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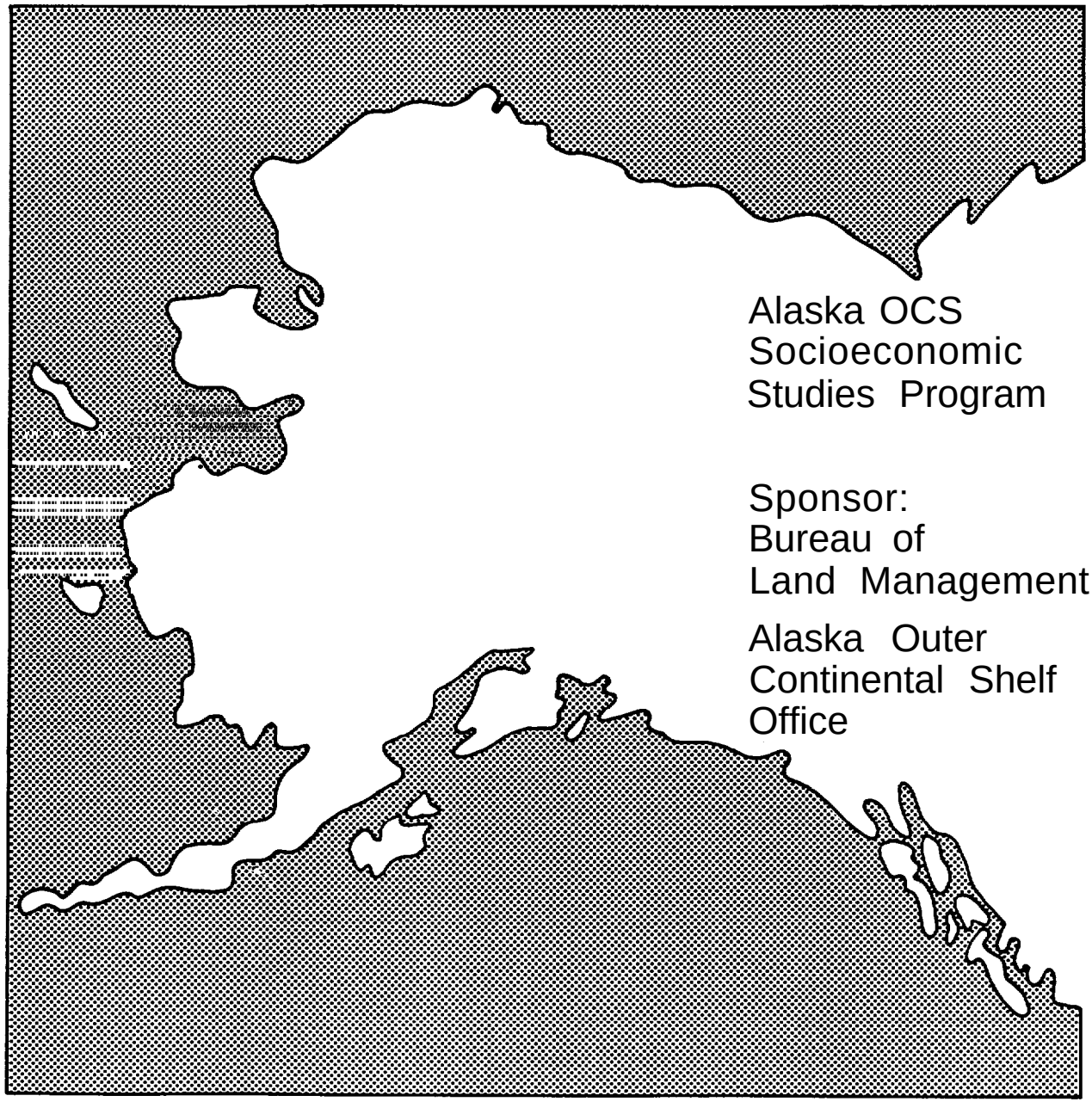

Alaska OCS
Socioeconomic
Studies Program

Sponsor:
Bureau of
Land Management

Alaska Outer
Continental Shelf
Office

Alyeska– Fairbanks Case Study

The United States Department of the Interior was designated by the Outer Continental Shelf (OCS) Lands Act of 1953 to carry out the majority of the Act's provisions for administering the mineral leasing and development of off-shore areas of the United States under federa? jurisdiction. Within the Department, the Bureau of Land Management (BLM) has the responsibility to meet requirements of the National Environmental Policy Act of 1969 (NEPA) as well as other legislation and regulations dealing with the effects of off-shore development. In Alaska, unique cultural differences and climatic conditions create a need for developing additional socioeconomic and environmental information to improve OCS decision making at all governmental levels. In fulfillment of its federal responsibilities and with an awareness of these additional information needs, the BLM has initiated several investigative programs, one of which is the Alaska OCS Socioeconomic Studies Program.

The Alaska OCS Socioeconomic Studies Program is a multi-year research effort which attempts to predict and evaluate the effects of Alaska OCS Petroleum Development upon the physical, social, and economic environments within the state. The analysis addresses the differing effects among various geographic units: the State of Alaska as a whole, the several regions within which oil and gas development is likely to take place, and within these regions, the various communities.

