

## EMPLOYMENT FORECAST

by Jeff Hadland

Employment growth in Alaska during the forecast period will be most greatly impacted by government legislation and appropriations. Significant investment in capital projects by all levels of government should help to increase the demand for labor, especially for construction workers. High costs and slack demand have both lead to a drastic drop in residential and non-residential building construction. State and local appropriations should help to alleviate the construction downturn, although the exact timing of that impact is uncertain. Normal start-up delays will push many capital projects into the 1981 and 1982 construction season.

State government spending for fiscal year 1981 promises to have a stimulative effect on all sectors of the economy. The fulfillment of the state's obligation under the Alaska Native Claims Settlement Act (\$293 million), Alaska Housing Finance Corp. loan package (\$500 million), a major capital improvements program, probable reduction or elimination of the state income tax (\$90 million in refunds), and the possible distribution of permanent fund earnings (\$128.5 million) are all in addition to a general increase in state operating expenditures that add approximately 850 new jobs. In addition, tax relief would pump over \$100 million in after federal tax disposable income into the economy. This influx of monies for both construction and private discretionary spending should have a significant and pervasive influence during the forecast period. Of course the amount of leakage of money outside the state economy and the way the money is spent will have a great bearing on the amount of employment generated. Certain areas of the economy generate more jobs from the same amount of money. For example the spending of these funds on construction would result in more employment gains than if spent for travel or consumer goods.

The Alaska lands issue may also be resolved during the forecast period. With the elimination of some of the uncertainty surrounding available land use choices exploration investment should be positively affected. But continuation of current uses may be threatened, with the timber industry an area of particular concern. Reductions of the annual allowable cut may result in reduced timber employment.

Our current employment projections suggest an annual employment growth rate of 3 percent over the next year. The current employment statistics survey (CES) tend to confirm this even though the Anchorage-MatSu Region has experienced no significant employment changes from last year. The projection for next year may even be conservative considering the unusual government expenditures and prospects for preliminary work on the proposed gas line, neither of which are considered in our base case or normal development forecast.

The Anchorage housing market is currently experiencing a vacancy rate of approximately 16 percent, the first time that rate has been below 20 percent since December of 1978. During the first six months of 1980 only 385 housing permits have been issued, most of these as single family residences. This 60 percent drop in building construction has probably been the contributing factor in the vacancy rate decline. Healthy employment gains following the current plateau should help to fill vacant housing units quickly.

### MANUFACTURING

An area of particular interest and concern has been the Bristol Bay fishery which had been involved in a potentially disastrous strike by fishermen. The Bristol Bay harvest was expected to account for some 40 percent of the total salmon harvest, according to the Alaska Dept. of Fish and Game. A price agreement between fishermen and processors was reached during the

first few days of July. The sockeye salmon price for 1980 was set at 57¢ compared with last years price of 80¢ - \$1.25. It is now believed that the total catch will be approximately 22 million fish, down from last year's harvest of 32 million fish. The anticipated catch for 1980 had been 37 million fish. The reduced catch is expected to improve the world salmon price picture, with next year's fishermen and this year's processors expected to benefit. The employment impact of the reduced catch is not certain at this time but there will be reduced incomes from last season.

The seafood processing component of the manufacturing industry is expected to exhibit healthy growth over the next two years. New investment by native corporations, particularly Sealaska, will help to modernize and expand the industry. Sealaska's leasing and proposed purchase of the bankrupt New England Fish Co. properties is part of a long term interest in attaining an import position in the west coast fishery.

The forest products industry is expected to grow at a very conservative pace over the next several years. This growth is predicated on maintenance of annual allowable cut levels. Long term growth will have to come from lands transferred to private ownership. Native corporations will be able to supply at least 100 MBF but most of this is earmarked for round log export leaving pulpmill requirements in doubt. Pulp and paper markets appear to be strong but lumber markets are exhibiting slack demand in the U.S. and Japan. Alaska Lumber and Pulp has shortened its work week at its Wrangell mill in response to the reduced Japanese requirements.

