

Alaska's Employment Forecast: 1988-1989

By John Boucher

Introduction

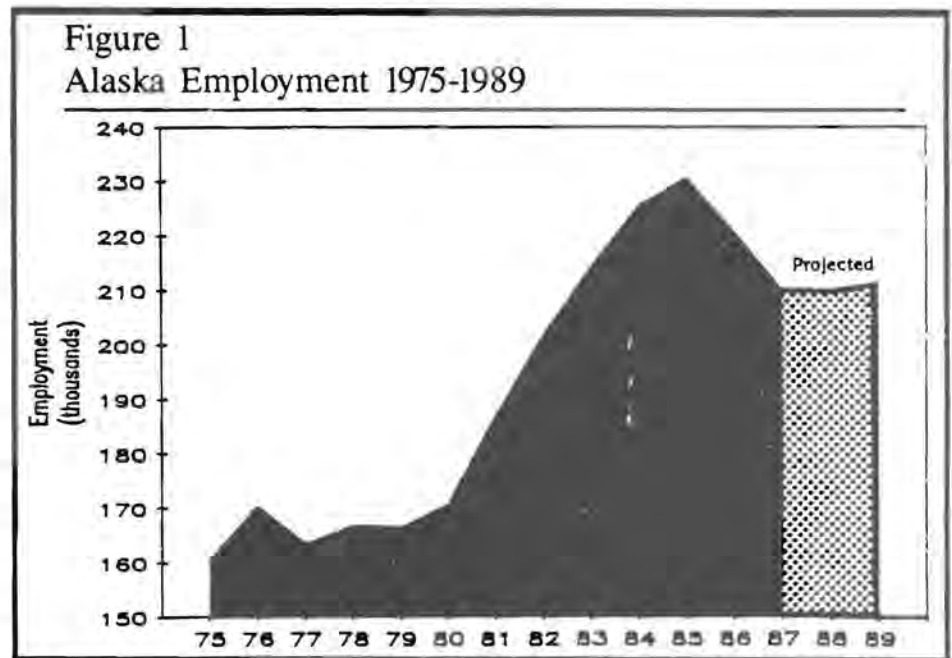
Alaska is going headlong toward 1990 with a guarded apprehensiveness about the future of the state's economy. Since the mid 1970s the economy of the state has been inexorably linked to the price of one commodity-oil. With a large portion of Alaska's economic well-being tied to the price of oil, the economy has been subject to the fluctuations which inevitably occur to the price of that commodity. Add to this the fact that the world oil market is best described as volatile, and the foundation for uncertainty about the future of Alaska's economy is firmly in place.

There is no event on the horizon which will magically extricate Alaska's economy from its dependence upon world oil markets. The price of oil and the associated employment and revenue it provides the state will be the single most important factor in determining the direction that the Alaskan economy takes in the near future. Other events in the next two years can stabilize Alaska's economy and produce overall employment growth if oil prices foster the stability in industries which have been responsible for most of the employment losses during the past two years (Figure 1).

Despite the dependence of the economy upon oil, some sectors are thriving and will lead the state to employment growth provided that oil prices stay stable. Tourism activity is anticipated to increase in the next two years. Initial bookings are up over 1987, and current exchange rates are favorable for the industry. Foreign tourists will find a visit to Alaska more affordable and Americans who would otherwise travel abroad will find Alaska relatively less expensive.

The tourism industry could receive the beginning of a major windfall in winter tourist activity in 1989 if Anchorage is selected as the site for the 1994 Winter Olympic Games. Selection of the site for the 1994 games will occur this fall. Sofia, Bulgaria is currently considered Anchorage's leading competitor in the effort to land the games. If the Anchorage bid falls short but makes a strong showing, benefits could still accrue to the winter tourist business from continued promotion of Anchorage as a premiere winter sports destination.

Hard rock mining will make some inroads in 1988 and continue to post employment growth through 1989. The Green's Creek Mine is anticipated to come on line in late 1988 and reach peak employment by mid 1989. The Red Dog mining venture is expected to come on line near the end of the forecast period. Besides



these two mining ventures, no new major mine (100 or more employees) is expected to come into production in the forecast period. A significant contribution to employment in this industry will be smaller mines and the exploration and development of projects which may come on line in the early 1990s.

The manufacturing industry is expected to be the outstanding performer in terms of employment growth during the forecast period. The export and production of Alaska's natural resources, primarily

fish and timber, are expected to propel manufacturing's share of total wage and salary employment to 7%. Manufacturing has not played this large a role in wage and salary employment since 1980.

Military expansion is expected to continue in Fairbanks although it may not be as large as originally planned. The scaling back of the number of civilians will dampen the potential economic benefit to Fairbanks, but the expansion will still have a positive effect on the economy.

Other smaller projects and proposals are on the drawing board and hold promise for future employment growth, however they will have a relatively small impact on Alaska's economy. Two events which are highly unlikely but would revise the forecast significantly upward are 1) if the price of oil were to increase to over \$20/bbl. and be perceived to remain there for the foreseeable future or 2) if contracts for North Slope natural gas were signed.

ing budget for fiscal 1989 (beginning July 1, 1988) is expected to be in the range of \$2.0 billion. The budget for the following state fiscal year is anticipated to be no larger than the expected budget for FY89.

The yen/\$ exchange ratio, which has been favorable to the growth of Alaska's manufacturing industry, is anticipated to remain so.

In examining the overall impact of the forecast it is important to keep in mind that the timing of employment changes is very important. This timing problem can cause distortions in the annual averages and as such the annual average doesn't always reflect perceptions of what is happening in an industry. In government employment, particularly state and local government, changes tend to occur at mid-year (the beginning of the state fiscal year). In calculating the annual average, the average for the first half of the year and the second half of the year may differ significantly and the annual average may under or overstate changes. For example Table 1 shows annual average employment in state government and compares it to the six month averages for the same period. This illustrates the danger of relying solely on annual average trends.

Table 1
State Government Employment
Yearly Trend and Six Month Average Trend 1985-1987

Year	Annual Average	Percent Change	6 Month Average	Percent Change
(1st Half)	-	-	20,234	-
1985 (2nd Half)	20,467	-	20,699	2.3
(1st Half)	-	-	20,579	-0.5
1986 (2nd Half)	20,184	-1.4	19,781	-3.8
(1st Half)	-	-	18,784	-5.0
1987 (2nd Half)	18,739	-7.2	18,695	-0.5

Table 2 gives the statewide employment forecast by industry while each major industry is discussed in detail below. In addition to the statewide forecast, there are employment forecasts for the Anchorage, Fairbanks and Southeast Alaska regions. While each forecast was made independently, all of the forecasts assumed the same price of oil and level of state spending. Individual assumptions crucial to regional forecasts were incorporated into the statewide forecast. The statewide forecast anticipates that the Anchorage economy will exert a drag on total employment growth in 1988 with a return to slow employment growth in 1989 after losses in Anchorage subside.

Assumptions

A forecast is a prediction of what will happen in the future given certain assumptions. In the forecasting process arriving at the assumptions upon which to base the forecast can be the most critical stage. The assumptions are crucial because oftentimes they influence the results of the forecast. There are several specific assumptions in this forecast in addition to the generalities discussed above.

