

## II. Brief History of the Area's Economy

## History of Craig

(A portion of the following is excerpted from the  
**Craig Comprehensive Plan, 1987**)

In 1907, Craig Millar and eight Haida men established a saltery at Fish Egg Island. The settlement consisted of shacks and tents for saltery workers. Between 1908 and 1911, a permanent saltery and a cold storage facility along with 20-25 houses were constructed at what is now the location of the City of Craig.

In 1912, a cannery was built which packed 57,501 cases in its first year. The salmon processing industry boomed as the demand for canned salmon rose during World War I. In this period, the number of Alaskan canneries increased from 81 in 1914 to 135 in 1918. The peak production at the Craig cannery occurred in 1917 when it was purchased by the Columbia Salmon Canning Company.

The year 1912 brought further economic development and growth to Craig. In 1912, the first school was constructed, the first post office was opened and E.M. Streeter, a Tacoma sawmill operator, opened the first sawmill. Since sawmills in Southeast Alaska were usually opened in conjunction with a cannery, mine, town etc., many mills closed soon after the initial development was completed when no other markets developed for their lumber. The Craig mill faced the same situation and was sold to the Craig Lumber Company. The mill operated profitably, however, until the close of World War I when the demand for spruce for military aircraft ceased.

The economy of the town declined after World War I, but Craig continued to diversify and become the center of island government. It served as the seat of a U.S. Commissioner and a U.S. Marshall. A ranger station was established in Craig in 1919.

Craig had been a part of the Tongass National Forest since 1910, when the national forest was established. But in 1922, it was detached from the national forest so that residents could apply for patents to their land and petition for a municipal government.

During the 1920's, a wireless station, bi-annual steamer visits from Seattle, and mail and freight shipments from Ketchikan were established.

When the depression came, the price of salmon dropped sharply. In 1931 many Craig fishermen struck in order to obtain a higher price for their salmon. Although the salmon market

continued to slump, apart from the strike the effects of the depression were not as evident in Craig as in other areas. A second cannery opened in Craig in 1935, the Libby cannery expanded and modernized and government sponsored WPA and CCC projects provided additional jobs. The Craig-Klawock highway and several Forest Service trails were constructed during the depression as part of these two federal programs.

By 1939, Craig's year-round population had reached 505. In 1941, a record salmon catch gave the economy an additional boost, but declining salmon runs and World War II brought an end to what had been ten years of sustained growth. The draft and a boom in wartime industry in Sitka and Seattle caused many in Craig to leave. By 1950, Craig's population had dropped to 374.

Reduced fishery production in the early 1950's and the destruction of the Libby cannery, which burned in 1956, combined to accelerate the decline in the local economy. By 1958, the population in Craig had dwindled to 257.

In 1954 the Ketchikan Pulp Company mill opened. It had no immediate impact on Craig's economy, but timber sales for the mill on Prince of Wales led to increased logging activity and the stationing of more Forest Service personnel on the island.

The 1960's saw a continued economic slump for Craig as a result of several years of poor salmon runs. In 1959, Alaska was granted statehood. The new governor made a commitment to restore the salmon fishery, but the rehabilitation of the salmon runs would be a gradual process. During this time, Klawock maintained the only operating cannery on Prince of Wales Island while Craig was little more than a maintenance center for the Columbia Ward fishing fleet.

From 1960 to 1970, Craig's population remained fairly constant, but with the 1970's the local economy began to recover due in part to the efforts of two economic development associations. The Craig Development Corporation obtained a Small Business Administration loan to build a new cold storage in 1969. The West Coast Development Association petitioned the Department of Agriculture to hold a local hearing for a Special Use Permit from the Forest Service in order to obtain land for a sawmill site. Undaunted by an initial response from the State Legislature to the effect that the area should look to producing decorative cedar canoe paddles, canned blueberries and pickled food products for economic development, the association persevered and succeeded in securing land and attracting the Alaska Timber Company to build a sawmill near Klawock.

Also during this same period, Craig began to establish itself as the government and commercial center for the rest of Prince of Wales Island. A state trooper and magistrate were permanently

stationed in Craig. Sewer and water improvements were made with funds from federal grants. A road was built from Craig to Hollis (on the east coast of the island) which linked Craig and Klawock with the Alaska Marine Highway System (state ferry). A new high school was built. The Klawock airport was constructed and the road from Craig to Klawock was widened and straightened.

In 1971, the Alaska Native Claims Settlement Act (ANCSA) created regional and village corporations throughout Alaska. The Craig village corporation, Shaan-Seet, which grew out of this legislation, has been active in the local economy and has provided employment in the community through several different enterprises. The corporation has logged between 10 and 20 MMBF annually during the 1980's. It owns and operates the Haidaway Lodge, Restaurant and Bar, two mobile home parks, an office building, as well as its own corporate office building. Together with Klawock Heenya and Sealaska, Shaan-Seet also owns the KIDCO dock in Klawock.

Since 1980 Craig's population jumped from 587 to 1637 (1991) due to increased employment opportunities from improved salmon runs, extensive logging on Native and USFS lands, timber processing, state funded capital projects and the community's continued growth as a retail and service center for the rest of the island. The only major economic setback during the 1980's was the closure of Alaska Timber Company's sawmill at Klawock which employed between 60-100 people. The mill declared bankruptcy and remained closed from 1984 to 1987 due to depressed timber markets. Since 1992, the increasing price of wood, as well as a settlement between the mill's operators and landlord, has led to recent improvements at the mill. The facility is expected to reopen by Spring, 1994. This and other economic developments in the area during the 1980's, however, are dealt with in greater detail in the following section (III. Area and Its Economy).

### III Area and Its Economy

## A. Area

### 1. Location

Craig is located on the west coast of Prince of Wales Island in southern Southeast Alaska (see Appendix A: Location Map of Craig, Alaska). It serves as the staging area for the commercial fishing fleet that fishes the west coast of Prince of Wales from Sea Otter Sound to the north and Cape Chacon to the south.

### 2. Size

Craig has a federal townsite patent on 46.87 acres (see Appendix B: Map of Existing Land Use in Craig); this patent was issued by the BLM Townsite Trustee on November 24, 1923. The trustee in turn deeded occupied parcels to residents and vacant subdivided lots to the City. Other identified parcels include a school site withdrawal of 3.29 acres.

In June, 1973 the State of Alaska sold the land comprising East Craig at public auction. Most of this area is now privately owned, but much of it is also the subject of the ongoing Mental Health Lands litigation that questions the legality of the State of Alaska's sale of the land. The City of Craig annexed this area, thereby increasing its land area by approximately 200%. The total area within the city limits is approximately 9.5 square miles.

### 3. Property Acquisitions

The city gained ownership of 671 acres of tideland in June of 1992 when the State patented ATS 1410. This patent conveyed to the city ownership of much of the upland adjacent tidelands east of Craig proper within the city limits. The city expects that some of the tideland will be identified for marine industrial related uses.

In April of 1992, the city and Shaan-Seet, Inc. reached an agreement on the 14(c)(3) reconveyance requirement of the Alaska Native Claims Settlement Act. The agreement transfers to city ownership of approximately 630 acres of upland both within and outside of the Craig city limits. The city has identified uses for each of the 19 parcels included in the reconveyance. Some of these properties, such as those at False Island, will be developed for marine industrial and commercial uses.

### 4. Distance from Major Cities

Craig is 55 air miles northwest of Ketchikan; the flight from Craig to Ketchikan takes approximately 35 minutes.

Craig is linked to the east coast of Prince of Wales Island and the Hollis ferry terminal by an asphalt road (30 miles). Travelling by car or truck, one can reach Hollis from Craig in approximately 40 minutes. The terminal at Hollis is part of the Alaska Marine Highway System and is served by the AMHS ferries Aurora and LeConte. The ferry trip to Ketchikan from Hollis takes 3.0 to 3.5 hours depending upon the weather.

From Ketchikan one is 235 miles from Juneau to the north and 679 miles from Seattle to the south. Anchorage is approximately the same distance from Ketchikan as Seattle, but, due to the orientation of the Craig economy (fishing, timber and tourism), Craig's tie to Anchorage is relatively weak compared with its connection to Seattle and Juneau.

## 5. Distribution of Population

The population of Craig is divided between the original townsite and East Craig. Since the annexing of East Craig in 1973, East Craig has provided the space needed to accommodate the community's exponential growth (217% : since 1975, the population in Craig has gone from 484 to 1,637). The present population is almost equally divided between the original townsite and East Craig.

## 6. Geographic Features

The significant geographic features (coastline, elevation, etc.) in and around Craig are readily discernible in the map of the Craig Coastal Management District Boundary provided in the appendix (see Appendix C: Map of the Craig Coastal Management District Boundary).

The original Craig townsite is on an isthmus that juts out into Buccarelli Bay. At one time Craig was on an island, but the construction of a causeway that now separates the city's North and South harbors connects Craig to Prince of Wales Island.

## 7. Transportation Linkages

Craig is connected by a paved road to the Alaska Marine Highway System (AMHS) and is accessible by car and truck from Ketchikan and other cities with Alaska ferry service. Much of the freight for Craig arrives by truck via ferries from Ketchikan. The road system also connects Craig with Thorne Bay, Klawock and Hydaburg and, thereby, allows it to act as a service and supply center for the rest of the island.

In 1993, the summer AMHS schedule included nine departures to Ketchikan and nine arrivals in Hollis each week. The winter schedule for Hollis calls for only three weekly northbound and southbound stops by either the LeConte or the Aurora.

Craig is served by a single barge line (Alaska Outport) that comes up from Seattle twice every month in the summer and approximately half as often in the winter.

Six miles north of Craig is the Peratovich Airport, which has 5,000 feet of asphalt runway and can accommodate a Boeing 737; however, it lacks navigational aids and is not yet jet certified. The draft airport master plan calls for the installation of navigational aids to be installed over the next seven years to allow for passenger and cargo flights in all weather types. Electricity was provided to the airport in 1992. Runway lighting will be completed in the summer of 1993.

Craig is also served by two airlines out of Ketchikan (Taquan and Ketchikan) that make scheduled daily flights between Craig and Ketchikan (and Ketchikan International Airport). All of these airlines use DeHavilland beavers and otters as well as wheel planes and land at either the Craig float plane dock or at Peratovich Airport.

## **B. Population and Labor Force**

### **1. Population Changes**

The dramatic growth in Craig's population over the last 17 years has followed fairly closely the recent growth in the timber industry on the west coast of Prince of Wales.

Large scale logging has been occurring on Prince of Wales Island for the last 36 years, but prior to the early 1980's most of this logging was done either on the northern end or the east coast of the island. Before the late 1970's there were no roads connecting Craig with these areas where most of the logging was occurring. Consequently, until 1972 Craig's economy relied almost completely on commercial fishing.

In 1972-73 Ed Head built a sawmill (Klawock Timber Inc.) in Klawock and employed approximately 100 people (two shifts). The presence of the mill had a direct impact on the population of Craig where land for home sites was much more available than it was in Klawock.

The mill not only provided year-round employment, which attracted families to the area, it also acted as a recruiter for the area since many of the people who originally came to Craig to work at the mill found other work (construction, commercial fishing, etc.) during the mill's periodic closures and continued to live in Craig rather than move away.

In the late 1970's and early 1980's, the native village corporations in Klawock (Klawock-Heenya) and Craig (Shaan-Seet) began to log the timber in the area. This was timber they had selected as part of the Alaska Native Claims Settlement Act (ANCSA) of 1971. This logging activity brought about a rapid increase in the population of Craig which housed most of the loggers and their families that migrated into the area. Logging in the Craig/Klawock area reached a peak in 1983 and declined in 1984 due to a drop in log prices (**Timber Supply and Demand Report, 706a**, 1988, USFS, Region 10). An increase in log prices from 1986 to 1989 produced another spurt of logging activity and this was reflected in another period of population growth in Craig.

Although the timber industry has been the major force driving Craig's population growth, it is not the only reason Craig has grown during the 1980's. The development of a road system on Prince of Wales Island has also contributed to Craig's growth by linking Craig to the other towns and villages on the island. Craig is close to the center of this system. As a result, Craig has been able to play the role of service and supply center for the rest of the island. The community's growth in this regard is reflected in the rapid expansion in retail and service sector employment during the 1980's which has grown faster than the area's population (see Appendix D: Non-Agricultural Wage and Salary Employment Craig/Klawock 1980 - 1992). The employment in both of these sectors grew by a factor of 3.8 between 1980 and 1992.

The combination of available land for homes, a substantial retail and service sector and a road system that links Craig with the entire island have all contributed to make Craig an attractive location for logging families that in the past would have been housed in isolated camps or in Ketchikan or stayed in the lower 48 (Washington, Oregon, California, etc.). As a result, Craig now benefits from the logging activity going on throughout Prince of Wales in a way that it could not prior to the construction of the island's road system. Without a comprehensive survey, there is no way to document or quantify this addition to the population. Telephone conversations with managers of logging camps operating in northern, eastern and southern parts of Prince of Wales, however, reveal that almost all of these operations have employees who are commuting from Craig.

## Population Changes 1950 - 1991

1950	1960	1970	1975	1980	1983	1986	1989	1990	1991
374	273	272	484	587	907	961	1,111/1,231 <sup>1</sup>	1,260/1,535 <sup>2</sup>	1,637

Source: 1950-1985 **Craig Comprehensive Plan**, 1987; 1986, 1989, Alaska Department of Labor; 1990 U.S. Bureau of the Census; 1991 City of Craig Census, Approved by Alaska Department of Community and Regional Affairs.

## 2. Population Characteristics

### a. Racial Composition

The 1980 Census showed that 43.6% of the Prince of Wales/Outer Ketchikan Census Area population was Alaska Native. The Alaska Department of Labor in 1989 published an estimate for 1986 that claimed 42.8% of the POW/OK Census Area was Alaska Native.

There are no statistics with which to make an estimate of the racial composition of Craig. Although the federal and state estimates may in fact reflect the racial composition of Craig, there is no reason to assume this. The communities in the POW/OK Census Area do not typically have a 42% -43% Alaska Native population. Instead, they tend to be either predominantly (or almost exclusively) Alaska Native (Kasaan, Klawock, Hydaburg, Metlakatla) or non-Native (Thorne Bay, Coffman, Meyers Chuck, Hyder). Craig, however, is the exception. Over the last twenty years, Craig has gone from being predominantly Alaska Native with a substantial non-Native population to being predominantly non-Native with a substantial Alaska Native population. In the absence of any recent survey of the Craig population (or until the results of the 1990 Census are published), one can only speculate

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<sup>1</sup> The Alaska Department of Labor (ADOL) estimate (1,111) is much lower than the estimate that was done by the City of Craig in 1989. The City of Craig estimated its population to be 1,231 in 1989.

<sup>2</sup> The 1990 Census figures are preliminary. ADOL and the U.S. Census Bureau believe the 1,260 figure is high since it probably contains people who will ultimately be assigned to another place of residence. However, the Alaska Department of Community

and Regional Affairs accepts Craig's own population count (November, 1990) which estimates the population in Craig to be 1,535.

as to what percentage of the current population in Craig is Alaska Native. Some of the people who have lived in Craig for more than twenty years claim that the population has shifted as a result of the large in migration of non-Native families; they estimate that Alaska Natives account for only 30% - 40% of the Craig population when prior to 1970 Native Alaskans had made up more than 70% of the population. Recent (Fall, 1990) school (K-12) population figures for the Craig School District support this estimate. They show the ratio of native to non-native school age children to be approximately 1:2 (120 out of 310 or 38.7%).

#### b. Age and Sex

In 1980, Craig's median age (26.7) was slightly older than the median age for the POW/OK Census Area (25.7). Also the 20-64 year old age group (58%) in Craig was a larger percentage of the same age group in the POW/OK Census Area (52%) and the 0-19 age group in Craig was a significantly smaller percentage (37%) of the Craig population than was the same age group in the POW/OK Census Area (44%). The percentage of males in Craig was slightly higher than it was in POW/OK. These differences are consistent with what one would expect. During the 1970's, Craig experienced more in migration than the area as a whole and the in migrating population in Alaska is usually older than twenty and more male than female.

