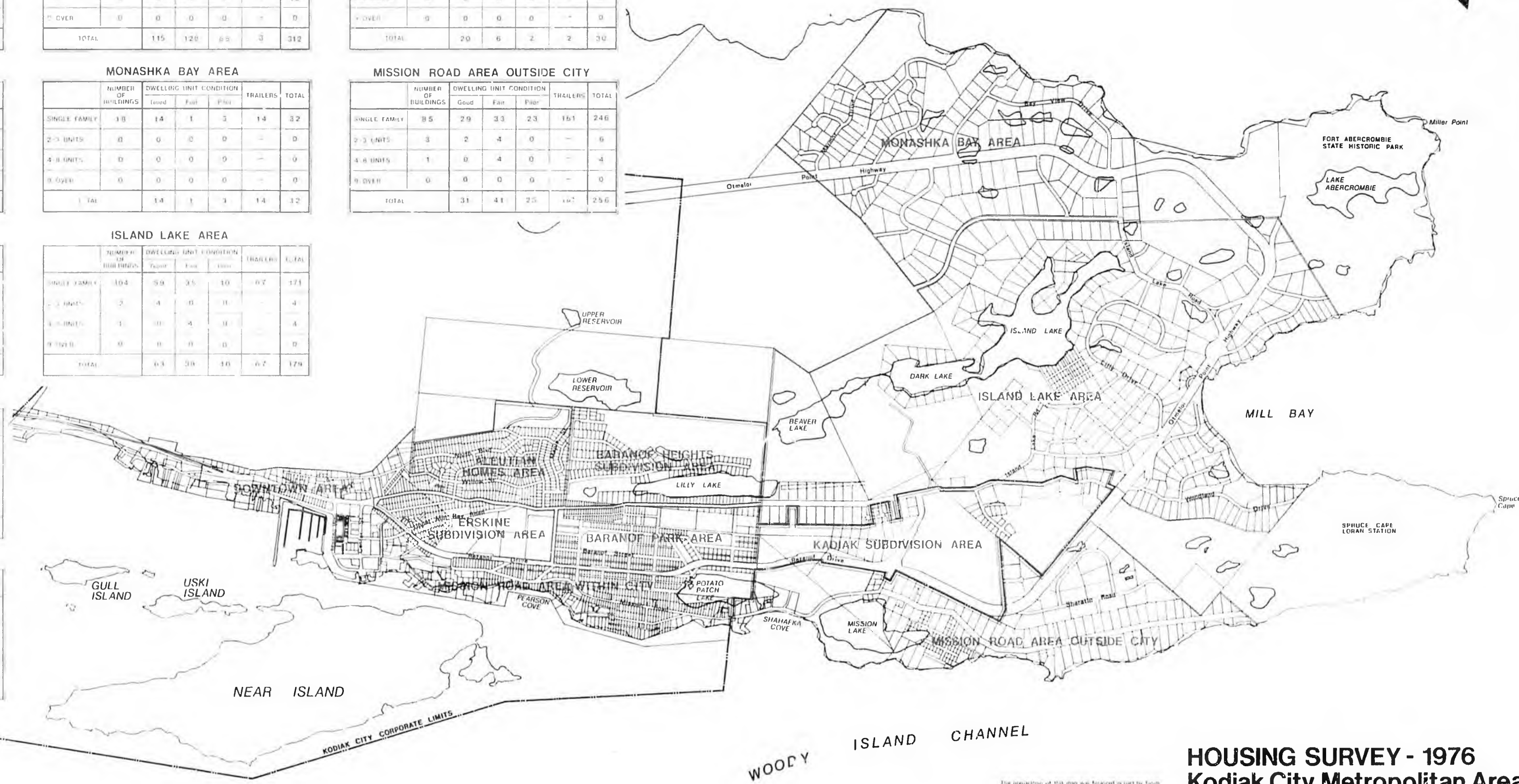
	NUMBER OF BUILDINGS	DWELLING UNIT CONDITION			TRAILERS	TOTAL
		Good	Fair	Poor		
SINGLE FAMILY	104	59	35	10	67	171
2-3 UNITS	3	4	0	0	-	4
4-6 UNITS	1	0	4	0	-	4
OVER	0	0	0	0	-	0
<b>TOTAL</b>		<b>63</b>	<b>39</b>	<b>10</b>	<b>67</b>	<b>179</b>

**BARANOF HEIGHTS SUBDIVISION AREA**

	NUMBER OF BUILDINGS	DWELLING UNIT CONDITION			TRAILERS	TOTAL
		Good	Fair	Poor		
SINGLE FAMILY	52	51	4	2	3	60
2-3 UNITS	5	0	4	2	-	14
4-6 UNITS	2	4	0	1	-	5
OVER	0	0	0	0	-	0
<b>TOTAL</b>		<b>57</b>	<b>8</b>	<b>3</b>	<b>3</b>	<b>67</b>

**BARANOF PARK AREA**

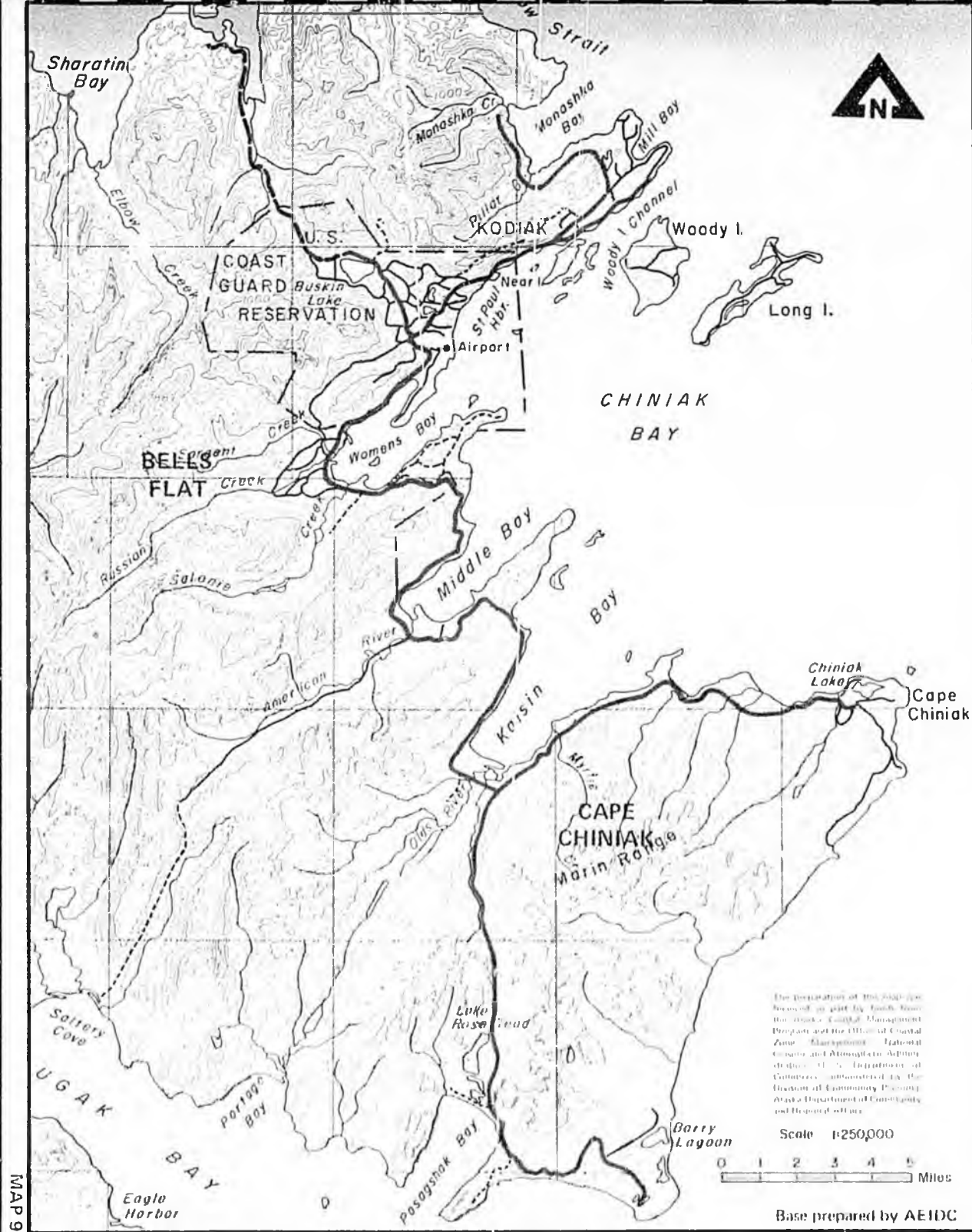
	NUMBER OF BUILDINGS	DWELLING UNIT CONDITION			TRAILERS	TOTAL
		Good	Fair	Poor		
SINGLE FAMILY	42	91	22	12	22	147
2-3 UNITS	12	16	0	2	-	18
4-6 UNITS	4	3	17	0	-	20
OVER	0	32	0	0	-	32
<b>TOTAL</b>		<b>141</b>	<b>41</b>	<b>14</b>	<b>22</b>	<b>204</b>



**HOUSING SURVEY - 1976  
Kodiak City Metropolitan Area**

The preparation of this map was financed in part by funds from the Alaska Coastal Management Program and the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, and coordinated by the Division of Community Planning, Alaska Department of Community and Regional Affairs.

Prepared by Simpson Usher Jones Inc. for Kodiak Island Borough



	NUMBER OF BUILDINGS	DWELLING UNIT CONDITION			TRAILERS	TOTAL
		Good	Fair	Poor		
SINGLE FAMILY	53	8	4	23	18	53
2-3 UNITS	-	-	-	-	-	-
4-8 UNITS	-	-	-	-	-	-
9-OVER	-	-	-	-	-	-
<b>TOTAL</b>		8	4	23	18	53

	NUMBER OF BUILDINGS	DWELLING UNIT CONDITION			TRAILERS	TOTAL
		Good	Fair	Poor		
SINGLE FAMILY	60	10	16	13	21	60
2-3 UNITS	1	-	-	2	-	2
4-8 UNITS	-	-	-	-	-	-
9-OVER	-	-	-	-	-	-
<b>TOTAL</b>		10	16	15	21	62

————— State Maintained Roads  
 - - - - - Summer Maintenance Only

# NORTHEAST PORTION KODIAK ISLAND HOUSING SURVEY/STATE ROADS

Prepared by Simpson Usher Jones Inc. for Kodiak Island Borough.

The preparation of this map was financed in part by funds from the Alaska Coastal Management Program and the Office of Coastal Zone Management. Technical assistance and information were provided by the Department of Community Planning, Alaska Department of Community and Economic Development.

Scale 1:250,000  
0 1 2 3 4 5 Miles

Base prepared by AEIDC

The area that has the highest concentration of poor units is Bell Flat. There were only 53 dwelling units within Bell Flat housing at the time of the survey. The majority of them are World War II structures that are substantially substandard in terms of building code requirements. Many of these buildings are Quonset huts which have been converted into dwellings.

The area that has the highest concentration of fair units is the Aleutian Homes. This is one of the densest areas in Kodiak, and while most of the units within the Aleutian Homes area are structurally sound and safe for habitation, many of them are in need of relatively major maintenance. It is expected that this type of maintenance will be encouraged with the completion of the paving and drainage project that is currently underway in that area.

Another area which has a high concentration of fair units and a higher than normal concentration of poor units is the Mission Road area within the city limits. There are several reasons for this. First, this is one of the older neighborhoods in Kodiak and many of the houses are quite old and in need of repair. They are also interspersed with commercial and industrial uses along the waterfront. This situation is not conducive to residential land uses; consequently, houses are not maintained in as good condition as they would be in a location more suited to residential uses.

The area that has the highest concentration of trailers is the Mission Road area outside the city. This area has traditionally had a high number of mobile homes, both in courts and on individual lots. The majority of mobile homes are in trailer courts within that area. The Monashka Bay area also has a high percentage of mobile homes, although the majority of these are on individual lots and are owner occupied. It is anticipated that many of those are placed there as temporary dwellings until permanent homes can be constructed. The majority of standard construction homes in this area are relatively new, but their size and character vary greatly.

Characteristics of housing density also differ between various areas indicated on Map 8. Figure 18, on the following page, shows the number of residential units per building by neighborhood. As should be expected, the area with the highest concentration of larger apartment buildings (nine units per building and up) is the downtown area. 52.9% of the dwelling units within that area are within the larger buildings. The second highest concentration of larger apartment units (31.3%) is in the Baranof Heights area. The number of single family units in these two districts correspond to the number of larger apartments, with 28.9% in downtown being single family homes and 49.6% in Baranof Heights being single family homes.

The Erskine Subdivision area, which is adjacent to downtown, has a high percentage of small and medium size apartments. Forty-three percent of the dwelling units in this area consist of two to eight unit apartment buildings and the remainder of the dwelling units are single family homes.

Fig. 18: Number Of Units Per Building By Area

Area	Single Family		2-3 Units		4-8 Units		9+ Units		TOTAL
	# of Units	% of Total	# of Units	% of Total	# of Units	% of Total	# of Units	% of Total	
Downtown	76	28.9%	30	11.4%	18	6.8%	139	52.9%	263
Aleutian Homes	304	87.4%	4	1.1%	0	0	40	11.5%	348
Baranof Heights	57	49.6%	14	12.2%	8	6.9%	36	31.3%	115
Baranof Park	125	63.5%	24	12.2%	16	8.1%	32	16.2%	197
Erskine Subdivision	57	57.0%	18	18.0%	25	25.0%	0	0	100
Mission Road within City	224	72.5%	72	23.3%	13	4.2%	0	0	309
Mission Road outside City	85	89.5%	6	6.3%	4	4.2%	0	0	95
Kodiak Subdivision	22	78.6%	6	21.4%	0	0	0	0	28
Island Lake	104	98.0%	4	3.5%	4	3.5%	0	0	112
Monashka Bay	18	100.0%	0	0	0	0	0	0	18
Bell Flat	35	100.0%	0	0	0	0	0	0	35
Chiniak	34	94.4%	2	5.6%	0	0	0	0	36
TOTALS	1,141	68.9%	180	10.9%	88	5.3%	247	19.9%	1,656

Source: Simpson Usher Jones, 1976

The remainder of the area surveyed has a high percentage of single family homes. In fact, the lowest percentage of single family homes in neighborhoods other than those described above is Baranof Park which is 63.5% single family. The remaining neighborhoods have a higher ratio than that.

The pattern of residential development that has occurred in Kodiak is common for growing communities. The highest concentration of high density residential development has been in or near the city center. Also in that area there is a relatively high percentage of fair and poor buildings. The residential areas immediately adjacent to the city center have a high percentage of units in fair to good condition. As you move out of town, especially towards Chiniak, the percentage of poor housing increases. This type of residential development is reflective of historical development trends. It indicates a formerly small, more rural community has begun to consolidate near the urban center. It is also reflected in the land values, which are generally higher near the city center, causing residential structures to be more expensive and better maintained. However, as the commercial core grows and land values increase further, the desirability of land in and immediately adjacent to the core for residential use decreases from a living environment as well as an investment standpoint.