The price of oil is expected to average between \$14 and \$17/bbl. throughout the forecast period. The State of Alaska's capital and operat-

Mining

The mining industry is composed of oil and gas extraction, metal and nonmetal mining. The oil and gas sector accounts for over 90% of employment in this industry.

Table 2
Alaska
Industry Employment Forecast
1988-1989

	1985	1986	1987	1988	Percent Change 87-88	1989	Percent Change 88-89
Total Nonag Wage & Salary	230,610	220,681	210,252	210,150	-0.0	211,450	0.6
Mining	9,513	9,080	8,461	8,700	2.8	9,100	4.6
Construction	18,605	13,372	10,594	9,950	-6.1	9,900	-0.5
Manufacturing	12,095	12,548	13,535	14,400	6.4	14,750	2.4
Transportation	18,684	17,949	17,733	17,850	0.7	17,900	0.3
Wholesale	8,732	8,142	7,362	7,400	0.5	7,400	0.0
Retail	37,069	35,522	34,001	33,900	-0.3	34,000	0.3
F.I.R.E.	12,766	12,431	11,159	10,900	-2.3	10,900	0.0
Services	44,810	43,657	41,742	41,400	-0.8	41,500	0.2
Federal	17,567	17,592	17,987	18,200	1.2	18,300	0.5
State	20,467	20,184	18,739	18,750	0.1	18,750	0.0
Local	30,303	30,205	28,940	28,700	-0.8	28,950	0.9

Assumptions

1. Price of oil will remain in the \$14-17/bbl. range.
2. The state's operating and capital budget for both FY 89 & 90 will be approximately \$2.0 billion.
3. Yen/\$ exchange rate continues to promote growth in Alaska manufacturing industry.

As 1987 closed there were signs of a return to activity on the North Slope and Kenai Peninsula. The recent fluctuations in the price of oil may cause some industry nervousness but as of this writing exploration and development activity planned for 1988 exceeds last years. The Prudhoe Bay field is gradually approaching a point where more wells are needed to keep production at its current levels. It is typical of an oil field to become more labor intensive as it ages and therefore the outlook for Prudhoe Bay related oil and gas employment is for continued growth throughout the forecast period.

Metal mining will have significant growth during the forecast period. Green's Creek near Juneau and Red Dog near Kotzebue will be making substantial contributions by 1990. A number of other ventures will make smaller contributions to employment, primarily in exploration and development. A few projects will be producing during the forecast period but they will be small in scale compared to Red Dog and Green's Creek. Percentage-wise, metal mining will probably be the fastest growing sector in terms of employment in Alaska's economy during the next two years.

Nonmetal mining employment is not expected to experience any signifi-

cant change in employment during the next two years. The two largest components of this sector are coal mining and sand and gravel extraction. Sand and gravel is tied to the fortunes of the construction industry so this industry could be expected to lose employment during the next two years. Coal mining will not make any significant employment additions. Production at Alaska's lone coal mine could be expanded without a tremendous amount of additional labor.

There are some potential large contributors to employment but they will not occur during the forecast period. The Beluga coal field is not currently competitive given existing technology and the world market for coal. The same can be said for the molybdenum rich Quartz Hill mine near Ketchikan. In the long term however, these two projects may contribute significantly to Alaskan mining employment.

Construction

The construction industry has taken the largest employment losses during the past several years. Every sector which contributed to the run up in construction employment in the early 1980s has trimmed back significantly during the last three years. Given the recent performance of the industry it would be easiest to fore-

cast a continued downward spiral for the next two years. However, the statewide forecast looks for construction employment to continue downward in 1988 but at a slower rate and then flatten out in 1989.

Residential and commercial construction is expected to remain at its currently depressed levels, especially in the urban markets. The largest bright spot in residential construction will be the military, which is planning on continuing housing expansion on Fort Wainwright. Residential and commercial construction will have pockets of activity throughout the state. Seward for example will have to accommodate the new employees which will staff the Springs Creek Correctional Facility. These small pockets of residential and commercial activity will not be enough to offset the continuing declines in Anchorage in 1988, however as Anchorage losses abate, these areas will help the industry stabilize in 1989.

Other major players in Alaska's construction industry are expected to either hold steady or increase activity during the forecast period. The worst seems to be over for the oil industry and oil and gas related construction is anticipated to increase. The list of scheduled projects include the rebuilding of the Steelhead oil platform in Cook Inlet, a refinery in Valdez and modules to be built by VECO for the North Slope.

The federal government will continue to be a steady source of construction employment as federal highway and airport dollars, the Forest Service, Post Office and military will all make contributions. State funded construction, which has become less of a dominant factor, will contribute to employment but scaled back from 1987 levels. The most significant project will be the Bradley Lake hydroelectric dam near Homer.

Manufacturing

The manufacturing industry is projected to be the greatest contributor to new jobs during the next two years. Much of the employment gains will be in the seafood processing sector. In Alaskan seafood circles salmon is the most prominent species in terms of employment and value. The

burgeoning bottomfish fishery is challenging other species for the second spot.

The employment growth related to the bottomfish fishery is significant for several reasons. It provides the seafood processor and harvester with off-season income and activity, a plus for an industry which experiences 70-80% of its activity in three months of the year. The off-season activity helps diversify the industry and provides income and employment opportunities in areas of Alaska which often have limited wage and salary employment opportunities during the winter months.

The timber industry will also contribute to employment growth in manufacturing. Southeast's pulp mills have just come off one of their most productive years in recent memory. Closed sawmills are reopening their doors and new investment is taking place. Provided exchange rates remain favorable the outlook in the timber industry is for steady growth.

Manufacturing employment which is not timber or seafood related is dominated by newspapers and printing and publishing firms. The outlook for this portion of the manufacturing industry foresees little change and perhaps some slow growth in newspapers serving Alaska's smaller communities. One bright spot in this sector for the next two years will be the Ketchikan shipyard. Employment could double from its current level by the summer of 1989.

Transportation, Communications and Utilities

This industry covers a broad range of activities which makes the outlook for the industry as a whole mixed. Some sectors of transportation will be benefactors of increased tourism activity. Air transportation, some ground transportation and to a lesser extent water transportation will all be impacted positively by a growing number of Alaskan tourists. The air and water transportation sectors should also benefit from growth in mining and manufacturing activity in Alaska's smaller communities. Logging camps, remote seafood processors and mine exploration groups will have to transport people and supplies

and air and water are the two most likely modes of transport.

For other portions of the industry little change or continued losses are projected. Trucking and warehousing is expected to experience some losses as the construction industry continues to struggle. Communications and utilities are expected to have relatively small changes in employment because population is not being lost at the rate it was during 1986 & early 1987.

Trade

Lower incomes, declining population and uncertainty about Alaska's economic future all helped push wholesale and retail trade into employment losses the last two years. As all three of these factors stabilize during the course of 1988 employment losses will subside.

When the losses do subside though some sectors will emerge in much better shape than others. Construction related wholesale and retail trade will be one sector which continues to experience employment losses. Examples of this type of establishment are building and material supply stores, hardware stores and construction related machinery.