In 1987 ADOL did an estimate of the age and sex composition of the POW/OK Census Area (**Alaska Population Overview: 1986 and Provisional 1987 Estimates**, ADOL, 1989). It greatly resembles the age and sex profile of Craig in 1980. One would expect, though, that Craig, because it continued to grow more rapidly than the rest of the POW/OK Census Area, would show a higher percentage of 20-64 year olds and a higher percentage of males than females than it did in 1980. Since 1983, school enrollments in Craig have not increased at the same rate as has the Craig population as a whole (1983: 151 school enrollment, 907 population; 1990: 310 school enrollment, 1,535 population; 1991: 314 school enrollment, 1,637 population) which suggests that a larger percentage of the in migrating population during this period have been single adults as opposed to families and married couples.

Sex and Age Profiles for Craig (1980) and  
Prince of Wales/Outer Ketchikan (1980, 1987)

Craig 1980		Craig 1990		Craig 1991	
Age	Total	Age	Total	Age	Total
0-4	42	0-4	144	0-4	189
5-9	32	5-17	286	5-17	372
10-14	54	18-20	41	18-20	52
15-19	67	21-24	60	21-24	76
20-24	40	25-44	529	25-44	692
25-34	113	45-54	110	45-54	142
35-44	75	55-59	36	55-59	47
45-54	44	60-64	29	60-64	39
55-59	15	65-74	20	65-74	25
60 & Over	35	75 & Over	3	75 & Over	3
Median Age	26.7		28.5		28.5
Percent Male	54		53		53

Source: Craig 1980 - U.S. Bureau of the Census; Craig and POW/OK - **Alaska Population Overview 1986 and Provisional 1987 Estimates**, ADOL, 1990 - U.S. Bureau of the Census; 1991 - City of Craig

#### d. Craig Unemployment Rate and Characteristics of the Unemployed

As was stated above no estimate of unemployment for Craig has been developed by the Alaska Department of Labor. ADOL does, however, publish monthly an estimate of the unemployment rate for the POW/OK Census Area. Since 1986, the unemployment rate in the POW/OK Census Area has ranged between 8.2% and 11.9% in July and between 16.9% and 24.4% in January.

Applications for unemployment benefits provide an extensive data base that profiles the unemployed in Craig. Included here are the profiles for 1984, when employment in Craig was relatively low, 1989, when employment was relatively high, and 1992, the most current year for which data is available, to show that there were actually more claims in a period of high employment. This can be explained by the seasonality of the work in Craig since more seasonal workers are likely to apply for unemployment benefits when there is high employment than when employment is low.

The 1989 and 1992 unemployment claims reflect the change in the work force as a result of the resurgence of the timber industry and the in migration of workers into the area to work in the woods and the sawmill. Most of the increase in the number of claims was in the manufacturing industry which includes logging

and sawmill employment. A higher percentage of the claims in 1992 were older, with 51% in 1992 as opposed to 36% in the 35-54 age group in earlier years, although the single largest age group is the 21 to 24 year olds; and white (70% in 1992 as opposed to 55% in 1984). The claimants in 1992 also reflect the higher wages in the timber industry (34% above \$30,000 in 1989 as opposed to only 11% in 1984).

c. Size of the Labor Force (Exclusive of Seafood Harvesting)  
by Industry and Season for the Craig/Klawock Sub-Area  
(there are no sectoral employment estimates for Craig)

Sector	July 1988		January 1989		September 1992	
	Units	Employment	Units	Employment	Units	Employment
Construction	6	69	5	(20) <sup>1</sup>	4	39
Manufacturing	8	(282) <sup>1</sup>	7	(110) <sup>1</sup>	12	215
TranComUt <sup>2</sup>	11	48	12	44	12	91
Retail	22	151	21	112	25	186
FIRE <sup>3</sup>	4	(24) <sup>1</sup>	5	30	5	57
Services	12	62	12	61	18	82
AgForFis <sup>4</sup>	2	(2) <sup>1</sup>	2	(2) <sup>1</sup>	1	---
Federal	3	35	3	23	4	41
State	5	33	5	27	8	34
Local	5	101	5	101	4	128
<b>Total Employed</b>	<b>78</b>	<b>807</b>	<b>77</b>	<b>530</b>	<b>93</b>	<b>873</b>
<b>Total Unemployed</b>	<b>(8%)<sup>5</sup></b>	<b>70</b>	<b>(19.6%)<sup>5</sup></b>	<b>129</b>	<b>8.4%</b>	<b>75</b>
<b>Total Work Force</b>		<b>877</b>		<b>659</b>		<b>887</b>

Source: Alaska Department of Labor

<sup>1</sup> Construction and FIRE employment in ( ) are estimated based on previous quarters when employment in the sector was not suppressed. In the case of Manufacturing, ADOL figures have been ignored in favor of estimates based on conversations with employers in the sector. Manufacturing employment assumes: the sawmill is running two shifts in July and January; that logging employment is zero in January. There are no quarterly figures for AgForFis but based on POW/OK quarterly reports published in **Alaska Statistical Quarterly** by ADOL this sector cannot have more than one or two employees per reporting unit.

<sup>2</sup> TranComUt - Transportation, Communication and Utilities

<sup>3</sup> FIRE - Finance, Insurance and Real Estate

<sup>4</sup> AgForFis - Agriculture, Forestry (tree farming), Fish (fish

farming)

<sup>5</sup> There are no unemployment rates published for the Craig/Klawock area. The unemployment rates used here are ADOL estimates of the unemployment rate for the POW/OK Census Area for July 1988 and January 1989. September 1992 estimates are based on a population of 1,637 (City of Craig population estimate, 1991).

There was no change from 1984 to 1989 in the percentage of the claims made by males (77%) and females (23%). However, between 1989 and 1992, the number of female claimants jumped to 29 percent. More claims were made by claimants with dependents in 1992 (52%) than in 1989 (47%) or 1984 (38%) which suggests that the in migration of workers to work in the timber industry included more families in 1989 than in 1984. The data also appears consistent with the growing number of families headed by single parents, primarily females.

The changes from 1989 to 1992 show trends similar to those between 1984 and 1989, and also display changing demographics. Unemployment claims in the manufacturing sector again increased, although only by 19 percent, a significant drop from the 64 percent increase between 1984 and 1989. 1992 Unemployment claims in the services sector jumped 115 percent over the 1989 level, demonstrating that local businesses are developing an agglomeration economy around the manufacturing base.

Large changes are also evident in the transportation, communications and utilities sector. Claims in this area in 1992 jumped to a level 64 percent above that in 1989. Similarly, unemployment claims for public administration increase 75 percent during the same time. These increases likely stem from the same conditions in the services sector: the increased manufacturing base has made more opportunities possible in the service sector of the economy. Additionally, an increased population has demanded increasing services from government, causing changes in government employment.

The data also reflects an influx of young workers to the area since 1989. Claims filed by individuals 21-24 years old increased 59 percent, while claims filed by those aged 25-54 increased at lower rates.

The unemployment data shows an economy that is behaving in a rational manner. Increases in the support, services and government sectors is a reasonable and predictable result of an active manufacturing base (logging and fishing).

#### Unemployment Claims Profiles: Craig 1984, 1989 & 1992

	1984	1989	1992
Occupation			
Agriculture Fishing and Forestry	57	74	58

Clerical and Sales	20	14	35
Machine Trades	26	18	30
Processing	7	2	14
Professional, Technical, Managerial	21	27	27
Service	26	25	41
Structural Work	50	48	75
Miscellaneous and Unknown	53	-	102
Unemployment Claims Profiles: Craig 1984, 1989 & 1992 (cont'd)			
	1984	1989	1992
Industry			
Agriculture, Forestry, and Fishing	-	4	6
Mining	1	-	0
Contract Construction	31	43	34
Manufacturing	82	135	161
Transport., Communication and Utilities	39	29	47
Trade	28	21	25
Finance, Insurance and Real Estate	7	32	33
Services	18	26	55
Public Administration	33	12	21
Unclassified	6	-	0
Sex			
Female	55	69	110
Male	190	233	272
Age			
less than 21	9	1	4
21-24	29	17	27
25-34	101	103	131
35-44	57	100	126
45-54	33	55	70
55-64	14	23	22
65 and older	2	3	2
Ethnic			
Alaska Native	105	85	96
Asian and Pacific Islander	2	-	5
Black	2	-	3
Hispanic	1	3	4
White	135	212	269
No Information	-	2	5
Annual Income			
1000- 9999	84	52	77
10000-19999	67	84	99
20000-29999	68	64	107
30000-39999	17	58	56
40000-49999	5	30	29
50000-59999	3	10	9
60000- +	1	4	5
Dependents			
0	152	159	198

1	31	49	67
2	33	56	66
3 or more	29	38	49

Source: Alaska Department of Labor

e. Craig/Klawock Wage Levels, 1988, 1991, 1992

Average Monthly Wage

Sector	Craig/Klawock 4/1988 <sup>1</sup>	Craig/Klawock 4/1991	Craig/Klawock 3/1992
Construction	\$1,616	\$----	\$2,717
Manufacturing	\$2,503	\$3,528	\$2,902
TranComUt	\$2,558	\$2,787	\$3,234
Retail	\$1,202	\$1,207	\$1,369
FIRE <sup>2</sup>	\$1,616	\$2,031	\$3,031
Services	\$1,056	\$1,034	\$1,151
Federal	\$2,800	\$2,661	\$2,285
State	\$2,868	\$3,647	\$3,685
Local <sup>3</sup>	\$1,884	\$2,140	\$1,821

Source: Alaska Department of Labor

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<sup>1</sup> 4th Quarter 1988 was selected as the period for comparison because it was the most recent period when there was the least amount of suppressed employment and wage data.

<sup>2</sup> FIRE for Craig/Klawock in the 4th Quarter 1988 was suppressed; the figures used here for Craig/Klawock, POW/OK and Ketchikan are from 1st Quarter 1989.

<sup>3</sup> Local government average wage is difficult to compare from community to community because ADOL includes in this category payments to appointed local representatives along with the wages

for full-time and part-time employees. Since this kind of payment varies significantly from community to community, the average wage in this category may also appear to vary significantly even though the monthly wage for full-time and part-time employees does not.

### C. Economy

#### 1. Estimate of the Annual Non-Agricultural Wage and Salary Employment and Income for the Craig/Klawock Sub-Area by Industry Sector (Based on 1991 and 1992 Employment and Wage Figures for the Craig/Klawock Sub-Area)

	Annual Average Employment	% Total Employment	Total Annual Wages	% Total Wages	Annual Average Wage
Industry Sector					
Private Industry					
Construction	33	4%	\$1,003,000	4%	\$30,404
Manufacturing	199	25%	\$6,050,000	26%	\$37,485
TranComUt	70	9%	\$2,415,000	10%	\$34,479
Retail	171	23%	\$2,709,000	12%	\$15,843
FIRE	47	6%	\$1,583,000	7%	\$33,681
Services	77	9%	\$1,039,000	4%	\$13,500
<b>Private Industry Subtotal</b>	<b>597</b>	<b>76%</b>	<b>\$14,799,000</b>	<b>63%</b>	<b>\$27,552</b>
Government					
Federal	34	4%	\$1,034,000	4%	\$30,400
State	32	4%	\$1,372,000	6%	\$42,900
Local	153	19%	\$4,041,000	17%	\$26,400
<b>Government Subtotal</b>	<b>219</b>	<b>24%</b>	<b>\$6,447,000</b>	<b>27%</b>	<b>\$33,233</b>
<b>Total</b>	<b>816</b>	<b>100%</b>	<b>\$21,246,000</b>	<b>100%</b>	<b>\$29,446</b>

Source: Estimates are based on wage and employment data for the Craig/Klawock Sub-Area provided

by the Alaska Department of Labor (see Appendix D: Non-Agricultural Wage and Salary Craig/Klawock 1980 - 1992, ), Craig Economic Indicators 1991-1992

## 2. Changes in Employment in the Craig/Klawock Sub-Area by Industry Sector 1980 - 1989

The following summary of changes in employment by industry sector is, for the most part, based on employment data for the Craig/Klawock Sub-Area provided by the Alaska Department of Labor (see Appendix D: Non-Agricultural Wage and Salary Employment Craig/Klawock 1980 - 1992). ADOL admits, though, that its figures for manufacturing employment for Craig/Klawock 1980 - 1987 are incorrect due to a reporting error. Rather than try to correct this error, it has been reproduced as is in the appendix, but in the following discussion of manufacturing employment ADOL's employment figures for 1980 - 1987 have been ignored in favor of interviews with individuals in the manufacturing sector who remember the changes in employment that took place during this period and what precipitated them.

There are also problems with the data for the transportation, communication and utilities sector and the construction sector. Here, due to the extensive suppression of data in both sectors, it is possible only to speculate (based on what is known about the employment in these sectors in the Prince of Wales/Outer Ketchikan Census Area as a whole) as to what the employment trends have been in the 1980's. Unlike the manufacturing sector, these two sectors are relatively diffuse with several participants which precludes (given the scope of this project) canvassing them to determine what happened in these sectors. Despite the limitations of the data, 80% of the employment activity in the Craig/Klawock Sub-Area for 1980 -1992 can be explained with a high degree of certainty.

### a. *Construction*

Construction employment in 1980-81 was a very small part of the Craig/Klawock economy (15 jobs), but toward the end of 1981 it increased rapidly and peaked (45) toward the beginning of 1983 only to fall off rapidly to a low of 20 jobs in the first quarter of 1984. Between 1984 and 1986 construction employment fluctuated between a low of 20 jobs and a high of 35 jobs.

Between 1986 and the third quarter of 1988 there is no data, but the number of units (6) remained fairly constant. A comparison of the Craig/Klawock Sub-Area Construction employment with the POW/OK Census Area construction employment prior to 1986 shows the two rising and falling parallel to each other with the Craig/Klawock Sub-Area consistently accounting for two thirds to three fourths of the POW/OK Construction employment. Assuming this

was also the case between 1986 and the third quarter of 1988, construction in the Craig/Klawock Sub-Area fluctuated between 15 and 28 jobs until the second quarter when it doubled to 48 jobs and rose again in the third quarter of 1988 to 68 jobs and rose again in the fourth quarter of 1988 to 63 jobs. It began to decline in the first quarter of 1989, falling to 53 jobs. This decline has continued through 1991. However, 1992 saw a steady increase in the number of construction jobs, rising from 23 in the fourth quarter of 1991 to 39 jobs by the end of the third quarter of 1992. The level is expected to increase gradually through 1993.

Although the data reflects to some extent a seasonal pattern, the ups and downs in construction employment in the Craig/Klawock Sub-Area during the 1980's were somewhat erratic with little consequence for the area economy as a whole. Only toward the end of the decade did construction have a significant impact on the area economy. This late surge can be explained by an increase in road construction for the State of Alaska and by a resurgence in the timber industry and increased logging road construction. Although the level of employment is less than what it was toward the end of the 1980's, the increase through 1992 can be attributed to a high market for timber and the need for construction of logging roads.

#### *b. Manufacturing*

Manufacturing in the Craig/Klawock Sub-Area encompasses the timber industry (logging and sawmill employment) and seafood processing (commercial fishing is considered self-employment and is not included).

Timber industry employment in Craig has fluctuated wildly in the 1980's. Native logging, though, which began slowly and increased rapidly in the early 1980's, has been a stabilizing influence. Native logging employment during the 1980's remained between 110 and 150 jobs annually. As a result of the strong log market in the second half of the decade, Native logging employment stayed around 150 jobs.

Employment at the Klawock sawmill has been much more erratic. When the mill operated, employment fluctuated between 65 and 100 jobs depending on whether or not there were two shifts. But in 1984, the mill closed as a result of depressed timber markets and did not open again until 1987. Since 1987, the mill has participated in the general resurgence of the timber industry; during most of this period, the mill ran two shifts. The softening in the Japanese timber market, though, forced the mill to operate only one and half shifts (85 jobs) in 1990-91. The mill closed in

1991 and remains closed until ownership and other legal entanglements can be cleared. It is expected that the mill will reopen by 1994 to process logs from small timber sales in the POW area. The reopening of the mill should see the renewal of the approximate 85 jobs that were lost at shutdown, with the resulting multiplicative effect of payroll dollars in the community adding additional jobs.