## TOURISM

A general downturn in the U.S. economy and a dramatic increase in travel costs have lead travel industry experts to forecast more conservative growth in this area over the next few years. The anticipated number of tourists traveling to Alaska this year is 550,000 with 600,000 expected next year. This 10 percent expected increase compares with an estimated historical growth rate of 15 percent. Total expenditures by out of state visitors will total approximately \$215 million (with as many as 17,000 people employed this summer as a direct result).

An aggressive advertising campaign for 1980-81 is being financed by the state and private industry. The advertisements and direct mailings will cost approximately \$2.6 million with the goal of increasing that small part of the total market willing and able to spend discretionary income on a relatively expensive Alaska vacation.

Because tourism provides employment in transportation, trade and service sectors while having relatively little demand on state services growth in this area is believed to be in the state's interest.

Current employment statistics show a leveling off of hotel, transportation and restaurant employment reinforcing predictions of reduced growth rate in tourist market.

## MINERAL/PETROLEUM

The approval by the Canadian government of construction of southern segments of the natural gas pipeline makes undertaking of the Alaskan segment of the line probable. Although final approval of the Alaska Northwest Natural Gas Co's \$7.9 billion project by the Federal Energy Regulatory Commission (FERC) is not expected for some time, both the U.S. House and Senate have approved the project and President Carter has expressed assurances of construction to the Canadians. Pipeline employment impact will be significant with peak direct

employment at 6,000 to 7,000 workers. Field projects are currently underway with preparation expected to continue through 1983 and two thirds of pipeline work to take place in 1984 under one scenario. The employment impact of the pipeline project will be considered in detail when more information is available.

The Beaufort Sea oil leases have been upheld by the courts and delivered but exploratory work cannot begin without United States Geological Survey approval. Much preparatory work is required before any drilling can begin including the construction of gravel islands to be used for drilling platforms.

Several major energy and chemical companies have submitted proposals for conducting a feasibility study for a gas liquids based petrochemical industry. The proposals generally call for a 16" to 18" gas liquids line from Prudhoe Bay south to tidewater and a petrochemical plant which would employ 900 permanent workers under the Dow Chemical Co. proposal and 1200 permanent workers under the Alaskan Arctic Resources Group proposal. The Construction phase would require approximately 5000 man/years of labor with several thousand indirect jobs created as well.

Of major concern is the acquisition of the gas liquids from the Prudhoe Bay producers and a decision prior to construction of the natural gas pipeline since the two projects must be compatible.

Alpetco has reached agreement with the city of Valdez for construction of a \$1.5 billion petroleum complex which is expected to employ 800 full time workers. Alpetco is currently receiving 75,000 barrels per day of state royalty which will be the fuel for the petrochemical plant which is to be in operation by 1986. Controversy has surrounded the project ever since the "world scale" status, as described in the original contract, was

diminished. The state has reduced the amount of oil sold to Alpetco from the originally scheduled 150,000 barrels per day.

Current base case projections suggest an annual employment increase rate of approximately 11 percent in the mining industry. The employment projections may very well be conservative in light of recent activity, especially over the longer terms. It must be kept in mind that we are building upon a relatively small labor base of approximately 6000 mining industry workers. Any large scale project could make for large percentage increases. In addition mining and petroleum development are capital intensive industries. Relatively few workers are utilized in the operation of most petroleum projects.

#### CONSTRUCTION

Construction employment is currently inhibited by the housing slump. Building construction, approximately 25 percent of total construction, is down 25 percent from last year, while overall construction employment is experiencing very modest gains. Subsidization of home mortgage interest rates should help to make housing accessible to more people causing an increase in units demanded.

Several major construction projects and programs are expected to start up this year and next. A \$44.5 million computerized terminal facility in Valdez will be worked on through 1982. Chugach Electric has a \$67 million electrical transmission system to be constructed. Anchorage is planning a \$65 million sports and performing arts complex as part of their Project 80's program. In addition several major hydroelectric systems are being worked on, such as Swan Lake, in Ketchikan, a \$120 million project. The state is also spending money for major highway and school projects throughout the state. All of these should help to increase employment in the heavy construction component of the construction industry.