This trend could become more pronounced and more significant in the future. If it continues as it is currently progressing, the desirability for residential uses in or near downtown will probably deteriorate. This is due to a combination of the lack of residential amenities, and the possible desire on the part of property owners to develop higher value commercial structures. The result could be a downtown area that offers little opportunity for quality residential units within walking distance. The long range ramifications that this would have on the economic viability of people-oriented retail establishments in the downtown is significant. This subject should be addressed in the Kodiak Island Borough's planning program before rapid development begins in response to OCS related demands.

Overall, the housing stock is in good condition. Unfortunately, the supply of housing is short. This problem will also have to be dealt with as economic development occurs more rapidly. The impact of OCS development on housing will be severe; consequently, programs and policies must now be developed to prepare for that impact and to assure that Kodiak can maintain its relatively high-quality housing stock.

#### CONSTRUCTION ACTIVITY

Residential construction activity has been increasing in recent years although the degree of increase has been somewhat erratic, as shown in Figure 19. In 1975 there was a dramatic increase in the number of units built over previous years.(43) This is primarily due to two large multi-family projects that were begun during that year. The number of single family units in 1975 actually decreased over 1974. In general,

housing construction peaked in 1974 and 1975 and has now begun a slight decline. It is anticipated that housing construction will increase again in 1977, well above previous levels of the early 70's.(44)

Fig. 19: Historical Construction Activity\*

<u>Year</u>	<u>Single-Family Units</u>	<u>Mult-Family Units</u>	<u>Group Quarters</u>	<u>Total</u>
1971	12	4	*	16
1972	18	50	*	68
1973	14	12	*	26
1974	26	0	*	26
1975	26	107	*	133
1976	69	10	55	134
TOTAL	165	183	55	403

\* Prior to 1975, construction reports are not available outside the city limits of Kodiak. Consequently, 1971 through 1974 figures do not include those areas.

Source: Kodiak Island Borough  
Simpson Usher Jones, Inc. 1976

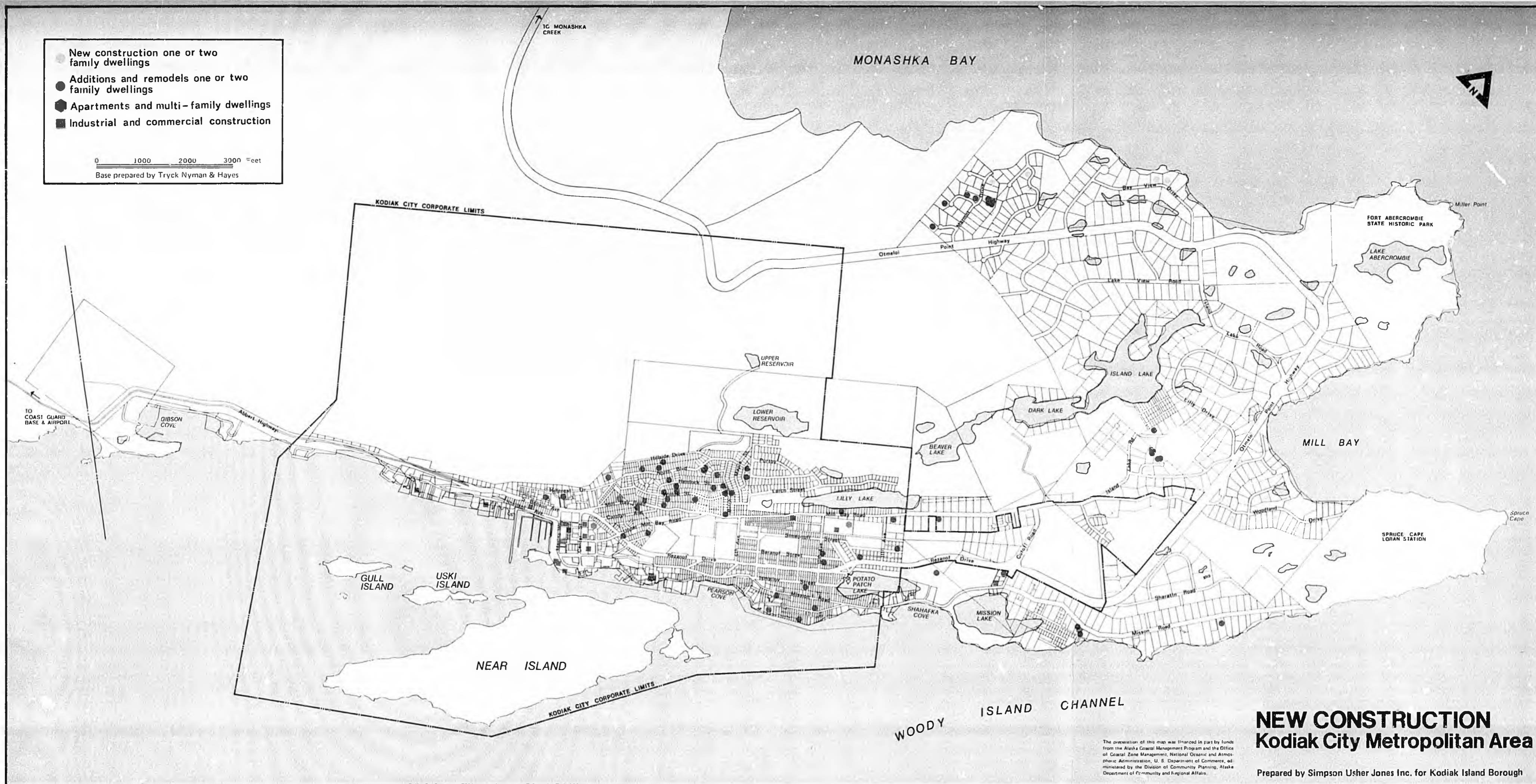
Map 10 shows the type and location of residential structure that has been occurring in the Kodiak area this year. It is interesting to note that the highest concentration of new construction is immediately adjacent to the area with the highest concentration of remodels and alterations. This denotes upgrading of the Aleutian Homes area as was predicted to occur as streets were improved. There is a substantial amount of additional land available in the Russel Estates area to the north and northwest of Baranof Heights Subdivision. This area will probably continue to be the center of substantial new construction in the next few years. The area is served with both water and sewer utilities, and as such, is very attractive for new home construction.

#### CONSTRUCTION COSTS

Constuction costs in Kodiak for residential units generally range from \$35 to \$40 per square foot for the average home.(45) This makes it possible to build a basic three-bedroom house with a garage for approximately \$60,000 to \$80,000 depending upon the size of the building, the amenities involved, and other variables. Assuming it costs \$70,000 to

- New construction one or two family dwellings
- Additions and remodels one or two family dwellings
- Apartments and multi-family dwellings
- Industrial and commercial construction

0 1000 2000 3000 Feet  
 Base prepared by Tryck Nyman & Hayes



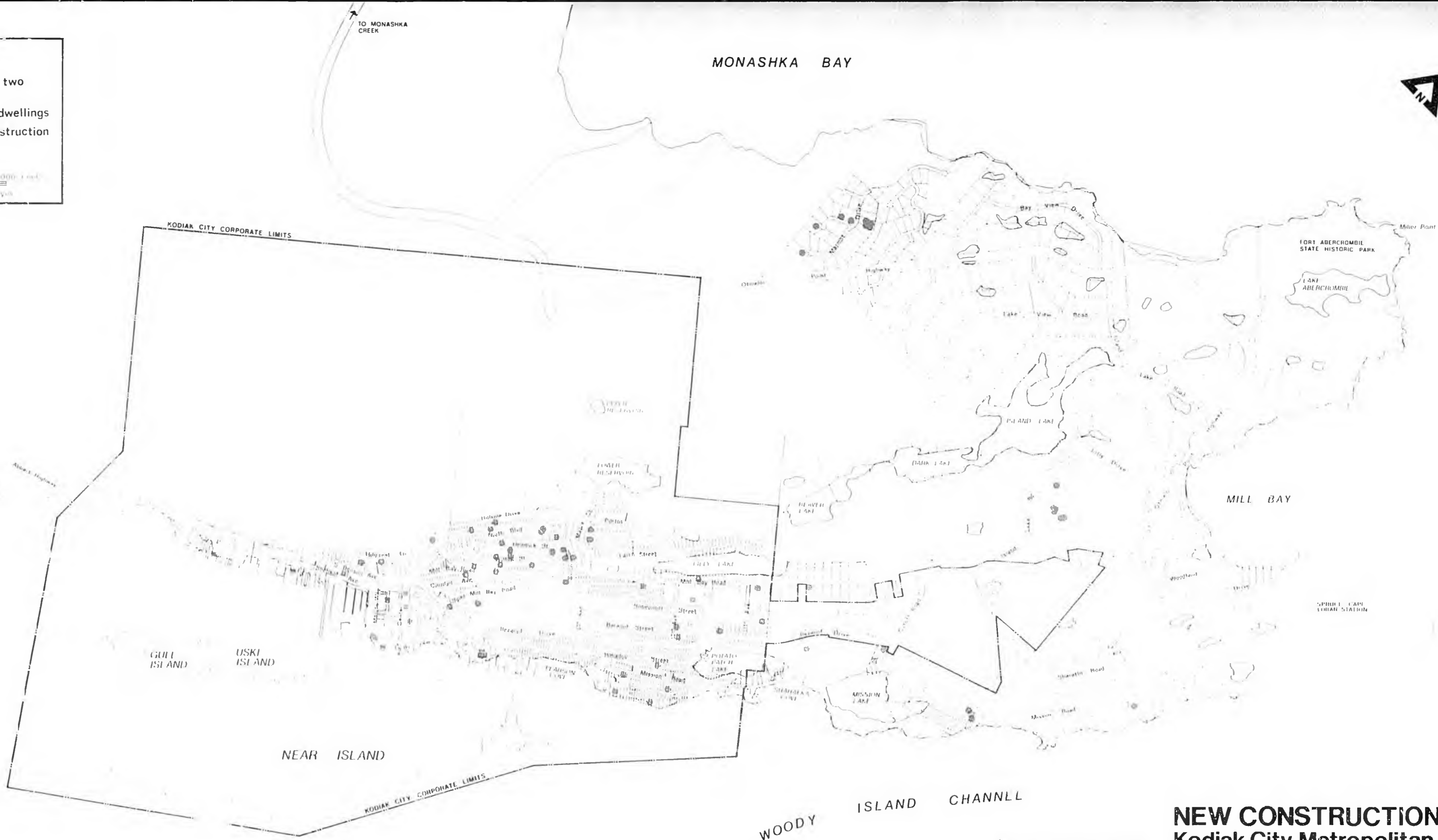
## NEW CONSTRUCTION Kodiak City Metropolitan Area

The preparation of this map was financed in part by funds from the Alaska Coastal Management Program and the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration, U. S. Department of Commerce, administered by the Division of Community Planning, Alaska Department of Community and Regional Affairs.

Prepared by Simpson Usher Jones Inc. for Kodiak Island Borough

New construction one or two family dwellings  
 Additions and remodels one or two family dwellings  
 Apartments and multi-family dwellings  
 Industrial and commercial construction

0 1000 2000 3000 Feet  
 Base prepared by Tracy Newman & Hayes



## NEW CONSTRUCTION Kodiak City Metropolitan Area

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Prepared by Simpson Usher Jones Inc. for Kodiak Island Borough

purchase an average new home in Kodiak, under conventional financing the mortgage payments on that house would be approximately \$650 to \$700 per month. According to a formula preferred by financial institutions, it would take a family with an income in excess of \$30,000 to afford such a house.

These costs put the purchase of a new home out of reach for many residents in the Kodiak area. It has become increasingly difficult to build houses in the \$50,000 range throughout Alaska, including Kodiak. This is due to rising construction costs, land costs, financing costs, and labor costs. One way to avoid this is to allow and encourage construction of higher density residential units of a townhouse or condominium type. Such construction should result in a more efficient use of land, lower utility and street costs, and lower overall per unit construction cost. This can allow the development of owner occupied residential units in a price range affordable by a majority of the public.

### RENTS

Rental costs are also relatively high in Kodiak. Average apartment rents range from \$350 to \$500 for a two-bedroom unit without covered parking. Although there are no definitive records available, all information indicates that apartment rents have been going up in the last few months in anticipation of the demands that will be created by the potential OCS development. According to apartment owners, vacancy rates are currently at zero, and even at normal growth rates they are not expected to be much above zero in the near future.

### FUTURE HOUSING NEEDS WITHOUT OCS DEVELOPMENT

Impending development of the Outer Continental Shelf will obviously generate increased demand for housing in Kodiak. As indicated, existing housing is already in short supply. To judge the impact of that increased demand, one must predict future new housing needs without OCS development.

As explained in the Demographic Inventory of this report, future housing needs are estimated by comparing population projections with average family size. Utilizing this method, Figure 20 gives Kodiak's housing demands through 1995. The rate of housing demand increase is slightly higher than population increases due to the history of diminishing family size, both nationally, and in Kodiak.

Estimated housing requirements indicate a need for constructing an average 188 units per year for the next 20 years. This construction will not occur evenly, but will come in sporadic bursts in response to economic conditions and population pressures.

Clearly a long-term increase in residential construction is necessary. The average rate of increase required would be 40 percent higher than the level of construction indicated in 1975 and 1976.

Fig. 20: Estimated Housing Required Without OCS Development

<u>Year</u>	<u>Estimated Population</u>	<u>Estimated Family Size</u> <sup>1</sup>	<u>Estimated Housing Need</u>
1975	9,620	3.30	2,665 <sup>2</sup>
1980	11,370	3.20	3,553
1985	13,439	3.10	4,335
1990	15,884	3.04	5,225
1995	18,773	2.92	6,429

1. It is assumed that family size will continue to drop as it has in the past (See the Demographic Inventory for explanation.)
2. Unlike Figure 14, this figure includes 250 Coast Guard Base Barrack units since the people occupying those units are included in the total population.

Source: Simpson Usher Jones, 1976 (Ann Sontag)

#### CONCLUSION

Housing has the potential for being the most serious problem facing Kodiak within the next five years. The dilemma facing the community is how to meet short term demands for increased OCS related housing without over building permanent units in the long run. Such over-building far in advance of the demands shown in Figure 20 would have serious effects on the community, including a reduction in the value of existing homes, the potential vacancy rates far above what is economically acceptable, a subsequent reduction in rent and associated lack of maintenance and upkeep of apartment buildings, wasteful use of land, and reduced tax base. In order to avoid these problems, the community must find a way to provide the housing necessary to accommodate OCS development on a temporary basis without creating a situation that is either aesthetically or socially unacceptable. At the same time the housing industry must be encouraged to maintain a relatively high level of activity in Kodiak during the next 20 years in order to keep abreast of demands caused by normal growth trends. These concerns must be addressed as soon as possible.

## ECONOMIC INVENTORY

An area's economy is an important determinant of what happens in the community. The economy both constrains and provides opportunities for the community. An expanding economy provides jobs for the residents of the community and also attracts migrants to the community. Expansion of the economy is an important determinant of population growth. This population growth effects the community by increasing the demand for public services, but it also increases the community tax base which often means an expansion of opportunities. In the following section we will examine the changes in the Kodiak economy which have occurred in the recent past. Estimates will also be made of what the economy will do in the near future without the additional impact of OCS development.