Durable goods retailers such as car dealers, furniture stores and large appliance retailers will be better off than construction related retailers. This is because many consumers put off the purchase of big ticket items due to past uncertainty about the economy. As consumer confidence returns, sales of durable goods are expected to pick up and employment will stabilize and experience some small growth.

Food stores and general merchandise and apparel stores have already indicated the start of the turnaround in trade employment. These retailers represent what might be termed necessity item purchases. Although population losses and income declines spurred employment drops in these sectors, they were among the first to recover. As of February, both of these sectors were posting employment growth over-the-year.

Finance-Insurance and Real Estate

Employment losses and other difficulties this industry has faced during the past 18 months have been well documented. Bank closures and consolidations, high foreclosure rates and a huge inventory of residential and commercial real estate are all a lamentable part of this industry's current picture.

Unfortunately, there is nothing on the horizon which will turn Alaska's real estate market around in the next two years. While single family home sales have picked up recently, no relief is in sight for the condominium, multi-unit, and mobile home markets.

One of the most crucial factors to Alaska's overall economy will be how the large inventory of foreclosed properties are managed by institutions such as the Alaska Housing Finance Corporation (AHFC), and the Federal Deposit Insurance Corporation (FDIC). Wholesale liquidation of foreclosed properties would drive down property values even further and exacerbate the problem of "negative equity" which many property owners are already too familiar with.

In terms of employment in this industry, the worst of the losses are behind. Many banks and credit unions continue to struggle but are turning the corner. Employment losses are projected to continue through the end of 1988 but level off in 1989.

Services

Much like the other support industries of transportation and trade the outlook for the services industry is mixed. Overall, services is expected to lose employment in 1988 and follow that with a slight gain in 1989.

The services sector encompasses a broad range of activity: from hotel and motel operators to architects; dry cleaners to auto repair; bowling alleys to hospitals. In general the trend of service industry employment is dependant upon disposable income, of which there is much less in Alaska than there was two years ago.

Some essential services such as medical and health care services are projected to have employment growth throughout the forecast peri-

od. Services which are closely tied to the tourism industry, such as hotels and motels and some recreational services, will also have some employment growth.

Services which are almost entirely dependant upon local consumers such as beauty shops, dry cleaners and membership organizations are expected to continue to lose employment but at a much slower rate than the past two years. As incomes stabilize and the economic outlook improves these services will rebound into slight employment growth.

Government

Dramatic declines in state and local government employment took place in 1986 and 1987. These losses are expected to reverse themselves by the end of the forecast period. Federal government employment has been growing largely due to staffing associated with the 6th Light Infantry Division, but these gains are expected to subside and perhaps even reverse themselves during the forecast period. A change of administration may have a dramatic impact on federal government employment in the future, but the changes would probably not take place until the end of the forecast period.

State government employment is expected to experience a small increase in 1988. This estimate may be on the conservative side given the budget submitted by the governor. Additional staffing of the Department of Corrections for the Springs Creek facility in Seward is included but it is anticipated that cuts may have to occur elsewhere to bring the facility up to full strength. As of this writing the legislature was faced with projected revenue of approximately \$1.8 billion and a proposed budget about \$400 million in excess of that. Clearly a cautious forecast about state government employment growth is warranted, but flexibility in terms of alternate revenue sources and employee contracts allows for some growth.

Local governments must struggle with the same fiscal difficulties as the state government. In part this is due to local governments dependence upon state funds for their operations of both the education and noneducational functions they provide. If recent

trends are any indication, Alaskan local governments are more likely to scale back services or trim operating expenditures in response to financial difficulties than raise local taxes. With property values in most cities and boroughs dropping the pressure on local governments to cut expenditures will remain. Those areas which are almost entirely dependant upon state funds will almost certainly face no growth or cutbacks in employment.

One demographic fact will push the education portion of local government into a growth mode as early as 1989. For the foreseeable future Alaska has a larger amount of youngsters entering school than graduating. In some years the projected differences make for an additional 4,000 potential students per year. Additional school staffing will almost have to take place to accommodate the addition of these young people to Alaska's educational system.

Conclusion

Sometime during the next twelve months employment in Alaska will post its first year-to-year employment gain since February of 1986. Mining, manufacturing, and to a lesser extent tourism will be the activities which will lead Alaska out of the longest period of employment contraction in recent memory.

Previous boom and bust cycles have passed through Alaska's economy and each time when the cycle has run its course Alaska has emerged with a larger and more diversified economy. While this rout has been protracted, it is no exception to previous boom and bust cycles. If the forecast for employment through 1989 is accurate, Alaska's economy will head into the 1990s with 40,500 more jobs than at the beginning of the decade. This translates into 24% more jobs and an annual growth rate of 2.2%.

In any economic shake out there are winners and losers. While the surplus of commercial space in many markets is a disaster to some investors, the flip side is that new and existing marginal business ventures may find operating costs lower and be able to make a business viable that might not have been otherwise. While it is a tough pill to swallow there are indi-

cations that the recession has helped Alaska become more competitive with the lower 48 in terms of wages, the overall cost of living and the cost to do business.

The outlook for the immediate future of the Alaskan economy is one of guarded optimism. Optimistic in the fact that employment growth is beginning to overtake employment losses and Alaska is currently on a course

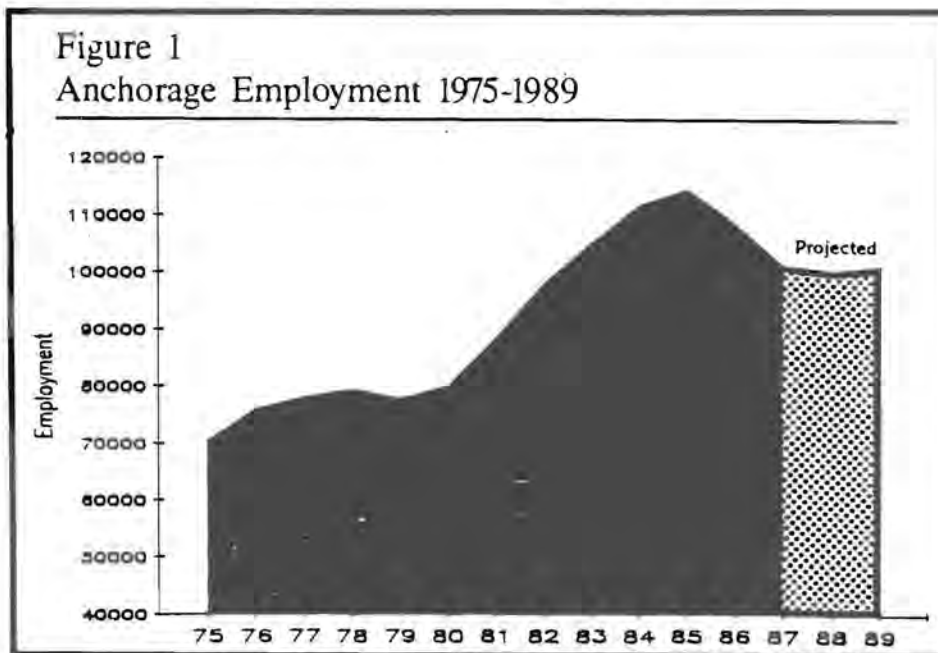
for future growth. However this optimism is guarded because while employment gains in some industries will be realized, overall employment growth is dependant upon the stabilization of the oil and gas industry; government and other secondary industries dependant upon oil. In that sense overall employment growth still rests squarely on the shoulders of that capricious beast—the world oil market.