Seafood processing has only accounted for a few jobs in the Craig/Klawock Sub-Area since the 1980's. The addition of Silver Lining Seafoods has increased the employment in this industry, but only slightly. During the peak of the fishing season (3rd Quarter), seafood processing never exceeded 40 jobs (including the Columbia Ward maintenance jobs) in the 1980's and only maintained this level of employment for a short period during the year. Year round seafood employment, even with the addition of Silver Lining, has not exceeded 14 jobs.

#### *c. Transportation, Communication and Utilities*

Based on the sketchy data that is available for this sector for the Craig/Klawock Sub-Area and the general trend in this sector during the 1980's for the POW/OK Census as a whole, one can observe a general decline in overall annual employment in the TranComUt sector between 1980 and mid-1984 with distinct peaks in the third quarter of each year. However, from mid-1984 to early 1989 there was a general recovery in this sector, a recovery which continues into 1993. These two employment patterns suggest that employment in this sector is heavily influenced by the float plane taxi industry which is also very seasonal and has fallen and risen with the fortunes of the timber industry during the 1980's. Recent prospecting work on the island, increasing charter boat activity, as well as the high price for logs is responsible for the marked increase in employment in this area during 1992 and 1993.

In this sector there can be radical changes in the level of employment from one season to the next. After the third quarter of 1985, when Craig/Klawock's TranComUt employment peaked at 65 jobs, there were only 25 jobs in this sector. This 4th Quarter drop was followed by another decline in the 1st Quarter of 1986 which was in turn followed by a resurgence in the 2nd Quarter of 1986 which saw TranComUt employment return to 60 jobs. After 1986 the peaks and valleys in TranComUt employment in the POW/OK Census Area appear to level off. In the Craig/Klawock Sub-Area, from the 3rd Quarter of 1988 to the 2nd Quarter of 1989, TranComUt employment peaked at 58 jobs in the 4th Quarter of 1988 and only fell to a low of 40 jobs in the 1st Quarter of 1989. The sector reached a

total of 91 jobs in the third quarter of 1992, the latest quarter for which data are available.

#### *d. Retail*

The growth in employment in the retail sector in the Craig/Klawock Sub-Area has clearly been tied to the population growth in Craig and Prince of Wales as a whole. Just as the population in the Craig/Klawock Sub-Area has grown steadily despite declines and advances in various industry sectors, so also has the employment in the retail sector which posted increases in employment every year from 1980 to 1992.

But, while the population in Craig grew by 200% from 1980 to 1991, employment in the retail sector grew 273% (from 44 to 164 jobs). As was mentioned above, the expansion and improvement of the road system on Prince of Wales has directly benefited the Craig/Klawock area by reinforcing its position as a retail center for the whole island. The growth in the retail trade sector above and beyond the growth in the local population reflects the extent to which the Craig/Klawock retail sector is serving a market beyond its own population base.

#### *e. Finance, Insurance and Real Estate*

Employment in the FIRE sector grew steadily but modestly from 1980 to 1985 when it went from 15 - 20 jobs a year to 30 - 40 jobs a year. In 1985, after peaking in the 2nd Quarter with an employment of 43 jobs, the FIRE sector went into a steady but modest decline through the beginning of 1988 when employment in this sector began to rise. These changes, however, are probably more illusory than actual and have little or no significance since for 90% of the 1980's, employment in the FIRE sector stayed, give or take five jobs, around 25 jobs.

Since the first quarter of 1990, however, the FIRE sector has been responsible for an average of nearly 45 jobs. Since the first quarter of 1991, the average employment in the sector has increased to 47 jobs. With the closing of Key Bank's Klawock branch, this sector will see some decline in 1993. However, that loss could be reduced if the Klawock sawmill reopens, creating other opportunities in this sector.

#### *f. Services*

Employment in the services sector except for a brief decline in 1981 and 1982 followed a pattern similar to the employment in the retail sector. After the 2nd Quarter of 1982, services sector employment rose each year through 1987. By the end of the 2nd

quarter of 1989, services employment was three times greater (76 jobs) than it was in 1980. By third quarter 1992, the sector had maintained a higher average employment rate than in 1989. However, the sector has had as many as 90 jobs during the year.

#### *g. Government*

Both State and Local Government employment increased 100% between 1980 and 1989. This increase was driven by the increase in the Craig/Klawock Sub-Area population and the growth of the State budget. Average annual State employment in the Craig/Klawock Sub-Area went from 14 jobs in 1980 to 29 jobs in 1985 when it levelled off. This pattern coincides with the growth and levelling off of the State budget. Likewise, Local Government employment, which includes school teachers (which are funded by the State), went from 59 jobs in 1980 to 159 jobs in 1985 and fell back to 128 jobs in 1988 and 1989. Local government averaged 150 jobs during the first three quarters of 1992, unchanged from the 1991 average.

In contrast, Federal Government employment, which includes both the U.S. Forest Service and the U.S. Postal Service, posted only a modest 20% increase between 1980 and 1985 when it too levelled off and ended the 1980's with only four more jobs than when it started the decade.

### **D. Trends in Craig's Basic Industries: Fisheries, Timber, Tourism and Mining**

#### **1. Fisheries**

##### **a. Changes in Limited Entry Permit Ownership Among Craig Residents 1975 - 1988<sup>1</sup>**

**Salmon Purse Seine:** (Southeast) - 12 permits were issued to Craig residents in 1975. This number fell to 9 in 1978 and rose steadily from 1978 to 1982 to 14 when it began to fall again falling to 9 permits by 1988. The number of permits has since remained largely unchanged (9 in 1989, 10 in 1990 and 8 in 1991).

Changes in the number of seine permits have been the result of either sale or purchase rather than migration (Alaska Commercial Fisheries Entries Commission). The decline in the number of seine permits in rural Southeast communities is occurring throughout the region. The beneficiaries of this movement appear to be the larger fishing communities in Southeast (ex. Ketchikan and Petersburg) that have more and better services and facilities for commercial fishermen.

**Salmon Drift Gillnet:** (Southeast) - 1 permit was issued to a Craig resident in 1975. It was sold in 1978 but stayed in Craig. In 1980 the permit holder left Craig; (Prince William Sound) - 1 permit was issued to a Craig resident in 1975 and there has been no change since then; (Bristol Bay) - Between 1985 and 1988 three permits were purchased by Craig residents; one of those permit holders moved away in 1986 leaving two permits still held by Craig residents. 1989 saw no salmon drift gillnet permits held by Craig residents. In 1990 and 1991 two such permits were held by individuals claiming Craig as their residence.

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<sup>1</sup> Commercial Fisheries Entry Commission, **Changes in Permanent Permit Ownership for Southeast By City Fisheries and Year, 1975 - 1988; Census report on Craig permits, 1989-91.**

**Salmon Power Troll:** (Statewide) - 39 permits were issued to Craig residents in 1975. As of 1988, 40 Craig residents held these permits for a net gain of one permit. During the 1970's and early 1980's the number of power troll permits held by Craig residents fell to a low of 27 permits (1981), but since 1981 there has been a gradual recovery of the resident power troll fleet in Craig. More power troll permits were bought by Craig residents between 1981 and 1988 than were sold and there was very little migration or power troll either into or out of Craig. The number of local permits has remained constant since 1989 with 42 to 43 power troll permits held locally.

**Salmon Hand Troll:** (Statewide) - The number of Hand Troll permits has increased from 20 in 1982 to 26 in 1988. Practically all of this increase has resulted from the purchase of permits by Craig residents. Migration accounted for only a net loss of two permits from 1982 to 1988. The number of such permits decreased in 1989 to 24 permits, then climbed to 26 in 1990 and to 27 in 1991.

b. Estimate of the Size and Impact of Commercial Fishing and Shellfish Aquaculture Employment on the Craig Economy

Limited entry permit ownership provides a mechanism for making a rough estimate of commercial fishing employment in Craig. Alaska Department of Labor has developed estimates of crew size for the different fisheries and gear groups (Salmon Purse Seine (Southeast) 5.25; Salmon Drift Gillnet (Southeast) 1.75; Salmon Drift Gillnet (Prince Wm. Sound) 1.75; Salmon Drift Gillnet (Bristol Bay) 1.75; Salmon Power Troll (Southeast) 1.75; Salmon Hand Troll (Southeast) 1.00). Multiplying these crew size figures by the number of limited entry permits owned by Craig residents, Craig commercial fishing employment is estimated to be 148 jobs, a net gain of 16 jobs from 1975 to 1991. One should

keep in mind, however, that a percentage of these jobs are held by non-residents, and no mechanism exists for measuring non-resident participation in the commercial fisheries where all of the permits are held by Alaska residents. Furthermore, none of these jobs are considered full-time since all of the fisheries are seasonal even though some fishermen, trollers for example, fish year round. Consequently, comparing fishing employment with Non-Agricultural Wage and Salary employment figures often results in comparing apples and oranges.

Because commercial fishing is so mobile, the impact of resident fleet employment on the Craig economy is probably less than employment in other sectors. This is compensated for by the impact of the transient fishing fleet that uses Craig as a base of operations; Craig serves as the staging area for the seine fleet that fishes Districts III and IV. These two districts encompass the west coast of Prince of Wales. During the months of July and August the seine fleet alone in Districts III and IV often exceeds 200 boats (see d. Seine Fleet Supported by the Community of Craig). When one considers that each seine boat has a crew of 5.25 people, the magnitude of the impact of this fleet on the community of Craig is obvious. During these months (3rd Quarter) the population, in effect, doubles and retail and services employment increases by 40% to 60%. According to local merchants, almost all of this increase can be attributed to the commercial fishing fleet.

In contrast, shellfish farming has relatively little impact on the Craig economy. At present, all of the shellfish farming on Prince of Wales is being done on the north end of the island. In the future, though, there could be two farms near Craig (see e. Shellfish Aquaculture: Proposed and Operating Farms on Prince of Wales Island). As fish processing expands in Craig and the airport in Klawock develops, the shellfish aquaculture that is planned for the island could have a significant impact on the Craig economy by providing Craig processors with more year round product.

#### d. Seine Fleet Supported by the Community of Craig

##### Size of the District III & IV Seine Fleet 1987 -1990

Year	District	Average Number of Boats per Week	High	Low	Number of Weeks Open
1987	III	44	79	9	2
	IV	99	151	64	7
1988	III	112	159	25	4
	IV	166	217	81	9

1989	III	72	159	25	4
	IV	90	137	34	9
1990	III	62	110	10	5
	IV	142	214	68	9
1991	III	49	97	8	7
	IV	127	223	23	9
1992	III	23	52	3	5
	IV	126	193	52	8

Source: Alaska Department of Fish and Game

Note: There is the possibility that a boat could be counted twice in the same week, thereby inflating the size of the fleet. Seiners, however, typically stay in the same district throughout an opening. It is also possible that the number of boats could be inflated if a boat fished an opening at the beginning of a week in District III and fished an opening at the end of the same week in District IV. During the early part of the season when there is usually only one opening per week in these districts the size of the fleet per week is similar to the combined averages presented above for Districts III and IV. A conservative estimate, therefore, for the size of the District III and IV seine fleet is 150 to 200 boats.

### c. Total Gross Earnings of the Resident Craig Commercial Fishing Fleet, 1975 - 1988

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
SSN's <sup>1</sup>	88	97	86	97	87	98	93	88	99	114	119	126
Permits <sup>2</sup>	110	129	109	137	131	136	143	151	186	205	230	272
lbs. (000's) <sup>3</sup>	3,065	4,080	4,192	4,602	3,130	4,687	5,431	2,927	2,781	6,263	5,219	5,340
\$'s (000's) <sup>4</sup>	1,761	2,399	2,160	1,912	2,043	2,428	2,947	2,683	2,920 <sup>5</sup>	4,588	4,609	3,837

Source: Commercial Fisheries Limited Entry Commission, Alaska Department of Fish and Game

### e. Shellfish Aquaculture: Proposed and Operating Farms on Prince of Wales Island

#### Operating Shellfish Aquaculture Farms

Operator	Three Year Production	Area	Location
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## Projection

Don Nicholson	400,000 oysters	4 acres	Blashke Islands, Coffman Cove
Clifford Adamson	200,000 oysters	2 acres	Lake Bay, NE Prince of Wales
Richard Andrew	1,000,000 oysters 100,000 scallops 10,000 lbs. mussels	4 acres	Sunny Cove, SE Prince of Wales
Tom & Elzada Henderson	250,000 oysters	5 acres	Kosciusko Bay, NE Prince of Wales
Extry Sarff	100,000 oysters	5 acres	Lava Bay, NE Prince of Wales
Deborah & David Lyons	500,000 oysters 10,000 lbs. mussels	11.5 acres	Tokeen Bay, NW Prince of Wales
Klawock Heenya Corp.	200,000 oysters 150,000 lbs. mussels	9 acres	Klawock Harbor, Klawock
John & Beverly Scheimann	200,000 oysters	4 acres	Naukati, NW Prince of Wales

<sup>1</sup> Number of social security numbers, an indicator of the number of permit holders

<sup>2</sup> Total number of permits fished by Craig residents (ie permit holders who listed a Craig address for their residence)

<sup>3</sup> Total number of pounds in thousands of seafood product caught by Craig residents

<sup>4</sup> Gross earnings in thousands of dollars: payments to fishermen as recorded on CFEC fish tickets

<sup>5</sup> Gross earnings for 1988 were suppressed; the estimate provided is the sum of the total gross earnings for the fisheries and gear groups that were not suppressed

## Proposed Shellfish Aquaculture Farms

Operator	Three Year Production Projection	Area	Location
Sea Otter Sound Fisheries	10,000 oysters	3 acres	Tuxekan Island
Tenass Pass Shellfish Co.	344,000 oysters 14,400 lbs. Littleneck Clams	5 acres	Tenass Pass, Kosciusko Is.
Emily Island Oysters	130,000 oysters	2.5 acres	Emily Island
Dan Savone, Bonnie Westlund	40,000 oysters	1.3	Little Duncan Bay

Source: Alaska Department of Natural Resources

f. Seafood Industry Infrastructure: Processors, Transportation, Support Industries and Harbor Facilities

At one time there were several large canneries on the west coast of Prince of Wales (Waterfall, Steamboat Bay, Craig and Klawock). Over time, canning in Southeast Alaska was consolidated in a few sites and the canneries on the west coast of Prince of Wales were closed. The cannery buildings that remained were either converted to other uses or fell into disrepair and disappeared altogether.

At present, almost all of the fish that are caught on the west coast of Prince of Wales Island are processed in Ketchikan. Recently, a new cold storage facility was built in Hydaburg (30 miles south of Craig on the west coast of Prince of Wales Island), but it has not operated for the last two years. There is also an ex-cannery facility in Klawock (site of the oldest cannery in Alaska), but it too has been closed the last few years and is presently being converted into office space.

Craig is the site for two major buying stations for two cold storages (E.C. Phillips & Son, and Silver Lining Seafoods) that are based in Ketchikan. It is also the site for Columbia Ward's maintenance facility which supports all of the boats in the District III and IV seine fleet that have ties to Columbia Ward.

In the past, the barrier to the development of seafood processing in Craig has been the lack of a sufficient, reliable water supply. Recent improvements in the Craig water system, however, have addressed this limiting factor. As a result, seafood processors have begun to explore the feasibility of developing a processing facility (cold storage and/or cannery) in Craig. In a recent letter (10/20/90) Richard Pollen, plant manager for Silver Lining Seafoods/Craig, outlined Silver Lining's plans for its Craig facility:

We are currently installing a blast freezer which will give us the ability to freeze our product in Craig instead of sending the product to Ketchikan for processing. This in turn will increase our production and employment levels.

Our future plans in the short term call for an expansion of our present dock facility to include an 8,000 square foot processing area, a new unloading area and an increase of our production to 20 tons per day. Once these projects are completed, we anticipate an employment level of twenty-five workers. These workers would include fork lift drivers, fish workers, refrigeration personnel, etc.

Our long term plans call for further unloading dock space to target the large seine fleet that works off the west coast of Prince of Wales and the developing fisheries such as geoduck, sea cucumbers and many other not yet marketed fish. We expect to employ 40-50 persons full time in five to ten years.