The analysis in this section will be based on the Economic Base Theory of regional growth. This theory assumes that the economy can be divided into basic and nonbasic sectors. The basic sector consists of those industries which sell their goods and services outside the region. The fishing industry is the best example of a basic industry in Kodiak. State and Federal government employment are also examples of basic industries, since the funds that pay for these services come from outside the island. Industries in the nonbasic sector are those which exist primarily to serve the population generated by the basic sector. An example of a nonbasic industry is retail trade. Economic base theory states that the only reason for growth in the economy is the growth in the basic sector. Growth in this sector has a multiple effect on the economy because it also generates growth in the nonbasic sector to serve the population increase in the basic sector. What follows is an analysis of the important sectors of the Kodiak economy, and a projection of the future growth.

## ECONOMY: PAST AND PRESENT

The most important industry to the Kodiak economy has traditionally been the fishing industry. It includes not only the fishing fleet which Kodiak services as a main port, but also the processing industry. The fishing industry also impacts the economy through the docking and re-supplying of ships not registered in Kodiak during fishing season. Kodiak serves as home port for the biggest fishing fleet in Alaska and this has been the major determinant of economic activity.

The second major sector of the economy is government, primarily Federal government. The Coast Guard base on Kodiak is the most important part of the Federal government sector. State government has also shown a recent strong growth in Kodiak. Government employment has the same effect in Kodiak as it has throughout the remainder of the State; it serves as a stabilizing force which counteracts any cyclical shifts in seasonal industries. Fishing and government are the two most important sectors of Kodiak's economic base.

Fig. 21: Proportion Of Total Employment By Industry

	<u>1970</u>	<u>1974</u>
Self Employed & Miscellaneous	21.4%	15.0%
Mining	---	---
Construction	1.5%	5.2%
Manufacturing	23.9%	32.4%
Transportation, Communications & Public Utilities	7.0%	6.6%
Trade	11.1%	10.8%
Finance, Insurance, Real Estate	---	2%
Service	6.1%	7.7%
Federal Government	12.4%	6.1%
State & Local Government	14.5%	14.2%

Source: Alaska Department of Labor, Statistical Quarterly, 1970 and 1974.

By examining the proportion of total employment in each industry (Figure 21), it can be seen that the most important industry is the fishing industry. The fishing industry accounts for the majority of employment

in the miscellaneous self-employed and manufacturing sectors (food processing accounts for almost 100% of the total manufacturing employment). The most important change in the ranking of industries was the drop in Federal Government from the fourth to the eighth most important employer. The combined effect of Federal, State, and Local Government makes the government sector the second most important industry, employing about 20% of the labor force in 1974. The addition of military employment would increase the importance of the governmental sector.

The same relationships can be seen in wages and salaries paid. Figure 22 shows the breakdown of wages and salaries by industry in 1973 and 1974. The fishing, which includes almost all of the workers in agriculture, forestry, and fisheries categories, as well as the manufacturing category, is the most important employer, paying almost 46% of total wages and salaries in 1974. Government is the second most important employer, paying about 24% of civilian wages and salaries. This underestimates fishing incomes by leaving out the incomes of the self employed fishermen and those that are based out of locations other than Kodiak. The distribution of labor in the fishing industry, between fishing and manufacturing, is reversed in wages and salaries. The average monthly wage in fisheries in 1974 is \$2013. This is more than twice that of \$851 per month in manufacturing.

Fig. 22: Percent Of Total Civilian Wage/Salary Payments By Industry

	<u>1973</u>	<u>1974</u>
Agriculture, fisheries, forestry	17.8%	15.7%
Construction	6.4%	8.9%
Manufacturing	30.4%	30.0%
Transportation	6.4%	7.1%
Trade	8.3%	8.2%
Finance	1.5%	1.7%
Services	4.8%	4.8%
Federal Government	9.8%	8.7%
State & Local Government	14.7%	14.9%

Source: Alaska Department of Labor, Statistical Quarterly, 1973, 1974.

Figures 23 and 24 illustrate the recent changes in civilian employment and its sectoral makeup. Between 1970 and 1974 civilian employment increased by approximately 26%. Three industries increased faster than the rate of civilian employment growth; they were construction, which more than tripled in the time period, manufacturing, and service. Even the industries below the average growth rate grew at acceptable rates, between 20% and 25%. Only Federal government civilian employment decreased

during this time period by 37%. Federal government civilian employment has experienced a continual decrease since 1970 even though the military stationed on Kodiak has grown.

Fig. 23: Kodiak Employment - Annual Average

	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>
Total Civilian Employment	3329	3023	3090	3844	4210
Mining	----	----	----	----	----
Construction	46	----	125	131	206
Transportation, Communication, Public Utility	217	266	228	223	263
Trade	346	343	355	394	429
Finance, Insur. Real Estate	----	64	----	----	78
Service	190	241	232	268	302
Miscellaneous	219	219	190	252	282
Government	837	851	821	823	807
Federal	387	351	272	263	244
State & Local	667	500	549	560	589

Source: Alaska Department of Labor, Labor Force Estimates, by Industry and Area, 1970-1974.

An examination of employment shows that Kodiak has experienced a healthy growth rate since 1970. Employment has increased by 26% and the economy seems to be diversifying with a larger proportion of employment in the non-basic sector. Wages seem to be following this trend, with the average monthly salary increasing by 12% from \$900 to \$1,004 between 1973 and 1974. One problem is that even though the economy seems to be diversifying by increasing the size of its nonbasic sector, its concentration is increasing in the basic sector. Government employment, while still important, has decreased since 1970. If this trend would continue it would leave the Kodiak basic sector entirely dependent on the fishing industries and its cycles. This problem is lessened somewhat by the diversity of the fishing industry. Kodiak has become a year-round fishing port with salmon, crab, shrimp and halibut seasons overlapping, permitting year-round fishing. This has reduced the seasonality and dependence on one species; but diversity of the economic base is still a problem which needs attention.

Fig. 24: Growth Rates - 1970-1974

	<u>1970 - 1974</u>
Total Civilian Employment	26.3%
Mining	---
Construction	347.8%
Manufacturing	71.5%
Transportation, Communications & Public Utilities	21.2%
Trade	24.0%
Finance, Insurance & Real Estate	---
Service	58.9%
Miscellaneous	28.8%
Government	
Federal	-37.0%
State & Local	24.8%

Source: Alaska Department of Labor, Labor Force Estimates by Industry and Area, 1970-1974.

Three measures of regional economic well-being will be examined to describe the effect of the past economic growth. Two measures deal with employment while the third provides an overall indication of the growth of the economy. Unemployment and the unemployment rate are indicators of regional well-being. If the unemployment rate increases even with an increase in employment, economic well-being is decreased since the unemployment rate measures the probability of any one who wishes to work being out of a job.

Fig. 25: Kodiak Annual Average Unemployment Rates 1970-74

	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>
Unemployment Rate	7.8%	7.8%	9.0%	6.5%	9.5%

Source: Alaska Department of Labor, Labor Force Estimates by Industry and Area, 1970-1974.

Figure 25 shows the increase in the unemployment rate by 1.7% between 1970 and 1974. Because of this increase, we cannot claim an unambiguous increase in economic welfare since 1970.

The second measure of regional economic welfare concerns another type of unemployment, seasonal unemployment. The seasonal employment problem is common to most economies based on natural resource production. The problem arises because peak employment comes only in a few seasons leaving workers unemployed in the other seasons. Figure 26 analyzes the seasonality of employment in various industries. This table displays seasonality indexes for each industry. The seasonality index is the average winter quarter employment, divided by the average summer quarter employment. The extent of seasonality in an industry is measured by the extent this index is below one. If the number is below one it means employment was reduced in the winter quarter and seasonal employment existed.

Fig. 26: Kodiak Seasonality Index

	<u>1974</u>
Total Employment	.88
Construction	.78
Manufacturing	.83
Transportation, Communications, & Utilities	.80
Trade	.96
Finance, Insurance, Real Estate	1.16
Service	1.16
Miscellaneous	.60
Federal Government	1.06
State & Local Government	1.00

Source: Alaska Economic Research, Simpson Usher Jones, Inc., 1976.

The Kodiak economy can be easily divided into two sectors -- one where seasonality is of little importance, such as in Trade, Finance, Services, and Government, and another where seasonality is of primary importance. This illustrates the stabilizing effect of government employment, since it counteracts the seasonality in the fishing industry. The seasonality in the fishing industry can be seen by examining total employment, miscellaneous, and manufacturing -- all of these sectors are highly seasonal with employment as great as 40% less in the winter season.

One problem in regional economic studies is the lack of any data except civilian employment data for describing the economy. Employment data does not tell the whole story. To get a better overall picture of the performance of the Kodiak economy, a Kodiak Economic Index was developed.

(See Figure 27.) This index serves as a summary of the various important economic factors. The index is described as follows:

$$\begin{aligned}
 \text{K.E.I.} &= 3 \times \text{total civilian employment} \\
 &\quad 10,000 \\
 &\quad - 2 \times \text{total unemployment} \\
 &\quad 10,000 \\
 &\quad + 4 \times \text{gross earnings of Kodiak fishermen} \\
 &\quad 100,000,000 \\
 &\quad + 1 \times \text{Military Stationed} \\
 &\quad 10,000
 \end{aligned}$$

Fig. 27: Kodiak Economic Index

	<u>Employment</u> <sup>1</sup>	<u>Unemployment</u> <sup>2</sup>	<u>Gross Earnings</u> <sup>3</sup>	<u>Military</u> <sup>4</sup>	<u>K.E.I.</u>
1970	2866	244	\$ 11,614,077	1491	1.426
1971	3023	255	9,002,554	1301	1.344
1972	3090	306	11,764,112	659	1.403
1973	3844	266	21,242,365	690	2.015
1974	3928	414	23,576,533	733	2.114

- Sources:
1. Alaska Department of Labor, Labor Force Estimated by Industry and Area, 1970-1974.
  2. Ibid.
  3. Alaska Commercial Fisheries Commission, 1976.
  4. Alaska Dept. of Labor, Current Population Estimates, 1970-74.

This index includes many factors that employment figures alone would not account for. For example, in the fishing industry, both the size of the catch and the amount paid are important determinants of the available income. These variables do not depend directly on employment of fishermen. Use of gross earnings of fishermen in Kodiak serves to account for variability of the catch and prices paid. This index shows an increase in economic activity of 48% since 1970. The growth described by the index is greater than the 26% increase shown in the same time period by employment data. This illustrates a basically healthy and expanding economy.

## THE FUTURE OF THE KODIAK ECONOMY

The future of the Kodiak economy without OCS development will depend on its two most important basic industries, the fishing industry and the Government. Growth in the economy is dependent on growth in the basic sector; the nonbasic sector serves the basic industries and grows as a result of its growth.

### FISHING INDUSTRY

The future of the fishing industry on Kodiak will be effected by three external factors -- the effectiveness of the 200 mile fishing limit, the impact of limited entry, and the success of scientific management of Alaska's fishing resources. The 200 mile limit and its enforcement should increase the productivity of the Kodiak fishing industry by increasing the supply of fish available to the Kodiak fishing industry. Limiting foreign fleet hauls within 200 miles will make more fish available to be caught in the present and will also allow better management, which should increase the supply of fish available in the future.

Scientific management of the fisheries should be more effective if the renewable resource fund which the state is trying to establish is approved. This fund may provide capital for proprietary fish hatcheries run by fishermen's associations which will then increase salmon runs. The importance of the increase in salmon supply to Kodiak depends on the effect of the State's limited entry program. The limited entry program was established to effect four goals: 1) Prevent the addition of more gear to overcrowded fisheries; 2) Encourage the use of underdeveloped fisheries; 3) Stabilize the amount of gear in each fishery at levels which allow fair dollar returns, effective fisheries management, and upgrading of gear and vessels; and 4) promote professional and diversified commercial fisheries.(46)

This program will have the effect of reducing the number of fishermen, but will increase the return to those remaining. The overall economic impact of this program on Kodiak will depend on whether the total return to the remaining fishermen on Kodiak is greater than the loss from the reduced number of fishermen.

Increasing the supply available to the Kodiak fishing industry and increasing the productivity of fishermen are only two ways of increasing the Kodiak fishing industry. Diversifying the types of fish caught is another way of expanding the fishery. Since 1969, the ratio of shellfish to salmon catch has changed from 1:9 in 1969, to about 2:1 in 1973. This diversification was important to the Kodiak fishing industry, reducing its seasonality and the impact of low runs in particular species.(47) Bottomfish offer an important future source of expansion.

Current limited production of such species as perch, cod, pollock and flounder is a result of unsatisfactory market conditions. The production of bottomfish should be helped by the 200 mile fishing zone and the reduction in foreign fishing vessels activity in Alaskan waters.(48)

### GOVERNMENT

The most important segment of government activity on Kodiak is the Federal Government. Employment on the Kodiak Coast Guard Station is the largest sector of Federal employment. The Kodiak Support Center currently employs 1,120 people. Of these, 185 are civilians which is approximately 75% of all civilian federal employees on Kodiak. The Center currently spends about 15 million dollars a year on Kodiak in salaries, operating expenses, and capital improvements. An increase in Coast Guard activity on Kodiak will result because of the requirement to enforce the 200 mile fishing zone. Current plans for expansion call for increasing the military force by about 130. If existing ratios hold, this could lead to an increase of 28 in civilian employment and \$200,000 in additional salaries and operating expenses. Future personnel expansion will also be necessary. Coast Guard expansion will also have an impact because of required construction. Current recommendations call for about \$21,000,000 of construction in the next few years.(49)

### OTHER BASIC INDUSTRIES

A recent study by Bradford Tuck on the Kodiak economy describes the future of the other portion of the Kodiak basic sector. We will summarize his findings below. Besides fishing and government, Tuck includes agriculture, mining, logging, and construction in the Kodiak basic sector. (50)

Agriculture is unlikely to produce a change in the near future. Problems of cost and scale will prevent any major increase in this sector. Tuck lists these problems with the beef industry in Alaska:

1. Lack of Alaska feed lots and infrastructure
2. Distance from markets and supply areas
3. High relative cost of Alaska beef

Mining has been only minimal, but this trend could change with OCS development in the Western Gulf. Without this development mining should continue to have only minimal impact.

Construction should see an upward trend in the future. Demand for construction will come from plant construction and improvement in the fishing industry, state public works, and federal government construction at the Coast Guard Station. Demand will also increase for residential construction.

Logging and lumbering activity has potential for expansion. Future expansion will depend on the solution to environmental problems brought out in current timber sales.

### CONCLUSIONS

Tuck concluded that without OCS development the Kodiak economy would experience a modest growth similar to the rate experienced during the last 10 years. He projected a total military and civilian employment of 6,292 in 1980. Of this, the basic employment would consist of 3,071 in the civilian base and 863 in the military. This projection shows a 43 percent increase in the total employment between 1970 and 1980.(51) With this same growth rate in the following decade Kodiak would have a total employment of about 9,000 by 1980. The impact of OCS development in the Western Gulf of Alaska on the Kodiak economy can be judged against these non-OCS development projections.