The overall research method is multidisciplinary in nature and is based on the preparation of three research components. In the first research component, the internal nature, structure, and essential processes of these various geographic units and interactions among them are documented. In the second research component, alternative sets of assumptions regarding the location, nature, and timing of future OCS petroleum development events and related activities are prepared. In the third research component, future oil and gas development events are translated into quantities and forces acting on the various geographic units. The predicted consequences of these events are evaluated in relation to present goals, values, and expectations.

In general, program products are sequentially arranged in accordance with BLM's proposed OCS lease sale schedule, so that information is timely to decision making. In addition to making reports available through the National Technical Information Service, the BLM is providing an information service through the Alaska OCS Office. Inquiries for information should be directed to: Program Director (COAR), Socioeconomic Studies Program, Alaska OCS Office, P. O. Box 1159, Anchorage, Alaska 99510.

Subtask 5-B

Contract No: AA550-CT6-61

Alaska OCS Socioeconomic Studies Program

ALYESKA-FAIRBANKS CASE STUDY

Prepared For

Peat, Marwick, Mitchell & Co.

May 8, 1978

NOTICE

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Alaska OCS Socioeconomic Studies Program
Subtask 5-B Alyeska-Fairbanks Case Study

Prepared By
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16. Abstract

Fairbanks, Alaska was the only urban community in the construction corridor of the trans-Alaska oil pipeline. The community was faced with planning and decision making to prepare for the impact of the pipeline, but had to do much of that planning without information. Population growth, stress on the Fairbanks infrastructure, social problems and the continuation of the economic cycles of "boom and bust" are examined through three major impact research works completed during and just after pipeline impact. Synthesis of this information details what the community of Fairbanks learned from the impact of pipeline construction, the attitudes of residents toward future growth and development and how they are applying the lessons of oil pipeline impact to planning and decision making for the future of the community.

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I. INTRODUCTION

Fairbanks, Alaska was the only urban community in the path of construction of the 800-mile trans-Alaska pipeline. The impacts during that construction and the long terms effects on the community of Fairbanks have been the focus of national news, local discussion and academic research. Among the many articles, documents and studies written about pipeline impact in Fairbanks are Dr. Mim Dixon's book What Happened to Fairbanks?, Ms. Sue Fison's compiled reports of the Fairbanks North Star Borough Impact Information Center, and the research findings of a community survey conducted by Jack Kruse of the University of Alaska's Institute of Social and Economic Research.

This report attempts to synthesize the findings of those three works and examine what the community of Fairbanks learned from the three year pipeline impact experience and how it has incorporated that experience into its preparation for future impacts generated by petrochemical development, for example, the construction of the trans-Alaska gas pipeline, or lease sales in the Beaufort Sea.

At the time of the discovery of oil on Alaska's North Slope, the Fairbanks North Star Borough was an area populated by slightly more than 45,000 people; the City of Fairbanks had about 21,000 residents. Population growth in the Interior in the period 1968 to 1970 had slowed to 15% per year compared to 34% growth per year in the state as a whole for that period. The major "industry" of the area was government employment. The Fairbanks

economy was lagging at the end of a decade of unemployment and slowed construction activity. Fairbanks was still attempting to recover from the 1967 flood -- its worst in recorded history, The reaction of residents to the North Slope discovery as expressed at Chamber of Commerce meetings, public hearings and at local government proceedings, was to try to capitalize on the jobs, dollars and activity that they perceived would be generated by the pipeline construction and would help solve the community's economic ills. But this reaction was not an unexpected one for Fairbanks. The trans-Alaska oil pipeline wa's not the first project looked at as an answer to the economic uncertainties in Fairbanks.

FAIRBANKS AND ITS BOOM-BUST HISTORY

What Does it Mean to Live in Fairbanks?

Fairbanks is the only urban center in Alaska's interior and is the state's second largest city. It lies at the northern edge of the Tanana River Valley, and in a basin surrounded by hills and mountain ranges. Urban planner Ken Rainey has described Fairbanks as special -- a place of paradoxes. It has a severe climate, yet it is an uncrowded and beautiful place to live. Though residents endure material hardships, Fairbanks offers unique opportunities for personal freedom. There are few government services; there are also few government restrictions. It is a place to "get a piece of land away from your neighbors and use it the way you want" (Rainey 1975, P. 43). The Fairbanks climate offers a range of extremes as well: rapid growth based on mining and construction activity accompanied by population and economic declines with the departure of people who came to make their fortunes.

Fairbanks' first "boom" came with the discovery if gold in 1902. The golden creeks to the north drew miners, extrepreneurs and activity to the town for the next 10 years. The first U.S. Census for Fairbanks was taken in 1910, and counted 3,541 in the city with some 7,000 others, mostly miners, living in nearby camps. Each gold discovery was accompanied by a major population influx, but as soon as deposits were exhausted, the miners and those accompanying them, left. By 1920, the population had dwindled to 2,182.

