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COMMITTEE REPORT  
SENATE

3/30/82

FURTHER: Finance

Date: 4-14-82

Mr. President: HEALTH, EDUCATION &  
The Committee on SOCIAL SERVICES has had SB 868

establishing a Committee on Employment and Productivity as part of the University of Alaska

under consideration and (a majority of the committee) (the committee) reports it back with the following recommendations:

- do pass  do not pass
- do pass with attached amendments(s)
- replace with CS for \_\_\_\_\_  same title  
 new title
- and recommends \_\_\_\_\_
- AND attaches a "Letter of Intent"  New Fiscal Note
- reports it back without recommendation
- referred to the \_\_\_\_\_ Committee

MEMBERS SIGNING  
DO PASS

MEMBERS HAVING  
OTHER RECOMMENDATIONS:

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CHAIRMAN

SCR 51 & SB 868Concept outline from Discussion with Tom Lane (Institute of Social and Economic Research, Univ. of Ak.)

The concept as discussed involved transmitting research finding from the University into pilot projects based on the research and then after refinement providing practical models which are based on the research as well as the pilot projects which can be used by business and industry to increase productivity.

The intent is to have the costs of the "applied research" covered by the industries which would benefit. The initial "seed" money would only be necessary in the first years of the program, after which, no state funding will be sought.

This project will be guided by a committee of one member of ISER, two members of the academic community and two members of the business community.

A PROPOSAL FOR THE CREATION OF AN ALASKA  
COMMITTEE ON EMPLOYMENT AND PRODUCTIVITY (CEP)

February 1982

Institute of Social and Economic Research  
University of Alaska

## Background and Need

Simply stated, most manpower programs operate exclusively on the public side of the labor market. The unemployed and disadvantaged worker is provided with some mix of basic education, job-related skill training, and work experience to make him or her "employable"; that is, to make him or her both able (capable of doing the work) and willing (equipped with the necessary work discipline) to successfully hold a regular unsubsidized job. Our experience in working with Alaska Natives and American Indian manpower programs during the past decade gives us reason to believe that this emphasis on public solutions to the problems of persistent, high unemployment and low labor-force participation among Native males may be contributing to the unsatisfactory results many of them have reported.

Large numbers of Native men are either unwilling or unable to conform to the traditional 40-hour week for 50 weeks per year. Faced with conventional job definitions, work rules, and employment practices, many males apparently choose to remain outside of or marginal to the labor force. This marginal attachment to the labor force is characterized by a pattern of short periods of employment and several different jobs held during the work year. This is accompanied both by frequent periods of unemployment and total withdrawals from the labor force.

It is our contention that when the hiring practices and work rules of private employers are sensitive to important Native cultural values (such as community cooperation versus individual competition), they have a significant effect on the labor-force participation of the Native males. This implies a cooperative effort to (1) document Alaska employment experiences, (2) make the information available to private employers, and (3) assist private employers in implementing this information into demonstrations of successful, unsubsidized Native employment.

The Alaska Committee on Employment  
and Productivity (CEP)

To accomplish this, we propose the formation of an Alaska Committee on Employment and Productivity (CEP). The formation of the committee is a recognition that the next decade will witness a significant expansion in Alaska's labor markets. New patterns of employment will emerge, and new occupational requirements will be demanded. The purpose of the CEP is to engage in cooperative efforts with private employers directed toward ensuring that (1) all Alaska residents have the opportunity of participating in the benefits of economic growth through the employment of their production abilities and (2) Alaska businesses are able to grow and expand through the hiring of reliable, productive Natives and other resident workers.

The CEP will organize and direct its efforts toward the following objectives:

- Improving the full employment efficiency of the Alaska economy.
- Providing Alaska's private employers with motivated Native workers.
- Providing economic security for Alaska workers.
- Enhancing the human ecology of Alaska labor markets.

CEP will be a committee attached to the Institute of Social and Economic Research (ISER) of the University of Alaska. It will act as a clearing-house to direct efforts designed to further its purposes and objectives. Annual guidelines will be issued, and both solicited and unsolicited projects will be considered.