## DEMOGRAPHIC INVENTORY

This section of the OCS Study discusses the population characteristics and growth trends of the Kodiak Island Borough. In examining the growth of the population, particular attention has been paid to the various factors that generated the growth and forecasts of future population growth have been made. By studying the characteristics of the population with respect to age and locational distributions, trends and areas of stability have been identified.

Knowledge of both the present and future population is helpful for impact planning. The numerical level of population growth and its demographic makeup both determines and indicates the amount of activity in the public and private sector. The activity in the support sector of the local economy is significantly affected by the amount and type of population. More importantly, the services demanded of the local government are directly related to the population.

A good example of the effect that demographic components can have on the public sector is the effect that a particular population characteristic can have on a school budget. The size of the school budget fluctuates in proportion to the number of school age children in a given population area. This characteristic would be identified through age ratios. A given increase in population caused by OCS development will have varying impacts on Kodiak depending on its demographic characteristics.

Information utilized in this report about the demographic makeup of Kodiak's population was obtained from the 1960 and 1970 census. Information on the population growth has been gathered from both the census and the annual state population reports produced by the Alaska Department of Labor.

## POPULATION GROWTH: 1970 - 1975

The population growth on Kodiak between 1970 and 1975 has been sporadic. There have been a number of major increases and decreases. The yearly rate of growth ranged from a low of -10.5% to a high of 4.2%. During this time period, Kodiak experienced an average annual rate of growth of 0.4%. This is less than one-fifth the average yearly growth rate found in the 1960's. This information, as well as the components of population growth is shown in Figures 28, 29, and 30. As a comparison, in the period between 1970 and 1975 the State of Alaska grew at a yearly rate of 6.8% which is about 17 times the rate of growth of Kodiak.

Fig. 28: Kodiak Population

<u>Year</u>	<u>Total</u>	<u>Civilian</u>	<u>Military</u>
1960	7174 <sup>1</sup>	5367 <sup>2</sup>	1807 <sup>2</sup>
1970	9409 <sup>1</sup>	7918 <sup>2</sup>	1491 <sup>2</sup>
1971	9723 <sup>2</sup>	8422 <sup>2</sup>	1301 <sup>2</sup>
1972	8703 <sup>2</sup>	8044 <sup>2</sup>	659 <sup>2</sup>
1973	8868 <sup>2</sup>	8118 <sup>2</sup>	690 <sup>2</sup>
1974	9232 <sup>2</sup>	8499 <sup>2</sup>	733 <sup>2</sup>
1975	9620 <sup>3</sup>	8720 <sup>3</sup>	900 <sup>2</sup>

1. 1960 and 1970 U.S. Census
2. Current population estimates 1971 - 1975, Alaska Dept of Labor
3. Estimate made assuming rate of growth was the same as rate of growth of school enrollment

An important cause of the sporadic population growth was the change in the military population on Kodiak. The major population decrease in this time period occurred in 1972 when the Coast Guard took over the Kodiak base from the Navy. The military population was reduced by 49% from 1301 to 659 between 1972 and 1973. This military decrease was accompanied by a drop in the civilian population of approximately 400 people as a result of a reduction in military families and the loss of some support jobs.

Since 1972 both the civilian and military populations have experienced healthy growth. The population has grown at approximately 3.4% each year since 1972. The military has grown, since it reached its low of only 659 military stationed on Kodiak in 1972, to 900 stationed in 1975. This is a yearly average growth of 12% and brings the military to within 600 of the number stationed on Kodiak in 1970. This smaller

number of military may, because of the changing complexion of the military since Vietnam, have a greater population impact. Since the end of the Vietnam war, the Coast Guard may include more career-oriented personnel with families.

Fig. 29: Yearly Growth Rates

<u>Years</u>	<u>Total</u>	<u>Military</u>	<u>Civilian</u>
1960 - 1970*	3.1%	- 1.7%	4.8%
1970 - 1975*	.4%	- 7.9%	2.0%
1970 - 1971	3.3%	-12.7%	6.4%
1971 - 1972	-10.5%	-49.3%	-4.5%
1972 - 1973	1.9%	4.7%	1.7%
1973 - 1974	4.1%	6.2%	3.9%
<u>1974 - 1975</u>	4.2%	22.8%	2.6%

\* Annual average

Source: Alaska Economic Research, Simpson Usher Jones, 1976

Fig. 30: Components Of Growth

<u>Year</u>	<u>Population</u>	<u>Military</u>	<u>Births</u>	<u>Deaths</u>	<u>Migration</u>
1971	314	-190	283	52	83
1972	-1020	-642	212	37	-1195
1973	165	31	196	43	12
1974	364	43	191	63	236
1975	388	167	199	53	242

Source: Alaska Department of Labor Current Population Report, 1971-1975.

The civilian population has grown by 10% since 1970. The increased civilian population has counterbalanced the reductions in military personnel during its major reductions. Increases in civilian population can be best explained in terms of the increased importance of other sectors of the economy and are discussed in the Economic Inventory of this report.

## POPULATION ESTIMATES

The population estimates for the years 1970 to 1974 were made by the Alaska Department of Labor, however the state's 1975 estimate was not consistent with other indicators of population growth. The state population estimate showed a decrease in Kodiak population of 431; this was a 4.6% decrease. Other indicators grew during this time period. Figure 31 compares the state's estimated growth rate and the growth of other indicators.

Yearly estimates of the population can be made in many ways which vary in accuracy and cost. Most accurate and costly would be to conduct a yearly census. Without a census, population estimates must be based on hard data which is produced yearly and is related to population growth. A housing count is an accurate method, if a measure of vacancy can be made. Two other types of data which reflect population are available - labor force data and school enrollment data. If a stable relationship can be found between either of these types of data and population, they can be used to estimate population growth. Of this data, school enrollment is the only data available for timely estimates.

Fig. 31: Growth Rates

State's Population Estimate	-4.6%
Military	22.8%
School Enrollment	4.2%
Gross Sales Receipts	11.7%

Source: Alaska Economic Research, Simpson Usher Jones, 1976.

By examining the relation between school enrollment and population, we found that the ratio of population to school enrollment varied by only 0.3 from 1972 to 1974 and by only 0.4 since 1970. Because of this stable relationship it was assumed that population grew at a rate equal to the school population. Assuming a rate of population growth equal to the 4.2% growth of school enrollment, a 1975 population of 9,620 is estimated, which is an increase of 388.

## POPULATION GROWTH AND THE COMPONENTS OF CHANGE

One of the goals of this study is to forecast what Kodiak will be like in the future, both with and without outer continental shelf oil development. An obvious conclusion is that without OCS development, growth will continue much as it has in the past. This means that those forces determining population growth in the past will continue to operate and

grow at the same rate that they have in the past. The following projections of the future course of population growth will utilize the technique known as the Component Method.

The Component Method examines the growth in total population by forecasting the three major components of population change -- births, deaths, and migration. By examining these components in the recent past, we can estimate rates of change in each. Using these rates of change, population growth can be projected through 1995.

Figure 32 shows the components of population change since 1970. Traditionally, the Component Method develops growth rates for a five year time period. The change in military personnel in 1972 prevents the use of growth between 1970 and 1975 to determine the rates. We will develop five year growth rates based on the yearly averages found since 1972.

Fig. 32: Components Of Population Change

<u>Year</u>	<u>Population</u>	<u>Population</u>	<u>Births</u>	<u>Deaths</u>	<u>Migration</u>
1971	9723	314	283	52	83
1972	8703	-1020	212	37	-1195
1973	8868	165	196	43	12
1974	9232	364	191	63	236
1975	9620	388	199	53	242

Source: Alaska Department of Labor, Current Population Reports, 1971-1975

Figure 33 shows the birth, death, and migration rates found since 1972. This figure also shows the average yearly rate for each component;

Fig. 33: Birth, Death and Migration

<u>Year</u>	<u>Populaion Growth Rate</u>	<u>Birth Rate</u>	<u>Death Rate</u>	<u>Migration Rate</u>
1972-73	.019	.022	.005	.001
1973-74	.041	.022	.007	.027
1974-75	.042	.022	.006	.026
Average	.034	.022	.006	.018

Source: Alaska Economic Research, Simpson Usher Jones, 1976

Using these average rates, the five year growth rates shown in Figure 34 were developed.

Fig. 34: Five Year Growth Rates

<u>Population</u>	<u>Births</u>	<u>Deaths</u>	<u>Migration</u>
.182	.115	.030	.093

Source: Alaska Economic Research, Simpson Usher Jones, Inc., 1976

Using the average rate increase of 3.4% per year, population projections for Kodiak through 1995 are shown in Figure 35.

Fig. 35: Population Projections Without OCS Development - 1975-1995

<u>Year</u>	<u>Population</u>	<u>Year</u>	<u>Population</u>
1976	9,947	1986	13,896
1977	10,285	1987	14,368
1978	10,635	1988	14,857
1979	10,996	1989	15,362
1980	11,370	1990	15,884
1981	11,757	1991	16,424
1982	12,157	1992	16,982
1983	12,570	1993	17,559
1984	12,997	1994	18,156
1985	13,439	1995	18,773

Source: Alaska Economic Research, Simpson Usher Jones, Inc. (Sontag)

According to these projections, population doubles by 1995. Any major change such as OCS development will affect population levels since this forecast is based on continuation of past trends.

#### POPULATION CHARACTERISTICS

As we mentioned previously, knowledge of the demographic makeup of the population is as important to decision makers as is knowledge about the total number of people. The distribution of certain population characteristics will determine the demands placed on the public and private sectors. Stability is an important characteristic to look for in the Kodiak population. If it has been stable in the past, there is reason to predict the same stability in the future. A change in the distribution

of population characteristics associated with OCS development will mean a disproportional impact on Kodiak's future population.

The main population characteristics of interest to public decision makers are age distribution, locational distribution, and the family composition. These have an impact on housing, schools, and public services. The following analysis shows considerable stability in these characteristics. The population may seem less than stable, particularly when its migration pattern is examined. According to the 1970 Census, 49% of the population over five years old lived outside of Kodiak in 1965. This does not seem to describe a stable population, but this high proportion of migrants can be accounted for by the high proportion of military in the population. Of the 2,676 people over five years old on the military base in 1970, 77% had moved to Kodiak since 1965. Subtracting the military migrants reduces the number of new residents to 36%. This figure compares with 41.1% for the state as a whole, 44.9% for Anchorage, and 52.4% for Kenai. A relatively high rate state-wide is not unexpected since the state is growing faster than what would be considered a normal rate of increase. Migration is an important component of that growth.

Figure 36 through 38 describe the age distribution of Kodiak as indicated in the 1960 and 1970 Federal Census and a 1974 Census conducted by the Kodiak Borough. Comparing the percentage distribution in 1960 and 1970 shows a remarkable similarity.

Fig. 36: Age Distribution

<u>Age</u>	<u>1960</u>	<u>1970</u>
5	963	1073
5 - 9	754	1153
10 - 14	639	931
15 - 19	722	801
20 - 24	984	1380
25 - 29	631	900
30 - 34	620	735
35 - 39	560	570
40 - 44	406	502
45 - 49	277	404
50 - 54	199	356
55 - 59	168	243
60 - 64	110	151
65 -	141	210

Source: 1960 Census; 1970 Census.

Fig. 37: Percentage Age Distribution

<u>Age</u>	<u>1960</u>	<u>1970</u>
5	.134	.114
5 - 19	.295	.307
20 - 29	.225	.242
30 - 39	.164	.139
40 - 49	.095	.096
50 - 59	.052	.064
60 -	.035	.038

Source: 1960 Census; 1970 Census

The importance of any age group is measured by its proportion of the total population. The largest change was in the 30-39 age group which showed a decrease of 2.5% over the 10-year period. Both with the 0 through 29 year olds increasing by 4.9% of the total population, and the population above 50 increasing by 1.6%. Despite the small changes, the age distribution can be considered the same in 1960 and 1970. This stability of the age distribution continues through to the present.

Figure 38 compares the civilian populations in 1970 and 1974. A greater change can be seen since 1970; the 5-17 age group, which is the school age portion, has increased by more than 10%. Even with this increase, the age distribution does not seem to have experienced any major change since 1970.

Fig. 38: Civilian Age Distribution

<u>Age</u>	<u>1970</u>		<u>1974</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
5	698	.110	555	.087
5 - 17	1043	.164	1805	.282
18 - 55	3979	.626	3554	.554
55 -	637	.100	490	.077

Source: Kodiak Island Borough Special Census, 1974.

The locational distribution of population has also remained fairly stable. Figure 39 compares the locational distribution of the population in 1970

and 1974. Some distortion in these distributions may result from definitions of areas, since 1970 areas are defined by the census and 1974 areas are precinct boundaries. Even so, the two distributions are extremely similar. The biggest change was a decrease in the City of Kodiak by 1.9% and an increase in the proportion of population outside of the city and village boundaries by 1.7%. The change in population between 1970 and 1974 have been fairly evenly spread throughout the island.

Fig. 39: Civilian Locational Distribution

	<u>1970</u>		<u>1974</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Kodiak	3798	.597	3700	.578
Ouzinkie	160	.025	180	.028
Port Lions	227	.036	243	.038
Akhiok	115	.018	102	.016
Karluk	98	.015	94	.015
Larsen Bay	109	.017	98	.015
Old Harbor	290	.046	304	.047
Remainder	1560	.246	1683	.263

Source: U.S. Census, 1970  
Kodiak Island Borough Census, 1974.

Family composition can be measured by average family size. This statistic is important since a projection of the future population can determine the overall demand for housing. The required housing stock equals the total population divided by the average family size. A reduction in the average family size would mean a larger housing stock would be required to house a given population. The average family size decreased between 1960 and 1970 by .09 people per household (from 3.63 to 3.54). This decrease can be explained by the national trend toward smaller families. A census taken in 1974 showed an even larger decrease in population per household to 3.30. This statistic shows the greatest change of the population characteristics we have examined, but still it can be explained by the trend to smaller families seen throughout the country. As long as this general trend can be predicted, the change should not disturb the ability to make predictions of the future demographic characteristics of the population.

## LAND STATUS/CAPABILITY

Throughout the process of planning and preparation for the impacts of OCS development in Kodiak, questions concerning the demand for land and its use, capabilities, and availabilities will be brought before the community by both public and private entities. If the decision making bodies in Kodiak cannot respond to those questions promptly, then the development of residential, commercial and industrial facilities will occur in an unplanned, uncontrolled and haphazard atmosphere.

OCS development will create both direct and indirect demands for land throughout the exploration, development and production phases. Uses that will create a demand for land directly related to OCS development will include onshore marine service bases, oil storage facilities, tanker terminals, industrial parks and transportation facilities such as roads, freight terminals and air support bases.

Indirect demands for land will be created by population growth and the resultant need for residential and commercial facilities to serve the population and local industrial facilities designed to meet the needs of a growing population. There will also be an increased demand for recreation lands and open space as well as the need for new facilities devoted to tourism and public facilities.