The founding of the Alaska Agricultrual College and School of Mines in 1922, the completion of the Alaska Railroad from Seward to Fairbanks in 1923, and a larger scale placer gold mining operation begun at the same time by the U.S. Smelting, Refining and Mining Company set the stage for a more stable era of growth and development, and by the 1929 Census, the area's population had climbed back to where it had been in 1904 with the first big strike. During the 1930's gold production expanded into a profitable industry, and the spruce shacks and tent camps that had dotted the banks of the Chena River gave way to a permanent city with paved streets, utilities and the construction of a number of large buildings. Fairbanks had become an established town.

Construction of two military installations and the Alcan Highway in the 1930's and 1940's began a pattern of dependence on the military and large-scale construction as cornerstones in the Fairbanks area population growth and economy. The long-range bomber program, distant early warning systems, the Korean War, arctic weather and polar space research installations,

all drew people, jobs, activity and dollars into the Interior. In 1959, Alaska became the 49th State of the Union, and two years later the population of the Fairbanks area was more than 43,000.

But the decade following statehood was not a booming one for Fairbanks, so the discovery of oil at Prudhoe Bay in 1968 seemed like one more gold strike, one more Distant Early Warning Line, one more economic boom for a sluggish community waiting for the next "big project". But why were people waiting? What was it about Fairbanks, unlike Anchorage (which had shown steady growth throughout its history) that led people to wait and react, instead of to plan and cause things to happen?

What Kind of People Live in Fairbanks?

Each major influx of population to Fairbanks was lured by a "boom," by the hopes of making that one stake that would provide economic security for an individual or family -- the discovery of gold, the promise of a high-paying job on a remote construction project, the dreams and hopes of building a homestead. These first in-migrants were gold seekers, adventurers, entrepreneurs and dreamers, leaving behind them stable communities, regulations, customs. Among them were also those who would prey on fast-made fortunes: gamblers, prostitutes and scalawgas of all sorts. The Fairbanks pipeline-era term "rip and run" was not a name for an attitude new in 1974. That trend was born with the city itself -- a shadow behind Captain E.T. Barnette as he stepped off the Sternwheeler Lavelle Young in 1901 to establish a trading post that was to become Fairbanks. Ten years later Barnette was run out of town amidst accusations that he had embezzled half a million dollars the hardworking townspeople had deposited in his

Washington-Alaska Bank. The legacy of the “Fairbanks fast fortune” did not leave with him (Cole 1977, P. 6).

The people who settled Fairbanks came for adventure, money and to be left alone. They came as individuals, not as members of a community endeavor. To them, a boom did not bring fear, it brought excitement, money, and opportunity, according to planner and impact observer Jerry Smetzer. “The things that go with booms, like prostitution, crime and so on, are to Fairbanks more exciting then frightening. This is the frontier, not a staid bedroom community” (Smetzer 1977).

More recent immigrants to Fairbanks brought with them many of the same attitudes and expectations about what survey researcher Jack Kruse calls “the Alaskan Lifestyle.” In his 1976 community survey, Kruse found that those respondents who came to Alaska before 1964, cited as their main reasons: being close to a wilderness environment, curiosity about Alaska and a chance to be independent and start something new (Kruse 1977, P. 13). Expectation of boom and bust, hard work in the summer, story telling and activity all winter, living high when there was construction and living hand-to-mouth when there wasn’t, were a part of the Fairbanks lifestyle. Anthropologist Joe Meeker sees those risks and insecurities as a norm Fairbanks has been trying to maintain. “Danger may be one of the most important components in the psychology of this community,” he told an audience at a community forum on growth in 1975 (Meeker 1975, P. 39). Ten or 20 years ago that danger presented itself to a pioneer spending a winter on a trapline. Today it could face a modern Fairbanksan driving from Chena

Ridge to Fox at 40 below temperatures. The harshness of the climate and its challenge to survival are things people have in common in the extremes of the Interior.

Another important component of the Fairanks psychology, if there is one, is the sense of individuality and self-reliance. Applied anthropologist Mim Dixon, speaking at the 27th Alaska Science Conference, called this stance a "frontier attitude" present in many communities in the north, one of basic individualism and independence. "There's much more a sense of the individual good rather than the collective good. ..Let people maximize their individual profits. There is very little desire for a collective kind of good for the community" (Dixon 1976, P. 116).

What are Residents' Attitudes Toward Planning and Management of Change?

It was not until the late 1950's and 1960's that the frontier attitudes of Fairbanksans began to change. The moderating influence of homesteaders bringing families, the Alaska Statehood Act creating a government within the state, and the addition to the population of people who had been educated at the University of Alaska settled the community somewhat. Residents who were educated and more used to amenities were no longer as willing to put up with all the risks and insecurities as their predecessors on "the last frontier." Planner Smetzer puts it this way:

> Fairbanks has been a raw, rough place since its beginning. Until Statehood. Then the University started pumping out bourgeoisie. So did the state and federal governments with their employees. They had families and were people with different attitudes than those who settled Fairbanks. They wanted more moderation in their lives. They were willing to admit risks of living here, but didn't want a frontier (Smetzer 1977).