## SUMMARY

Overall employment should increase at the rate of 3 percent per year during the forecast period to some 185,000 workers during the 3rd quarter of 1981. Our basic projection still appears valid for the coming year. No employment declines are expected for the major industries we have forecasted. Over the two year period employment growth in mining will increase at the fastest pace with construction employment following close behind.

The expectation of large oil revenues over the next several years and major natural resource development suggests that massive amounts of capital will be flowing through the state economy. The economic activity generated will put pressure on both business and government. The current period of slow growth should be viewed as a breathing spell from which renewed activity will be forthcoming.

STATEWIDE  
August, 1980

LARMOD FORECASTS TO 1981  
INDUSTRY EMPLOYMENT, POPULATION, AND WAGES AND SALARIES

	1979					1980					1981				
	Qtr 1*	Qtr 2*	Qtr 3*	Qtr 4*	Ave.*	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Ave	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Ave
Population (July 1) 1/	413,516					417,806					426,801				
Total Nonag. Wages & Salaries (\$1,000's)	776,637	866,256	934,945	899,282	869,230	852,970	949,831	1,028,030	1,006,130	959,241	951,972	1,061,480	1,147,570	1,129,610	1,072,660
Average Quarterly Earnings	4,999	5,131	5,320	5,421	5,218	5,331	5,531	5,743	5,850	5,620	5,754	5,961	6,181	6,296	6,055
Total Nonag. Wage & Salary Employment	155,298	168,817	175,732	165,886	166,433	159,987	171,737	179,006	171,992	170,681	165,457	178,071	185,658	179,421	177,152
Mining	5,642	5,903	5,919	5,626	5,773	6,144	6,501	6,866	6,574	6,521	6,691	7,229	7,743	7,456	7,280
Construction	7,461	9,846	12,806	10,253	10,991	7,635	10,531	14,243	11,254	10,916	8,947	12,226	15,787	12,786	12,437
Manufacturing	7,800	13,139	18,821	11,511	12,818	9,779	12,902	15,818	11,680	12,545	10,411	13,531	16,412	12,324	13,170
Transp./Comm./Utilities	15,609	16,726	17,831	16,650	16,704	16,023	17,246	18,367	16,859	17,124	16,190	17,606	18,721	17,280	17,450
Transportation	10,016	11,081	12,098	10,976	11,043	10,237	11,224	12,211	10,844	11,129	10,333	11,498	12,430	11,149	11,353
Communications	4,214	4,224	4,289	4,374	4,301	4,374	4,543	4,619	4,517	4,513	4,397	4,571	4,678	4,556	4,551
Public Utilities	1,379	1,421	1,444	1,301	1,404	1,412	1,479	1,537	1,498	1,482	1,460	1,537	1,613	1,575	1,546
Trade	27,768	29,777	30,636	29,370	29,388	28,960	30,166	31,173	30,574	30,218	29,615	31,105	32,158	31,600	31,210
Wholesale	5,289	5,679	5,735	5,340	5,511	5,316	5,660	5,806	5,599	5,595	5,397	5,738	5,929	5,658	5,681
Retail	22,479	24,098	24,901	24,030	23,877	23,644	24,506	25,367	24,975	24,623	24,218	25,367	26,229	25,942	25,439
Finance/Insurance/Real Estate	8,093	8,208	8,021	7,819	8,035	7,923	8,109	8,324	8,057	8,103	7,990	8,258	8,458	8,275	8,245
Services	27,558	28,657	29,807	27,358	28,345	27,744	29,357	30,791	29,049	29,235	28,403	29,705	31,690	30,291	30,022
Government (Civilian)	54,885	55,814	50,916	56,603	54,554	55,275	56,199	52,440	57,330	55,311	56,743	57,649	58,832	56,742	56,742
Federal	17,516	17,816	18,729	17,688	17,937	17,651	18,169	18,644	18,026	18,123	17,740	18,257	18,732	18,114	18,211
State	14,651	15,041	15,059	15,155	14,977	14,938	15,418	15,473	15,746	15,394	15,433	15,913	15,968	16,241	15,889
Local	22,718	22,956	17,128	23,760	21,641	22,686	22,612	16,323	23,558	21,795	23,570	23,479	19,042	24,476	22,642
Miscellaneous	482	747	975	676	720	504	726	984	615	707	467	762	947	578	689

1/ Employment based population estimates.  
\* Actual employment data.