The recent expansion of the Klawock airport to a point where it can accommodate jet planes has also increased the likelihood that there will be seafood processing in the Craig/Klawock area. Regular jet service out of the Klawock airport will allow a processor on Prince of Wales Island to process and pack seafood for shipment directly to Seattle in much the same way it is being packed and shipped out of Wrangell and Petersburg. It will no longer need to be trucked to the ferry terminal at Hollis and ferried to Ketchikan before it is processed. The Klawock airport still needs lights and instruments, though, before it will be able to land jets on a regular basis, but there are plans to install this equipment in the near future.

The support industries that serve the seafood industry in Craig are confined almost entirely to a few retail stores that sell food, clothing and fishing equipment (see Craig Support Services in Comparison with Other Communities in Southeast Alaska). During the fishing season these stores depend heavily on the area's fishing fleet for a large percentage of their annual sales. There is some small engine repair in the area and the Columbia Ward maintenance facility in Craig (mentioned above) can haul boats and engines and make major mechanical repairs. But the Columbia Ward facility exists to serve only those boats that have a tie to the company.

There is a small boat repair facility in Craig capable of hauling a boat out to the water and making structural repairs. Despite the large number of small boats in Southeast, there are relatively few small boat repair facilities in the area (see Craig Harbor Facilities in Comparison with Other Communities in Southeast Alaska). There are small boat repair facilities in the larger Southeast Alaska communities, but many Southeast fishermen prefer to take their boats south to Port Townsend and Seattle for structural repairs because the harbor facilities and boat yards there are set up to accommodate a large transient fleet. There may be other reasons as well for why Southeast fishermen take their boats south for repairs, but there has never been a comprehensive survey to determine exactly what they are.

The Craig harbors are the center of the fishing industry in the community, but its 129 berths of permanent moorage and its 825' of transient moorage space do not meet the needs of the local fishing industry. More than 80% of the boats that have permanent berths are fishing vessels, but there is another 45 boats on a waiting list (all of the applicants have paid a \$50.00 retainer to be on the list) and most of these are commercial fishing vessels

as well. While they wait for permanent moorage, many of these

applicants use the transient moorage in the Craig harbors. By themselves, though, the boats on the waiting list for permanent moorage exceed the amount of transient moorage space in Craig by 288'. This leaves little or no room for the actual transient fleet which may number as many 300 boats a day during the months of July and August.

It is very difficult to obtain an accurate count of the number of transient fishing vessels during these months since it is not uncommon for as many as fifteen to twenty boats to be rafted together. The Craig Harbormaster, however, has prepared a video that graphically illustrates the congestion in the Craig harbors during the summer. Not only do the crowded conditions present a safety hazard for the boats that have to be rafted together, they also interfere with the fish buying facilities in Craig which tend to become clogged with boats that use their dock just to tie up.

## Comparison of Fisheries Support Services in Southeast Alaska

	Boat Repair	Engine Repair	Fishing Gear	Jet <sup>1</sup> Service	Small Plane Service	Barge <sup>2</sup> Service	Groceries	Fuel
Metlakatla	yes <sup>3</sup>	yes <sup>3</sup>	yes	no	yes	1/1	yes	yes
Ketchikan	yes	yes	yes	3	yes	2/3	yes	yes
Hydaburg	no	yes	yes	no	yes	1/.5 <sup>4</sup>	yes	yes
Craig	yes	yes	yes	no	yes	1/.5 <sup>4</sup>	yes	yes
Klawock	no	no	no	no <sup>5</sup>	yes	no	yes	yes
Wrangell	yes	yes	yes	1	yes	3/2.5	yes	yes
Petersburg	yes	yes	yes	1	yes	1/1	yes	yes
Sitka	yes	yes	yes	2	yes	1/1	yes	yes
Angoon	no	no	yes	no	yes	1/.5 <sup>4</sup>	yes	yes
Tenakee Springs	no	yes	yes	no	yes	1/.5 <sup>4</sup>	yes	yes
Pelican	no	yes	yes	no	yes	1/.5 <sup>4</sup>	yes	yes
Hoonah	yes	yes	yes	no	yes	1/.5 <sup>4</sup>	yes	yes
Juneau	yes	yes	yes	4	yes	2/3	yes	yes
Haines	yes	yes	yes	no	yes	2/1	yes	yes
Skagway	no	yes	no	no	yes	1/1	yes	yes
Yakutat	yes	yes	yes	1	yes	1/.5 <sup>4</sup>	yes	yes

Source: Economic Development Center, UAS-Ketchikan

<sup>1</sup> Number of daily northbound and southbound flights; this does not include charter flights

<sup>2</sup> Number of barge lines serving the community/ Number of weekly northbound and southbound trips

<sup>3</sup> At the cannery; in season only

<sup>4</sup> Twice a month in the summer; once a month or less (depending on the volume of freight) in the fall, winter, spring. Most of the surface freight to Prince of Wales arrives via Alaska Ferry (AMHS).

<sup>5</sup> Runway can accommodate jets and jets have used the airport, but until navigational equipment and lights are installed there will be no regular jet service

### Comparison of Harbor Facilities in Southeast Alaska

	Public <sup>1</sup> Grids	Boat Storage	Marine Ways	Travel Lift	Dry Dock	Dock Hoist	Berths <sup>3</sup>	Transient <sup>4</sup> Moorage	% FV <sup>5</sup>	Waiting <sup>6</sup> List
Metlakatla	2/60'	yes <sup>2</sup>	yes <sup>2</sup>	no	no	5t <sup>2</sup>	144	4#	90%	0
Ketchikan	3/100'	yes	yes	yes	9,600t	5t	1,073	4,000'	25%	341
Hydaburg	1/100'	no	no	no	no	5t	136	400'	90%	0
Craig	3/225'	yes <sup>2</sup>	yes <sup>2</sup>	yes <sup>2</sup>	no	yes	200	1,500'	80%	100
Klawock	1/68'	no	no	no	no	no	56	14#	NA	24
Wrangell	1/75'	yes	yes	no	yes	1t	496	600'	66%	80
Petersburg	2/280'	yes	yes	yes <sup>2</sup>	no	5t	785	150#	90%	350
Sitka	4/58'	yes	yes	yes <sup>2</sup>	400t	no	1,150	530'	52%	355
Angoon	1/72'	no	no	no	no	no	55	15#	90%	60
Tenakee Springs	1/51'	no	no	no	no	no	36	23#	NA	NA
Pelican	3/75'	no	no	no	no	1t	68	40#	90%	20
Hoonah	1/40'	no	yes	no	no	1t <sup>2</sup>	260	600'	75%	0
Juneau	3/425'	yes	yes	yes	no	2t	869	375#	35%	120
Haines	1/65'	no	yes	no	no	4t	140	100#	70%	75
Skagway	2/100'	no	no	no	no	5t	104	20#	5%	0
Yakutat	1/52'	no	no	no	no	1t	80	600'	66%	6

Source: Economic Development Center, UAS-Ketchikan

NA Not Available

#### g. Market Outlook for Seafood Species Caught in the Craig Area

##### Canned Salmon

After two weak returns of pink salmon to Southeast in 1987 and 1988, there were two very strong returns in 1989 and 1990. The problem in the down years for canned salmon is insufficient supply and a resistance to the high price in the supermarket that canned salmon must sell for when the supply is scarce. When there is a large pack, or two back-to-back large packs, the over supply of

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<sup>1</sup> Number/Maximum length

<sup>2</sup> Private, not for public use

<sup>3</sup> Year-round moorage space only; does not include transient moorage

<sup>4</sup> Harbormasters estimate transient moorage either in linear feet (') or in terms of the estimated number (#) of boats that can be accommodated

<sup>5</sup> Percentage of the permanent moorage used by commercial fishermen

<sup>6</sup> Waiting list includes all boats, pleasure and commercial

product drives the retail price down because there simply is not enough demand to absorb the excess. This drop in price is felt immediately by the wholesaler and eventually by the fisherman.

The huge, unpredictable swings in the supply of canned salmon from year to year have made it difficult for retailers to develop a long term, mass market. Compounding the problem is a general decline in the per capita consumption of canned salmon in the U.S. which fell almost 60% from 1969 to 1988. Per capita consumption has continued to fall slightly, as it did in 1992. (**Fisheries of the United States, 1988**, NOAA).

#### Frozen and Fresh Salmon

In the past (as recently as 1980), most of Southeast Alaska's troll caught kings and cohos were frozen and shipped to Europe where they were smoked. The last few years, however, have seen more and more of Southeast Alaska's kings and cohos going to Japan. Both troll caught cohos and kings have found a niche in the Japanese market which previously had been only a sockeye market supplied for the most part by Bristol Bay.

Due to the strong Yen, the Japanese have been able to outbid both European and West Coast fish buyers for Alaskan sockeye, cohos and kings. Japanese buyers in 1988 bought up most of the kings and cohos that had been going into a growing West Coast fresh fish market. As a result, West Coast buyers turned to farmed salmon from British Columbia and Chile. In 1989, when the ex vessel price for troll caught kings and cohos fell dramatically, Alaska troll caught kings and cohos were able to reclaim much of their share of the West Coast fresh fish market. But in 1990, the Japanese again outbid both domestic and European buyers for not only most of Alaska's troll caught kings but much of its coho catch as well.

The Japanese demand for Alaska salmon has made the competition from farmed salmon from Norway, British Columbia and Chile a less troublesome factor than recent projections suggested it would be. With the Japanese in the market paying a premium price, Alaskan fishermen do not have to rely on the West Coast

fresh fish market or European smokers to support the price.

The relative abundance of wild salmon from Alaska the last two years has brought the price for kings and cohos down so that they are much more competitive with farmed salmon. Due to relatively high production costs, farmed salmon can only compete with wild salmon when wild salmon is scarce, as it was in 1987 and 1988. Farmed salmon has some characteristics (year-round supply, uniform size and quality) that make it attractive to buyers who also buy Alaska wild salmon, but the over production (British Columbia and Chile) and dumping (Norway) of farmed salmon the last couple of years have shown how vulnerable salmon farmers are to competition not only from wild salmon but also from each other. A recent development that has weakened the market further for farmed salmon on the West Coast is the increasing number of troll caught pink salmon that are appearing in fresh fish markets at a fraction of the cost of farmed salmon of comparable size.

#### Halibut

The outlook for the demand for halibut in the 1990's is good. Throughout the 1980's the domestic demand for halibut has risen as Pacific coast landings rose from a low of 21.9 million pounds in 1980 to high of 74.3 million pounds in 1988 (the domestic market consumes 80% - 90% of the Pacific halibut catch; almost all of the exported halibut goes either to Japan or Canada).

The growth of the halibut market is stymied by a declining supply. Since the mid-1980's the International Pacific Halibut Commission has set a limit each year on the Pacific halibut catch to protect the fishery. In 1989 the halibut quota was lowered from 11.5 million pounds to 9.5 million pounds; in 1990 it was lowered again to 8.0 million pounds. In 1991 the Southeast quota will only be 7.4 million pounds.

#### Sablefish (Blackcod)

The sablefish or blackcod fishery has experienced the most dramatic growth of any other fishery in Southeast Alaska. This has particular significance for Craig which, due to its location, has played an important role (as a buyer) in the development of this fishery.

From 1981 to 1985 the annual Southeast blackcod catch averaged only 5.3 million pounds with an ex vessel price (price paid to the fisherman) between \$.55/lb. and \$.95/lb.; however, from 1987 to 1989 the annual Southeast blackcod catch averaged 16.5 million pounds with ex vessel prices ranging between \$1.16/lb. and \$1.68/lb. In 1992 10.2 million pounds of blackcod

was caught, and the 1993 fishery landed 10.8 million pounds with an estimated ex vessel price ranging between \$1.60/lb and \$2.00/lb.

Most of the increase in volume came from the federally administered area between the three mile and the two hundred mile limit (Exclusive Economic Zone, EEZ). The blackcod catch in the Southeast EEZ has averaged 13.5 million pounds from 1988-1991.

The increase in price was caused by the rise in the value of the Yen. Almost all of the blackcod caught in Southeast Alaska is dressed and frozen and shipped to Japan (only a small percentage goes into to the domestic market and it goes to smokers). In 1989 the price for blackcod dropped sharply. This was caused by an overabundance of product on the Japanese market and a drop in the value of the yen. As of August, 1990, the supply of blackcod in Japan was down (274,000 lbs. compared to 2,000,000 lbs. at the same time in 1989) and the price was once again high. Fishermen in the Chatham Strait blackcod fishery received between \$1.50/lb. and \$1.75/lb. for blackcod depending on size; fishermen delivering in Prince Rupert received \$.15 - \$.20/lb. more.

The blackcod fishery in Southeast Alaska is not expected to grow. Both the state and the federal managers of the fishery have set the catch limit for 1990 at the same level it was at in 1989: the combined limit for both the federal and state managed areas is 16.2 million pounds. The state has also placed a moratorium on new blackcod permits and is planning for a very short season (3-5 days in southern Southeast and 12 to 24 hours in northern Southeast). The federal managers plan to implement a quota system (IFQ) by 1995 that will give each individual permit holder a quota.

### Rockfish

The ex vessel price for demersal shelf rockfish (yellow eye, quill back and eight other species) has remained fairly constant for the last three years. The Canadian drag fishery takes a large volume of rockfish as by-catch and sells it on the West Coast where most of Southeast Alaska's rockfish catch is also sold. The Canadian rockfish by-catch tends to keep the wholesale price for all rockfish down. When Southeast Alaska processors figure in their high shipping costs (air freight) to West Coast markets, their margin for this fishery is very low.

In the mid-1980's it was thought that rockfish would be a dependable winter fishery that would keep Southeast cold storages operating and would give the local fishermen a winter income. The rockfish resource, though, has proven to be incapable of supporting a large commercial fishery. The rockfish harvest declined by almost 50% from 1987 to 1989 (2.9 million pounds in 1987; 1.5 million pounds in 1989). From 10/1/89 to 5/15/90 only one third to one half of the projected catch (1.0 million) for the

season had been harvested. The 1993 fishery has been allocated 1.76 million pounds, of which 28 percent had been taken by June 1. The balance of the quota is expected to be taken by year's end.

According to the Alaska Department of Fish and Game, the future of a dedicated rockfish fishery is in doubt. The quantity of rockfish bycatch from other bottomfish openings, such as halibut and blackcod, will likely dictate whether or not future directed rockfish openings occur. Given that an IFQ system for halibut will begin next year, and an IFQ system for blackcod will begin in a few years, it is expected that commercial fishing boats will harvest halibut, blackcod and rockfish virtually simultaneously and sell them to processors throughout the year. Unless unusually low levels of rockfish bycatch occur, future rockfish openings are unlikely.

Hag fish, dog fish, pacific cod, salmon shark and pelagic rockfish (black bass) have not figured significantly to date in the Southeast Alaska rockfish fishery. In the future, though, they may serve as an alternative to the declining demersal shelf rockfish fishery.

#### **Groundfish Summary**

The table below demonstrates the quantity of groundfish landed in Craig since 1987. The table shows fish landed from all potential statistical areas. It is likely, however, that fish landed in Craig were caught in one or more ADF&G statistical areas near Craig.

Total pounds of groundfish landed at Craig, by species.

<u>Year</u>	<u>Permits</u>	<u>Landings</u>	<u>Demersal Rockfish</u>	<u>Other Rockfish</u>	<u>Sablefish</u>	<u>Pacific Cod</u>	<u>Other Groundfish</u>	<u>Lingcod</u>	<u>Total</u>
1987	60	113	154,944	8,468	349,185	5,669	17,925	24,120	560,311
1988	173	492	609,643	68,535	502,033	33,888	62,824	141,805	1,418,747
1989	154	386	448,931	58,244	916,459	34,892	10,685	68,921	1,538,132
1990	176	395	376,222	66,919	1,077,668	12,816	8,765	58,213	1,600,603
1991	202	434	294,613	52,602	814,273	19,402	5,677	57,841	1,244,408
1992	175	392	307,217	43,003	518,043	15,947	6,523	70,129	960,862

Source: Alaska Department of Fish and Game

#### Abalone

There is a set quota of approximately 40,000 lbs. of abalone that can be caught on the west coast of Prince of Wales. The quota is usually caught in a short period of time depending on the weather. No expansion of this fishery is projected for the near future. Due to the limited supply and the strong Yen, the price paid to the fishermen for abalone has risen sharply in the last

four years from \$2.50-\$3.50/lb. to the current price of \$7.00/lb. Almost all of the commercially caught abalone is exported to Japan where it is considered a delicacy. In recent years, the abalone catch for districts III and IV have been half the set quota.