Anchorage Employment Forecast: 1988-1989

By Greg Huff

After two years of employment declines it appears that the recession has nearly run its course, however, given the shaky nature of oil prices and state government expenditures, the impending recovery will be tentative at best. The Anchorage employment forecast, based on sample employment data through February 1988, indicates that by the end of this year overall employment declines will end, replaced by slow job growth through 1989. The net results show total employment declining 1% in 1988 and increasing 0.9% in 1989 (Table 1).

However, by the time Anchorage employment turns around, 14,400 jobs will have been lost, a decline of 12.6% since 1985. Total employment levels would be down to those found in late 1982 (Figure 1). Even with total employment forecasted to increase in 1989, employment levels will remain 4% below 1985's annual average.



Assumptions

Key assumptions during the forecast period include:

- 1) The price of oil will remain the \$14-17/bbl. range.
- 2) The state's operating and capital budget will be approximately \$2.0 billion.
- 3) The fish processing and timber industries current vitality continues.
- 4) Hard rock mining activities around the state continue to pick up.
- 5) Tourism continues to increase.
- 6) Federal government expenditures remain relatively stable in 1988 and fall slightly in 1989.

In addition, the forecast **does not** assume Anchorage will be designated as the site of the 1994 Winter Olym-

pics. The announcement expected this fall would have little direct impact during the forecast period, but it would heighten people's outlook. One direct impact the announcement may have in 1988 would be to give an added push to the proposed ski resort in Eagle River. Construction of the ski resort is not assumed in this forecast. In short, a positive announcement would act as an attitude spring board, while a negative announcement, though a disappointment for many in Anchorage would not impact employment trends projected by this forecast.

Employment Outlook by Sector

The forecast shows a mixed industry performance in 1988. Employment increases are indicated in mining; manufacturing; transportation, communications & utilities; and trade. Losses are predicted in construction; finance-insurance and real estate; services; and government. By 1989 the forecast indicates that only the construction industry remains in the negative category (Figure 2).

Government

In 1988, small increases in federal and state government employment offset much of the declines in local government employment, resulting in a net decline of 50 government jobs.

Federal government employment is expected to grow by 100 jobs, despite the announcement by the Army that several hundred civilian jobs will be lost in Anchorage in 1988 and 1989. Offsetting these declines are gains in Air Force civilian and National Guard employment. With those offsetting changes combined with small net gains elsewhere in federal government, federal employment will increase slightly in 1988.

By late 1988 cutbacks in the Army in addition to federal deficit pressures will cause employment declines which won't be registered until 1989. Any major shifts in the military's policies and/or federal funds could alter this middle of the road forecast.

State government employment will increase approximately 50 jobs in 1988. However, this figure could easily go the other direction. Indications are that employment losses in state

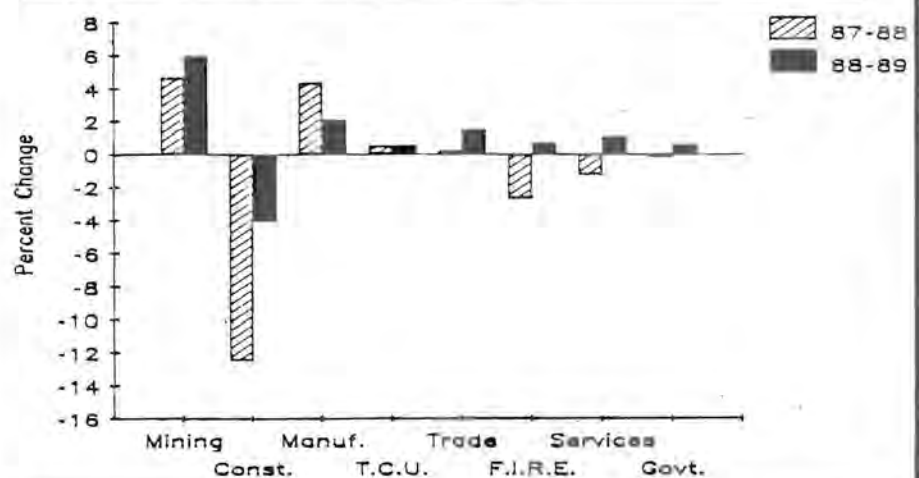
Table 1
Anchorage Employment Forecast
1988 - 1989

	1987	1988	Percent Change 87-88	1989	Percent Change 88-89
Total Nonag. Employment	101,100	100,100	-1.0	101,000	0.9
Mining	3,200	3,350	4.7	3,550	6.0
Construction	5,600	4,900	-12.5	4,700	-4.1
Manufacturing	2,300	2,400	4.3	2,450	2.1
Trans. Comm. & Utilities	9,400	9,450	0.5	9,500	0.5
Trade	23,400	23,450	0.2	23,800	1.5
Wholesale	5,400	5,300	-1.9	5,350	0.9
Retail	18,000	18,150	0.8	18,450	1.7
Finance-Ins. & R.E.	7,400	7,200	-2.7	7,250	0.7
Services	23,700	23,400	-1.3	23,650	1.1
Government	26,000	25,950	-0.2	26,100	0.6
Federal	10,400	10,500	1.0	10,450	-0.5
State	6,700	6,750	0.7	6,850	1.5
Local	8,900	8,700	-2.2	8,800	1.1

Assumptions

- 1) The price of oil will remain in the \$14-17/bbl. range.
- 2) The state's operating and capital budget will be approximately \$2.0 billion.
- 3) The fish processing and timber industries current vitality continues.
- 4) Hard rock mining activities around the state continue to pick up.
- 5) Tourism continues to increase.
- 6) Federal government expenditures remain relatively stable in 1988 and fall slightly in 1989.

Figure 2
Percent Change in Employment by Major Industry
Anchorage 1987-1988 and 1988-1989



government had abated by early 1988. For example, our sample of state government employment as of February 1988 shows state government employment down only 47 jobs or 0.6% over-the-year compared to the 8% decline since 1985. Moderate growth is anticipated into 1989.

Most local government employment losses are forecasted to take place

during the first half of 1988 and subside during the second half of the year. As of February 1988 local government employment was down 8% or 800 jobs from year-ago figures. Most declines were initiated in mid to late 1987. Some reductions occurred in the number of teachers and other full-time staff, but most of the declines were related to part-time help.

By the second half of 1988 most of these cutbacks will have been completed. With school enrollment stabilizing and the start-up of all day kindergarten local education employment will grow slightly in 1989. In addition, state funds assisting local education are expected to increase.