CEP will be chaired by Theodore Lane, Professor of Economics of ISER, and will contain seven (7) voting members, including the chair, distributed as follows:

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| Government (including Native corporations) . . . . .     | 2 |
| Business and Industry . . . . .                          | 3 |
| University Research Community (including ISER) . . . . . | 2 |

It is our intent to have CEP become a permanent committee attached to ISER. To do this, we will solicit endowments from government, business, industry, and private foundations to create a permanent endowment fund. Income from the permanent endowment fund will be used by CEP to fund its ongoing program. This ongoing program will mature with time as findings accumulate, new issues emerge, and improved hypotheses are developed. We anticipate CEP's eventual agenda will involve all of the following topics:

- Understanding and anticipating major trends in the industrial and occupational structure of the Alaska labor market.
- Studying methods by which public policy can more effectively link the work of school with the world of work.
- Investigating methods to enhance and stabilize job opportunities by better coordination of training and economic development programs.
- Understanding the special labor market needs of the Alaskan elderly, youth, and disadvantaged populations.
- Improving the labor force participation and work site performance of Alaska Natives through research into the relationship of cultural norms, traditional values, and work place structures.

Only the final topic, "Improving the Labor Force Participation Work Site Performance of Alaska Natives," however, will be addressed during CEP's first year. This will involve the work plan described on the following pages.

#### First-Year Work Plan

##### OBJECTIVES

The objectives of this proposed project are twofold: (1) to document the influence on the low labor force participation rate of Alaska Native men of work rules and hiring practices that conflict with their Native cultural patterns and (2) to work jointly with

industry to demonstrate how modified work rules and employment practices can contribute to the successful performance of Alaska Native males in the state's labor markets, thereby enhancing their local job opportunities while contributing to the success of private economic development initiatives in rural Alaska.

Recent studies of the Alaska economy show that the gaps between rich and poor, rural and urban, and Native and non-Native are widening. This has occurred partially not only because of the differential impacts inflation has on low-income groups but also because significant numbers of the poor, rural, and Native population remain outside the labor force.

Aggregate statistics describing the labor force behavior of Native males show their participation rate to be 49 percent (compared to 86 percent for Alaska non-Native males and 76 percent for all U.S. males) and their measured unemployment to be approximately 20 percent. Approximately two-thirds of those employed are in manual and service occupations, and less than one-fifth are employed in white-collar occupations.

Three major explanations have been offered for the low labor force participation rate of Alaska Natives: (1) Alaska Natives have inadequate skills or formal education; (2) they live in areas outside of effective labor markets; and (3) they suffer from racial discrimination. However, secondary school enrollments have improved dramatically since statehood, and by 1974, Alaska Native youth were attending secondary schools at the same rate that non-Native youth were. Although the quality of the Natives' education may not yet be comparable to that of non-Natives, undeniable improvement has occurred in the formal education of young Alaska Natives.

Second, the State of Alaska is increasingly decentralizing the delivery of state services which has the direct effect of creating jobs in rural areas. Federal, state, and local governments employ

approximately one-third of the work force directly and larger proportions through various contract services. Consequently, many new job opportunities have been and will continue to arise in rural Alaska.

Third, the Civil Rights Act of 1974 and the Equal Employment Opportunity Act have both had significant impacts on reducing employment discrimination based on race. Public and private employers now actively recruit qualified minorities. This is not to suggest that racial discrimination towards Alaska Natives does not persist as a barrier, rather that it has been significantly mitigated.

Passage of the Alaska Native Land Claims Settlement in 1971 endowed Alaska Native people, through their profit-making corporations, with 962.5 million dollars and 48 million acres of land. Notwithstanding the economic significance of the Settlement Act, research has shown that the benefits resulting from increased Native employment would far exceed Settlement Act benefits in terms of Native per capita income. While the Settlement Act is a significant factor in the development of rural Alaska, Native people will benefit even more if they can successfully join the labor force and take advantage of the state's expanding economic base.