All of the decision makers concerned with Kodiak, including the private sector, the Kodiak Island Borough, the City of Kodiak, the State of Alaska, and the federal government will be involved in planning for the use and disposition of lands within the Borough. Decisions will have to be made in response to immediate requests for use permits, zoning, subdivisions and other types of applications relating to development projects. Decisions will also have to be directed toward long term land

uses so that land in the proper amounts and locations can be reserved for future requirements. In order to make these decisions, it will be necessary to determine what land is available for use and suitable for development within the Kodiak Island Borough as well as what the future needs will be. Information will also have to be available that will allow decisions directed toward minimizing the impact of OCS development on the natural environment, creating and maintaining a high quality of human environment, and protecting the significant historical and cultural assets of the area. At the same time and also to help minimize the overall long term impacts, it will be necessary to make land use decisions directed toward providing the type of land that will suit the proposed uses associated with OCS development from an economic and functional standpoint.

As stated above, information is required to make rational decisions. In order to function efficiently, the decision makers will need several types of information relating to land and its use. First they will need base line data concerning the physical attributes of the land within their various jurisdictions. Information will be required relating to soils, topography, slopes, hydrology (including water tables, aquifers and flood plains), environmental sensitivity both on a micro and macro scale, and seismic characteristics. The information should be in a form adaptable to application to specific sites as well as large ecosystems.

Second, information will be needed concerning the socio-economic attributes of land. This will include ownership, natural resources, land use demand requirements, and land values.

Third, it will be important to know the various special features associated with the land involved. This will include archeological sites, the importance to the various cultures involved, and any unique and scenic attributes that specific sites might possess.

This separation and delineation of various types of information is easily done in a report such as this; however, in actual fact the various facets of the land characteristics are inexorably intertwined to the point that it is almost impossible to consider one without the other. This portion of the OCS study will report on the information that is available concerning land in Kodiak and will make recommendations relative to the types of information needed for use evaluation that has yet to be developed and/or refined to the point of usefulness to local decision makers.

## AVAILABLE INFORMATION

Information concerning land in Kodiak is generally limited. Most of the information that is available is on a very broad scale. Much of the needed information mentioned above is not available at all. This is an extremely unfortunate situation considering Kodiak is now facing rapid industrialization. However, it is not a predicament that was entirely unexpected. To date Kodiak has not been the site of rapid population growth or industrialization. There has not been a great deal of interest in the land and its detailed qualities and characteristics. In fact, the history of Kodiak is built on the basis of the opportunities and demands that come from the surrounding oceans instead of the lands.

The gathering, analysis, refinement and publication of information concerning land and its uses is an extremely complicated and time consuming process. Rarely has the demand for such data been recognized in a given area far enough in advance to have it ready for use when required. Kodiak is no exception. For instance, one of the basic tools of land analysis are aerial photos. However, the only photos available of Kodiak are extremely high level, generalized photos that do not allow analysis of detailed topography, vegetation and land features. There is soils information concerning the entire island; however, it is very generalized. It only provides data concerning soils and materials within six inches of the surface. There is extremely generalized seismic information and little or no specific information on the environmental sensitivity of the flora and fauna that inhabit the island. In that regard there is some raw data that has been compiled by the Alaska Department of Fish and Game on specific species and habitats. However, this data needs to be translated and consolidated into a form that can be applied to land use analysis.

A number of known archeological sites have been identified, but very few of those have been evaluated as to their historical and cultural importance. Many of these sites are extremely old, reaching back into prehistory. However, their significance in terms of potential future land use is not known.

There are large areas of public lands, wildlife reserves, and national forests within the Kodiak Borough. However, there is no data on the past use, the capabilities, and the future demands on those lands.

Ownership is one of the most complicated and frustrating problems relating to land status within the Kodiak Island Borough. Again, on a very broad scale, some ownership information is available. However, in attempting to determine exact ownership patterns, information was found to be either totally lacking or hopelessly complex. For instance, in trying to determine the ownership patterns in areas that were considered likely locations for onshore facilities related to OCS development, we found that most of the land was overlaid with several ownership claims, in some cases up to four. For instance, confusion arises when land that was originally owned by the federal government has been tentatively transferred to state ownership, whereupon private homesteading claims have been made and subsequently the same lands have been claimed by one of the various native corporations.

A good specific example that illustrates the problem of determining ownership in Kodiak is Near Island, which is located immediately adjacent to the waterfront in the City of Kodiak. According to the State of Alaska's land status plats, Near Island is owned by the federal government and has been tentatively approved (TA) for transfer to the State of Alaska. Prior to the passage of the Alaska Native Land Claims Settlement Act, a TA from the federal government was considered as an assurance that the ownership of the land would be transferred. However, the passage of ANCSA has reduced the amount of surety involved in a TA. To complicate this problem, in the early 1960's apparently with the feeling that the TA would be followed by a transfer of title, the State of Alaska granted a patent to the City of Kodiak for Near Island. Consequently, the current ownership of Near Island could be questioned. According to the State Division of Lands, if a question does arise concerning that ownership, it would have to be answered through the legal process. It must be remembered that the situation with regard to Near Island is not an unusual occurrence. It is common throughout Kodiak Island, and in some cases is compounded even further with homestead claims and ANCSA claims.

Because of these typical complications, it is imperative that public and private agencies in Kodiak verify land ownership prior to making decisions concerning land use or land disposition whether it relates to OCS development or not. This is especially true in the case of lands outside the Kodiak metropolitan area.

Even with these complications, there is sufficient information available about general land status on a broad scale to draw conclusions relative to areas available for OCS onshore development. Utilizing the information that is available for Kodiak Island, Map 11 was compiled to show the basic soils, topography and special features that are known to affect land in Kodiak. It can be determined from that map that the great majority of lands within the Kodiak Island Borough and in the Kodiak Island group are unsuitable and/or unavailable for active, permanent uses. There are a number of reasons for this and a description of these factors follows. (Map 11 is in back envelope.)

### Soils

As indicated on the map, a large portion of Kodiak Island is unbuildable from a soils standpoint. In making this determination factors were taken into account which included drainage, flood plains, bearing capacities, steepness, the presence of year-round ice, and soil composition. Some of the information for this portion of the study was obtained through the joint Federal/State Land Use Planning Commission.(52) Other information utilized was obtained from the Soil Conservation Service and is generally related to agricultural potential.(53) However, a rough translation of the information can be made that allows its application to developmental potential.(54)

The area of poor soils shown on Map 11 is considered usable only for recreational, hunting and fishing, scenic, open space and possible some agricultural uses. The reasons from a soils standpoint that these lands were eliminated from potential development areas vary. Throughout the

center of the island the land forms are constituted primarily by mountainous areas. There are outcroppings of rocks, ice fields, steep mountainsides with talus slopes and slide areas. Because of these influences the land would not support permanent development.

Near the southwestern end of the island, the mountainous areas are replaced by low lying swamp areas which contain soils with high silt contents. The water tables are high, and there are what appear to be large flood plain areas. Along the northwestern side of the island between Uyak Bay and Afognak Island there are additional mountainous areas that, from a soils standpoint, are unsuitable for development.

The majority of the good soils located within the Kodiak Island Borough are on the southwestern portion of the island between Cape Ikolik and the entrance to Uyak Bay. The village of Karluk is located about midway in this area. The soils in this area appear to be alluvial plains with fair developmental potential.

Additional good soils are found to the northeast of there, still on the western side of the mountains. Most of these areas are situated at the heads of the various bays including Zachar Bay, Spiridon Bay, Uganik Bay, Terror Bay, Viekoda Bay and Kizhuyak Bay, on which Port Lions is located. It would appear that the reason for the better soils in these areas is that slopes are gentler and the drainage areas are not as confined by steep topography. Consequently, sedimentary deposits have been able to accumulate. This allows for more stable and usable soil conditions from a development standpoint.

On the southeastern side of Kodiak Island adjacent to the lease sale area, the proportion of usable soils is much smaller. In fact, according to the information available, there are only two areas to the south of Uyak Bay that are at all usable for development purposes from a soils standpoint. Those areas include a small area around Old Harbor and a slightly larger area between Ahkiok and Olga Bay. The great majority of the remaining lands on this part of the island are mountainous and contain very few level areas where soils can accumulate. This is also true of Sitkalidak Island immediately adjacent to the Old Harbor area.

On the northeastern portion of the island from the north side of Uyak Bay to Narrow Strait, some relatively good soils can be found. Again in these areas, especially along the coastline, the slopes are generally less steep and the drainage systems have allowed sedimentation. Throughout the area localized soil conditions vary greatly from extremely wet lowlands to rock outcroppings. However, in general, as demonstrated on Map 11, usable land can be found throughout the area. The one exception to this is the Marin Mountains located to the southwest of Cape Chiniak and north of Uyak Bay.

Continuing north, Spruce Island on which Ouzinkie is located is generally composed of usable soils. Also, much of Afognak Island, especially in the northeastern portions, is buildable. Again, this is primarily due to the absence of extremely steep slopes and the greater depth of soil as opposed to rock outcroppings. Localized soil conditions can vary greatly, however, and specific sites may or may not be usable for development purposes.

## Slopes

Slopes also constitute a major problem from a development standpoint in Kodiak. As indicated above, many of the soils problems are related to the steepness of the land. Map 11 also shows the generalized areas that contain slopes of greater than 25 percent. This is considered by most experts in the field as the reasonable limit of developable slopes. Even a 25 percent slope is quite steep. It is generally considered that anything above 10 to 15 percent is usable for special purposes only. Uses on slopes of this steepness are normally low in intensity and primarily confined to residential and recreational uses. Larger industrial type development almost always requires slopes that are less than 10 percent. The information available does not allow the accurate identification of slopes less than 25 percent.(55)

As indicated, steep slopes are common throughout the island. In the southwestern portion of the island around Karluk where soils are generally good, a large percentage of the land can be eliminated from the developable category because of the steepness of the hills in that area. This is also true in the area around Akhiok. Localized steep slopes are found throughout the entire western portion of the island where soils are in many cases considered usable. This also occurs in the northeastern portion of the island in the area served by the road system. This area ranges from gently rolling hills to larger mountains. The steepness of the land varies greatly within relatively small areas.

The physical characteristics of the land shown on Map 11 indicate that an extremely small percentage of Kodiak Island and its adjacent islands are suitable for development purposes. As pointed out above, it is primarily located on the northeast portion of the island in close proximity to the road system and existing developed areas. It is near the areas involved in the upcoming OCS lease sale. When detailed information is developed concerning these areas, even more land will be eliminated from the developable category and a clearer picture will emerge. With this information, assuming it is specific and detailed enough, specific sites can be evaluated.

## Land Ownership

As indicated earlier, detailed information concerning land ownership on Kodiak Island is extremely complicated.(56) However, a review of the information that is available in usable form shows that large portions of Kodiak Island are in federal ownership in the form of the Kodiak National Wildlife Refuge and the Chugach National Forest. For the purposes of this study, it is assumed that federally owned lands within those reserves are not available for industrialization.

All of Afognak Island is within the Chugach National Forest and almost two-thirds of Kodiak Island is within the Kodiak National Wildlife Refuge. Afognak Island is a popular recreation area that is utilized by sportsmen and outdoor enthusiasts for hunting, fishing, camping, and various other outdoor activities. There are a number of Forest Service cabins available for recreational use on the island which are used by

residents of Kodiak as well as people from other parts of the state and nation. In addition there are logging operations being carried out on the northern side of the island to a limited extent.

The Kodiak National Wildlife Refuge covers the majority of Kodiak Island. It has been used for a number of experimental programs involving transplants of various animal species to the area. Most of the lands in the refuge are subject to poor soils and/or steep slopes, but some areas have physical characteristics that would allow development. Again, it is assumed that they will not be available for industrial or any other long term uses.

With the exclusion of these two federal reserves, the lands available for OCS industrialization are relatively limited. (See Map 12.) They have been narrowed down to the northeastern portion of Kodiak Island generally from Whale Passage to Kiliuda Bay. In addition it might be possible for the oil industry to utilize lands in or immediately surrounding the village of Old Harbor.

One factor that further complicates the question of land ownership in many areas is the Native selections made under the Alaska Native Claims Settlement Act (ANCSA). There are 19 village corporations, in addition to the Koniag Regional Native Corporation, on Kodiak Island. Together they have selected 1,566,720 acres of land (see Map 13). The lands selected are not necessarily unavailable for use by virtue of their selection. In fact, Koniag, Incorporated has indicated a willingness to talk with the oil industry concerning on-shore facilities. However, some of the lands are not suitable for OCS related uses due to their inclusion in other categories discussed here (natural features, federal reserves, etc.).

In the Kodiak urban area, specific information is available. As can be seen from Map 14, there are relatively large areas of local government ownership including both the Kodiak Island Borough and the City of Kodiak. Much of that land, especially that owned by the Borough, is available for future community expansion, and much of it is ideally located for residential uses although most of the lands outside the city limits are not served by municipal services. It is also important to note that the majority of the land within the existing developed portion of the Kodiak area that is shown in local government ownership is the site of various community facilities and therefore is not available for development.

It should be pointed out that the majority of the City's land shown on Map 14 to the west of the City center is extremely steep and unsuitable for development. Near Island is shown on the ownership map as the property of the City of Kodiak in spite of the previously mentioned complications with the title. It is interesting to note that both the federal and state governments own very little land in the developed portion with the exception of Ambercrombie State Park and the Spruce Cape Loran Station.

The lands on Map 14 that are not shown in governmental ownership are all privately owned although much of the land to the northeast of the city

center remains undeveloped. Most of the land is platted at the present time; however, the majority of these are "paper plats" and are unimproved. While this does indicate large areas available for growth of the community, such growth will require the provision of roads and public utilities prior to development in most cases.

### Special Features

One of the most important special features associated with land in Kodiak is its archeological sites. According to the information available, there are presently 170 sites that have been identified as having archeological significance (see Map 11). (Federal/State Land Use Planning Commission) They range from prehistoric remains to early human settlements up to 2,000 years old. As is the case with current development on Kodiak Island, the archeological sites are located primarily along the seashore and within bays and inlets that provide protected water. It is extremely important that these sites be evaluated and cataloged according to their archeological, historical and cultural significance so that proper measures can be taken to protect them from encroachment or destruction as a result of future community growth and industrialization.

Another feature that is important with respect to future development is the seismic characteristics of the island. As shown on Map 11, there are several known faults on both sides of Kodiak Island. Although there is no record of recent significant seismic activity in these areas, it will be important in the future to develop basic geologic information sources and monitoring systems if the affected areas are considered for development.

### CONCLUSION

In spite of the generality of the information available on Kodiak relative to land status, it is relatively easy to eliminate large areas of Kodiak Island as potential sites for development.