No major layoffs are anticipated in the noneducational side of local government. It appears negotiations concerning wage and benefit concessions have been effective, cancelling many proposed layoffs. Continued constriction in state government assistance to local governments combined with a falling local tax base will cause some declines through 1988, but by 1989 employment in the municipal government, which includes city owned utilities, will increase slightly.

Mining

The forecast calls for mining to be the growth leader during the forecast period. Employment in this industry is forecast to increase over 10% in the next two years. This is after declines of 26% from 1985 to 1987. The increases in mining employment in 1988 and 1989 are concentrated in the oil and gas sector as drilling and exploration schedules expand on the North Slope.

The rebuilding of the Steelhead platform in Cook Inlet which was destroyed by a blowout last year and VECO's contract to build modules for the North Slope will also cause some employment growth.

If oil prices go above \$18 Milne Point would reopen and above \$20 other development projects currently on hold would take place. Hence, higher oil prices means employment growth above the growth indicated by the forecasted figures. However, if oil and prices fell and stayed below \$13 for a

substantial period the opposite would happen and the oil and gas industry would not post even moderate employment gains.

Construction

There are no indications that the drums are over for the construction industry. The forecast indicates employment declines of nearly 13% in 1988 and 5% the following year. These declines put construction employment levels below those of any year since the early 1970's.

The forecast assumes that residential construction picks up slightly this summer with the possibility of 300 single family homes being built during the summer of 1988. This is an increase of nearly 40%. In percentage terms this sounds good, but in absolute terms it can be classified as nothing but a poor year. In terms of residential permit data there hasn't been a time outside of 1987 that fewer homes were built since the late 1960's. Residential construction employment will continue to grow slowly in 1989, but will remain significantly below levels found during the boom years or for that matter below levels of the last 15 years.

Highway and heavy construction will decline slightly in 1988 and stabilize in 1989. The two major highways getting underway in 1988 are the Eagle River bridge and the Rabbit Creek/DeArmoun interchange both valued at over \$20 million.

The commercial building sector will take the brunt of the construction employment declines. State and private construction projects have dried up and there are not many bright spots on the horizon. Construction of the court house expansion will not occur in the forecast time frame. It appears even if approved this session the earliest the project would start would be 1989. Indeed, a start-up that year would offset the construction employment declines forecast for 1989.

One bright spot in the commercial building sector is Alyeska's plan to expand their ski resort facilities in Girdwood. This \$40 million project includes an addition of 300 rooms and the construction of a gondola. This project will directly impact several hundred construction workers

through 1991. The proposed \$200 million Eagle River ski/tourist resort is not assumed in this forecast. If the project does get the go ahead the forecasted construction employment figures would need to be revised upward by several hundred jobs.

Military construction levels are anticipated to remain stable with increases in National Guard construction projects offsetting declines in other military components. The largest military project in Anchorage during the forecast period is construction of the Air National Guard hangar and support facilities on Elmendorf Air Force Base.

Secondary Industries

A recovering mining industry, robust seafood processing industry, increasing tourism, stabilizing government employment and the bottoming-out of population and income levels will all have a positive impact on the secondary sectors.

Transportation, Communications, and Utilities employment is forecast to increase 1% over the two year forecast period. Trucking employment will remain stable because of military contracts. Air transportation will see modest increases after falling 6% in 1987. Increasing tourism and the robust seafood processing industry will help fuel the growth in air transportation. Water transportation employment will remain flat although cargo tonnage may increase slightly. The communications industry and private utilities are expected to grow slightly.

After falling nearly 20% in two years, employment in the **Trade** industry is expected to increase in 1988 and 1989. However, the movements of wholesale and retail trade are largely offsetting in 1988. Stabilizing population and income levels and increasing tourism are the primary impetus for growth in the retail sector. In short, it appears that trade has been stripped of its overcapacity quite quickly and now slow growth will settle in.

Bad news continues for the **Finance, Insurance and Real Estate** industry. After falling 15% since 1985 employment in this industry is forecast to fall another 3% before all the declines

are over. After the worst year ever for Anchorage's banking industry, a dismal year for insurance companies and a rock bottom year for real estate it does appear the worst is over. Some banks remain financially strapped. The real estate market has shown signs of life as sales of single family homes are picking up. The inventory of condominiums will continue to be a drag on the real estate market throughout the forecast period.

The **Services** industry is composed of many sectors but the primary groups include hotels/motels, personal services (like laundry and beauty parlors),

business services, construction services (like architects and engineers) and health care. Due to continued employment declines in the business and construction services sectors total services is forecast to decline in 1988. By the following year overcapacity should be wrung out of those sectors preparing the way for the other services sectors to induce increases in total services employment.

Conclusion

Forecasting, at best, provides economy watchers with a tool to judge the possible movement of an economy.

The Anchorage employment forecast presented in this article establishes a baseline or most likely outlook. Given the assumptions stated above total Anchorage employment is expected to hit bottom sometime in late 1988 and grow slowly through 1989.

A number of different scenarios could actually occur. Some can produce a continued downward spiral in employment levels and some could show moderate to rapid employment growth. Any major change in the key assumptions could lead to any one of the scenarios.

Fairbanks Employment Forecast: 1988-1989

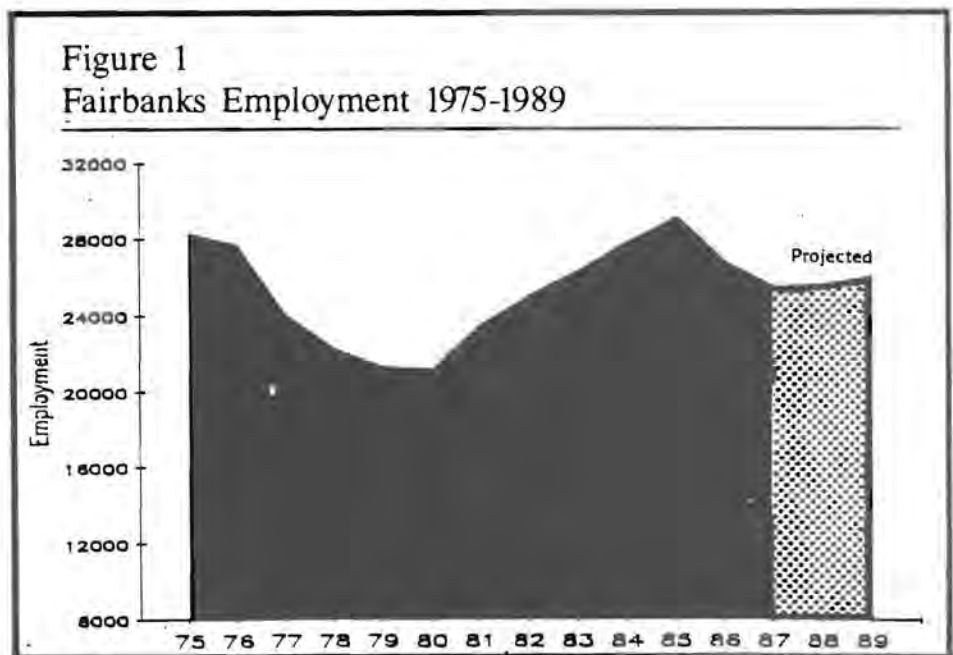
By Neal Fried

"The economic forecaster . . . is disliked when his prophecies are ominous: he is distrusted when they are cheerful and he is reviled when they turn out wrong. Nevertheless, the forecaster survives and even prospers because business decision makers feel that they need him."
Leonard Silk, 1970

The Outlook Improves

After losing 3,650 jobs over the past two years, Fairbanks' economy will begin to stabilize in 1988 and 1989. While we will not see a strong recovery there will be a period of convalescence and slow recovery (Figure 1). The annual rate of growth for 1988-1989 will be slightly shy of 1%. This compares to an annual growth rate of 5.5% for the 1980-1985 period. Though the projected growth pales in comparison to 1980-85, any growth is a milestone in its own right because it signifies an end to the recession in Fairbanks.