#### RELEVANCE

Economic development requires the creation of a disciplined industrial labor force. As an industrial labor force emerges from the indigenous population, however, the problem arises of how it is to be integrated with traditional societal (or cultural) norms. This problem has been solved in a variety of ways. The range of these solutions is illustrated by the experience of England, Germany, and Japan. During the industrial revolution in England, traditional codes of authority were rapidly swept away and replaced by new laissez-faire capitalist institutions (E.P. Thompson, The Making of the English Working Class, Random House, 1963). In Germany, an ideology of nationalism was coupled with the modeling of industrial organization

after military patterns to assert authority over non-industrial modes of social organization (H. Hartman, Authority and Organization in German Management, Princeton University Press, 1959). Japanese employers used traditional symbols and practices, grounded in familial ideologies, to gain worker acquiescence of their new employment practices (R.E. Cole, Work, Mobility, and Participation, University of California Press, 1979).

In all successful developing countries, tradition was used to devise new solutions to the emerging problems of industrialization. As pointed out by Neil J. Smeloes ("The Relevance of Economic Sociology for Economics," 1976), ". . . The complex of changes we refer to variously as 'growth,' 'development,' or 'modernization' involves, above all, the growth of more differentiated roles and social structures." It is our hypothesis that the degree to which these "new roles and social structures" are derived from traditional cultural norms determines the success of an indigenous population's short-run adaptation to the process of industrialization.

This hypothesis is supported by a variety of information. Some of it is based on casual (i.e., nonscientific) observation. The Makah Indians of northwest Washington State found that tribal members actively competed for jobs with the tribe's fishing fleet (a traditional activity) even though it meant giving up jobs in the forest products industry and taking a substantial loss in real income (Al Zwintz, personal communication). The Navaho Nation's training and employment programs were improved significantly by the inclusion of an orientation program linking the skilled trades to traditional Navaho activities (Tom Brose, personal communication). Dorothy Jones, Adjunct Professor, ISER, reports a link between successful participation in "cash" activities and traditional fishing and hunting activities in several Aleut and Eskimo villages. The Bureau of Land Management's employment of Athabascan fire fighters appears to have become much more successful after they began using the work tradition of

structured competition among teams from the same village (Judy Kleinfeld, personal communication).

Some formal research studies have systematically examined the effects of adapting employer work rules to the cultural situation of Indian and Eskimo groups. They suggest that culturally sensitive work scales are promising both in terms of meeting employers' needs for a stable work force and also meeting Native people's needs for culturally relevant employment and increased income.

The most careful study of the effects of changed work rules was done by Kupfer and Hobart, who examined an innovative Inuit (northern Eskimo) work program conducted by Gulf Oil Canada in 1972-73.<sup>1</sup> Rather than importing oil exploration workers from southern Canada, Gulf representatives contacted an entire Inuit community and offered employment in their MacKenzie Delta drilling program. About half the male work force of the community (55 men) worked for Gulf under a schedule where they worked for 14 days, 12 hours per day, and were then returned to the community for a 1-week break while other villagers replaced them.

A team of anthropologists examined the impact of the innovative employment program in terms of earnings, expenditure patterns, subsistence hunting, family life, and community problems. The research reported such findings as:

- Good working relationships between Gulf and the Inuit community and the expectation that the employment program would continue.
- Almost unanimous approval of the work program by Inuit men, women, and children interviewed.
- Only one instance of a respondent rejecting employment for the coming winter although many community members reported loneliness.
- Increased interest in similar employment among workers' children.

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<sup>1</sup>Kupfer and C. Hobart, "Impact of Oil Exploration Work on an Inuit Community," Arctic Anthropology, 15:1 (1978), pp. 5867.

In short, this study showed predominantly positive community effects of changed work rules, at least in the short term.