ANCHORAGE  
August, 1980

LARMOD FORECASTS TO 1981  
INDUSTRY EMPLOYMENT, POPULATION, AND WAGES AND SALARIES

	1979					1980					1981				
	Qtr 1*	Qtr 2*	Qtr 3*	Qtr 4*	Ave.*	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Ave	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Ave
Population (July 1) 1/	194,532					198,756					204,890				
Total Nonag. Wages & Salaries (\$1,000's)	377,313	401,437	422,076	425,029	406,464	417,806	450,788	472,432	474,585	453,903	472,375	510,624	534,620	537,592	513,803
Average Quarterly Earnings	5,063	5,167	5,330	5,407	5,242	5,558	5,676	5,796	5,919	5,740	6,044	6,173	6,303	6,437	6,242
Total Nonag. Wage & Salary Employment	74,519	77,697	79,189	78,609	77,501	75,172	79,420	81,510	80,180	79,071	78,156	82,719	84,820	83,516	82,301
Mining	1,840	1,867	2,172	2,055	1,984	1,990	2,086	2,206	2,110	2,098	2,148	2,442	2,496	2,401	2,372
Construction	4,471	5,662	7,117	5,690	5,735	4,589	5,959	7,391	6,203	6,036	5,075	6,503	7,932	6,941	6,613
Manufacturing	1,393	1,709	2,124	1,714	1,735	1,422	1,811	2,277	1,835	1,836	1,637	1,876	2,363	1,934	1,953
Transp./Comm./Utilities	7,587	8,025	8,412	8,117	8,035	7,449	8,029	8,585	7,978	8,010	7,638	8,361	8,977	8,221	8,299
Transportation	5,432	5,870	6,168	5,900	5,843	5,379	5,865	6,295	5,759	5,825	5,488	6,106	6,601	5,921	6,029
Communications	1,584	1,563	1,603	1,631	1,595	1,519	1,563	1,630	1,585	1,574	1,541	1,607	1,691	1,640	1,620
Public Utilities	571	592	641	586	598	551	601	660	635	612	609	648	685	660	651
Trade	16,536	17,218	17,310	17,100	17,041	17,229	17,766	18,189	18,299	17,871	18,215	18,648	18,864	19,059	18,697
Wholesale	3,946	4,061	4,081	3,958	4,012	3,838	4,033	4,116	4,032	4,005	3,921	4,144	4,255	4,135	4,115
Retail	12,590	13,157	13,229	13,142	13,030	13,391	13,733	14,073	14,267	13,866	14,294	14,504	14,609	14,924	14,583
Finance/Insurance/Real Estate	4,900	4,910	4,861	4,904	4,894	4,668	4,919	5,071	4,938	4,899	4,836	5,052	5,313	5,226	5,107
Services	15,288	15,129	15,664	15,141	15,306	15,186	15,565	16,196	16,069	15,754	15,691	16,322	16,826	16,700	16,385
Government (Civilian)	22,083	22,510	20,782	23,266	22,160	22,199	22,777	20,885	22,426	22,072	22,511	23,043	21,375	22,748	22,419
Federal	9,672	9,633	9,993	9,733	9,758	9,550	9,828	10,018	9,730	9,782	9,904	10,092	9,804	9,856	9,856
State	4,725	4,700	4,644	4,913	4,746	4,807	4,880	4,956	5,007	4,913	4,889	4,962	5,038	5,089	4,995
Local	7,686	8,177	6,145	8,620	7,657	7,842	8,069	5,911	7,689	7,378	7,997	8,177	6,245	7,555	7,569
Miscellaneous	421	657	746	622	612	440	508	710	322	495	404	472	674	286	459

1/ Employment based population estimates.  
\* Actual employment data.

NOTE: These forecasts are the product of econometric research. As such they are not directly comparable to employment estimates found elsewhere in this publication.