<u>Season</u>	District III		District IV	
	<u>Harvest in pounds</u>	<u>Harvest in pounds</u>	<u>Final Price</u>	<u>Value</u>
1991/92	17,205	11,459	\$9.50/lb	\$272,308
1992/93	10,600	11,600	13.70/lb	\$304,140

Source: Alaska Department of Fish and Game

Although the quantity of abalone harvested in the 1992/93 season was less than in the 1991/92 season, the higher per pound price for those harvested in 1992/93 increased the total value of the catch. The outlook is for the abalone fishery to remain stable.

#### Geoduck

The geoduck fishery is also managed by a quota. The harvest takes place each year near Noyes Island, on the west coast of Prince of Wales. The harvest takes about two weeks. No one expects an expansion of the geoduck fishery to occur in the near future. The price to the fisherman for geoduck remained fairly constant (\$.60/lb.) until the 1992/93 season, when the price per pound reached \$1.00 to \$1.30.

The quota had been stable at about 45,000 pounds through the 1990/91 season. The 1991/92 season saw a relatively high 64,000 pound quota established, of which 62,800 pounds was taken. In 1992/93, the quota returned to a point closer to its previous levels, at 41,000 pounds, which likely contributed to the doubling of the price per pound paid to the participants. The geoduck bodies go into the domestic market where they are used in chowders and other clam dishes. The necks are sold as a delicacy to the Japanese and Taiwanese.

All commercial geoduck openings have been in the waters off Noyes Island. The variation in the quota depends upon the specific area near the island opened for harvest. The grounds near Steamboat Bay present the largest area quota, at 64,000 pounds. The following years the fishery moves to near Cape Ulitka, where the quota has tended to be approximately 41,000 pounds. The third year the harvest moves further seaward before returning to Steamboat Bay in year four.

#### Sea Cucumbers

A diminishing sea cucumber resource in the Puget Sound area has caused divers to migrate north into Southeast Alaska to find

new sources of sea cucumbers to satisfy the market. In recent years there have been experimental harvests on both the east and west coast of Prince of Wales Island, but these were curtailed in 1989 while ADF&G developed a management plan. The plan was necessitated by an enormous increase in harvesting effort in 1988 that some claimed jeopardized the subsistence sea cucumber fishery. A small sea cucumber harvest occurred the winter of 1990 when the Alaska Board of Fish established the level the sea cucumbers to be utilized.

The market for sea cucumbers is primarily in the Orient. The skins of the cucumber, which are fried in an oven, are popular for soups and jerky. The five strips of meat that are taken from the inside of the animal have the consistency and texture of lobster and taste like clams. In 1988, the wholesale price for the meat was about \$2.40/lb.; the skins sold for approximately \$1.00/lb.

The average final price per pound in the 1991/92 fishery was \$0.95 for the 365,296 cucumbers harvested. The 1992/93 fishery landed 209,208 cucumbers at a final price of \$1.06/lb. In each case, the average weight per sea cucumber was .41 pounds. As a result, the value of the product market dropped from \$142,283 in 1991/92 to \$90,922 for the 1992/93 fishery.

Like the geoduck fishery, cucumber harvests are dictated in part by the location of the fishery. Variations in quota amounts for the 1991/92 and 1992/93 fisheries, for example, are a result of the area opened to the harvest. The fishery can therefore expect to see a cyclical quota occurring every four years.

### Urchins

The demand for sea urchins is in Japan where the sea urchin gonads (uni) are prized as a delicacy. Since 1987, the market has been very marginal with different processors (including Silver Lining) enjoying varying degrees of success. Ex vessel prices have fluctuated between \$.10/lb. and \$.18/lb. whole weight depending on roe maturity.

There was no sea urchin fishery or harvest in 1991 or 1992. State Fish and Game has not completed the survey of the urchin population required prior to the fishery. Future fisheries will be subject to stable urchin populations and available ADF&G staff time to prepare the fishery.

Recent fisheries in the Sitka area have been impacted by the resurgence of sea otter populations. Otter predation on urchins, as well as abalone and sea cucumbers, threatens those fisheries in Sitka as well as in areas surrounding Prince of Wales Island. The extent to which the harvest of these resources is affected will depend partly upon ADF&G's ability survey fishing grounds to establish the target species' populations.

### Herring Roe on Kelp (Pound Fishery)

In 1992 the first local herring roe on kelp (pound) fishery was conducted in Klawock Inlet. The fishery requires fishermen to build floating traps (pounds) into which macrocystis kelp is placed. Once ADF&G has determined that the herring are ready to spawn, participants seine a permitted quantity of herring, and release them into the pound. Once the herring spawn upon the kelp, they are released and the kelp and roe are collected and sold to local processors.

The 1992 fishery's 248 participants landed 25.7 tons of roe on kelp and were paid an average price of \$3.50 per pound. Although the quantity of product landed given the amount of participants was low, fishermen expected limited results given that the fishery was a new one to most participants.

1993 was expected to be a much better year for the pound fishery. However, the herring spawn did not occur in the area designated for the herring seine and as a result the fishery was considered a failure. Fish ticket information has not yet been tabulated, but very few participants landed product. ADF&G is planning fisheries for 1994 and beyond. The outlook for the fishery is good if herring spawn in those places where they are historically found. Most consider the lack of spawn in 1993 to be an aberration.

### Miscellaneous

There are several fisheries that could develop in the area in the future. There is the potential for a major shrimp trawl fishery off of Dahl Island; the expansion of the herring fishery in Mears Pass; a kelp harvest; an octopus and squid fishery. The extent, however, to which any or all of these fisheries could become a significant part of the commercial seafood harvest in the Craig area is still uncertain.

## **2. Timber**

### a. Craig/Klawock Timber Employment (1980-1992)

(see II.C.b. Changes in Employment in the Craig/Klawock Sub-Area by Industry Sector: Manufacturing)

### b. Native Timber Harvest, Ketchikan Pulp Company/USFS Long Term Contract Timber Harvest, and the USFS Independent Timber Sale Harvest and their Impact on the Craig Economy

### Native Timber Harvest

The harvest of timber off of Native lands selected by Klawock-Heenya (Klawock), Shaan-Seet (Craig) and Sealaska (regional Native Corporation for all of Southeast Alaska) under ANCSA (Alaska Native Claims Settlement Act) legislation has had a direct impact on employment and population growth in the Craig area because many of the loggers and their families have chosen to live in Craig.

It is expected that Native logging will continue to play an important role in the Craig economy well into the 1990's, but how great that role will be is uncertain due to a variety of unknowns. First, it is unclear how much timber each of the Native corporations has left to harvest. One estimate states that Sealaska will have harvested all of its timber by 2000-2002, assuming Sealaska logs at a rate of approximately 100 MMBF/year. (Knapp, **Native Timber Harvests in Southeast Alaska**, 1989; USFS, **Analysis of the Management Situation**, 1990). Neither Klawock-Heenya nor Shaan-Seet have published an official estimate of how much timber they have left, but some estimate that both corporations could log at the current level (between 10-20 MMBF) for the next three years.

Bob Loescher, Vice President in charge of natural resources development for Sealaska, stated as recently as October, 1990, that Sealaska has enough timber to log for the next ten years. Even if this is the case, Sealaska's logging will have much less impact on the Craig economy since most of its timber is in areas relatively far removed from Craig or off the road system that feeds into Craig. Sealaska does have a large stand of timber just north of Klawock (Big Salt), though, that could support significant logging activity that would directly affect the Craig economy. In 1990, however, Sealaska did not log this area. The only area on the road system where Sealaska did log was near Hydaburg. Phoenix Logging, which logged for both Shaan-Seet and Klawock Heenya, logged this area for Sealaska and estimates that it employed approximately 100 people at all of its logging sites on Prince of Wales in 1990.

Apart from the question of how much Native timber is left, another uncertainty that makes predictions about Native logging difficult (or suspect) is the uncertainty surrounding the projected demand for round logs in the Pacific Rim in the 1990's. When log prices are high, particularly for relatively low grade logs, the percentage of Native timber that can be sold for a profit goes up. When prices are low, only a relatively small percentage of Native timber can be harvested and sold profitably. Consequently, in a down or soft timber market there is no incentive for the village corporations and Sealaska to log. All three corporations have stated that they will log at a rate that

is consistent with market demand. In 1990, the market for round logs was soft, but this softness was attributed to Japanese stockpiling. As a result the 1990 drop in price was only temporary while the surplus was absorbed. For the foreseeable future, the Japanese demand for spruce and hemlock round logs is expected to be strong while their sources of supply, including Southeast Alaska, are expected to decline. In addition, the decline in logging activity in Oregon and Washington due to environmental issues will increase the value of timber harvested by the native corporations. Together, these factors have resulted in high prices for export logs in 1993 and should cause the price of round logs to remain high even as Native logging increases along with the rising prices.

Logging employment in the Craig area as a result of Native logging should be high (150 jobs) and continue at that level through 1995. After 1995, there should be a sharp drop off in Native logging that will be reflected in a sharp decline in local logging employment.

The table below summarizes recent annual private harvest (primarily native corporation) amounts for Ketchikan and Prince of Wales.

**Ketchikan and Prince of Wales private timber harvest (in millions of board feet-MMBF)**

	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
All Logs	183	239	226	236	211	229	245

Source: Alaska Department of Natural Resources

**KPC/USFS Long Term Contract Timber Harvest**

The timber harvest on Prince of Wales that is part of the USFS's long term timber sale contract with Ketchikan Pulp Company has a significant impact on the Craig economy. Perhaps, as many as 100 loggers employed in this harvest have their residences in Craig (this is a rough estimate based on conversations with logging contractors and Craig residents).

The KPC logging that is based out of the camps and communities on the north end of the island also enhances the Craig economy. As was noted above, Craig is both a retail and service center for the entire island. As such, its businesses draw customers from all over Prince of Wales. People come from the logging communities of Lab Bay, Coffman Cove, Naukati and Thorne Bay and shop in Craig's stores, eat in Craig's restaurants and stay in Craig's hotels.

The long term timber contract between the USFS and KPC requires the USFS to make available (on average) 192 MMBF/year

(including utility log volume). KPC is not obligated, however, to harvest 192 MMBF/year. During the recent years when the demand for timber products has been high, it is estimated that KPC has harvested approximately 175 MMBF/year (including utility logs). This contrasts with the mid-1980's when the market for dissolving pulp and cants was low, and KPC's harvest was closer to 100 MMBF. These big swings in harvest volume cause big swings in employment. When the KPC harvest is high, KPC logging employment (direct and contracted) is between 400-450 jobs; when it is low, its logging employment drops to between 200-250 jobs.

Where and how much timber KPC will be able to harvest on Prince of Wales Island for the next four years (through 1997) has to a great extent already been determined. Under the terms of the long term sale, the USFS prepares a five year timber harvest plan for KPC. The present plan runs through 1994. Whether or not the USFS will actually be able to carry out its plan, though, is uncertain. A diminished timber base due to Tongass Reform legislation, an insufficient timber sale budget for the Ketchikan Area or court challenges to areas proposed for logging could, together or separately, limit or curtail KPC logging on the island.

Even if none of the above occur, it seems likely that KPC's timber harvest on the island will experience a steady decline during the next five years due to a softening in demand for dissolving pulp. KPC has the option to route small logs through its sawmill if the demand for dissolving pulp goes down, and this should prevent its timber harvest on the island and its timber harvest employment from falling far below 300 jobs. In 1993, the pulp milling process shut down for two to three month periods, while KPC's Ward Cove sawmill has hired additional employees to meet the demand for dimension lumber. KPC expects regular shutdowns of its pulp manufacturing process to continue due to low demand for dissolving pulp and expects the sawmill to continue its brisk production due to a high demand for dimension lumber.

KPC, as a part of its contract with the USFS, is obligated to continue to operate its pulp mill even if the mill is losing money. When the market for dissolving pulp went away in the mid-1980's both pulp mills continued to harvest timber and produce pulp, but the total harvest for **both pulp mills** in 1985 (the low point for pulp production in Southeast in the 1980's) was only approximately 188 MMBF (131 MMBF sawlogs; 57 MMBF utility logs est.).

#### USFS Independent Timber Sale Harvest

A third timber harvest that affects the Craig economy is the harvest that occurs through the USFS's Independent or Short-term timber sale program. These sales are set aside for the sawmill

operators who are not associated with the two pulp mills that hold long term contracts with the USFS. The Klawock sawmill, which can employ between 65 and 110 people, is one of two mills (soon to be three sawmills) in Southeast that falls in this category and is completely dependent on this timber sale program for its sawlogs. It is estimated, though, that recent Tongass Reform legislation may have reduced the commercial timber base in the Tongass to the point where the USFS will no longer be able to meet the demands of the long term contracts and the independent sawmill operators. If this is the case, the Klawock mill's future could be jeopardized by an insufficient supply of sawlogs (the Klawock mill has the capacity to saw 60 MMBF annually). The Klawock mill owners, however, feel confident that they will be able to obtain the logs they need to operate. If the mill is successful in securing logs, the projected demand for softwood lumber in Japan suggests that the mill could operate steadily through the next the five years and on through to the end of the decade.

Unfortunately, the mill encountered financing problems and was forced to close in June of 1991, despite the fact that enough timber was available to operate the mill. The financing institution is preparing to sell the mill at auction in June of 1993 and any subsequent operator is expected to reopen the mill shortly thereafter.

The locations of some of the timber sales that the Klawock mill is currently harvesting are located in various parts of Southeast and have very little impact on the Craig economy, but some are close to Craig or on the road system on Prince of Wales and contribute directly to the Craig economy. Just prior to its closure, the mill was logging approximately 45-50 MMBF at Lancaster which is a camp off the road system, and consequently has relatively little impact on the Craig economy. In addition, Klukwan was logging a 7 MMBF sale at Winter Harbor for the Klawock mill. This sale is on the road system and many (no estimate is available of how many) of those involved live in Craig. In the future, there will be an independent 14 MMBF timber sale on Suemez Island (Refugio Sale); many of those involved will also be able to commute from Craig. Another independent sale near Salt Lake is being prepared (est. 7 MMBF) that could also have an impact on the Craig economy. The forest service is also preparing to begin work on the Control Lake timber harvest. This is a large potential harvest that would likely include commuting workers from Craig. It is impossible to estimate with any confidence, though, how much impact any one or all of these sales will have on the Craig economy.

The table below summarizes the national forest timber harvests in the Ketchikan area, which includes Prince of Wales Island.

**Ketchikan Area National Forest Timber Harvest (in millions of board feet-MMBF)**

	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
Sawlogs	133.64		183.06	203.57	222.15	218.01	159.58
158.09							
Utility	17.54	23.07	30.44	32.51	30.01	26.34	29.32
Total	151.18	206.13	234.01	254.66	248.01	185.92	187.41

Source: USFS, Tongass National Forest, Ketchikan Area

### 3. Tourism

#### a. Inventory of Craig's Tourism Facilities

##### Hotels and Bed & Breakfasts

Haida Way Lodge - open all year; 16 units; restaurant; prices based on double occupancy are \$76 +

Ruth Ann's Motel - open all year; 10 units; restaurant; prices based on double occupancy are \$75 +

Bed & Breakfasts - seasonal; 10 rooms; prices \$35 +

TLC Rooms - open all year; 12 sleeping units; shared baths; prices start at \$45 per night.

During the summer, both hotels experience close to 100% occupancy. During the winter, weekday occupancy drops off to 40% to 60%, but it is much higher on weekends and during the fall hunting season. Recently, summer occupancy has increased as a result of increased charter boat activity in Craig. Three different charter boat operators housed their clients in Craig's two hotels during the summer of 1990. The Haida Way is in the process of remodeling the Lodge's former restaurant to add nine additional guest rooms, bringing the total to 25.

##### RV Parks

None

##### Sport Fishing Lodges and Marinas

None

There are sport fishing lodges north and south of Craig, but none in Craig. A marina development is planned for the Hamilton Drive waterfront. This would be developed in phases starting with 140' float, 16 unit (to go 42 units) lodge tackle shop. The owner/proprietor anticipates that he would operate two charter boats and contract with two or more other charter operators. In season, the operation would employ approximately 24 people.