Similar conclusions were reached in another Canadian study which examined the effects of a Canmar exploratory drilling program in the Beaufort Sea.<sup>2</sup> Canmar developed a special employment and training program for the residents of the community of Tuktoyaktuk during the drilling session. As a result, 127 Natives were employed, drop-out rates were low, and about \$367,000 was added to the local community. The experience was considered to be highly positive by both the company and the community.

To our knowledge, no comparable studies have been done in the United States on these issues. The experience of Alaska Natives in obtaining employment on the trans-Alaska pipeline has been studied, but this situation emphasized Native preference in hiring. It did not involve any special employer adaptation to Native cultural patterns.<sup>3</sup> The results were disappointing. While an extremely large number of Natives were hired (5,770), over half worked for only eight weeks or less, and one-quarter worked for two weeks or less. Thus, the majority did not exhibit successful labor force performance patterns, and the substantial social investment in recruitment and education did not have commensurate returns.

Over the years, employers in Alaska have experimented with a variety of work situations in order to increase the stability of Native workers in their organizations. The experiences, for example, of the Public Health Service, Bureau of Indian Affairs, and rural school districts will be a rich source of information. These experiences suggest that alterations of work routines to reflect cultural

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<sup>2</sup>"Assessment made of Social and Economic Impacts of Canmar Program," Beaufort Sea, February 1977, p. 5. Full report available from Mary Collins Consultants, Ltd.

<sup>3</sup>"Alaska Native Hire on the Trans-Alaska Oil Pipeline Project," Alaska Review of Social and Economic Conditions, 15 (February 1978): 20 pp.

values are positively associated with the "success" of private economic development projects in employing Alaska Natives.

Studies by the Institute of Social and Economic Research have also provided an opportunity to examine the effects of changed work rules on one Native group, the North Slope Eskimo.<sup>4</sup> One study involved the Native-organized North Slope Borough which has removed many work barriers usually believed to impede Native participation in employment. For example, subsistence hunting leave is official policy, and people are reemployed despite what non-Natives would view as "unjustified" absences from work. Based on interviews in six villages with 80 percent of the North Slope population and the collection of detailed work histories and employment preferences, these data suggest that different work structures are desired by Native population groups differing in sex, age, and education levels.

The scattered information presently available does suggest a few preliminary conclusions. More extensive analysis will refine these tentative notions and suggest others.

Adapting work situations to Native cultural patterns and values is likely to be a tricky enterprise and much more complicated than allowing time off to pursue subsistence activities and other matters. Successful programs have structured flexibility into the work situation (e.g., Gulf's one-week time off) but retained clear expectations about necessary work time.

External group support for sustained work may be important. In many social contexts, it is much easier to increase individual motivation through influencing significant membership groups. Groups also provide important emotional support for individuals confronted with difficult and unfamiliar work roles.

While most employers assume workers prefer career ladders leading to positions of more authority and pay, such aspirations may not be prevalent among certain Eskimo and Indian groups. In the cultural context of these groups, strong

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<sup>4</sup>This research was part of the Man-in-the-Arctic Program funded by the National Science Foundation.

criticism is leveled against people who boss others around.<sup>5</sup> While such cultural norms are changing as modernization increases, they may remain important determinants of Native labor force performance.

#### TASK NO. 1: DOCUMENT NATIVE EMPLOYMENT EXPERIENCE

The documentation of Native employment experiences and the lessons to be learned from these experiences will come from a variety of sources. A major source will be the Man-in-the-Arctic Program (MAP). This is a multiyear study of social and economic changes in Alaska funded by the National Science Foundation. As part of this study, a major survey of Alaska Natives on the North Slope Borough was undertaken. It contained approximately 1,500 observations, and these data are available at ISER.

The Alaska Public Forum, funded by the Alaska Legislature, conducted a major survey in Kotzebue. Discussions have already been held, and we are assured of the cooperation of the Alaska Public Forum in making all survey data available to us. We are currently holding further discussions with the Public Forum staff to try to develop procedures for obtaining their data in a format compatible with that used in Barrow and the North Slope.