The growth will be modest enough that individuals and businesses may not perceive a great deal of change. However, layoffs in most sectors of the economy will be fewer and some industries will actually expand. In late 1987 signs of improvement in Fairbanks' economy began to appear. State government (including the University), Fairbanks' largest basic sector employer, was no longer sustaining losses. By early 1988 some employment growth was evident. Retail trade's employment levels also recovered, a possible indication of a return of consumer confidence and in reaction to the growing military presence. Construction continues to lose ground, but these losses have moderated considerably. Fairbanks' remaining industry losses have either moderated or have come to an end.



Key Assumptions

Fairbanks' employment forecast is predicated on a set of key assumptions. A change in any one of the following factors could have a profound influence on Fairbanks' economy. In addition to these key assumptions, other assumptions have been made which will be discussed in the general text of the article.

- 1) Oil prices: \$14-17/barrel.
- 2) State operating budget: Approximately \$2.0 billion.
- 3) The Army will deploy 1,034 additional soldiers at Fort Wainwright in Federal fiscal year (FY) 1988 and an additional 277 in FY 1989.

Table 1
Industry Employment Forecast
Fairbanks
1988-1989

	1987	1988	Percent Change	1989	Percent Change
Nonag. Wage & Salary	25,500	25,600	0.4	26,050	1.8
Mining	100	100	0.0	100	0.0
Construction	1,600	1,550	-3.1	1,500	-3.2
Manufacturing	500	550	10.0	550	0.0
Trans. Comm. & Utilities	2,200	2,250	2.3	2,300	2.2
Trade	5,500	5,600	1.8	5,700	1.8
Wholesale	700	750	7.1	750	0.0
Retail	4,700	4,800	2.1	4,850	1.0
Finance-Ins. & R.E.	900	850	-5.6	850	0.0
Services & Misc.	5,500	5,600	1.8	5,700	1.8
Government	9,100	9,100	0.0	9,350	2.8
Federal	2,800	2,800	0.0	2,900	3.6
State	3,700	3,750	1.4	3,800	1.3
Local	2,600	2,550	-1.9	2,650	3.0

- 1) Oil prices: \$14-17/barrel.
- 2) State operating budget: Approximately \$2.0 billion.
- 3) The Army will deploy 1,034 additional soldiers at Fort Wainwright in Federal fiscal year (FY) 1988 and an additional 277 in FY 1989.
- 4) Military related construction spending during FY 1988 will exceed \$70 million and in 1989 it will be slightly less.

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The Light Infantry Brigade

Since 1986 1,400-1,500 additional soldiers have arrived in Fairbanks. If we were to count these soldiers in our wage and salary or labor force statistics, employment during the next two years would grow quite dramatically. This is not done because uniformed military are not counted in wage and

salary statistics nor civilian labor force numbers, but instead are accounted for separately. In addition to this defined limitation, an increase in uniformed military personnel does not represent direct new job opportunities for Fairbanks residents. The soldiers, their spouses and dependents also compete for jobs in the local labor market, which offsets some of the employment opportunities generated in the community by the military activity.

Nevertheless, the military impact in 1988 and 1989 has been treated cautiously in this forecast since the Army's deployment plans continue to be scaled back due to actual or proposed cuts by the Pentagon. An important example of this is what is occurring with federal civil service employment. Presently there are plans to cut federal civil service by 125 positions. In previous scenarios, given the approximate ratio of 3 soldiers per civilian employee, federal government employment was expected to grow by as much as 400 positions. Apparently this is not going to happen because of budget problems. This represents a major potential loss to the Fairbanks economy.

However, there are civilians employed on Fort Wainwright who are federal civilian employees but are not civil service, and are not funded by the Pentagon budget. These federal employees are employed by self supporting enterprises that provide services to the soldiers. They include the postal exchange (PX), recreational activities, day care and a variety of other concessionaires. Their employment is expected to grow slightly because they have more soldiers to serve. You will notice in Table 1 that we have not forecasted any growth for federal government—a surprising phenomenon considering the major expansion of uniformed personnel.

Construction

The construction industry will be one of the major beneficiaries of the planned military expansion during the next two years. In FY88 approximately \$70 million is expected to be spent for military construction in Fairbanks (which is about equal with 1987 levels), and a slightly smaller number is projected for 1989. Without this activity, construction's

employment would continue to fall, possibly to levels not seen since the 1960s. Even with the expected military construction, no growth is forecast for the industry. This will put the industry's employment at 1979 levels, which was hardly a brisk year for construction.

Commercial and public building construction is not projected to experience any rebound during the forecast period because of existing excess capacity in the market and fewer public construction dollars. Last year's dollar valuation of building and zoning permits fell to \$34.7 million, the lowest since pre-pipeline construction days. Construction of the \$12.5 million Fairbanks Multipurpose Community Activity Center will provide some relief to this sector of construction but not enough to put it on a growth path. On a somewhat brighter note, the Department of Transportation estimates highway construction activity should remain at least on par with last year. On the residential side there were indications in late 1987 and early 1988 that sales began to improve, which could mean a slight upswing in residential construction.

State and Local Government

State government is one of the brighter spots, though it is only projected to grow about 1% per year. State employment levels pulled out of the slump in late 1987, led by the University. Because a steady operating budget is projected, expect employment to inch upwards.

Local government's picture is mixed. The education side of local government looks relatively healthy after experiencing losses in 1987. Employment will remain level in 1988 and grow slightly in 1989 in response to a projected increase in students and an improved student/teacher ratio. The borough, city and the Municipal Utilities System will continue to lose ground in 1988 and stabilize in 1989. Deterioration of assessed property values and resistance to proposals to tap alternate sources of operating revenues preclude growth during the forecast period.

Promising News in the Secondary Sector

Retail trade and service employment are forecasted to move ahead approximately 2% per year during the next two years. Retail trade and services will benefit disproportionately from additional military personnel. These two industries will also benefit from what is expected to be a good tourism season in 1988. Though no good measure of consumer confidence exists, economic uncertainty contributed to employment declines in the secondary sectors when people delayed purchases because of the uncertainty. Those people whose incomes were not affected by the recession but who delayed purchases may now choose to spend more than they have during the past two years.

Only the finance-insurance and real estate sector is not projected to improve. The surplus of real estate and weakness in the financial sector will continue to put downward pressure on this industry. It will not be until 1989 when employment in this industry will finally stabilize.