Registered Charter Boat Operators  
Operating out of Craig (1990)

Name	Boat(s)
Wayne Sanger	Wave Dancer
	Justin Case
Duane Hohvart	Duchess
Richard Manning & Paul Roop	Catch-a-King
	" " "
	" " "
Don Hamilton	-----
Larry Christiansen	Sandra Lee
Will Jones	No See'em
	Skaget
	Olympic
	Hobbit
Dick Asplund	-----

b. Attractions, Activities and Events in the Craig Area

The "Craig Area" in this context includes the area that can be reached easily by a car or boat from Craig. Within this area, the list of attractions includes wildlife, salmon streams, totem poles, local artists and a salmon hatchery. With a boat, one is only 45 minutes from the outer rim of the islands (Noyes, Baker and Lulu) that stand between Prince of Wales and the open Pacific. This area has been proposed by the USFS as a National Recreation Area.

The list of activities that are possible in this area include flightseeing, guided and unguided sport fishing, boating, canoeing, kayaking, hunting, hiking, wildlife viewing and photography, shopping (limited), dancing, dining and camping.

The main events during the summer are the annual 4th of July celebration and the annual salmon derby. Thorne Bay, approximately 30 miles northeast of Craig, holds an annual summer fair and logging contest in August which is attended by people from all over Prince of Wales.

### c. Transportation

#### Air Service

Two airlines provide scheduled air service to Craig. Both fly Dehavilland Beavers and Otters. Ketchikan Air offers three float plane flights a day from Craig and three wheel plane flights each day from Peratovich Airport to Ketchikan. Taquan Air flies into Ketchikan from Craig three times daily. It also offers three flights from the Klawock airport to the Ketchikan airport. Both companies provide van service from Craig to Klawock. Round trip fees range from \$120 to \$140. These scheduled flights can be, and often are, either delayed or cancelled due to bad weather. In Ketchikan, one can connect with Alaska Airlines flights going south to Seattle and north to Sitka/Wrangell/Petersburg/Juneau/Anchorage three times daily.

#### Alaska Marine Highway System (AMHS)

In 1990 the summer AMHS schedule included eight northbound and eight southbound stops each week at Hollis which is connected to Craig by a paved road that runs across the island. The Hollis stops are turnaround stops for a feeder run that connects with the AMHS trunk line in Ketchikan. The winter schedule for Hollis calls for only three weekly northbound and southbound stops by either the LeConte or the Aurora. Each vessel has a maximum capacity of 300 passengers and 47 vehicles (neither has stateroom berths).

The number of passengers disembarking at the Hollis terminal has risen from an annual total of 7,350 in 1980 to 29,359 in 1992. The number of disembarking vehicles during the same time period has gone from 2,445 to 8,839.

What is interesting to note is that over the same time period (1980-1992) the seasonality in the volume of passengers disembarking at the Hollis terminal decreased significantly: in the summer (June-September) of 1980 the average number of passengers disembarking each month was 55% greater than the monthly average for the whole year, but by 1992 the monthly summer passenger volume was only 18% greater than the monthly average for the whole year.

These figures suggest that the growth in the ferry traffic disembarking at Hollis does not reflect a growth in summer tourism as much as it reflects the growth in the year round population on Prince of Wales. In fact, it implies that there is almost no seasonal increase in traffic for the Hollis run that can be attributed to tourism. The 18% difference in 1992 can easily be accounted for by the increased traffic that results from increased fishing and logging activity on the island during the summer.

d. Trends and Developments in Southeast Alaska Tourism that have Implications for Craig

Tourism figures for southern Southeast Alaska reveal that almost three fourths (195,000) of the tourists who visit the area enter by cruise ship; the other one fourth arrive by air (37,000) and the AMHS (Alaska Marine Highway System) (23,000). Almost none of those entering by cruise ship ever visit the communities like Craig (Sitka is the exception) that are not on the Inside Passage from Ketchikan to Skagway. Those who enter by air and AMHS can be divided into two groups: independent travelers who plan their own itineraries and make their own travel arrangements; and package visitors whose vacations, including transportation, are sold as a complete package.

Both of these groups are evident among the tourists who are visiting Craig and the Craig area. The extensive road system on Prince of Wales, which is unusual in Southeast Alaska, has attracted RV users who, for the most part, are independent travelers. The sport fishing opportunities on the west coast of Prince of Wales have attracted a rapidly increasing number of sport fishermen who typically purchase their fishing trip as a package.

Craig and the Craig area are like other small communities in Southeast and share many of the same weaknesses and strengths in respect to tourism development. On the negative side there is a:

- \*low demand in off-peak months
- \*small labor pool of qualified, experienced people
- \*lack of infrastructure in remote areas
- \*high costs of facility construction
- \*cumbersome regulatory procedures for new projects

On the positive side, Craig is blessed with an:

- \*abundance of significant natural attractions
- \*high seasonal demand for new attractions and accommodations
- \*public ownership of lands and rights of way
- \*state programs to assist financing and planning private or concessioned projects

This set of pluses and minuses means that tourism in Craig and the rest of Southeast can be successful, but in order to be successful the tourism operator must generate a lot of revenue in a short time in order to cover inordinately high operating costs and to compensate for the short tourist season.

Fortunately, the area is able to attract tourists who are able and willing to pay a great deal for the opportunity to see and experience Alaska. The profile of the typical Southeast tourist is a person between 45 and 65 (in their peak earning years) who is making over \$50,000 a year.

This market is growing: by the end of the 1990's it will have increased 31%. As a group, it not only has a substantial discretionary income, it also likes to travel to places that offer experiences that are imaginative and interesting and feature a high degree of activity.

Where Southeast Alaska has been successful in attracting and satisfying this market, it has capitalized on the region's natural beauty, abundant wildlife and indigenous culture. All of these are available in Craig, but as the charter boat operators (who already enjoy a thriving business serving this market) will testify, the area and the activity must be aggressively promoted and the service to the client must be of a very high quality.

Clearly, the best tourism opportunity for Craig is the one that it has already been identified: is charter boat fishing. From Vancouver to the Kenai Peninsula, this very lucrative business is growing very rapidly (short term, out-of-state sport fishing license sales in these areas suggest that it has been growing at a rate of 13% annually over the last decade). The areas south (British Columbia) and north (Kenai Peninsula) of Southeast Alaska, however, have begun to show signs of an appreciable decline in the resource due to the increased pressure that is being placed on it. In the short term, this should benefit Southeast which is well positioned as an alternative fishing destination with a relative abundance of sport fish. In the long run, though, it should serve as a cautionary note reminding everyone that the resource is finite and must be managed

prudently.

Another cause for caution is the condition of the U.S. economy, particularly on the West Coast, which provides most of Alaska's independent and package (non-cruise ship) visitors. If there is a severe depression or a major industry on the West Coast (like the defense industry) declines sharply, the amount of discretionary income that people have to spend on travel could be significantly reduced. Also, if the price of oil reaches a high level, the cost of all travel, but particularly the cost of air travel, will go up substantially. Together, a depressed economy and high oil prices typically force people to travel less and to stay close to home when they do travel. This should be reflected in a decline in the number of tourists coming to Alaska. These conditions may not, however, have as great an impact on Alaska as they have on other tourist destinations because Alaska is already a very expensive place to visit and is attracting for the most part people with relatively high incomes who are more insulated from a downturn in the economy.

#### **4. Mining**

In the past, mining has had no impact on the Craig economy. At present there is no mining, mine development or mineral exploration going on in the area around Craig.

There are, however, a few sites near communities that are on the road system that are currently (in the last five years) being explored. There is the Dawson gold mine near Hollis; the Salt Chuck gold and PGM (platinum group metals) mine near Thorne Bay; and the Niblack copper, zinc and gold mine near Hydaburg. If any of these sites is developed into an operating mine, Craig would benefit to some extent as the service and retail sales center for all of the communities on the road system on Prince of Wales. None of these sites, however, is being explored at a level that suggests that any of them will be developed into an operating mine in the near future.

There are other sites on Prince of Wales that are being explored, but these are off the road system. Consequently, it seems unlikely they will ever influence Craig economically. Sealaska, for example, has entered into a lease with American Copper and Nickel Company to develop a mine near Dolomi. If and when a mine is developed at this site, the work force for the mine will be based and supplied out of Ketchikan.

#### **E. Craig Financial Resources**

##### Banks

There is one regional bank and one statewide banks in Craig:

First Bank (Ketchikan), and National Bank of Alaska (NBA). Both of these banks make personal and commercial loans and have extensive experience in financing resource (timber and fisheries) development projects.

Key Bank, which had a branch in Klawock, closed that branch in late 1992.

#### Craig Sales and Property Tax Valuations

Craig has a 6 mill tax rate on real property. The assessed value of real property in Craig for the current year ending 6/30/93 is approximately \$ 37.3 million:

Residential	\$ 17,082,840
Commercial	11,742,300
Industrial	8,214,600
Other	306,700
Total Real Property	\$ 37,346,440

Overall assessed property values have generally increased each year since 1988 at rates of from 5 to 10 percent. The tight market for residential and commercial property that has existed in Craig the last several years is expected to remain through 1995.

Craig has a 4% sales tax. Three fourths of the revenue goes to the city's General Fund; the other fourth is dedicated to education. Retail sales for the years 1984 through 1990 increased an average of 18.5% annually. Sales from 1991 through 1992 were down slightly.

<u>Year</u>	<u>Retail Sales</u>
1984	\$ 8,249,200
1985	13,857,700
1986	17,367,700
1987	15,858,567
1988	17,202,033
1989	21,045,575
1990	22,819,750
1991	23,312,671
1992	23,311,641

## F. Inventory of Housing and Community Facilities

### Housing

	Total Units	Vacant Units	Occupied Units	% Vacant <sup>1</sup>	% Occupied
Single Family	157	10	147	6.5%	93.5%
Multi Family (2 units)	33	0	33	0%	100%
Multi Family (3 or more units)	35	6	29	18%	82%
Mobile Home	271	4	267	1.6%	98.4%
Other <sup>i</sup>	53	7	46	14%	86%
<b>Total</b>	<b>549</b>	<b>27</b>	<b>522</b>	<b>5%</b>	<b>95%</b>

Source: City of Craig (12/7/90, 10/91)

### Water and Sewer

Until 1989, the Craig water source was a spring and small earthen dam at the base of Sunnahae Mountain and water from a creek on St. Nicholas. The water system consisted of two storage tanks, a distribution system of 6-inch and 8-inch diameter ductile iron pipe. Water was pumped across Port Bagial through the chlorination station and then to a storage tank in East Craig. With this system, Craig was subject to repeated water shortages when there was insufficient rain in the summer or when the creeks froze in the winter.

In 1989, the City of Craig installed a dam and 10 miles of pipe along St. Nicholas which was connected to the City's water system. This gave Craig, for the first time, a substantial, reliable water supply. In April of 1992, the city began operation of a new water treatment plant. The plant uses a conventional mixed media filtration system and is designed to process up to 600,000 gallons per day. Current consumption rates for the city range from 250,000 to 400,000 gallons per day.

### Educational Institutions

The Craig School District maintains two buildings, an elementary school and a high school. The high school was built in 1978 to serve grades 7 through 12. It has four general classrooms,

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<sup>1</sup> Vacancies includes dwellings that will require extensive repairs before they can be inhabited.

<sup>2</sup> Includes boats, floathouses and apartments in commercial buildings.

science, and general rooms for home economics, metal shop, wood shop, typing, and art. The Craig Elementary School serves grades kindergarten through 6. A new building was completed in 1982 and provides 7 general classrooms, a library, a gym, and a lunchroom. A school lunch program is offered and high school students participate at the elementary school.

The student enrollment in the Craig School District has increased 39% since 1989. Enrollment growth is particularly dramatic in the elementary school. The District added two modular classroom buildings in 1991 and 1992 in an attempt to meet space requirements.

### Clinics and Medical Services

Health Services are provided mainly through the Craig Health Clinic. The city provides the building which is leased to a public nonprofit corporation. The health clinic includes a family practice physician, Public Health nurse, community health aide and the SEARHC community educator. Some specialty service coverage is provided by visiting physicians in the areas of optometry and physical therapy.

There are two full-time practicing dentists and two part-time chiropractors within the city. Communities Organized for Health Options (COHO) provides counseling on substance abuse and mental health issues.

Emergency health care for the city is provided by an EMT coordinator and volunteer EMT's. Twenty four hour coverage is provided through the city jail dispatcher and a local paging system.

### Fire Protection

The fire department consists of 14 volunteers. The City funds the department and pays for health insurance for the volunteers. In 1984 a grant was obtained to purchase a 1981 fire truck. The department now has two fire trucks.

### Low Income Housing

There are 13 low income housing units in Craig that were built with HUD funds. Preliminary plans have been approved for a residential subdivision near Crab Creek, which would include HUD

low income housing, Tlingit/Haida housing and Farmers Home financing programs. The low income housing program in Craig is administered by Tlingit/Haida.

#### Cultural and Recreational Facilities

The City employs a librarian and maintains a public library. Public recreational facilities include a boat ramp, a ball field, a bike path, several public beaches and picnic areas, several hiking areas, the high school gym, a community gym and the Craig Youth Center.

With the settlement of the ANCSA 14(c)(3) reconveyance issue, hundreds of additional acres are available for recreation, including Reconveyance Parcels 9, 10, 14, 17 and 19. The city is investigating the development of these recreation areas through joint ventures with Shaan-Seet, Inc., the U.S. Forest Service, and with grant monies from federal and state sources.

#### Services for the Aged

There is a Senior Services program in Craig that includes "meals on wheels" for the elderly that is provided by Catholic Services. This program is funded by the State of Alaska and the City of Craig. There is also a 9 unit Senior Citizens home in Craig.

#### Condition of the Central Business District

The central business district is quite small. All of the buildings are occupied and most are in good repair; there is an acute shortage of developed land for commercial use in Craig. The streets in the Craig business district are all paved. Parking is limited.

#### **G. State or Federal Development Projects in Craig**

There is a \$ 2.3 million HUD low income housing project planned for Craig. This project calls for the construction of 10 single family units that will be made available to low income, Native families and 10 additional rental units for all low income families. All 20 units will be administered by Tlingit/Haida.

Also, Tlingit/Haida in conjunction with the Farm Home Administration will be able to provide loans to low income

families for the construction of 10 more housing units. Altogether, these two projects will add 30 units of low income housing to the community.

IV. Local Environmental Information

## OEDP Environmental Information

### **I. Description of the area.**

Craig is located on the west coast of Prince of Wales Island in southern Southeast Alaska (see Appendix A: Location Map of Craig, Alaska). It serves as the staging area for the commercial fishing fleet that fishes the west coast of Prince of Wales from Sea Otter Sound to the north and Cape Chacon to the south. The significant geographic features (coastline, elevation, etc.) in and around Craig are readily discernible in the map of the Craig Coastal Management District Boundary provided in the appendix (see Appendix C: Map of the Craig Coastal Management District Boundary).

### **II. Political Geography**

Craig has a federal townsite patent on 46.87 acres (see Appendix B: Map of Existing Land Use in Craig); this patent was issued by the BLM Townsite Trustee on November 24, 1923. The trustee in turn deeded occupied parcels to residents and vacant subdivided lots to the City. Other identified parcels include a school site withdrawal of 3.29 acres.

In June, 1973 the State of Alaska sold the land comprising East Craig at public auction. Most of this area is now privately owned, but much of it is also the subject of the ongoing Mental Health Lands litigation that questions the legality of the State of Alaska's sale of the land. The City of Craig annexed this area, thereby increasing its land area by approximately 200%. The total area within the city limits is approximately 9.5 square miles.

The passage of the Alaska Native Claims Settlement Act (ANCSA) has resulted in approximately eighty five percent of the uplands within the Craig city limits being owned by Shaan-Seet, Inc. and Klawock Heenya, Inc., the two native corporations in the Craig area. As a result, there is very little other private property available for sale or development.

In June of 1992, the city acquired title to 671 acres of tidelands within its municipal boundaries. The city's upland holdings amount to approximately 170 acres, or three percent of the land base. State and Federal holdings within the city limits are nominal.