Several of the Native organizations have conducted needs assessment surveys among their people. Probably the best of these is the Tlingit and Haida Central Council's study of "Southeast Alaska Urban Native Needs." The survey had 507 responses, of which 301 were returned by mail and 206 were administered through interviews.

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<sup>5</sup>See, for example, R. Nelson, Hunters of the Northern Ice (Chicago: University of Chicago Press, 1969).

Another major source of data will be the so-called 2(C) Report, "Federal Programs and Alaska Natives." Lee Gorsuch, currently director of ISER, was project director for this four-volume study, and through him, we have available all of the basic data.

A wealth of additional reports are available which contain information about the functioning of Alaska Native males in the private labor force. These range from "Profile of Native People in Alaska," developed by the Bureau of Indian Affairs, to such ISER reports as "Native Claims and Native Manpower" by Judith Kleinfeld, Peter Jones, and Ron Evans.

#### TASK NO. 2: DEVELOP BUSINESS APPROACH TO NATIVE HIRING

The information gathered in Task No. 2 will be presented to CEP for its review, discussion, and consensus interpretation. Tabular and graphic presentations will be used to the maximum extent feasible. Quantitative analysis (in the sense normally used by economists) will not be used.

After consensus is reached, CEP's business and industry participants will be asked to set up meetings and workshops with major Alaska employers to get their review of CEP's consensus approach to making work rules culturally sensitive. We will be particularly interested in identifying institutional barriers to implementing such an approach, such as labor management contracts. This information will be used to refine CEP's consensus approach to Native hire.

#### TASK NO. 3: DEMONSTRATE WORKABILITY OF BUSINESS APPROACH

Through CEP's business and industry participants and through the meetings and workshops with major Alaska employers, one or two firms will be identified as wishing to voluntarily participate in implementing (on a limited basis) CEP's consensus approach to successful native hiring practices. We will attempt to obtain firms which are fairly

large, both for their potential as large employers and for their ability to isolate a single work unit in which to conduct the demonstration. We will also seek a firm(s) which is (are) contemplating significant resource development investments in "bush" Alaska since this is the location of greatest job opportunity need among Alaska Natives. ~~Up to \$50,000 of the proposed grant funding will be used to compensate the private employer(s) for capital expenditures and training in the demonstration.~~

#### TASK NO. 4: EVALUATION AND DISSEMINATION OF RESULTS

The private sector demonstration on Native hiring practices will be documented and evaluated for the CEP by ISER. CEP will disseminate these findings to Alaska's business and industry community. It will also provide technical assistance to business firms wishing to consider the CEP approach to Native hire if the demonstrations show an ability to produce cost-effective results.

#### PARTICIPANTS

ISER faculty will comprise the core of the staff supporting the CEP. The project's manager will be Theodore Lane, professor of economics. His efforts will be augmented by ISER staff including Lee Gorsuch, Director of ISER; Dorothy Jones, adjunct professor of sociology; Lee Huskey, assistant professor of economics; Judith Kleinfeld, professor of educational psychology; and George Rodgers, adjunct professor of economics. The resumes attached at the end of this proposal adequately reflect their education and competence to carry out the staff responsibilities for this project.

Business, industry, and Native participation in the CEP will be fully identified immediately upon CEP's organization.

## ISER Organizational Qualifications

The Institute of Social and Economic Research has, since its inception in 1961, been devoted to the conduct of research on significant policy issues affecting Alaska. The principal focus of its research, as its name suggests, is on the developmental issues surrounding the human and natural resources of Alaska. The health and well-being of Alaska's Native people continue to be a major concern of the Institute, and much of its attention over the years has been devoted to the problems and opportunities confronting and/or impinging upon Alaska Natives.

Currently, the Institute is under contract to the Alaska State Manpower Services Council to provide an overview of the Alaska labor market and to analyze the role CETA performs within the labor market. For the State Office of Vocational Education, the Institute is contrasting the socio-economic characteristics and the work socialization experiences of employed Alaska Natives to the unemployed in an attempt to improve the design of employment training programs. Both of these research projects are scheduled for completion early this fall.