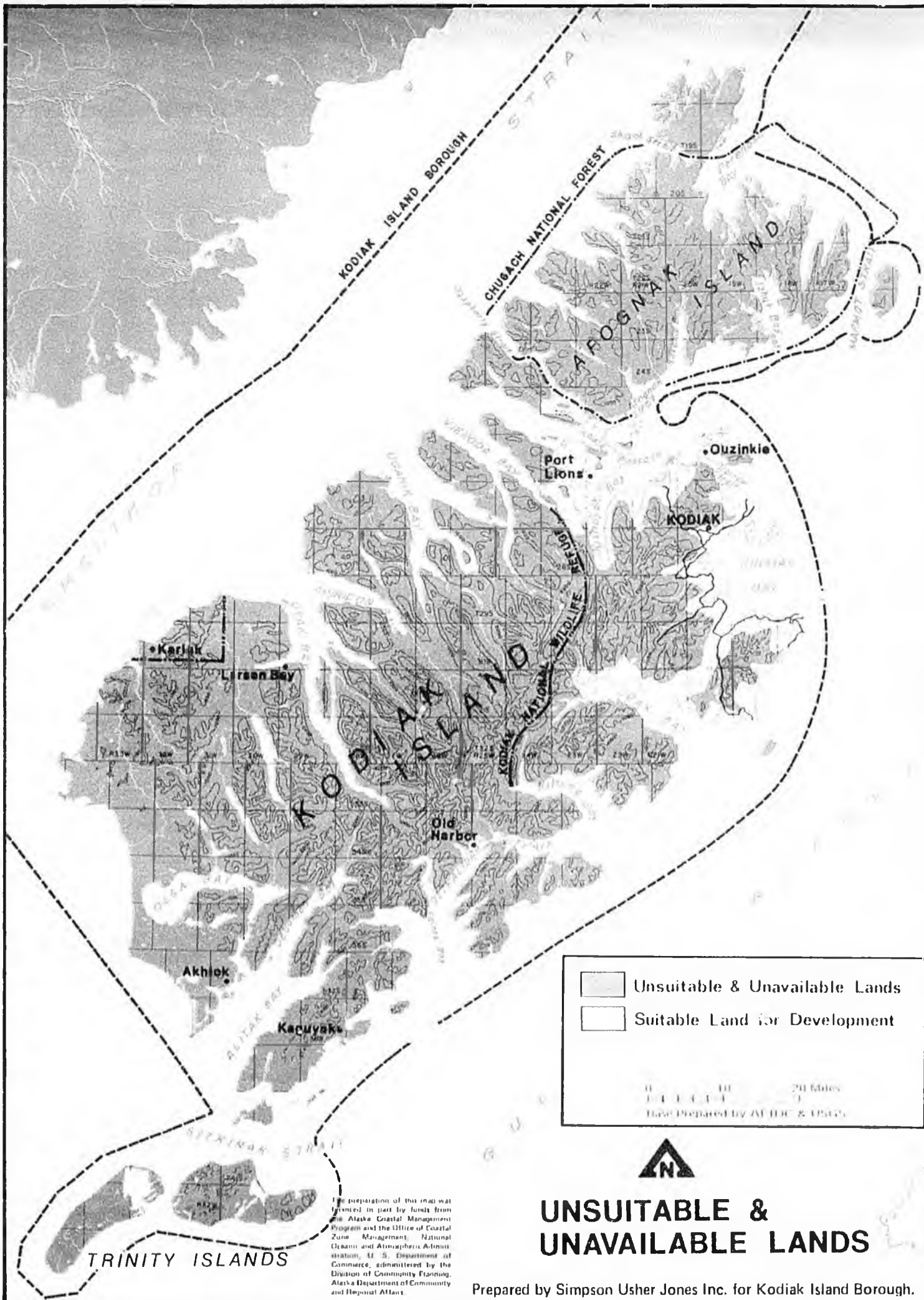
On the western and northwestern portions of the island, there is ample area with physical attributes necessary for development. However, this area is not located in close enough proximity to be utilized for onshore service base facilities related to OCS development and it is not near major areas that will generate population growth pressures. There are two major villages within the area (Karluk and Port Lions) that will undoubtedly continue to grow and will consequently affect the lands surrounding them. Detailed information should be gathered concerning those lands.

On the east and southeast portions of the island usable land is limited. However, based on the information available, land is available with suitable physical and socio-economic characteristics that could be used for community growth and industrialization. Prime candidates for such growth are, of course, the lands around the City of Kodiak and the lands

served by the road system in the area. The north side of Ugak Bay has several sites that could be utilized for OCS related industrialization. As indicated earlier, both Old Harbor and Ouzinkie appear to have the land characteristics and capabilities suitable for additional growth and potential industrialization.

Special attention should be paid to the archeological and seismic considerations on this entire side of the island as well as the natural environmental features of the area. In the Kodiak area where the lands are served by the road system, special attention needs to be paid to the impact that future growth and industrialization could have on the human environment.

Finally, more detailed information needs to be gathered and analyzed concerning land in the Kodiak Island Borough. Ideally this should be done for the entire borough; however, at the very least, specific studies should be done on lands that appear to be suitable for development in terms of population growth and OCS related industrialization. Detailed information needs to be gathered in the form of aerial photos, more complete soils information, topographic information (at a contour interval of no greater than ten feet), archeological evaluation, seismic considerations, and last but not least, ownership patterns. With this information, the decision makers in Kodiak and throughout the State of Alaska and in the Lower 48, including the various levels of government and private enterprise, can make rational decisions relative to land use and disposition.



KODIAK ISLAND BOROUGH

CHUGACH NATIONAL FOREST

Port Lions

Ouzinkie

KODIAK

Karlak

Larsen Bay

KODIAK ISLAND

Old Harbor

Akhlok

Kanuyak

- Unsuitable & Unavailable Lands
- Suitable Land for Development

0 10 20 Miles  
 0 10 20 Kilometers  
 Base Prepared by AFDC & USGS

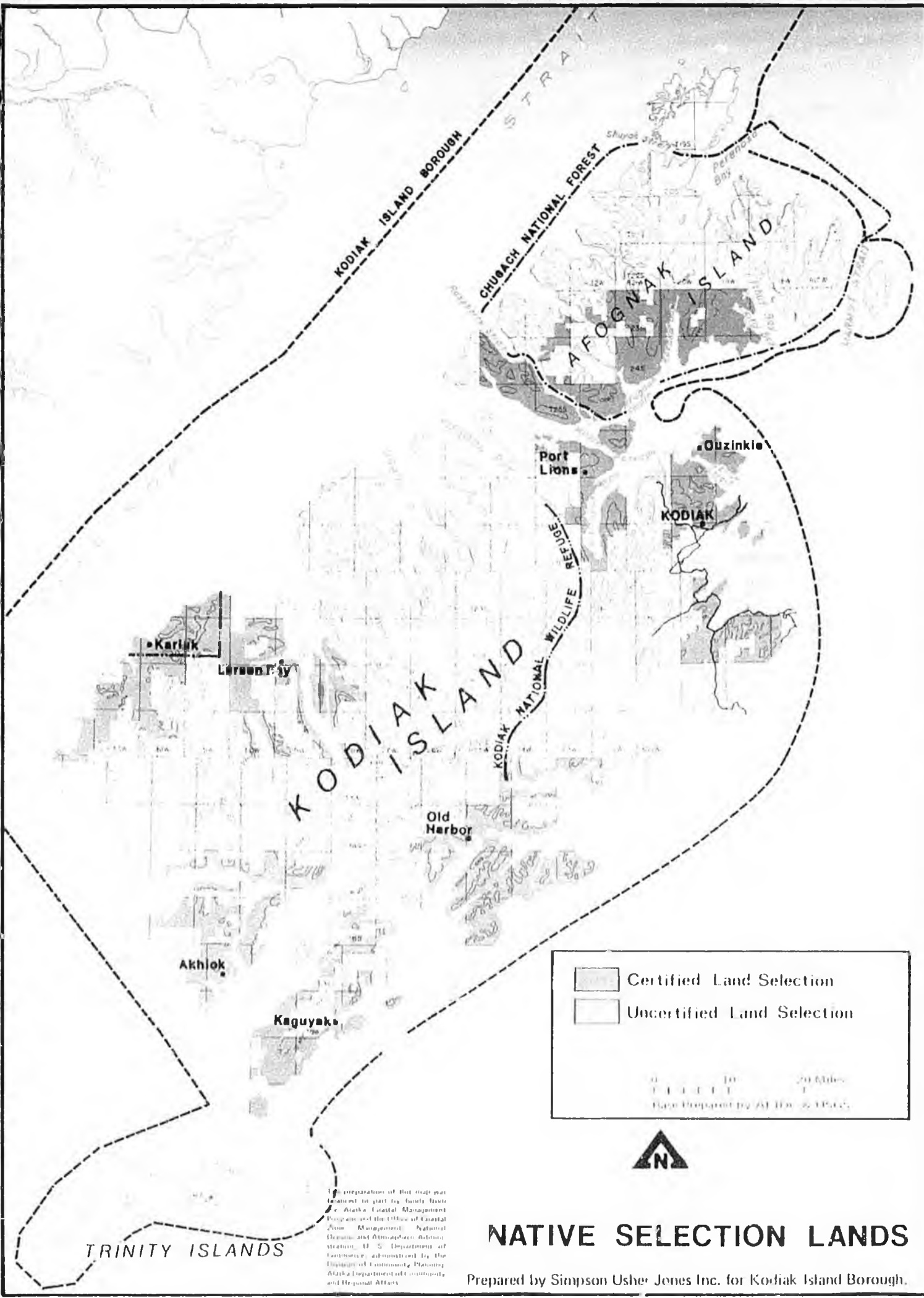



# UNSUITABLE & UNAVAILABLE LANDS

Prepared by Simpson Usher Jones Inc. for Kodiak Island Borough.

TRINITY ISLANDS

The preparation of this map was financed in part by funds from the Alaska Coastal Management Program and the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, administered by the Division of Community Planning, Alaska Department of Community and Regional Affairs.



	Certified Land Selection
	Uncertified Land Selection

0 10 20 Miles  
 Base Prepared by ATD-36-11502



# NATIVE SELECTION LANDS

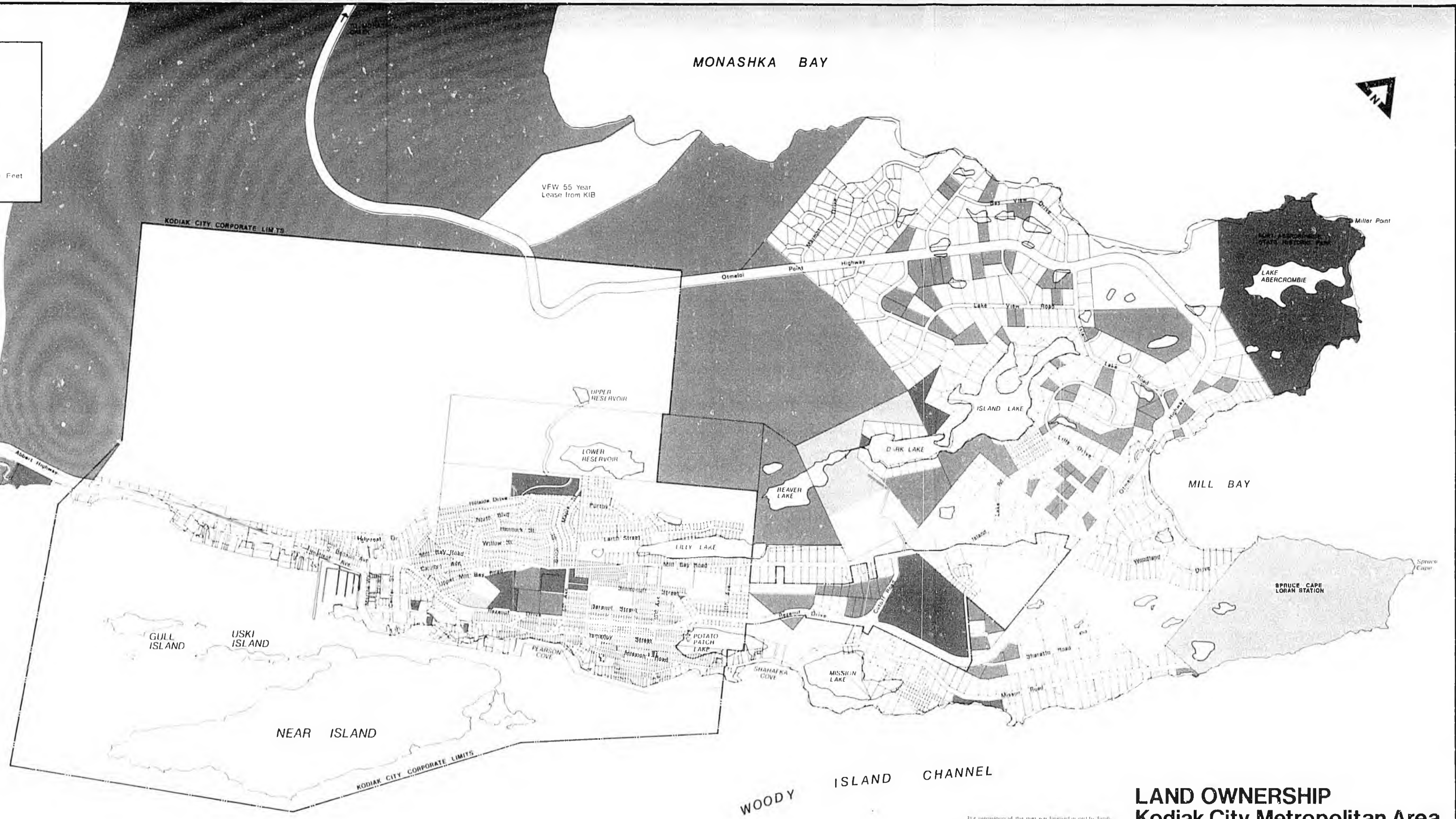
Prepared by Simpson Usher Jones Inc. for Kodiak Island Borough.

TRINITY ISLANDS

The preparation of this map was  
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 the Alaska Coastal Management  
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 tration, U.S. Department of  
 Commerce, administered by the  
 Division of Community Planning,  
 Alaska Department of Community  
 and Regional Affairs.

Federal  
 State of Alaska  
 Kodiak Island Borough  
 City of Kodiak  
 Private

0 1000 2000 3000 Feet  
 Base prepared by Tryck Nyman & Hayes



**LAND OWNERSHIP  
Kodiak City Metropolitan Area**

The preparation of this map was financed in part by funds from the Alaska Coastal Management Program and the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration, U.S. Department of Commerce, and supported by the Division of Community Planning, Alaska Department of Community and Regional Affairs.

Prepared by Simpson Usher Jones Inc. for Kodiak Island Borough

## SUMMARY PROFILE

Through the process of preparing the community inventory for Kodiak, a large body of information has been assembled that is descriptive of the social and economic characteristics of the Kodiak Island Borough. That information comprises Volume II of the OCS Impact Study for Kodiak.

The majority of the information presented is self-explanatory; however, there are portions which were analyzed and explained in some detail. The majority of Volume II consists of information presently available through a variety of sources but that had not been compiled, analyzed or presented in one document. This consolidation of information should be extremely valuable as a planning and management tool for the decision makers in Kodiak as they grapple with the problems that will face the community in the near future. The information should provide a method of predicting and understanding the problems facing Kodiak and the various routes available to solve those problems.

The Community Inventory has shown us that Kodiak is a very unique and vital community, both within the metropolitan area and throughout the outlying portions of the islands. The economy in Kodiak is strong, and the future holds promise of continued prosperity and economic independence. Unlike many other isolated communities in Alaska, Kodiak's size and economic importance has resulted in the provision of the full range of community facilities, utilities and services that are necessary for a growing self-sufficient community. Figure 40 shows who provides the basic public services available in Kodiak.

The study has also shown us that Kodiak has a number of problems that may negatively affect the community's quality of life and its ability to maintain its growth pattern in the future. These problems, if not addressed promptly, will be compounded with the advent of OCS oil activity.