### **III. Land Usage**

#### **A. Zoning**

The city has had formal zoning in place since 1987. Designations include multiple residential zones, commercial, light, heavy and Marine industrial zones, and forestry and public zones. The zoning ordinance also includes the Special Considerations Overlays. The overlays are specific to the following:

- A.Slopes greater than 25%
- B.Landslide hazard area
- C.Identified habitat areas
- D.Designated historic areas
- E.Hillside above Craig
- F.Shoreline setbacks
- G.Stream side setbacks
- H.Protected area of Crab Bay

The approximate acreage for each zoning category is:

- Residential 101 acres
- Commercial 56 acres
- Industrial 120 acres
- Forestry 4,800 acres
- Public 1,000 acres

Most of the property within the city limits is zoned forestry, which accommodates logging, the primary use of properties zoned in that fashion. The remaining zones can all be found in Craig Proper and in East Craig, where most of the city's residents live.

#### B. *Current/Historic Uses*

Historic uses in Craig have ranged from residential to fish and wood processing. There is currently no wood processing ongoing within the city limits. Fish buying and processing and cold storage, however, are active uses, and are, as one might expect, concentrated on the waterfront.

Craig expanded from the original Craig Island (West Craig) to the undeveloped area of East Craig in the late 1970's. What few incompatibilities exist between the current land use of a property and its designated zone are in West Craig. Most of the incompatibilities are established residential uses on property zoned for Commercial or Marine Industrial uses. These properties became incompatible when the zone designations were made in the mid-1980's.

#### C. *Prime or Unique Farmland*

There is no prime or unique farmland in the Craig area.

#### D. *Conservation Areas*

There are no national or state parks located in the Craig area. However, some can be found on the island. A portion of Southern Prince of Wales Island is home to the South Prince of Wales Wilderness Area, and the Tongass National Forest encompasses most of the island not encumbered by private ownership.

Locally, Crab Bay and catalogued anadromous streams in Craig are protected by the city's Coastal Management Plan (CMP). A portion of the Klawock River estuary is protected under the City of Klawock CMP.

#### **IV. Public Services**

##### *A. Sewage Collection and Treatment*

Most residences and businesses within the Craig city limits are tied in to the city's sewage collection and treatment system. The system uses a combination of pump stations and gravity flows to direct the effluent to the secondary treatment plant.

The design capacity for the existing sewage treatment plant is 90,000 gallons per day in dry weather and 120,00 gallons per day in wet weather. Current load levels for the city are 225,000 gallons per day in dry weather and 600,000 gallons per day in wet weather. Obviously, the city's existing load exceeds the treatment capacity of the plant.

The city is preparing to build a new sewage treatment plant to meet the city's current and future wastewater treatment needs. Public Health Service has provided the city with a \$160,000 grant for design work. The State of Alaska has, pending the Governor's approval, appropriated \$120,000 for design and engineering. The city is seeking additional engineering funds from the State Department of Environmental Conservation and other sources. If substantial construction dollars can be found, the new plant could be operational by 1996.

##### *B. Surface and Subsurface Water Sources*

The City of Craig draws its water from North Fork Lake, nine miles from downtown. Because the city has no subsurface aquifer, there is no EPA sole source designation. The state has granted the city authority to draw up to one million gallons of water per day from the lake.

In April of 1992, the city began operation of a new water treatment plant. The plant uses a conventional mixed media filtration system and is designed to process up to 600,000 gallons per day. Current consumption rates for the city range from 250,000 to 400,000 gallons per day.

The city uses the previous water source, an impoundment dam fed by a natural stream, as its backup water supply.

##### *C. Solid Waste Handling and Disposal*

The cities of Craig and Klawock share a solid waste disposal site. The landfill is located three miles from Craig, approximately half way between the two communities. The site has an expected useful remaining life of twenty years. The landfill collects nearly all residential and commercial wastes generated in the Craig/Klawock area. Scrap metal is

segregated from the rest of the waste and stored pending its removal by scrap metal recyclers, one of whom visited the island in April of 1993 and collected a substantial amount of scrap metal from the landfill.

#### *D. Transportation Facilities - Road System Adequacy*

Craig is connected to Klawock and Hollis via state highway. The roadway is paved and maintained in good condition. Craig is also connected to all other communities on the island which can be reached by road. All other roads are gravel and are maintained by either the State of Alaska or the Forest Service and Forest Highway Program. While the paved state highway provides good access to Klawock and the state ferry terminal at Hollis, access to other communities via dirt roads is frequently made difficult or dangerous by rough roadbeds and short-sight distance roads. State planned efforts to improve portions of the unpaved roads over the next ten years should improve road links between those communities that are home to a majority of the island's residents.

#### **V. Sites or structures of local significance**

The City of Craig is a relatively young community. There are few older buildings in the community which may qualify for historic preservation. The Wards Cove property in downtown Craig has preserved many of the features it had during at its beginning. The site is still operates as a dock and repair facility for fishing boats affiliated with the company.

The Prince of Wales Emergency Response building dates back to 1930. The building has had a variety of public uses and is still operating. Its extended state of disrepair, however, makes it unlikely that a substantial renovation will take place.

The only totem pole in Craig fell down in a windstorm in 1990. The pole is now stored at the City Shop.

There are no Craig sites listed on the National Register of Historic Places. Sites listed on the Alaska Heritage Resources Survey are potential candidates; they are:

1. Craig City Cemetery
2. Craig Petroglyphs
3. Original Craig Townsite

The Craig Comprehensive Plan includes a map of the Habitats, Natural Resources and Historic Sites. The Craig Comprehensive Plan Zoning Map shows areas of special significance, such as watershed, viewshed, old growth habitat/study area, Sunnahae trail and recreation area, and the protected area of Crab Bay.

## **VI. Floodplains and/or wetlands**

Coastal flooding occurs during wind storms, especially when there are also high tides. Erosion problems are particularly acute along the southern shore of West Craig. A local tsunami is possible in Craig.

The U.S. Army Corps of Engineers data indicate that flood potential in Craig is low. A river flood has never been recorded. Recently recorded coastal flooding occurred on the south side of West Craig and along the road to Graveyard Island.

The City does not regulate flood hazard areas. The Federal Emergency Management Agency has not mapped flood hazard areas in Craig. The U.S. Fish and Wildlife Service has not begun to catalogue area wetlands and as a result no definitive maps of wetlands are available.

Except for the tidal areas, the wetlands areas in Craig are muskeg. These muskeg areas occur in isolated patches. The Craig Coastal Management Program identifies significant habitat areas and areas which could be developed.

Locally, building codes restrict development within 50 to 100 feet of the ordinary high water marks for streams, rivers and coastline. The restriction protects not only buildings from potential flood damage, but also protects the numerous anadromous streams and rivers in the area from siltation and warming while ensuring that erosion of shorelines and stream banks is minimized.

## **VII. Endangered species**

There are no populations of plant or animal species in the Craig area that are threatened or endangered in the state. Typically, those animals that are threatened or endangered in similar climates elsewhere can be found in abundance in the area.

## **VIII. Coastal Areas and Coastal Management**

The City of Craig is an official coastal district within the state Coastal Management Plan. The district has its own CMP, which is adopted into the community's Comprehensive Plan. The plan lays out specific areas for development of water-dependent and water-related uses, and identifies areas meriting protection, such as Crab Bay and the catalogued anadromous streams in the district. The plan also specifies goals and objectives for the district in regards to activity such as waterfront development, logging, recreation and other uses. The state Coastal Policy Council has adopted Craig's plan and the district is in good standing with the statewide program.

In addition to projects taking place within the Craig Coastal District, the state requests district comments on those projects which take place on Prince of Wales Island, particularly those that are in close proximity to the district.

This OEDP recommends new or ongoing projects in those areas identified by the CMP as suitable for development. It likewise avoids encouraging development in those areas which are protected or considered to be important habitat, and proposes to limit waterfront uses to those activities either related to or dependent upon access to the water.

## V. Potential for Economic Development

Craig has excellent opportunities for growth in both its basic and its secondary, or support, industries. A substantial amount of economic growth will take place regardless of what Craig or its elected officials do or do not do in the way of planning and promoting development. But before Craig can take advantage of some of its economic opportunities, it will need to become actively involved in sponsoring and supporting development projects or some opportunities will be lost.

### Basic Industries

The timber industry has been the major cause for Craig's extraordinary growth over the last seventeen years. It should continue to operate at its present level with only a small decline for the next three years. After that, there should be a sharp drop in timber employment when Shaan-Seet and Klawock Heenya logging is expected to be completed. Sealaska, if it is still logging at this time, should also be close to harvesting all of its timber in the Craig area. Craig will also begin to feel, towards the middle of the decade, the effects of a predicted long term decline in pulp sales at the Ketchikan pulp mill. As the pulp mill enters the last decade of its long term contract with the USFS, one should expect major changes in the mill's operation, but what those will be can only be guessed at. Currently, the mill is producing pulp for only a few months at a time, with shutdowns in the interim. The sawmill at the site, however, is operating at capacity. If the sale of the Klawock mill is successful, it should begin operating again late in 1993 or early in 1994, adding over 100 jobs to the local economy. Unfortunately, Craig has no control over these events. The only way it can mitigate their impact is to begin to develop other areas of its economy.

The seafood industry is planning a major expansion in the Craig area that could help to soften the affects of a decline in the timber industry, but this is clearly an area where public support in the form of infrastructure development is essential. Craig is located in the midst of one of the most productive fisheries in the world, and one that is just beginning to be fully exploited. Craig's remoteness, however, tends to make operating costs high and local seafood processing less competitive. The recent successful development of a reliable water supply is an important step toward making seafood processing more competitive and thereby more likely in the Craig area. In addition, the acquisition in 1992 of much of the tidelands within the city limits also provides Craig an opportunity to cater to marine industrial development. But this needs to be followed up with a concerted effort to get instruments installed at the Klawock airport so that processors have twenty-four hour direct jet service off the island to Seattle and Anchorage, which are important hubs in the transportation of seafood to the Pacific Rim and the rest of the world.

Perhaps the major infrastructure improvement that the city could sponsor is the development of the city's property at False Island.

The relatively deep water along the western shore of False Island can provide the community with close access to a port that can support deep draft ships. The property the city owns between False Island and the Craig/Klawock Highway can be developed into a marine industrial area that can provide support to the proposed dock facility. Businesses catering to the transportation, seafood and tourism industries would find the property's proximity to the dock and its flat nature as major inducements to build in the area.

The seafood industry and the community of Craig should also explore the needs of the shellfish farmers (ex. local lab for testing for PSP) that are operating on the northern end of the island and will be operating in the Craig area in the not too distant future. These farms could provide a year round supply of product that could reduce the seasonality of seafood processing employment in Craig.

The successful completion of the expansion of North Cove Harbor will go far in meeting the needs of the resident fleet and the huge transient fleet that operates out of Craig during the summer. The alleviation of the overcrowding is having a positive impact on seafood processors who may have otherwise been forced to look elsewhere on the west coast of Prince of Wales for a place to base their operations.

Dock expansion is also critical to the development of the tourism industry. The rapidly growing charter fleet will continue to put pressure on harbor space. As it grows, its need for dedicated space for staging charters will also increase. The key to a successful charter business is maintaining a high level of service. The completion of the North Cove Harbor expansion makes this level of service possible.

Maintaining a high level of service will continue to be a challenge to all of the smaller communities in rural Southeast where there is a small pool of qualified, experienced people to work in the tourism industry. To address this problem, Craig needs to become actively involved in demanding that more and better training programs be brought to the island so that tourism development results in more local employment. If this does not happen, the tourism industry will be increasingly resented as an intruder rather than viewed as an economic asset.

Another problem area that the tourism industry will need to address is its lack of connection with the rest of the tourism industry in Southeast. There are numerous opportunities and programs for joint or collective promotion of Southeast Alaska's tourism attractions and activities that the industry in Craig ought to take advantage of. Craig should begin to look off the

island to communities like Ketchikan where there are obvious opportunities for joint marketing and packaging of tourism excursions. For the foreseeable future almost all of the tourist who visit Prince of Wales and Craig will have passed through Ketchikan first. And Ketchikan lacks some of the resources, like an extensive road system and easy access to the outer islands (Noyes, Baker, Lulu), that Prince of Wales and Craig have to offer.

### Secondary Industries

Craig's economy has benefited tremendously from the road system on Prince of Wales and the opening up of land for residential and commercial development in East Craig. The combination of housing and relatively easy access to the north and south ends of the island has resulted in people settling in Craig who work elsewhere on the island. Craig's central location on the road system and its nucleus of retail stores and service businesses have also allowed Craig to develop into an island-wide retail and service center that draws its customers from communities from all over the island.

To insure that this development continues, Craig will need to open more land for residential and commercial development to address the growing demand for more housing and retail space.

Craig needs to also look for ways to enhance its cultural, educational and recreational resources not only as a means of improving the quality of life for those who live in Craig but also as a way to continue to encourage people on Prince of Wales to use Craig as a recreational and cultural center. Craig should also aggressively seek out and recruit those who provide critical services, particularly medical services, for which there is a demand throughout the island. Finally, Craig should look closely at what is not being offered in the area that people are going off the island to buy and should begin to encourage local businesses to fill these gaps. Every dollar that can be retained on the island supports more local jobs which in turn insures that there will be greater economic stability and more growth.

## VI. Development Strategy

#### A. Craig OEDP Goals

The following four goals were identified by the Craig OEDP Committee. They are **not** arranged in order of priority. Together, they reflect the general consensus of the Committee.

It is the opinion of the Craig OEDP Committee that Craig should seek to expand its economy by building on what already exists. The Committee also recognizes the need to enhance the quality of life in Craig at the same time it seeks to increase the employment and employment income in Craig.

#### Craig OEDP Goals

1. Increase year round and long term employment and increase the employment opportunities for the unemployed and the under-employed in Craig.
2. Raise Craig's per capita personal income.
3. Enhance the quality of life in Craig both for those who live in Craig and as a tool for encouraging businesses to locate in Craig.
4. Increase the number of businesses and industries in Craig that both complement the existing economy and contribute to its stability.

### Project Criteria

The following criteria were developed by the Craig OEDP Committee for identifying and assigning priorities to the projects that are included in the Craig OEDP action plan.

#### Craig OEDP Project Criteria

1. Increases year round, long term employment.
2. Provides employment opportunities for the unemployed and under-employed.
3. Increases per capita personal income.
4. Complements existing businesses and industries and is consistent with community values and goals as set out in the **Craig Comprehensive Plan**.
5. Funding is available.

### C. Course of Action

The Economic Development Administration has stated that an OEDP should include a projection of the projects and activities that the OEDP Committee determines should be undertaken to accomplish its development goals. That program projection should:

reflect the scope of the area's Overall Economic Development Program and should include those items the OEDP Committee intends to be assisted by EDA and other Federal or State agencies, local governments or private organizations. The projections should indicate the area's priorities for the programs and projects proposed and the relationship of each to a goal of the area OEDP.

The following Craig OEDP Program Projection lists the projects and programs that comprise the scope of the Craig Overall Economic Development Program. These projects and activities are arranged in order of priority as determined by the Craig OEDP Committee.

## Craig OEDP Program Projection

### Highest Priority

#### 1. Marine Industrial Park

First Year

The addition of a marine industrial park as a base for providing an array of services to boat related industries would result in increased employment and income (that has been leaving the community) and would complement existing businesses and industries. Additionally, this project will also develop more land for commercial use and enable the community to attract complementary businesses, which will achieve the goals of project numbers 2, 6 and 9 of the city's previous OEDP, a feature that makes construction of this project a very efficient use of capital dollars.

### Other Priorities

#### 2. Expand Recreational Facilities (Swimming Pool Complex)

Although this project would produce only a few direct additional jobs, it could have a significant indirect impact on jobs and income in Craig. It would greatly enhance the quality of life in Craig and thereby contribute to attracting and retaining a skilled labor force. It would also be valuable for teaching water safety and survival skills that are critical in the seafood industry. Additionally, it would give people throughout Prince of Wales another reason to come to Craig which would benefit all of the stores, restaurants and hotels in Craig (particularly during the winter season/school year when occupancy is low).