So by 1968 the Fairbanks area was a community of 45,000 people, most of whom came to be close to the wilderness and have a chance at leading an independent kind of life. They were faced with the possibility of living a very independent life, because in 1968, Fairbanks was witnessing cutbacks in the military installations that had provided economic lifeblood for the last three decades. It was facing a loss of employment and prestige at the University of Alaska because of increasing activities and expansion in Anchorage. Fairbanks was trying to recover from the $84 million in damages caused by the 1967 flood. The last major gold mining operation had shut down in 1963, so one more element in the economic history of the Interior was lost.

But while some of the attitudes about the risky life on the last frontier had begun to change, many of those who made the decisions and a majority of voters still held the belief that while living in Fairabnks was not easy, it was a matter of choice. They believed, too, that independence from government regulation, low taxes and laissez faire economics in the business sector were more important than some undefined "greater community good." Decisions regarding expansion of the community's infrastructure in the years preceding the pipeline reflected these attitudes:

- Telephone rates had not been raised in nearly ten years, leaving the financial situation of the telephpne department of the Municipal Utilities System (MUS) so dismal that bonding for capital improvements was impossible;
- Bond issues for schools had been turned, down regularly;
- Although a new water treatment plant and a primary sewage

treatment plant had been constructed in 1963, the city of Fairbanks was facing pressure from the state and federal governments to stop dumping effluent into the Chena River;

- The two electric suppliers, the MUS and Golden Valley Electric Association (which served areas outside the city and those in the city annexed after 1963), had made recent additions to capacity in gas turbine, diesel fired and coal fired generation, bringing generation capacity up to 62,845 kw for the Fairbanks area, but plans did not call for any added capacity until 1970 for MUS and 1977 for GVEA.

Facing all these problems were the city government, the borough government, a voting public traditionally suspicious of government, politicians reluctant to increase taxes, and a general attitude of resentment towards any state or federal pressures imposing regulations and standards on the community.

The Fairbanks North Star Borough was incorporated on January 1, 1964 as a second-class borough. It has mandatory areawide powers of taxation and assessment, education, planning and zoning. Additionally, voters elected to transfer to the borough the following powers that previously had been exercised by the city of Fairbanks: flood control, animal control, library, hospital and parks and recreation. Additional authority, per Alaska statute, is vested in the borough for air pollution control, solid waste management and public transportation. An elected mayor is the administrative head of the borough and an n-member elected assembly has legislative

responsibi 1 ity.

The City of Fairbanks and the City of North Pole are the two incorporated municipalities within the Fairbanks North Star Borough. Fairbanks was incorporated on November 10, 1903, and on November 22, 1960, a home rule charter was approved by voters. The city has all the legislative powers not prohibited by state law or charter to perform the functions normally associated with local governmental units, except for the area-wide powers assumed by the borough. It has a city manager and mayor-council form of government. An elected Public Utilities Board operates a Municipal Utilities System consisting of telephone, water, sewer, electricity and steam systems which serve the city. (The Public Utilities Board was abolished by the City Council in March, 1978, but for purposes of this report, is was the PUB which was responsible for decisions regarding Fairbanks utilities.) Additionally, the City of Fairbanks provides police and fire protection for the area within the city limits. Law enforcement beyond the city limits is provided by the I Detachment, Alaska State Troopers.

FAIRBANKS AND ALYESKA PIPELINE SERVICE COMPANY
What were Residents' Expectations of Benefits the Pipeline Would Bring?

Fairbanks greeted the discovery of oil at Prudhoe Bay with cheers and a scramble to be ready for the dollars that were bound to flow in. As early as fall 1968, lengths of pipe were trucked into Fairbanks and were stacked in the yard north of town, portending the activity to come. And as early as August, 1968, a month after the Prudhoe strike was confirmed to have commercial value, Fairbanks set out to woo the oil industry. According to one observer, "when oil was discovered 300 miles to the north, a sort of

mass hysteria swept through the city... it was a wave of irrational fear that the city and its 21,000 people would somehow be deprived of their slice of the petroleum pie unless theydid something to attract the oil industry to Fairbanks''(Dixon 1976, P. 139).

The chance to serve as a service and supply center for pipeline construction led to expectations of jobs, income, sales of goods and services to the largest private construction project in history. Residents and community leaders emphasized these positive economic opportunities. If there were any fear that the pipeline might have negative effects on the community, it was shadowed by the expectation that jobs, economic opportunities and wealth would solve any community or personal problems that might come along. In fact, the pipeline was viewed not only as a positive thing in the economic sector with regard to jobs and development, but as a capital base that would finance solutions to Alaska's social -- as well as economic -- problems for years to come. At testimony on environment impacts of the pipeline, Fairbanksans in particular, and Alaskans in general, just wanted to get on with building the line. They viewed delay as a threat to putting Alaska back on the pre-1969 federal dole, and a curbing of the income the state would accrue from royalties. Fairbanks North Star Borough Mayor John Carlson called the revenues "the great public social overhead investments such as schools and medical facilities which are desperately needed in Alaska at this 'time" (Dept. of the Interior, TAP Hearings, February 24-25, 1971, Anchorage, Alaska). Another witness urged immediate construction of the pipeline "not because of its insignificant impact on the total environment, but for the social good it will make possible" (Lundgren, P. 2).