Tourism

A healthy year for tourism is forecasted. According to most major tour operators, 1988 is looking good and there are strong indications that the devalued dollar will entice a growing number of foreign tourists. The weak dollar should also make Alaska a more attractive place for domestic visitors. Gasoline prices remain low, which should insure a healthy flow of tourists coming to Alaska via motor vehicle.

Overview: Labor Market Remains Tough but Improves

Though the employment picture is projected to improve during the next two years, employment opportunities will be far from plentiful. High unemployment will continue to prevail and the labor market will remain extremely competitive. Only a small percent of the jobs lost during the past two years will be reclaimed. In spite of this, job seekers should still find a considerably improved labor market for a number of reasons. Many poten-

tial job seekers have left which means there will be less competition for jobs which become available. The national labor market remains robust; thus fewer job seekers from the lower 48 will be seeking opportunities in Alaska. Finally, an improving economy, although moving at a snail's pace, brightens the overall outlook.

Southeast Alaska Employment Forecast: 1988-1989

By Brian Rae

Total employment in Southeast is expected to increase slightly during 1988 and 1989, reversing a two year decline (Figure 1). Unlike recent periods of overall employment growth, this increase will be fueled by the manufacturing industries. Those industries with high losses over the past two years, such as government and construction, should slow their rapid declines and remain relatively stable over the next two years.

The largest swing in employment will occur during 1988. After a drop of 1.6% during 1987, employment will increase by one-half of one percent (Table 1). An increase of approximately 1% is expected to follow in 1989. Much of this recovery will be in response to demands for Alaska products from outside the state. Although active during the recession years, this increased demand and associated employment has been overshadowed by employment decreases caused by the decline in the price of Alaska's oil. As other sectors slow their employment losses, the impact of this increased demand will become more apparent in Southeast's economy.

Assumptions

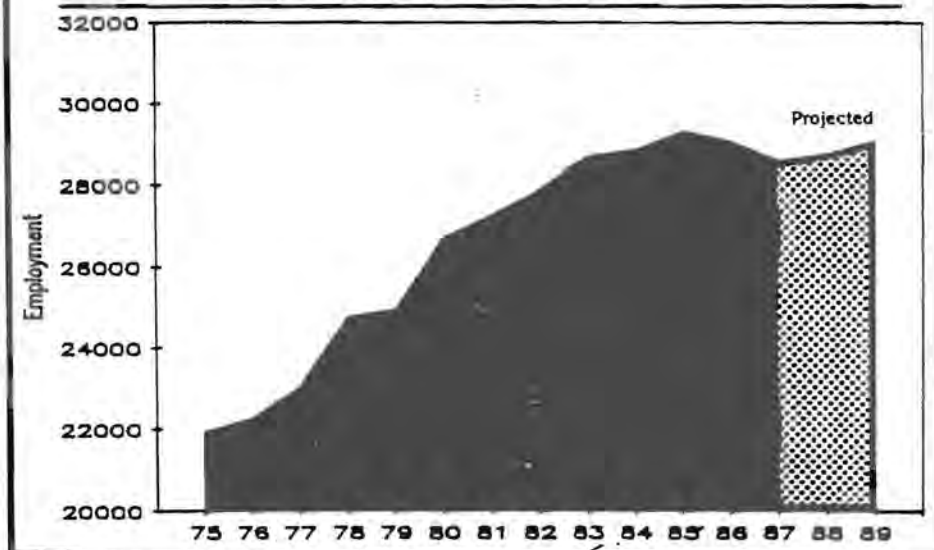
Southeast Alaska's economic decline will abate for three general reasons. First, Southeast industries reliant on the price of oil, mainly government, have cut back to sustainable levels given current price projections. Second, the wave of apprehension concerning the economy's ability to survive has for the most part passed. Unlike the last two years, 1988 and 1989 might well be the years when property bailouts are seen as investment opportunities. Third, favorable exchange rates will continue to spur demand for Alaskan products. The Japanese market in particular has boosted demand for products such as timber and fish. Although the dollar might appreciate somewhat in the world currency markets, it should not appreciate enough to kill this recent increased demand for Alaska's products.

One of Southeast Alaska's smallest industries will show a 300% increase by 1989 with the addition of the Green's Creek mine this year. These forecasts also assume that Southeast's largest industry, state government, will hold steady over the period.

Construction

Overall construction employment is expected to remain stable through the forecast period, a welcomed change from its constant declines since 1983. Following the capital move issue's resolution, pent up demand led to a construction boom. After this increased construction activity, annual average employment decreased by over 500 between 1985 and 1986. Accounting for as much as 7% of Southeast employment during the boom, construction will account for approximately 3.7% during the next two years. The current excess capacity in Juneau's residential and commercial real estate sectors will stymie growth in these sectors in Southeast for the next several years.

Figure 1
Southeast Alaska Employment 1975-1989



Public works projects scheduled for 1988 and 1989 will bring the construction industry out of its current slide. These include Wrangell's hospital expansion, several airport expansions, water and sewer service extensions, dock renovations, Juneau's city library and the new University of Alaska-Southeast library. Forecasted construction employment assumes 1986 levels to be near the minimum levels required to maintain existing structures and facilities.

Manufacturing

Responding more to outside demand than do other sectors of Southeast's economy, all manufacturing industries show strong employment growth over the next two years. After hitting a low point in employment in 1984, manufacturing has grown every year since. While only 10.5% of Southeast's employment was in manufacturing in 1984, almost 15% will be by the end of the forecast period. This employment share is the same as 1981 levels.

The forest products industry will grow steadily, continuing a trend which started in 1984 and has accelerated since that time. With recent increased demand, some mills which closed in the early 1980s will reopen over the next two years. Klawock's timber mill recently reopened, spurring employment in the area. Other mills currently in production are increasing their hours and shifts, while some new facilities have been proposed. Chilkoot Lumber Company is planning to bring on a second shift beginning in early 1988, while Louisiana Pacific Corporation has authorized Ketchikan Pulp Company to build a sawmill in Wards Cove. This new mill should be on line in September, 1988. Many mills are now remaining open for 11 months, compared to 7 or 8 months just a few years ago.

Even with moderate revaluation of the dollar, Alaska timber products should see demand sufficient to maintain modest employment growth. World supplies of dissolving pulp have dropped with the closure of three overseas producers over the last two years—Southeast's two dissolving pulp mills should experience some

increased demand. Several major fires in the U.S. Pacific Northwest should strengthen Alaska's position in the market. Two production factors have made Alaska timber processing more competitive. Labor disputes in British Columbia, and employer/employee agreements for wage concessions and profit sharing deals have helped make Alaska timber products more competitive in the market.

Seafood processing is the other bright spot in Southeast's employment. Although 1987 employment of 1,100 was less than expected, mainly because of a poor pink salmon season, employment should rebound to approximately 1,200 over the next two years. Three factors will determine this employment gain. First, as mentioned above, 1987 saw a very weak pink salmon fishery. All other things being equal, a normal run of pinks in 1988 should create increased employment. Second, Southeast processors expect to continue to participate in the strong bottomfish markets. Last year was quite good for black cod, and most processors are expecting similar catches during 1988. Finally, many processors are attempting to spread out their workloads, thereby providing longer term employment for their workers. Most of these jobs entail final processing, packaging, and labeling of the products.