The Institute has for the past several years been intensively engaged in assessing the impacts of oil and gas development in Alaska. Referred to as the Man-in-the-Arctic Program (MAP), this project, sponsored by the National Science Foundation, has special relevance to manpower planners. First, the project developed statewide and regional econometric models which generate projections not only of population and income but also employment by industry and occupation. With some additional refinement, this powerful tool could be used to support long-term manpower planning efforts. Second, the project has generated through the use of survey research invaluable data

on the North Slope Eskimos' response to development (specifically to high-paying job opportunities). This important data should reveal useful insights into the types of jobs preferred, the time trade-offs people are willing to make, particularly work versus subsistence, and the terms and conditions under which people are willing to work or choose not to work.

Other work the Institute has performed which is relevant to this project is illustrated by the following sample of publications which has culminated from ISER activities:

#### Manpower Related

A Forecast of Industrial and Occupational Employment in Alaska (ISEGR Report No. 43). Prepared by Theodore Lane for ISEGR's Man-in-the-Arctic Program. 1974: Fairbanks, 219 pp.

Mr. Lane presents statewide forecasts (1973-1983) for twelve industry categories as well as for total employment, civilian labor force, and total population.

Land Claims and Native Manpower (ISEGR Report No. 36). Judith Kleinfeld, Peter Jones, and Ronald Evans. 1973: Fairbanks, 52 pp.

The authors assess the upcoming occupational needs of the Alaska Native corporations as a result of the Native Claims Settlement Act.

Manpower Needs in Alaska State and Government (ISEGR Report No. 26). Judith Kleinfeld and Thomas A. Morehouse. 1970: Fairbanks, 83 pp.

Dr. Kleinfeld and Dr. Morehouse examine the manpower needs in Alaska state and local government and relate these needs to the unemployment and manpower training of Alaska Natives.

Urban Men and Women - Differences in Their Work Adaptations (ISER Occasional Paper). Dorothy M. Jones. 1976: Fairbanks, 45 pp.

This study, based on interviews with Native men and women, seeks to understand why Native women adapt better to low-status, low-paying jobs than Native men.

"Employment, Social Service, and Income Maintenance Programs (for Alaska Natives)." Dorothy Jones. In Federal Programs and Alaska Native Well-Being prepared for the U.S. Department of the Interior. 1974: Fairbanks.

In this series of articles, Dr. Jones descriptively analyzes the impact five major federal employment and income assistance programs have had on Alaska Native well-being.

#### Education Related

Alaska Natives in Higher Education (ISEGR Report No. 40). Karen Kohout and Judith Kleinfeld. 1974: Fairbanks, 49 pp.

The authors examine the threads of Alaska Natives' participation and success in higher education.

"Increasing the College Success of Alaska Natives," Judith Kleinfeld. In Journal of American Indian Education, 1974 13(3), 27-31.

Dr. Kleinfeld presents a study of the characteristics of Native students who succeed in college.

Some Instructional Strategies for the Cross-Cultural Classroom, Judith Kleinfeld, for Alaska Department of Education. 1972: Juneau, 22 pp.

In this article, Dr. Kleinfeld summarizes for the Alaska Department of Education rural teachers' suggestions on effective teaching techniques.

Institutional Styles and the Intellectual Performance of Indian and Eskimo Students, Judith Kleinfeld, for U.S. Office of Education. 1972: Washington, D.C., 58 pp.

In this report, Dr. Kleinfeld explores effective methods of cross-culture teaching.

#### Culture Related

"Patterns of Migration, Urbanization and Acculturation," Arthur E. Hippler. In Proceedings of the Twentieth Alaska Science Conference, American Association for the Advancement of Science, Alaska Division, 99-108. 1970: College.

Dr. Hippler analyzes the dynamics surrounding migration into towns by Alaska Natives and stresses the significance of cultural backgrounds and the nature and extent of job opportunities as factors influencing the difficulties of adjusting to changes.

