#### STATEWIDE IN ALASKA

A recently submitted report giving projections of occupational needs for Alaska will probably have a good deal to do with determining the course of manpower planning in Alaska for the period 1972 through 1977. A study of occupational needs conducted by Olympus Research Corporation of San Francisco for the Governor's Manpower Planning Division has identified those occupations best suited for manpower training programs, and through a comprehensive survey of employers throughout the state, has calculated the number of job openings that will occur in selected occupations. The results of the survey should help insure that graduates of State manpower training programs will be trained for jobs that will be in demand throughout the decade. Also calculated were the potential effects of construction of the Trans Alaska Pipeline, native land claims legislation, growing concern over the protection of the environment and other exogenous factors on the demand for various occupations, and hence their suitability for manpower training programs.

# SELECTING SUITABLE OCCUPATIONS

More than 100 occupations were selected as being suitable for manpower training programs using the criteria that 1) there be sufficient demand for the occupations; 2) that they require for entry no more than an equivalent of two years of college; 3) that they be of sufficient skill level to be proper subjects of training programs; and 4) that they be filled substantially by hires from the open market.

Having selected the occupations to be included in the study, a sample survey of Alaskan employers was conducted to determine: 1) the numbers of persons actually employed in the concerned occupations during February of 1972; and 2) the number of openings in particular occupations that employers experienced in the year 1971. The survey was designed so that a wide divergence of industry groups were sampled and that a significant portion of the employment in a particular industry was represented in the sample. In all, 112 different employers, most with 150 or more employees were sampled, representing 71 industry classifications including nearly 90% of total State employment. Firms actually sampled employed approximately 18 percent of the

total State work force. After collecting the information, employer projections were compared with those of the Alaska Manpower Outlook — '70's survey conducted in 1969 to determine the rate of growth to be expected in a given occupation.

The actual number of job openings in 1971 were combined with growth factors to produce the final estimates of employment and job openings to be expected in a given occupation in a given year.

Results of the survey showed that carpenters will be the most demanded of the occupations studied, with annual job openings ranging from 2,388 in 1972 to 2,563 in 1977. Electricians, retail sales clerks, grocery checkers, janitors and office clerks were the next ranking occupations, in terms of the number of job openings expected.

Also of importance is the relationship of the number of expected job openings to the actual number of employees in a particular occupation, which is indicative of the amount of turnover in that occupation, as high rates of turnover generally indicate that the job openings are a result of workers rotating from one employer to another, and not due to actual growth in employment. Occupations reflecting such high rates of turnover are carpenters, typesetters, bulldozer operators, painters, electricians, laborers. For the above reasons, these occupations are deemed less suitable for manpower training programs than would be indicated by the gross job openings expected. Conversely, occupations demonstrating abnormally low rates of turnover indicate that job openings in that occupation are most often filled by promotion from within the firm, which would again make them unsuitable for manpower training programs. Occupations which have been found to fall in this category are general foreman, police officer, sawmill worker, mechanic, fireman, welders, and millwrights, to name a few. Additionally, occupations were found to be better suited to manpower training programs if prior job experience is not a condition of employment. Occupations best meeting this criteria included janitor, laundry worker, police, government, auto body repairman and head pumper.

#### EFFECTS OF THE PIPELINE

Because of the uncertainty surrounding the pipeline issue, none of the manpower projections for the coming five years have assumed any benefit or harm from construction of the line. Instead, the probable effects of the pipeline were calculated and presented separately so that they could be imposed on the projections when the line becomes a reality. Employment consequences of the pipeline have been spread out over the five-year period of the study assuming construction lasts three years and two years for actual operation. For some occupations, i.e. carpenters, truck drivers, welders, diesel mechanics and pipefitters, large numbers of job openings will be created initially during the construction phase, but will rapidly dwindle after oil starts flowing. Other occupations, i.e. electronic technicians, machinists, seamen, and police officers will enjoy little initial benefit during the construction period, but will show increasing opportunities as the line goes into production. The overwhelming majority of the occupations studied however show a consistent employment benefit throughout the first five years of the pipeline, neither increasing or decreasing to a large extent.

#### OTHER EXOGENOUS FACTORS

A number of other factors which could potentially effect the number of job openings in occupations suitable for manpower training programs were considered in the study. These included growing concern for environmental considerations in lieu of industrial development, the passage of the native land claims legislation, tourism, and potential effects of large-scale mineral developments. Assuming that environmental concerns could either increase, decrease, or change the composition of manpower needs, depending on the degree of out-of-State capital invested in these projects, the study concluded that planning purposes, the current level of environmental concern will probably have a minimal additive effect on employment opportunities. Potentially harmful effects of these concerns are only speculative, the report says. No attempt was made to calculate the exact effects because of the above reason.

Native land claims legislation will have a measurable effect on employment opportunities according to the

report on the strength of the multiplier effects of the monetary reimbursements to native groups. It is estimated that some 4,280 additional employment positions will be created as a result of the spending of grants to native corporations by 1976. By 1984 when payments are fulfilled, approximately 1,600 employment opportunities will be created annually by this spending.

The level of tourism in Alaska is expected to increase in the coming five years and will have a positive effect on employment openings according to the study. Because long range estimates of the increase in tourism are highly speculative, the study dealt only with predictions for 1972, where it was estimated that an additional 800 job openings would be created by the expected increase in tourism over 1971 levels.

The occupational study recognizes that tremendous mineral potential exists in Alaska, and that subsequent development could substantially alter the number and character of employment opportunities, but the report did not allow that such developments were likely to occur in the five year time period studied.

### SUMMARY OF FINDINGS

Inasmuch as the study was designed to be a tool for Alaska's manpower planners, no conclusions were drawn from the data; instead it was presented in such a manner that all factors influencing employment opportunities could be identified and isolated. In this manner, manpower planners could tailor their programs to fit changing situations.

## ALASKA'S ECONOMY IN JULY

Mining: The month of July saw a slight decrease in mineral exploration around the State, and as a result, industry employment declined by 100 positions. Employment in 1972 has consistently been lower than recorded in 1971 and July was no exception with 200 fewer workers on the job compared to the previous year. The industry was in the news frequently during the month as speculation about new mineral producing operations was boosted by the visit of a Japanese mining industry delegation to Alaska. The oil sector of the industry took another large step toward the start of construction of the Trans Alaska Pipeline when U. S. District Court Judge