What little planning for the pipeline there was, was geared toward how the town could capitalize on the construction activity, rather than what it could do to prepare the Fairbanks infrastructure to handle it. The attitude was more “what can the Trans-Alaska Pipeline Service (TAPS) Company do for Fairbanks?” than “what can Fairbanks do for the TAPS Company?”

When leaders lobbied at public meetings for the winter haul road from Fairbanks to Prudhoe Bay, also known as the TAPS road or the "Hickel Highway,” it was not with an eye to creating the support services that would be necessary for the development of the North Slope resources, but as insurance that Fairbanks would not be bypassed as a supply center.

The emphasis of state and local leadership in business and government in the pre-construction period was to overcome the obstacles to the Trans-Alaska Pipeline and assure that it would be built. Before the permits were granted and construction was an absolute certainty, Fairbanksans felt it was a premature and inappropriate expenditure of energy and resources to plan for the pipeline. They spent their time and money instead on lobbying for the approval of the permit, building up inventories and waiting to cash in. The kinds of long-term investments like housing, build up of capital assets, expenditures in the public arena for roads and utilities, were viewed as too risky. When the Wilderness Society, Friends of the Earth and the Environmental Defense Fund filed suit over the Department of the Interior’s eight-page environmental impact statement for the pipeline, the injunction against granting the permit came less than a month later, resulting in a “mini-bust.” All action and work stopped.

Those businesses that had built up inventory and made investments for future demands, suffered losses, and reinforced the attitude that by planning ahead, they had lost money. This attitude was even supported by consultants and economists on the state level. In 1971 areport from the Alaska Housing Authority projected capital needs for the area such as housing, classrooms and public utilities and services such as health, welfare and employment. It emphasized the "temporary" nature of pipeline construction and accompanying employment and population increases and recommended that "communities should look for flexible methods of meeting temporary public needs to avoid investing in permanent captial improvements which will be underused in the future" (Dixon, P. 135).

These ideas were being put forth at a time when Fairbanks' schools, roads, utilities, office space, warehouse space, and housing were not even up to a standard able to deal with the community's existing needs as documented in planning done by the city, the borough and the Chamber of Commerce. But Fairbanks wanted commitments from the pipeline companies that they would use capital improvements the city provided, even if they were temporary. "Because of the lack of commitment by the oil industry," Carlson said, "it was difficult for people here to justify spending money--either their own or the public's--on preparations for the boom that might never come" (Carl son 1975, P. 34).

Another thing the community wanted from the pipeline companies during the pre-construction period was information. They wanted to know how many jobs, how many new families? But the information was not forthcoming:

- "The oil companies gave no specific numbers. In 1972, when they first came to Fairbanks, Alyeska said, 'the pipeline is not going to impact Fairbanks'" (Carlson, 1977).

- "The TAPS refused to make any public statements about their plans. The State of Alaska wouldn't do anything" (Smetzer, 1977).

- "Plans for the pipeline were discussed in government offices and company headquarters. Some news filtered through, but the average person on the street didn't know what was going to happen" (Straatmeyer, 1978).

Information from consultants and planners was vague at best:

> A few reports were written projecting various social and economic impacts of the pipeline, but the information was usually couched in general terms. Consultants preparing them tended to hedge on any definitive projections which might later be proven false. Like others, the consultants did not have experience with similar situations to draw upon and did not know what kinds of processes would occur to change the community. Their reports were based on a series of assumptions of the previous reports. The reports were not detailed enough to serve as planning documents. For the most part, they were ignored." (Dixon, P. 12).

The oil companies finally did consult with Fairbanks business leaders to find out what resources the community wanted to provide, and the business leaders, eager to reap as many economic benefits as possible, urged the oil companies to refrain from providing their own housing, office space and supplies "in-house" and allow the community's private enterprise to fill these needs.

Yet another excuse for the community's failure to be prepared for the impact of pipeline construction activity was the reluctance of the "taxpayer" and "voter" to spend money. Borough Mayor John Carlson said that although local government put forth plans and costs for preparing the community for

the pipeline, taxpayers and voters did not support planning activities. "How do you get people to accept the responsibility?," he asked. "Revenue bonds for sewer, telephones and so forth mean assessments and increases in taxes" (Carl son, 1977). Smetzer observed that after the injunction and accompanying "mini-bust" there was much uncertainty on the part of business. "From 1970 to 1973 there was a fear among a lot of people that there might not be a pipeline," he said. Business people had lost money in the false boom and "they carry a lot of weight in municipal elections and attitudes." Although there were attempts by local government to implement planning programs, every appropriation ordinance was turned down, ore planner said, until after the pipeline. One example of this was the funding by the Fairbanks North Star Borough of the Pipeline Impact Information Office. The first attempts in 1972 and 1973 failed to pass the borough assembly. Even in 1974, after Congress signed the permit allowing construction to begin, the appropriation ordinance failed one more time. It was not until after a public forum fostered discussion of possible negative aspects of the pipeline, that the Impact Information Center was funded in summer of 1974. It was the first attempt to recognize possible negative impacts on the Fairbanks community.