#### 3. Install Hydroelectric Generation Capacity.

The City of Craig's dam at North Fork Lake has the capacity to retain enough water to not only provide for the city's potable water needs, but also could produce a substantial quantity of electricity produced by a hydroelectric generator. Once installed, the generator could create enough electricity to operate the city's water treatment plant, cutting significantly the cost of water to city businesses and residents, as well as provide enough electricity to operate a facility such as a swimming pool complex or another municipal facility.

#### 4. Expand Health Services

Although this project would produce only a few direct additional jobs, it could have a significant indirect impact on jobs and income in Craig. It would greatly enhance the quality of life in Craig and thereby contribute to attracting and retaining a skilled labor force. Equally important, it will provide a wide range of

essential health services to the island's residents. The city has the staff and expertise to operate such a facility, based upon the success of the existing Craig Clinic. Such a facility would cement Craig's position as the retail and services center of the island.

#### 5. Develop a College Level Training and Cultural Center

A college level training program in Craig would prepare Craig residents to take advantage of the job opportunities that develop as the local economy expands. It could benefit employers who want to improve the job skills of their employees. It could also benefit the unemployed and the under-employed who lack essential job skills. The end result would be more jobs for Craig residents. If the training center were combined with a cultural center, it could be another magnet for attracting people on the island to Craig. Local artisans and artists, as well as the community, would benefit from having a facility that provides a place for the practice and display of Native culture. The indirect benefits of this kind of development are enumerated above.

#### 6. Upgrade streets

An overall widening and grading of local street surfaces, with the installation of subsurface improvements, such as water and sewer lines and a storm water drainage system, would facilitate local commerce, improve the quality of neighborhoods and reduce airborne particulates. Such improvements will reduce the cost of business, better define property lines, eliminate encroachments onto public and private property, improve air quality and enhance aesthetics in the community.

Appendix D

Non-Agricultural Wage and Salary Employment  
Craig & Klawock 1980-1991

## NAWS Employment Craig/Klawock 1980

## First Quarter

DIV	UNIT	AV EMP
Construction	2	*
Manufacturing	5	79
TranComUt	2	*
Retail	8	32
FIRE	2	*
Services	7	21
AgForFis	8	*
Federal	5	24
State	5	14
Local	6	98

## Second Quarter

DIV	UNIT	AV EMP
Construction	1	*
Manufacturing	9	115
TranComUt	2	*
Retail	8	34
FIRE	2	*
Services	7	19
AgForFis	7	*
Federal	3	20
State	5	12
Local	6	80

## Third Quarter

DIV	UNIT	AV EMP
Construction	2	*
Manufacturing	8	315
TranComUt	3	*
Retail	9	56
FIRE	2	*
Services	7	13
AgForFis	8	*
Federal	3	19
State	5	16
Local	6	58

## Fourth Quarter

DIV	UNIT	AV EMP
Construction	3	*
Manufacturing	9	212
TranComUt	2	*
Retail	8	55
FIRE	3	16
Services	7	28
AgForFis	8	*
Federal	3	18
State	5	15
Local	6	91

## NAWS Employment Craig/Klawock 1981

## First Quarter

DIV	UNIT	AV EMP
Construction	3	15
Manufacturing	9	120
TranComUt	2	*
Retail	9	48
FIRE	3	22
Services	9	29
AgForFis	2	*
Federal	3	16
State	5	17
Local	6	87

## Second Quarter

DIV	UNIT	AV EMP
Construction	6	24
Manufacturing	8	242
TranComUt	2	*
Retail	10	65
FIRE	3	19
Services	8	38
AgForFis	2	*
Federal	3	23
State	5	18
Local	6	96

## Third Quarter

DIV	UNIT	AV EMP
Construction	5	13
Manufacturing	9	309
TranComUt	2	*
Retail	10	109
FIRE	3	15
Services	8	21
AgForFis	2	*
Federal	3	24
State	5	21
Local	6	77

## Fourth Quarter

DIV	UNIT	AV EMP
Construction	6	10
Manufacturing	10	279
TranComUt	3	*
Retail	9	67
FIRE	3	19
Services	8	17
AgForFis	3	4
Federal	4	23
State	5	21
Local	4	103

## NAWS Employment Craig/Klawock 1982

## First Quarter

DIV	UNIT	AV EMP
Construction	5	*
Manufacturing	9	189
TranComUt	4	36
Retail	9	56
FIRE	3	23
Services	8	18
AgForFis	4	*
Federal	4	17
State 5	22	
Local 4	110	

## Second Quarter

DIV	UNIT	AV EMP
Construction	5	11
Manufacturing	11	443
TranComUt	4	45
Retail	9	56
FIRE	3	20
Services	8	15
AgForFis	4	*
Federal	4	26
State 5	23	
Local 4	72	

## Third Quarter

DIV	UNIT	AV EMP
Construction	6	23
Manufacturing	11	524
TranComUt	4	*
Retail	10	84
FIRE	3	12
Services	8	18
AgForFis	4	*
Federal	4	30
State 5	26	
Local 4	51	

## Fourth Quarter

DIV	UNIT	AV EMP
Construction	5	31
Manufacturing	11	334
TranComUt	5	*
Retail	12	70
FIRE	3	18
Services	8	19
AgForFis	4	*
Federal	4	28
State 5	22	
Local 4	114	

## NAWS Employment Craig/Klawock 1983

## First Quarter

DIV	UNIT	AV EMP
Construction	6	*
Manufacturing	9	116
TranComUt	4	*
Retail	12	71
FIRE	3	19
Services	10	28
AgForFis	3	*
Federal	4	22
State	5	19
Local 4	115	

## Second Quarter

DIV	UNIT	AV EMP
Construction	7	44
Manufacturing	9	342
TranComUt	4	*
Retail	12	75
FIRE	3	24
Services	7	31
AgForFis	2	*
Federal	3	29
State 5	25	
Local 4	109	

## Third Quarter

DIV	UNIT	AV EMP
Construction	7	*
Manufacturing	9	381
TranComUt	4	*
Retail	12	89
FIRE	3	25
Services	8	27
AgForFis	2	*
Federal	2	31
State 5	27	
Local 4	74	

## Fourth Quarter

DIV	UNIT	AV EMP
Construction	7	43
Manufacturing	9	332
TranComUt	4	*
Retail	13	80
FIRE	3	25
Services	8	25
AgForFis	2	*
Federal	2	29
State 5	22	
Local 4	124	

## NAWS Employment Craig/Klawock 1984

## First Quarter

DIV	UNIT	AV EMP
Construction	7	20
Manufacturing	9	177
TranComUt	4	*
Retail	14	77
FIRE	3	21
Services	7	25
AgForFis	1	*
Federal	3	24
State 5	22	
Local 4	129	

## Second Quarter

DIV	UNIT	AV EMP
Construction	6	*
Manufacturing	9	362
TranComUt	4	8
Retail	13	85
FIRE	3	22
Services	8	44
AgForFis	1	*
Federal	3	29
State 5	23	
Local 4	130	

## Third Quarter

DIV	UNIT	AV EMP
Construction	5	*
Manufacturing	8	493
TranComUt	4	12
Retail	13	124
FIRE	4	27
Services	9	*
AgForFis	1	*
Federal	3	39
State 5	29	
Local 4	159	

## Fourth Quarter

DIV	UNIT	AV EMP
Construction	5	30
Manufacturing	6	*
TranComUt	4	*
Retail	13	109
FIRE	4	29
Services	9	41
AgForFis	3	*
Federal	3	31
State 5	26	
Local 4	140	

## NAWS Employment Craig/Klawock 1985

## First Quarter

DIV	UNIT	AV EMP
Construction	3	35
Manufacturing	7	*
TranComUt	4	*
Retail	13	88
FIRE	4	30
Services	9	27
AgForFis	4	*
Federal	3	21
State 5	23	
Local 5	134	

## Second Quarter

DIV	UNIT	AV EMP
Construction	4	*
Manufacturing	8	310
TranComUt	4	60
Retail	14	111
FIRE	4	43
Services	9	52
AgForFis	4	*
Federal	3	24
State 5	31	
Local 5	158	

## Third Quarter

DIV	UNIT	AV EMP
Construction	5	*
Manufacturing	8	437
TranComUt	4	65
Retail	13	115
FIRE	4	32
Services	10	54
AgForFis	4	*
Federal	3	45
State 5	33	
Local 5	176	

## Fourth Quarter

DIV	UNIT	AV EMP
Construction	6	32
Manufacturing	7	*
TranComUt	4	25
Retail	13	91
FIRE	4	32
Services	12	49
AgForFis	4	*
Federal	3	27
State 5	29	
Local 5	170	

## NAWS Employment Craig/Klawock 1986

## First Quarter

DIV	UNIT	AV EMP
Construction	6	25
Manufacturing	8	*
TranComUt	4	19
Retail	13	92
FIRE	4	27
Services	13	42
AgForFis	4	*
Federal	3	23
State 5	25	
Local 5	142	

## Second Quarter

DIV	UNIT	AV EMP
Construction	5	*
Manufacturing	8	372
TranComUt	6	62
Retail	14	111
FIRE	4	34
Services	11	59
AgForFis	3	*
Federal	3	24
State 5	29	
Local 5	141	

## Third Quarter

DIV	UNIT	AV EMP
Construction	5	*
Manufacturing	8	472
TranComUt	8	53
Retail	14	122
FIRE	4	29
Services	11	64
AgForFis	2	*
Federal	3	38
State 5	34	
Local 5	118	

## Fourth Quarter

DIV	UNIT	AV EMP
Construction	6	*
Manufacturing	8	446
TranComUt	8	51
Retail	15	91
FIRE	3	24
Services	11	55
AgForFis	2	*
Federal	3	24
State 5	32	
Local 5	133	

## NAWS Employment Craig/Klawock 1987

## First Quarter

DIV	UNIT	AV EMP
Construction	6	*
Manufacturing	9	72
TranComUt	10	*
Retail	16	102
FIRE	3	24
Services	12	48
AgForFis	2	*
Federal	2	22
State 5	27	
Local 5	113	

## Second Quarter

DIV	UNIT	AV EMP
Construction	6	*
Manufacturing	9	121
TranComUt	10	*
Retail	18	140
FIRE	3	24
Services	12	65
AgForFis	2	*
Federal	2	23
State 5	28	
Local 4	127	

## Third Quarter

DIV	UNIT	AV EMP
Construction	6	*
Manufacturing	9	162
TranComUt	9	46
Retail	18	146
FIRE	3	25
Services	12	69
AgForFis	2	*
Federal	2	36
State 5	30	
Local 4	106	

## Fourth Quarter

DIV	UNIT	AV EMP
Construction	6	*
Manufacturing	8	88
TranComUt	9	39
Retail	19	136
FIRE	3	22
Services	12	68
AgForFis	2	*
Federal	2	23
State 5	28	
Local 4	134	

## NAWS Employment Craig/Klawock 1988

First Quarter			
DIV	UNIT	AV EMP	AV WAGE
Construction	6	*	
Manufacturing	8	*	
TranComUt	8	*	
Retail	20	118	1227
FIRE	4	24	1905
Services	12	54	1012
AgForFis	1	*	
Federal	2	21	2012
State 5	26	2776	
Local 5	143	1986	
Second Quarter			
DIV	UNIT	AV EMP	AV WAGE
Construction	6	*	
Manufacturing	9	133	2818
TranComUt	8	*	
Retail	20	142	1260
FIRE	4	26	1709
Services	14	60	1059
AgForFis	1	*	
Federal	2	26	2142
State 5	27	2865	
Local 5	127	2220	
Third Quarter			
DIV	UNIT	AV EMP	AV WAGE
Construction	6	73	1681
Manufacturing	8	193	2527
TranComUt	11	52	3283
Retail	22	142	1256
FIRE	4	*	
Services	12	64	951
AgForFis	2	*	
Federal	2	26	2053
State 5	33	2627	
Local 5	120	1827	
Fourth Quarter			
DIV	UNIT	AV EMP	AV WAGE
Construction	6	69	1616
Manufacturing	7	208	2503
TranComUt	11	64	2558
Retail	20	127	1202
FIRE	5	*	
Services	12	59	1056
AgForFis	2	*	
Federal	3	22	2800
State 5	31	2868	
Local 5	141	1884	

## NAWS Employment Craig/Klawock 1989

## First Quarter

DIV	UNIT	AV EMP	AV WAGE
Construction	5	*	
Manufacturing	7	181	2411
TranComUt	12	39	2221
Retail	21	121	1421
FIRE	5	30	1613
Services	12	63	967
AgForFis	2		
Federal	3	22	2069
State 5	26	3036	
Local 5	128	2066	

## Second Quarter

DIV	UNIT	AV EMP	AV WAGE
Construction	6	86	2252
Manufacturing	6		
TranComUt	13	64	3646
Retail	19	147	1483
FIRE	5	32	1707
Services	13	76	1299
AgForFis	1		
Federal	3	25	2241
State 5	30	2798	
Local 5	128		

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## Third Quarter

DIV	UNIT	AV EMP	AV WAGE
Construction	5	93	1778
Manufacturing	6	361	3339
TranComUt	12	86	2655
Retail	19	150	1547
FIRE	5	*	*
Services	13	95	1091
AgForFis	1	*	*
Federal	3	41	1692
State 5	36	2923	
Local 5	113	1930	

## Fourth Quarter

DIV	UNIT	AV EMP	AV WAGE
Construction	5	*	*
Manufacturing	6	298	3370
TranComUt	12	86	3493
Retail	20	150	1547
FIRE	6	34	1907
Services	13	95	1128
AgForFis	1	*	*
Federal	3	31	2178
State 5	35	2867	
Local 5	131	2075	

## NAWS Employment Craig/Klawock 19 90

## First Quarter

DIV	UNIT	AV EMP	AV WAGE
Construction	5	*	*
Manufacturing	9	274	2882
TranComUt	14	46	2400
Retail	19	134	1455
FIRE	6	39	1965
Services	13	88	1084
AgForFis	2	*	*
Federal	4	25	2098
State 5	27	3238	
Local 5	133	2115	

## Second Quarter

DIV	UNIT	AV EMP	AV WAGE
Construction	5	*	*
Manufacturing	8	360	3316
TranComUt	14	66	3341
Retail	19	153	1641
FIRE	6	42	1799
Services	11	108	1075
AgForFis	2	*	*
Federal	4	33	2375
State 6	29	3028	
Local 5	114	2557	

## Third Quarter

DIV	UNIT	AV EMP	AV WAGE
Construction	5	*	*
Manufacturing	10	364	3367
TranComUt	15	86	2632
Retail	19	180	1438
FIRE	6	37	2035
Services	13	100	1160
AgForFis	2	*	*
Federal	3	42	2186
State 6	33	3138	
Local 5	92	2395	

## Fourth Quarter

DIV	UNIT	AV EMP	AV WAGE
Construction	6	31	1781
Manufacturing	10	318	3292
TranComUt	15	80	2725
Retail	23	160	1460
FIRE	7	40	2143
Services	14	107	1061
AgForFis	1	*	*
Federal	3	29	2553
State 6	32	3172	
Local 5	132	2334	

## NAWS Employment Craig/Klawock 19 91

First Quarter			
DIV	UNIT	AV EMP	AV WAGE
Construction	5	*	*
Manufacturing	10	260	2757
TranComUt	13	62	2458
Retail	24	143	1158
FIRE	7	39	1961
Services	16	104	1040
AgForFis	1	*	*
Federal	3	25	2404
State 9	26	3078	
Local 4	140	2189	
Second Quarter			
DIV	UNIT	AV EMP	AV WAGE
Construction	5	*	3045
Manufacturing	11	266	*
TranComUt	13	89	2837
Retail	24	165	1342
FIRE	8	46	1961
Services	16	95	1218
AgForFis	*	*	*
Federal	4	35	2269
State 9	28	3028	
Local 4	152	2202	
Third Quarter			
DIV	UNIT	AV EMP	AV WAGE
Construction	4	*	3045
Manufacturing	10	237	*
TranComUt	13	75	2807
Retail	24	177	1219
FIRE	8	46	2021
Services	16	100	1155
AgForFis	1	*	*
Federal	4	43	2254
State 9	33	3923	
Local 4	141	1984	

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