Alaskan and Other Eskimo Acculturation: A Selected Annotated Bibliography of Alaskan and Other Eskimo Acculturation Studies by Arthur E. Hippler (ISEGR Report No. 28). 1970: Fairbanks, 215 pp.

A selected, annotated bibliography of sources related to Alaska Eskimo culture change.

Service Related

"Agency-Community Conflicts" by Dorothy Jones in Science in Alaska, Twentieth Alaska Science Conference, American Association for the Advancement of Science, Alaska Division, pp. 145-158. 1970.

In this paper Dr. Jones analyzes the community and agency representatives' attitudes toward social programs for Natives and the areas in which the attitudes are disparate.

ISER's past experience has included both classroom instruction as well as training and technical. The Director of the Institute, Lee Gorsuch, has worked with ten of the twelve Alaska Native regional corporations, offering various short courses and training programs for both their leaders and staff. Theodore Lane, the proposed principle investigator, has an extensive background in the design and development of manpower training and technical assistance programs as well as labor market research.

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Programs to Create Jobs for  
Washington State Department of

nt and Training Programs in  
State Employment Security

Performance Indicators for  
for the U.S. Department of

Demand Forecasting System"  
of Washington and Hawaii.

TA/DHEW Manpower Program  
of Health, Education, and

"Secondary and Indirect Labor Market Impacts of Constructing the  
Trans-Alaska Pipeline System (TAPS)" for the U.S. Department of  
Labor, Region X.

Representative Regional Economic  
Studies Where Principal Investigator

"Population, Employment, and Economic Impacts of Developing and  
Operating the Mt. Tolman Copper-Molybdenum Mine on the Colville  
Indian Reservation" for the AMAX Mining Company.

"An Assessment of the Economic Impact of Implementing the Clean  
Water Amendments of 1972 (PL 92-500) on the Yellowstone River and  
Puget Sound Water Basins" for the National Commission on Water  
Quality.

"A Comprehensive Economic Development and Environmental Plan for  
the Northwest" for the Pacific Northwest Regional Commission.

"A Cost/Trade-Off Analysis of Washington State's Long-Term  
Growth" for the Washington State Office of Program Planning and  
Fiscal Management.

"A Socio-economic Assessment of Alternative Waste Management  
Treatment Options" for the Municipality of Metropolitan Seattle  
(METRO).

"A Study of Methods and Techniques for Influencing the Rate,  
Composition, and Location of Economic Growth" for the Washington  
State Department of Commerce and Economic Development.

December 1981

THEODORE LANE

Professor of Economics  
Institute of Social and Economic Research  
University of Alaska  
707 "A" Street, Suite 206  
Anchorage, Alaska 99501  
(907) 278-4621

Employment History

Partner, Lane/Langley and Associates: Economic Consultants,  
Seattle, Washington, 1979-1981.

Senior Economist, The White House Conference on Balanced National  
Growth of Economic Development, Washington, D.C., 1978.

President, Human Resources Planning Institute, Inc., Seattle,  
Washington, 1969-1977.

Executive Vice-President, Consulting Services Corporation,  
Seattle, Washington, 1967-1968.

Assistant Professor of Economics, University of Wisconsin,  
Milwaukee, Wisconsin, 1965-1966.

Education

Ph.C., Economics, University of Washington, 1966.

M.A., Economics, University of Illinois, Champaign-Urbana,  
Illinois, 1958.

B.A., Economics, Temple University, Philadelphia, Pennsylvania,  
1956.

Awards and Honors

Teaching Fellow, University of Illinois  
Teaching Fellow, University of Washington  
Pre-Doctoral Associate, University of Washington  
Appointed by Mayor of Seattle to the Pioneer Square Historic  
Preservation Board

Representative Labor Market and Manpower  
Economics Studies Where Principal Investigator

"The Use of State Financial Incentive Programs to Create Jobs for Unemployed Residents" for the Washington State Department of Commerce and Economic Development."

"Linking Job Creation to Employment and Training Programs in Rural Areas" for the Washington State Employment Security Department.