The following profile briefly summarizes the information presented in Volume I which describes the community as it exists today and gives an indication of how its strengths and weaknesses will be affected by or will affect future development.

Fig. 41: Public Service By Provider

<u>Service</u>	<u>Borough</u>	<u>City</u>	<u>State</u>	<u>Federal</u>	<u>Other</u>
Electric					X
Telephone					X
Water		X			
Sewer		X			
Radio, TV					X
Roads		X	X		
Airports		X	X		
Marine Freight Terminal		X			
Ferry Terminal			X		
Police		X	X		
Fire		X			
Emergency		X		X	
Hospital	X				
Clinics	X		X		X
Public Health	X		X	X	
Mental Health	X		X	X	
Alcoholism Treatment	X	X	X	X	X
Public Assist.			X		
Legal Assist.			X		
Education:					
Primary	X				X
Secondary	X				
Higher			X		
Recreation		X	X	X	
Parks	X	X			
Camping			X		
Open Space	X	X	X	X	
Cultural		X	X		X

## ECONOMIC OUTLOOK

With an estimated current population of 9,620 people, Kodiak is among the five largest population centers in Alaska. Currently the Kodiak Island Borough is growing at a rate of approximately three percent per year. This is a healthy growth rate and one that demonstrates the economic viability of Kodiak. The community has the potential to continue growing as long as the basic industries continue to maintain their strength. In fact, based on historical trends and the current condition of the economy, it is estimated that the population of Kodiak will double within the next twenty years. It is especially important to note that these estimates are made without consideration of any possible OCS development impact on the population. This means that Kodiak does not need the economic boom that OCS activity would bring. The community is healthy; the population and economic base are growing; and the prospects for the future are bright.

## EXISTING FACTORS AFFECTING FUTURE TRENDS

There are several important factors that could affect the ability of Kodiak to maintain its growth rates and realize its potentials. The factors described below could have a stifling effect on the economy and could also adversely affect the living environment. Each of them is individually significant and should be addressed regardless of OCS development.

### Crime

Criminal activity is normally one of the first and most serious impacts experienced as a result of a "boom" economy. Recent history in Fairbanks, Valdez and a variety of smaller communities along the Trans-Alaska Pipeline route have borne this out. In Kodiak, the industrialization and rapid economic growth anticipated to accompany OCS development is already being preceded by an increase in crime. As indicated in the Law Enforcement Section of the Community Inventory, between 1975 and 1976 total criminal activity was up and the more serious and violent crimes (Part I Offenses) increased.

This situation presents the most serious threat to the quality of life in Kodiak that the community has ever faced. Immediate action by local, state and federal governments is necessary in order to prepare for and combat this problem.

The potential for further rises in criminal activity is increased due to the completion of the Trans Alaska Pipeline in the near future. As economic activity and population growth decreases in towns and cities along the Pipeline, the people who found them easy places to make an illicit living will look for new places to operate. Kodiak offers the opportunities they seek. This, along with changes in the internal characteristics of the community, could allow crime to rival fishing as Kodiak's largest industry.

It is incumbent on the community to take action that will create an atmosphere that discourages the criminal, both resident and non-resident.

### Housing

Another serious problem facing Kodiak today is a housing shortage. As indicated above, the population is currently growing at approximately three percent per year. However, over the last five years housing starts, including multi-family units, have averaged less than three percent per year. In addition, over 40% of the housing units in Kodiak are in fair to poor condition. Analysis of these statistics indicates that the housing market is barely keeping pace with population growth. There is no surplus housing stock on the market from which a prospective home buyer or renter can choose, thus costs are high. This is evident by the small number of dwelling units for sale or for rent in Kodiak at any given time. In addition, new homes built in Kodiak are normally sold and/or occupied very quickly. For example, single family homes under construction are generally sold before they are fifty percent complete.

An already inadequate housing supply coupled with an ever present desire by residents to upgrade their housing (a practice most generally achieved by moving into newer homes), creates a discouraging outlook for supplying the housing needs for Kodiak's normal population growth. Fulfilling housing needs resulting from OCS development would be impossible at the current level of housing starts.

There are several reasons why the growth in the housing market has been slow in Kodiak. First, areas available for development which have a full range of utilities are extremely limited. The areas currently served by sewer and water are developed to near capacity, and high utility installation costs discourage development of new areas.

Land availability is another problem in the Kodiak city area. Much of the land surrounding the city is owned by the government or the native corporations, and private land available for residential development is limited both in terms of quantity and quality. Much of the available property is either too steep or too boggy to attract development.

The cost of housing is another factor which affects the housing stock in Kodiak. As indicated in the housing inventory, the average new three-bedroom house in Kodiak ranges between \$60,000 and \$80,000. We have also noted in the economic inventory that in 1974 the average wage in Kodiak was just over \$1,000 per month. Applying an average increase in salaries of twelve percent per year, this same salary would be about \$1,260 per month in 1976. The purchase of a \$70,000 home, however, would require a monthly mortgage payment of approximately \$650 per month, much too high to be accommodated by the average wage. Therefore, for the average wage earner to purchase the average home in Kodiak, it would require that at least two persons within that household be employed. It may be concluded that housing costs are escalating faster than wages, thus creating a shortage of buyers for the Kodiak housing market. This in turn discourages speculative housing starts and drives up the value of existing homes and the cost of custom-built houses.

## Commercial And Industrial Land Use

Another problem which will affect the future growth of Kodiak is a shortage of commercial and industrial property. New businesses in Kodiak have a difficult time locating on properly zoned land. This results in higher land costs thus higher consumer prices and finally a higher cost of living. In addition, a less efficient growth pattern is created within the community when businesses are forced to locate on any available commercial or unzoned property they can find rather than in places that are logical and well-suited from a community growth standpoint. As a point in fact, commercial services are now beginning to show up in places scattered throughout the community. Each time this happens, the potential for conflicts among land uses is increased. This can compound the shortage of prime residential land as well as inhibit the planning and evolution of efficient transportation systems.

Industrial land is also needed to accommodate growth in the fishing industry, as well as to support the non-basic industrial activities within the community that are a direct result of basic industry growth. There are no industrial parks in Kodiak, either planned or unplanned. Warehouse space is in short supply and the potential for new space is limited.

These land use considerations must be addressed by the community in order to maintain the growth patterns and economic development rates that have been established. If they are ignored, they will become more serious and will have an accelerating negative impact on the economic system in Kodiak. In addressing the problems, careful planning must be considered in adopting fiscal policies which will encourage the development of additional moderately-priced housing, and the provision of more commercial and industrial areas. Considerations such as access, effect on surrounding land uses, neighborhood character, and future land use demands must be taken into account in order to affectively deal with these concerns without creating new problems.

## Social Services

In addition to these land use and economic considerations affecting the future of Kodiak, social factors affecting the quality of life in the community should also be monitored. While these factors may not directly affect the employment rates, housing costs and other developmental characteristics of the community, they do have a direct effect on the living environment in terms of the convenience, esthetics and social well-being of the residents.

Social services are particularly important to a well-balanced community. While there are many social services available in Kodiak, their capabilities to cope with some of the more serious problems is currently impaired by a lack of funds and personnel support on the part of the governmental agencies involved. This is especially true of the health and social services, provided by the State of Alaska, in spite of recent increases in personnel and budgets. For the most part, those agencies are still underfunded and undermanned. While programs have been established to

handle many serious problems such as mental health, alcoholism and public assistance, they can actually accommodate only a relatively small part of the persons currently in need of assistance.

At present there is no indication that the demand for these services will accelerate over and above normal population growth rates. However, if in the near future Kodiak is faced with an extraordinary increase in population due to OCS development, the problems already associated with the social service programs will be further compounded by a larger demand for services and the probability of more complex problems to solve. The community and the State should address these inadequate services as an immediate priority. The level of services offered must be upgraded to adequately meet the current needs of the community and plans should also be made to prepare for the impact that may occur with the advent of a population boom due to OCS development. If not resolved, the inadequacies in the social services will probably have one of the most serious and most deleterious OCS related impacts on the Kodiak community.

#### Recreation Facilities

Another community component that is currently below standard is adequate recreational facilities. Kodiak now falls short of meeting the community demand for neighborhood parks, indoor and outdoor winter recreational facilities, and weekend and vacation facilities around the island. Through provision of these facilities Kodiak can mitigate many of the social problems which plague many other growing communities. The potential for rapid population growth due to OCS development makes the need for parks and recreational facilities even more acute.

#### OUTLYING VILLAGES

The various villages located around Kodiak Island have many divergent characteristics while at the same time having a number of common concerns and features. Their populations range in size from over 300 to under 100. Their locational characteristics are similar in that each is located adjacent to salt water and each is near rivers or streams that offer fresh water sources.

The degree or level of development varies between the villages. Port Lions is the most highly developed, with a relatively wide range of community facilities and services including, but not limited to, lighted and maintained city streets, local police protection, modern community-wide telephone service and a comparatively high level of commercial services. The other villages have far less in the way of community facilities and government services. None of the others have maintained streets, community telephone service, or local police. Most have some degree of commercial services and all have schools operated by the Kodiak Island Borough School District. The level of community water and sewer service varies from village to village.

The relationship of the villages to OCS development also varies. Some have the potential of a high level of direct impact. Old Harbor has already been approached by oil industry personnel and is considered a possible site of an on-shore service base. The village corporation sought and received assistance from the Koniag Regional Native Corporation in dealing with the oil industry; as yet no facilities are definitely planned for Old Harbor.

Ouzinkie and Port Lions also have potential for direct OCS impacts; although because of their location, they are less likely candidates for service base facilities than is Old Harbor. Like Old Harbor, the rest of the village corporations on Kodiak Island will deal with the oil industry in cooperation with Koniag, Incorporated.

The probability of indirect impacts from OCS development is high in all of the villages. All offer scenic surroundings, hunting and fishing in relative abundance. This will draw tourists and sportsmen in their off-time who seek seclusion, as well as opportunities for trophies and food.

Preparation for these impacts are imperative. The villages can gain from the impacts if that is their desire. However, the implications in terms of economic change, alteration of life styles and physical modification of the villages are extreme. With the notable exception of Port Lions, none of the villages are at all prepared for what could ultimately be the largest influx of people in their histories.

## CONCLUSION

The factors described above are significant and deserve special attention. The assets of the Kodiak Island Borough and its communities are uniquely valuable and should be protected and enhanced. The problems faced by the communities are not insoluble; they are the types of problems that are normally to be expected in a time of rapid growth. They are also the type that can be dealt with through community awareness, local action and proper planning and implementation.

OCS oil development has the potential for either strengthening already healthy communities or creating problems that could result in economic and social disruption for many years to come. The result of OCS impact will depend upon the level of oil industry activity which will occur in Kodiak and the methods that are used in planning for and coping with the impact.

There are a number of trends that can be predicted for Kodiak regardless of OCS development. First, Kodiak will continue to grow. Along with that growth, the cost of living will undoubtedly rise moderately. Housing costs will increase until adequate, buildable land is available to accommodate a growing housing market. The residents of Kodiak can expect their problems with respect to crime, housing, recreational and open space facilities and social services to continue to worsen unless

the government steps up its efforts to deal with these issues. Inherent in such an effort, would be the possibility of some increase in the cost of government and a resultant rise in taxes. This situation is one that is common with a growing community.

There are a number of ways in which these concerns can be addressed through proper planning and management tools. Regardless of whether OCS development occurs, these should be addressed as part of the upcoming Kodiak comprehensive plan.

The components of the community that would be most affected by an economic and population boom resulting from OCS development would be those problems which are already most serious. Without exception, the problems described above would become worse at an accelerated rate. Also, increased demands for transportation facilities would place an additional demand on the existing facilities, both internal and external.

In order to determine the proper methods of dealing with the impacts that OCS development might bring, it will be necessary to determine the level of oil industry impact, the resultant population increases to be expected, and the demands that that economic and population growth will place on the basic community infrastructure. Volume I of this report assesses the demand that the oil industry will place on Kodiak. This assessment is used to determine the types of policy alternatives that are available to the community internally and what policies should be endorsed and encouraged in the state and federal governments in order to protect Kodiak's quality of living and economic viability in the forthcoming years.

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## NOTES AND REFERENCES

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16. Personal Interview -- Frank Byerly, Division of Correction, Department of Social Services, Kodiak.
17. Personal Interview -- Sister Josephine Patti, Administrator, KIB Hospital
18. Information provided by the Kodiak Health Center.
19. Kodiak Interagency Directory
20. Information provided by the Kodiak Aleutian Mental Health Center.

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56. Land ownership information was obtained through Bureau of Land Management and State Division of Lands Land Status Plats.

film -  
Place on file 292A  
file original on correct box  
send file to Vicky

A	3%	of 1st 300
B	5%	700
C	6%	1500
D	8%	> 2,500

AGO 513804

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"An Act relating to the oil and gas properties production tax; and providing for an effective date."

# COMMITTEE REPORT

3/26/75

HOUSE

FINANCE

Mr. Speaker:

Date 4-14-76

The Committee on RESOURCES has had HB 346

under consideration. A Majority of the members of the Committee

recommends it DO PASS

recommends it DO NOT PASS

recommends it DO PASS WITH ATTACHED AMENDMENT(S)

recommends it BE REPLACED WITH CS FOR HB 346 AND THAT

CS FOR HB 346 DO PASS

"and" recommends it BE REFERRED TO THE \_\_\_\_\_

COMMITTEE

reports it back WITHOUT RECOMMENDATION

"other"

Members signing the Majority report:

<u>[Signature]</u>	<u>[Signature]</u>	<u>[Signature]</u>
<u>[Signature]</u>	<u>[Signature]</u>	<u>[Signature]</u>
<u>[Signature]</u>	<u>[Signature]</u>	<u>[Signature]</u>

Members NOT concurring in the Majority report:

\_\_\_\_\_ recommends:

\_\_\_\_\_ recommends:

\_\_\_\_\_ recommends:

\_\_\_\_\_ recommends:

\_\_\_\_\_ recommends:

[Signature] Chairman

# STATE OF ALASKA

## DEPARTMENT OF REVENUE

OFFICE OF THE COMMISSIONER

JAY S. HAMMOND, Governor

POUCH S—JUNEAU 99801

April 28, 1975

The Honorable Nels Anderson  
Chairman  
House Resources Committee  
Alaska State Legislature  
State Capitol  
Juneau, Alaska 99811

Dear Mr. Anderson:

re House Bill No. 346

House Bill No. 346, an Act relating to the oil and gas properties production tax was introduced in the House on April 26, 1975 and was referred to the House Resources and Finance Committees.

For the consideration of the House Resources Committee, I am enclosing a copy of a memorandum dated April 24, 1975 from O. K. Gilbreth, Jr., Director, Oil and Gas Division, Department of Natural Resources, Anchorage, Alaska concerning effect on Treasury, administrative problems and indicating that there would be no additional costs of administration.