One area of concern to processors,

Table 1
Southeast Alaska Employment Forecast
1988-1989

	1987	1988	Percent Change	1989	Percent Change
Nonag. Wage and Salary	28,600	28,800	0.7	29,200	1.4
Construction	1,100	1,100	0.0	1,100	0.0
Manufacturing	4,100	4,275	4.3	4,375	2.3
Seafood Processing	1,100	1,150	4.6	1,200	4.4
Lumber & Paper Prod.	2,800	2,900	3.6	2,925	0.9
All Other Manufacturing	200	225	12.6	250	1.1
Trans. Comm. & Utilities	2,100	2,100	0.0	2,150	2.4
Trade	4,525	4,525	0.0	4,575	1.1
Wholesale	400	400	0.0	400	0.0
Retail	4,150	4,150	0.0	4,175	0.6
Finance Insur. & R.E.	1,050	1,075	2.4	1,075	0.0
Services, Mining & Misc.	4,700	4,850	3.2	5,000	3.1
Government	11,000	10,900	-0.9	10,900	0.0
Federal	1,950	1,950	0.0	1,950	0.0
State	4,975	4,975	0.0	4,975	0.0
Local	4,100	4,000	-2.4	3,950	-1.3

and one which might dilute potential employment gains in the industry, is overlapping seasons. Some canneries have been forced to contract with floating processors to increase their capacity. These floating processors come equipped with their own crews, limiting the number of jobs available for local residents. Coordinating fishery openings to optimize land based processors' capacities could lead to large increases in employment for Southeast residents.

Employment levels in seafood processing, like forest products, are somewhat dependent upon international currency markets. Employment forecasts for seafood processing assume the same currency movements stated above.

Transportation, Communication and Utilities

This sector has recovered from its low point from 1983 through 1985. Employment through the forecast period will rise only slightly, and not be evenly distributed throughout the sector.

The communications and utilities industries will continue to show weakness. Employment during 1987 in this sector has been very weak. Population swings and increased competition within the communications sector seem to be large contributing factors to this weakness.

Transportation services should increase over the forecast period, making up for losses in the communications and utilities sectors. One of the largest impacts on the air transportation sector will be increased mining activities in Southeast and Canada. Supplying Green's Creek mine will boost this sector in northern Southeast. In the last nine months of 1987, work at Canada's Skyline mine gave Wrangell 3,600 additional flights. City officials expect two to three times that impact in 1988. Echo Bay Mines is using Haines as its mobilization point, causing increased air and water traffic in the area. Exploratory operations throughout the area will also positively impact these sectors.

Another possible impact will be the ability of other Southeast companies to win contracts to supply Canadian

mines. Canadian mining companies, looking to reduce costs and prolong the life of their investments, are seeking the lowest cost suppliers of goods, whether Canadian or Alaskan. Several mining companies have expressed a need for a road system to reduce their operating costs, with the incentive of increased contracts for the area willing to subsidize such a project. Even with limited contracts and mining activities from Skyline in 1987, city officials estimated that an additional \$1 Million flowed through Wrangell's economy. If Alaskan firms win more such contracts, mining's impacts can go a long way towards diversifying the Southeast economy.

Tourism is expected to increase somewhat over the forecast period. In 1986, this industry saw very high traffic caused by several factors. Nineteen eighty-seven saw tourist traffic down to more traditional levels. Much of this increase in tourism will, however, be independent travelers. For the transportation industry, tourism will maintain its relative importance throughout the forecast period.

Government

Government employment is forecast to continue downward, reaching a low in 1988 and then holding steady in 1989. At that time, employment levels will equal those in 1981, the year before state government employment increased rapidly. As a share of total employment, government will see losses over the next two years.

State government in Southeast is forecast to remain at 1987 levels for the next two years. This assumption is made for two reasons. Since the largest share of state workers are still in the midst of contract negotiations, there is some flexibility in the wage structure. After reviewing revenue projections, wage or benefit concessions could be made if needed. It is assumed that a contract will be reached which will help maintain current employment levels. Also, further cuts in state employment will be difficult without directly impacting programs, a course of action not normally taken during an election year. Recent cuts trimmed and consolidated programs, but did so without noticeably cutting back service to the

public. At this time, many state agencies are at maintenance staffing levels, and additional cuts will be noticed in reductions in their services.

Federal employment in Southeast has fallen in every year since 1980, from 2,500 to only 1,950 in 1987. For the forecast period, employment is projected to remain at 1,950. Two important factors could affect employment, particularly by 1989. A change in Federal administration, if it reverses the declines in federal employment, could impact Southeast government employment. The other factor, although considered unlikely, would be the selection of a Navy home port in Southeast Alaska. Even if this were to occur, it would affect only the last part of this two year forecast.

Local government employment is projected to continue its fall through 1989, but not at the precipitous rate experienced between 1986 and 1987.

Compared to 1987 employment of 4,100, the forecast years will see employment stabilize at approximately 4,000.

Mining

Of all industries, mining shows the greatest employment growth on a percentage basis. Employment will increase from less than 100 in 1987 to more than 250 by 1989 with additional employment at the Green's Creek mine. As mentioned earlier, other sectors will reap benefits from this employment increase.

Both Wrangell and Haines have benefited from mining activities in Canada. As mentioned above, Wrangell air traffic increased sharply last year. As production from Canada's Skyline mine gets underway, transportation services will see even greater economic impacts. Many local companies, from machine shops to food stores, hotels and bars, have seen business increase.

Mining operations are, however, extremely dependent on world prices. Most of the operations being considered in Alaska are extremely tenuous proposals, only feasible if minerals' prices remain high. Given the volatility of the markets, many projects have been postponed or can-

celed. The Quartz Hill molybdenum mine project, after many years of study and much investment, will probably not be completed unless conditions change.

Alaska is rich in minerals. If prices increase to the point where mining operations become economically feasible, many companies are prepared to invest in Alaskan mines. Until then, mining should continue to be a small industry with strong growth.

Secondary Industries

Trade, though growing slightly, will lose in overall employment share during the next two years. Finance, insurance and real estate will also show some growth, but will not regain the 10% employment lost between 1986 and 1987.

Services will lose in its total employment share, but has and will continue to show steady growth over the next two years. Except for a small decline between 1984 and 1985, the service sector has grown steadily over the last 15 years.

Conclusions

Employment in Southeast will turn around during 1988, posting an overall increase of 0.6% compared to 1987 levels. Most of this employment growth will be created through the natural resource industries of mining, wood products, and seafood processing. Some positive effects will be felt in other industries because of this basic sector growth.

Employment will continue to rise in 1989, with a 1.1% overall increase. No industry is expected to show substantial declines between 1988 and 1989, although many will do little more than remain stagnant.

The past mainstay of Southeast employment, government, will continue to decline as a percentage of total employment over the forecast period. Losses will be offset by employment gains in services, which will show moderate growth as Southeast's economy matures.