What Were Residents' Negative Expectations about the Pipeline?

In early 1974 the Fairbanks Council of Churches began asking questions about what the impact of the pipeline and the population increase in Fairbanks might have on churches. They formed a group called the Social Concerns Committee to examine specific concerns to churches such as counseling and requests for donations of food from new residents or

transients. The scope of the committee's inquiry broadened after resource people from the university and the community became involved, and asked that the issue of impact on people be addressed with regard to the whole community, not just churches.

"That issue had not been raised before," said the Rev. Gene Straatmeyer, one of the members of the committee and the pastor of the First Presybterian Church in Fairbanks. "Everyone else had a political or economic stake in the pipeline. The churches didn't have anything invested, so it was thought they would be the best to look at it."

"We had a lot of preconceptions," Straatmeyer said. "After the first forum, the major problem became clear: fear. Not knowing what was going to happen" (Straatmeyer, 1978). "Not knowing" included fears about transients, increased public assistance rolls, "squatter communities," and the type of "victimless" crimes that traditionally have accompanied booms: gambling, prostitution and fraudulent schemes.

These fears voice at the first public impact forum were backed up by reports and studiesat the state level. A report from the legislature in February, 1974, predicted impact problems associated "with a transient population and with pipeline workers looking for recreation" (Fison, XII, 48). Some of the impacts the report saw were in law enforcement, recreation, unemployment, drugs, alcohol and welfare.

Another report from the state, through the Governor's Office, Division of

Planning, predicted during pipeline construction "the normal problems of growth, which include law enforcement, educational programs, welfare and social programs, health related problems, housing and manpower training and placement" (Fison, XII, 48).

Other state predictions had to do with the costs of increased pressure on these public services and the lack of accompanying government revenues. While it was pointed out the increased population would demand public expenditures and financing earlier than normal in impacted communities, "there will be an over-all lag in revenue, especially in property taxation" (Fison, XII, 48).

Thus, on top of all its other negative expectations, Fairbanks expected that the impacts brought on by the pipeline construction transients would run up a large bill in govenment expenditures, and the transients would be gone before the tab came due, leaving permanent residents with the increased tax burden. But despite what the community considered to be insufficient information, tangible fears, and dire predictions, it did do some things to plan for pipeline impact.

WHAT DID FAIRBANKS DO TO PREPARE FOR THE PIPELINE?

Armed with a series of reports and predictions on employment and population growth, conversations with business and leadership in other resource-based communities in Texas and Canada, and meetings with Alyeska Pipeline Service Company officials, Fairbanks set out to get ready for the boom.

Planning for Services as a Pipeline Staging Area

From the time oil was discovered on the North Slope to the Spring of 1974 when construction actually began, there were a lot of plans generated in and about Fairbanks. A 1972 City Center Plan called for an emphasis on the city center as the focal point for development, investments and improvements. "The overall objective," the plan stated, "is to retain the city center as the dominant feature in the North Star Borough" (Graham, P. 13). The plan addressed the needs of Fairbanks over the next 20 years, including projections based on resource development and employment. The plan examined retail, office and commerical space needs, traffic patterns, residential housing needs, governmental structures and open space. It projected that by 1975 Fairbanks would need an additional 101,000 square feet of retail space and 611 additional parking spaces downtown. It recommended an expressway system linking the north and south ends of town with a bypass from the Richardson Highway to the Steese Highway, and connecting ramps to provide traffic flow from the core to the expressway. It also recommended a public transportation system.

The condition of residential, commerical and public structures was rated at the time the City Center Plan was written, and the consultants found that only one per cent of the single family units in the city received a rating of "good to excellent" condition. There were 38 per cent with a "good" rating, 37 percent were rated "fair", and 2 per cent were rated in "poor" condition (Graham 1972, PP. C-3 to C-6).

The plan recommended a concentration of multi- and single-family residences

be built near the core area, with emphasis on design for senior citizens, single persons and couples without children. In order to achieve the goals the plan set out, the consultants emphasized the need for cooperation between the public sector and private developers, and changes in the existing zoning ordinance to insure orderly development, weed out substandard structures, and define stricter options for land use in the core.

The plan never got beyond the City Council and Borough Assembly. Even at the writing of this report, a new zoning ordinance has not been passed, although the planning department has submitted at least three different versions to the Borough Assembly. Downtown businesspeople fought the idea of a public transit system, and succeeded in defeating one until a general vote on the issue in 1976. The Steese Expressway around the east end of town was completed in 1977, but construction did not start until the middle of the pipeline perior. There was no high-density housing built in the downtown area prior to the pipeline, and very little out of town either. Housing remained a major problem throughout the impact period.

Another plan that surfaced in 1972 was a proposed restructuring of the rates for the Municipal Utilities System (MUS) to shore up the utility's poor financial situation and permit sale of bonds for capital expansion. A consultant's recommendation for the new rate structure would have put the bulk of the increase on the highest users, rather than the distribution that allowed rate breaks for volume users, i.e., higher rates for businesses than for residential customers. These ideas for rate increases to permit expansion were at a time 'when the city was also facing a mandate from the

federal government to build a secondary sewage treatment plant, and to extend water and sewer services to annexed areas. The areas annexed paid taxes for three years before they received city water and sewer services, with two projects completed only in late 1976, and a third not yet begun.