Very truly yours,



R. D. Stevenson  
Special Assistant

Enclosure

cc: The Honorable Hugh Malone  
Chairman  
House Finance Committee  
Alaska State Legislature  
State Capitol  
Juneau, Alaska

Mr. O. K. Gilbreth, Jr.  
Director, Oil and Gas Division  
Department of Natural Resources  
1001 Porcupine Drive  
Anchorage, Alaska 99504  
(Phone: 279-1433)

AGO 513806

# MEMORANDUM

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL AND GAS

## State of Alaska

TO:

R. D. Stevenson  
Special Assistant  
Dept. of Revenue


DATE:

April 24, 1975

FILE NO:

TELEPHONE NO:

FROM:

O. K. Gilbreth, Jr.   
Director

SUBJECT:

HB #346

We have examined the subject bill and have discussed in detail some of the ramifications of the bill with Mr. John Messenger, Tom Williams and Will Condon of the Attorney General's office. We pointed out to these attorneys that the proposed bill provides that the tax will be levied on "the gross value at the point of production of the gas and liquids produced each month". The present tax is levied on oil and gas sold during the month and this volume is considerably different from the volume produced each month. The oil and gas conservation regulations require reporting of the volume produced. All production may not be sold and some may be retained in storage at the end of the month. When a sale is made the quality of the oil and gas is determined and run tickets are prepared and values paid on the basis of the quality of the oil sold. If the proposed change in the law could be interpreted to be levied on oil produced there is no way to determine the value of the oil produced. The attorneys, however, have advised me that for purposes of this particular law, "the gross value at the point of production" is in reality the point of sale and even though the law says oil produced it really means oil sold. All three attorneys have advised that this is the case and such being the case I see no objections to it. I should point out, however, that common usage in oil field terminology throughout the remainder of the United States provides that oil and gas produced means just that and oil and gas sold means that. Our law, I think, will be confusing if the proposed wording is adopted.

As you know, the tax is levied on the basis of individual wells and the amount of oil sold. Only on the oil sold can we determine the quality. I have talked with John Messenger and suggested that the law be changed to permit the value to be determined on a lease basis and allotted back to the individual wells based on routine well tests. This as a practical matter, is being done now, because there is no way to audit production records and production values according to the present law. If the proposal were changed to permit determining value on the basis of the lease runs then we would have a law that provides a legal means for auditing. John Messenger advised me that this could be done and he would so recommend it to Representative Cowper. I certainly recommend the change in order to comply with the law.

From the standpoint of fiscal effects of the bill, most oil being sold in the state at the present time has a value such that the cents per barrel tax applies. Hence HB #346 would have no effect on income of the state since the cents per barrel law is effective. However, should crude oil prices increase and the Department of Labor

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cost index increase at a lower rate to the extent that the tax would be collected on percent of value, then there would be an increase in wellhead value of approximately 5 cents per barrel on each barrel of oil produced in the Cook Inlet area. As a maximum on one hundred ninety thousand barrels per day of production, this would amount to additional taxes of one hundred ninety two thousand dollars per year. Thus this law could have a fiscal effect of increasing tax receipts anywhere from zero to one hundred ninety two thousand dollars per year depending on the method of calculating the taxes.

I see no additional administrative costs associated with changing the law as the additional auditing burden would be minimal.

cc: Guy R. Martin, Commissioner

Bristol  
Bay  
Native  
Corporation

445 E. 5TH STREET / ANCHORAGE / ALASKA 99501 / PH. (907) 277-9511

April 9, 1976

The Honorable Nels A. Anderson, Jr., Chairman  
House Resource Committee  
Pouch "V"  
Juneau, AK 99801

Dear Mr. Anderson:

I respectfully request this letter be made part of the record when your committee holds hearings on HB 346 next week.

In the past Bristol Bay Native Corporation representatives have testified and have written several letters for the record explaining that we will be a producing oil company once commercial production is established on our lands.

The amendments in HB 346 are penalties to the producer who historically has used oil or gas on the lease or property to clean and treat the oil or gas to pipeline quality and shipment. This is a provision in both State and Federal lease forms, however taxing that portion of the royalty oil or gas is not a part of the lease forms. There are many variables and it is difficult to determine the amount of revenue this might produce, although it would be minor. Regardless, this bill would require additional metering, records, accounting and reporting which is punitive and would be costly to our Corporation. Therefore BBNC is opposed to the provisions of the entire bill.

Very truly yours,

BRISTOL BAY NATIVE CORPORATION

*W. C. Bishop*  
W.C. Bishop  
Petroleum Consultant

cc: Directors  
Regions  
AFN

AGO 513809

**Bristol  
Bay  
Native  
Corporation**

445 E. 5TH STREET / ANCHORAGE / ALASKA 99501 / PH. (907) 277-9511

rec'd 4/12

April 9, 1976

The Honorable Nels A. Anderson, Jr., Chairman  
House Resource Committee  
Pouch "V"  
Juneau, AK 99801

Dear Mr. Anderson:

I respectfully request this letter be made a part of the record when your committee holds hearings on the Second SS for HB 803 next week.

Bristol Bay Native Corporation is an Alaska Corporation subject to normal corporate income taxes, however this bill, if passed, will require separate accounting and would appear to be an accounting department nightmare.

Without a final copy of the bill, BBNC's objections will be limited general statements and not specific paragraphs as follows:

- 1) General administrative costs should not be tied to a cents per barrel.
- 2) No deductions paid for services used or provided outside Alaska could and probably would be an exceptionally high burden on our Corporation.
- 3) Limiting deductions of exploration costs incurred in any calendar year to 20% could be prohibitive and contrary to normal accounting procedures.
- 4) By not allowing engineering or design costs incurred outside Alaska as a deduction, would again be an excessive burden on our Corporation. For example, with established production, BBNC will build and own 100% of a topping plant to supply fuel for our joint operations. The engineering and major construction would be performed outside Alaska.
- 5) Limiting interest to 9% per annum on funds used during construction of facilities used and useful in the production of a field may be capitalized, certainly ignores the financial facts that interests rates vary over a rather wide range. It may also be considered as an attempt to regulate similar to utility regulations.

Overall this bill would penalize our Corporation by requiring additional accounting, limiting normal deductions, reduce our income and thusly increasing

our Corporate taxes over the present corporate income taxes. Therefore BBNC is opposed to this bill in its entirety. We expect to be good corporate citizens and pay our fair share of taxes without being penalized as an Alaskan corporation.

Very truly yours,

BRISTOL BAY NATIVE CORPORATION

*W. C. Bishop*

W.C. Bishop  
Petroleum Consultant

cc: Directors  
Regions  
AFN

AREAS OF CONTINUING CONCERN

Wellhead value litigation was first instituted in March of 1970. No judgment has been issued and the Petroleum Revenue Auditor is still unable to verify or take issue with wellhead values used by oil and gas producers to determine royalty and tax obligations.

Recently the Deputy Attorney General received permission from the present Administration to pursue individual settlements with as many of the 13 oil producers involved as possible.

Because of the extensive time already taken to approach an acceptable resolution we support individual settlements as long as there is no legal precedent being set to effect North Slope production.

There should be a joint effort by the Departments of Law and Natural Resources to insure that full guidelines and regulations are in force when North Slope production begins.

Legislative efforts are also being proposed to address this same problem. There is a current effort to change the point of taxation from a per well basis to the point of transfer to a common carrier. This approach would solve problems of per well production allocation as well as fluctuating transportation deductions effecting wellhead value. For this reason, we encourage any constructive activity in this area.

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The Federal Department of the Interior continues to make semi-annual payments to the State for 90% of the royalty revenue received from oil and gas produced on federal lands within Alaska. This revenue continues to be inadequately supported and as yet the Petroleum Revenue Auditor has been unable to verify the reasonableness of any of the payments.

Only recently has the Petroleum Revenue Auditor established a line of communication with United States Geological Survey personnel in an effort to independently compute the semi-annual receivables. As yet, it is too early to determine if this effort will be fruitful. For this reason we continue to recommend that the State require oil and gas producers to file a copy of their federal royalty return along with the State production tax return. The oil produced on federally-owned land is subject to production tax and the federal royalty is a deduction on the State tax return.

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FINDINGS AND RECOMMENDATIONS CONT.

3. Analyze calculated taxes and royalty vs. actual receipts.
4. Analyze actual receipts vs. forecast fees."

We encourage further development of the automated system for auditing Production Tax and Royalty returns. The automated audit procedures should include cross checking returns to valid supporting documents and comparing information reported in tax and royalty returns to production information required to be submitted directly to the Division of Oil and Gas by the producers.

5. There is a need for guidelines in determining "wellhead value" of oil for royalty and tax purposes.

On July 3, 1969, a directive was issued by the Commissioner of the Department of Natural Resources which was intended to define the value of State royalty oil.

A suit was filed against the State and the State filed suit in connection with the question of the value of the oil. Since the matter was referred to the courts, the Petroleum Revenue Auditor has been unable to verify the reasonableness of "wellhead value" used by oil and gas producers to determine royalty and tax due.

When the definition of wellhead value for royalty and tax purposes is legally determined:

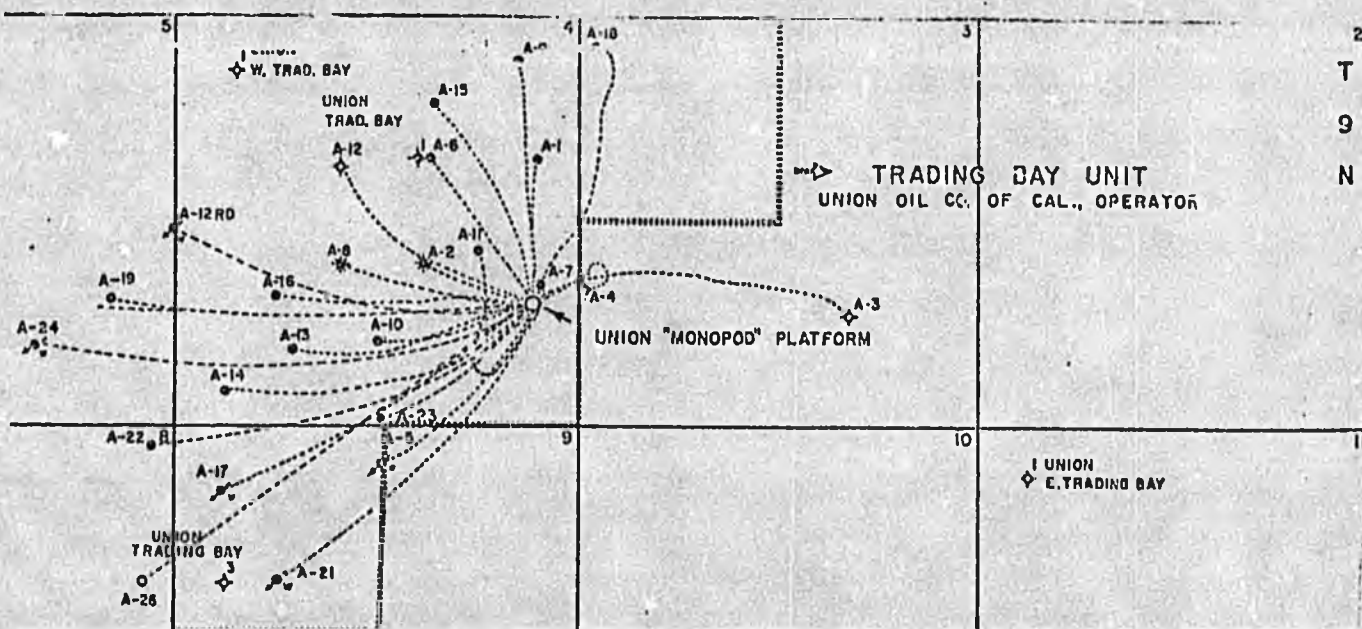
- A. The State should assess all deficiencies due;
- B. Specific guidelines for any deductible items should be established by regulation (if such guidelines are not established by the court) and added to the oil lease form; and
- C. Periodic audits of oil company records should be conducted to determine that deductions being taken are proper.

FINDINGS AND RECOMMENDATIONS CONT.

6. There is a need for more definitive and complete "per well" production figures for off-shore facilities.

Production tax calculations are based on average daily production for each well. However, it is standard practice in the oil industry not to meter the production of each well at offshore facilities. Instead, the production of each well is tested periodically to determine what portion of total production of the facility is represented by that well. Actual daily production of the facility for the month is allocated to each well based on the results of the periodic tests.

There are several of these offshore facilities in the Cook Inlet from which more than one well was drilled. A typical example is the Trading Bay Unit as illustrated in the below drawing taken from a statistical report issued by the Division of Oil and Gas.



STATE OF ALASKA  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL AND GAS  
ANCHORAGE, ALASKA

TRADING BAY FIELD

SCALE: 1,320' 0 1,320' 2,640' 3,960'

May 1, 1972

## FINDINGS AND RECOMMENDATIONS CONT.

The Division of Oil and Gas determines whether production on a "per well" basis appears reasonable by comparing current production to past history. In addition to the reasonableness test, periodic well tests conducted by oil producers are occasionally observed by Oil and Gas personnel. The well tests, however, are affected by many variable factors and average daily per well production cannot be certified by the Division of Oil and Gas as a result of observation of the tests.

The problem of pinpointing individual well production is a technical one. We have not addressed ourselves to this problem because of its technical nature. The Division of Oil and Gas should be encouraged to develop ideas regarding more effective observation and auditing tests or changing reporting requirements to obtain more definitive "per well" production figures.

7. Documents received in support of Production Tax and Royalty returns should be improved.

Oil is transported from offshore platforms in the Cook Inlet to onshore treating facilities and storage tanks by the producers. Pipeline companies such as Cook Inlet Pipeline Company and Kenai Pipeline Company receive the oil after it runs through a custody meter which measures the quantity. The only source document that the State receives in support of tax and royalty returns are meter tickets which report the amount of oil that passed through the custody meters during the month.

The meter tickets are supposed to be prepared and witnessed by a representative of the pipeline company and a representative of the oil producer. Employees of the State Division of Oil and Gas sign the meter ticket as a third witness when they are present to observe preparation of the ticket.

Out of 400 meter run tickets received in support of 1972 royalty returns, approximately 70 were printed by an automatic printing device at the meter station. The printing on about half of the above mentioned 70 tickets was illegible and hand written over. All other tickets were hand written. Only six of the 400 meter tickets were witnessed by a State employee.

2d SSHB 803 -

Smith Moved that the bill be passed out of Committee - Motion failed on Voice Vote.

(HB 346)

pg 1 Line 18 1/2 old language

Tom Williams - Dir of Petroleum Revenue, Dept of Rev.  
Question of where the valuation pt. of oil + gas should be.  
After removal of water globules and dissolved gasses oil is metered now - In other states production tax has been derived from the oil after cleansing.

Bill attempts to place value of oil at the metering pt.  
State doesn't believe it should absorb the gathering costs - cleaning + dehydration (Heater Treater) costs.

pg 1 line 18

CS SB 295: Average daily per well ~~the~~ production. X out for each well for the calendar month in barrels,

pg 2 line 2 daily per well production - delete ["for each well for the calendar month"]

pg 4 (15) "Average daily per well production" means arithmetic average of all ~~the~~ wells contributing to a meter point or  $ADP = \frac{P_T}{W \times D}$  when  $P_T$  = total production in barrels at the production point for a calendar month.  $W$  = Number of wells feeding the production point, and  $D$  = number of days each well produces in a calendar month.

present rates This bill would lower states income somewhat.