"Creating Operating Standards and Performance Indicators for Federally Funded Manpower Programs" for the U.S. Department of Labor, Region X.

"The Development of an Occupational Demand Forecasting System" for the community college agencies of Washington and Hawaii.

"An Analysis of Potential CETA/DHEW Manpower Program Coordination" for the U.S. Department of Health, Education, and Welfare, Region X.

"Secondary and Indirect Labor Market Impacts of Constructing the Trans-Alaska Pipeline System (TAPS)" for the U.S. Department of Labor, Region X.

Representative Regional Economic  
Studies Where Principal Investigator

"Population, Employment, and Economic Impacts of Developing and Operating the Mt. Tolman Copper-Molybdenum Mine on the Colville Indian Reservation" for the AMAX Mining Company.

"An Assessment of the Economic Impact of Implementing the Clean Water Amendments of 1972 (PL 92-500) on the Yellowstone River and Puget Sound Water Basins" for the National Commission on Water Quality.

"A Comprehensive Economic Development and Environmental Plan for the Northwest" for the Pacific Northwest Regional Commission.

"A Cost/Trade-Off Analysis of Washington State's Long-Term Growth" for the Washington State Office of Program Planning and Fiscal Management.

"A Socio-economic Assessment of Alternative Waste Management Treatment Options" for the Municipality of Metropolitan Seattle (METRO).

"A Study of Methods and Techniques for Influencing the Rate, Composition, and Location of Economic Growth" for the Washington State Department of Commerce and Economic Development.

Publications

Lower Cook Inlet Petroleum Development: Economic and Demographic Analysis (with Barbara Withers), Bureau of Land Management, Alaska Outer Continental Shelf Office, Technical Report No. 42, February 1980.

Industrial and Occupational Employment In Alaska, 1974, Institute of Social and Economic Research, Fairbanks.

"The Urban Base Multiplier: An Evaluation of the State of the Art," Land Economics, Vol. 42, No. 3, August 1966.

"The Local Service Sector and the Structure of Income Growth" (with Charles M. Tiebout), Strategies for Regional Development, 1965, University of Iowa Press, Ames.

The Use of Cost-Benefit Analysis to Evaluate Open Space Recreational Projects, 1964, Puget Sound Governmental Conference, Seattle.

"The Effect of Common Market on the Relative Growth of European Economics," Current Economic Comment, Vol. 20, No. 2, May 1958.

Papers Presented

"National and Regional Labor Markets," delivered to the Pacific Northwest Regional Development Conference, Seattle, Washington, May 1978.

"An Overview of the White House Conference," delivered to the Conference on Urban and Regional Development, SUNY, Binghamton, New York, January 1978.

"Inter-regional Manpower Planning as Part of the Development Process," delivered to the Pacific Rim Regional Science Association, Vancouver, British Columbia, Canada, August 1977.

"The Role of Labor Market Analysis in Post-Secondary Education Planning" (with Marc Reeder), delivered to the Annual Meeting of the Conference of College and University Planners, Seattle, Washington, August 1977.

"The Structure of the Alaskan Economy: An Economic Analysis," delivered to the Alaska Science Conference, Fairbanks, Alaska, March 1975.

"Long-Run Growth Prospects for the Pacific Northwest," delivered to the Northwest Regional Economic Growth Conference, Washington State University, Pullman, Washington, 1974.

"An Econometric Model for the State of Alaska" (with Eric Swanson and Rajanikant N. Joshi), delivered to the Western Regional Science Association, Monterey, California, February 1973.

"The Need for Information in the Social Planning Process: A Case Study" (with Rajanikant N. Joshi), delivered to the Western Regional Science Association, - San Diego, California, February 1972.

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#### Professional Affiliations

American Economic Association  
Western Economic Association  
Western Regional Science Association

#### References

Available on request.

#### Personal Information

Date of Birth: July 17, 1934  
Citizenship: United States  
Home Address: 752 W. 16th Avenue  
Anchorage, Alaska 99501