The MUS rate increases finally were passed in 1974, thereby delaying the purchase of desperately needed telephone equipment until the middle of the pipeline boom. The issue of rate increases continues even now that the heavy pipeline demand is over. At this writing, the council is still debating a rate increase that first was proposed in 1976. At that time, a Fairbanks Daily News-Miner editorial suggested that the management of the city's utilities should be less subject to the political pressures of the city council:

> The City Council and the customers of MUS should take a close look at the idea of pushing MUS and the Public Utilities Board farther away from the political influences of the council, and giving the PUB proper authority to do its job... it was the council that stalled for a year studying the rate increases proposed by the MUS management and the PUB in 1972. That procrastination of our councilmen while they second-guessed long deliberation and decisions already made by MUS board members significantly delayed MUS' preparation for the pipeline boom.

Meanwhile, the Golden Valley Electric Association (GVEA), which provided electricity to areas outside the city (and those in the city annexed after 1963), was also making plans for expansion. Its studies, conducted between 1970 and 1972, indicated the next increment of baseload generation-required would be 70,000 kilowatts and should come on line in 1977. Plans were made to add another 70,000 in 1978. The projections were based on Alyeska information about the number ofemployees who would be

working on the pipeline, and the assumption that most of them would be living in camps outside of Fairbanks (Kelly, 1978). GVEA's studies also indicated oil, which was then $3 per barrel, would be the cheapest fuel source for generation, as well as the generation fuel with the least amount of lead time required in "bringing it on line."

By the time pipeline construction began, the oil embargo had pushed the price of a barrel of oil to $13, but it was too late to switch plans for coal-fired generation, which requires a minimum of six years to bring on line. Additionally, many of those pipeline workers who were supposed to be living in camps were building new houses in the rural areas electrified by GVEA. The utility's solution was to declare a moratorium on "all-electric" homes, make arrangements with the military and MUS to "pool" power during peak demands, and push up the schedule of the first new 70,000 kw generator to 1976.

The school district was doing planning from 1972 to 1974 as well, based on the employment and population projections of a report conducted by Alyeska Pipeline Service Company and done by Mathematical Sciences Northwest. The school district based its expansion plans and requests for additional state funding on the projection of 3,300 to 3,900 new students in the 'district for the 1974-1975 school year. A number of solutions to the anticipated influx of students were examined: portable classrooms, year-round schools, construction of new permanent facilities and "double shifting,'" or using the same building for two shifts of students attending for five-hour periods, Voters approved three school bond issues for new construction, and the school district received state impact funds for 27 of 50 requested additional

teachers.

Planning for Human Impacts

Fairbanks may not have acted on all the information and planning it gathered prior to pipeline construction, but in some areas the community did try to pinpoint needs and gaps in its existing structure. Most of the planning efforts were aimed toward meeting the needs of the "supply" side of the pipeline: supplying manpower for jobs, supplying materials and services for construction. The expectations that went along with this type of planning were positive, such as increased employment, increased sales, increased income for the community. Government and business leaders were not addressing gaps in those community resources that would be tapped as a result of negative impacts such as crowding, traffic, increased crime, poverty. Leaders and decision makers were not expecting many negative impacts, and besides, they felt the increased wealth in the community generated by the pipeline construction activity would be sufficient to eliminate the problems that existed before or to solve any new ones that might be created (Stokes 1976, P. 5).

It was not until construction was about to begin that Fairbanksans looked at the needs of the "segments of the population who could not plug into the pipeline," commented one observer. "We were negligent in identifying those groups" (Fison 1978). Those groups included the very young, the elderly, and the "marginal" people, as one commentator described them--those who were barely making financial ends meet under normal conditions in Fairbanks, either because they were unskilled, or had language or cultural barriers to overcome, or had emotional problems before the stresses of a boom atmosphere set in.

When residents began asking questions at the first impact forum about what their lives would be like in the midst of a multi-billion dollar construction project, they found they all had questions, but few answers. At that forum in January, 1974, according to one planner, people were looking for information and for concensus. "We knew there were a lot of things to be done, but who was going to do them? What were the questions and did anyone even have the same ones?" (Smetzer 1977). One piece of information that came from the pipeline companies at that first forum was a statement from Alyeska Pipeline Service Company President Charles Elder that Alyeska was in Fairbanks to build a pipeline, not provide social services (Smetzer 1977).

Two of the plans that emerged from that first gathering were the idea of the Impact Information Center, and a request that the State of Alaska conduct an advertising campaign in the contiguous 48 states to discourage people from coming to Alaska in search of pipeline jobs. The concerns that emerged from the group were fears about what would happen in the community as the population was swelled by newcomers, and how could rumors about negative impacts be stopped. At that point, Fairbanksans still had not singled out potential impacts related to those persons mentioned above who could not "plug into the pipeline."

As early as 1971, some senior citizens in Fairbanks suggested that some multi-residential, low-to-moderate income housing was needed in the downtown area. Many of them were living in homes that were too large, or in substandard houses or cabins. There was no public transportation for

them and space at the low income public housing projects near the downtown area was available on a waiting-list-only basis even before the pipeline. The cause of the senior citizens and the plight of others on a fixed income did not become an issue in the community until the construction was well underway and the in-migration of jobseekers already had driven up rent prices and made housing at any price scarce. In 1975, the Golden Towers senior citizens hi-rise was still a dream. The project was not begun until that year, and the first residents did not move in until early 1977.

Another human impact that was not foreseen was the situation of children whose parents were working construction shifts of 10 to 12 hours, or who were in camps located out of town. Child abuse, child neglect and the scarcity and quality of child care were not addressed by any public body until well into the construction period. Attempts by private groups to secure loans or grants to expand day care facilities were largely unsuccessful. Government assistance in the situation did not occur until 1976--again, after the worst of the impact was over.

The fate of “marginal” people in the community was addressed only in terms of training unskilled Alaskans and Alaska Natives for employment on the pipeline. The training programs faced several problems including a late start relative to construction start-up, oversight by several agencies whose policies often were conflicting, and problems caused by location of training programs in urban centers while the people at whom the training was directed lived in rural communities. For a detailed discussion of training programs, goals and timetables for employment of

Alaska Natives, the reader is directed to Chapter 4 of Dixon's What Happened To Fairbanks?

As for those persons who could not work, or were somehow on the fringes of the community, one counselor in mental health programs said the pipeline provided the impetus or stress to push them over the edge. Some sought aid at the Salvation Army or Fairbanks Rescue Mission, in the public assistance lines or in the drunk tank. Some just left. A worker at the Salvation Army said that agency eventually began giving people financial assistance to get out of Alaska when they could find no jobs or housing. The people receiving such aid were not only newcomers (Mueller 1975, P. 13).

Prior to the pipeline it was predicted that the construction period would be accompanied by an increase in crime. A 1972 impact study of the transAlaska pipeline said:

> Alaska is entering the decade of the 1970's with acknowledged deficits in the area of public safety, . . The demand for police services will grow proportionately to the increase in population over the next decade. Further more, this demand will increase faster than the general population in the larger communities (Fison 1977, IV-5).

Despite those "acknowledged deficits" both the Fairbanks City Police and Alaska State Troopers, I Detachment, went through the impact period with a critical shortage of personnel and resources to handle the crime situation. Their problems were compounded by more than a lack of budget, however.

In June 1974, shortly after pipeline construction began, the Fairbanks

City Council approved a new wage and benefit package for the city police. In spite of the increase, by Spring 1975, the department was short 14 officers out of a force of 50. At the same time, the Troopers were down 18 officers. The eventuality no one had planned for was the recruitment of experienced law enforcement personnel by the pipeline security companies. Many city police and troopers left to take the higher paying and safer pipeline jobs.

It was not until 1976, a few months before major pipeline construction ended, that the I Detachment finally acquired sufficient manpower and other resources to more adequately handle the crime situation. That same year, the Fairbanks police were authorized to hire five additional patrolmen. From the beginning of the pipeline period to the end of the period, the department added only one additional position--one patrolman.

In the area of medical care, the two clinics existing in Fairbanks at the time oil was discovered at Prudhoe Bay decided to increase their staffs in anticipation of population increases due to the pipeline. By 1973, the clinics had increased their staffs to a total of 40 private physicians representing 10 specialties.

It was anticipated that the Fairbanks Memorial Hospital, a relatively new facility, would be able to accommodate the community for several years with major expansion being unnecessary before 1978. The hospital did add 28 beds in 1974 in anticipation of the increased patient load from pipeline construction.

What was not anticipated was a change in the structure of the medical profession in Fairbanks. The change took place as a result of expansion of the two existing clinics, the opening of a third facility housing independent physicians, a trend toward large contracts with pipeline companies rather than individual patients, and an increase in the number and kind of specialists in Fairbanks (Dixon 1978, P. 154455).

The result was that the local hospital was used in a different way. Because of the new specialists, surgery was being performed in Fairbanks that formerly had been done in Seattle; pipeline injuries were being evacuated to the hospital at an average of 3.5 per day; the emergency room was being used for routine medical care by newcomers who had no family doctor in Fairbanks, and also was required to double as an alcohol detoxification center. (About the time pipeline construction began, the community eliminated its drunk laws and the local alcoholism program eliminated its detoxification services.) The emergency room also was the recipient of more medical emergencies resulting from more traffic accidents, fires, industrial accidents and psychiatric traumas. The staff and number of beds that had sufficed at the hospital in 1974 when it had a 67.7 occupancy rate were not sufficient to handle the 80 per cent occupancy rate that came about in 1975.

In 1976 the nonprofit hospital foundation began a drive to raise money in the community to build a $6 million addition to the Fairbanks Memorial Hospital. The addition is not quite finished at this writing.

THE IMPACT EXPERIENCE--1974 to 1976

On January 23, 1974, the Fairbanks Daily News-Miner announced in a head line of bold, two-inch high letters: "Pipeline Permit Signed! Line Permit --Key to Alaska's Future. " It was the conclusion of months of waiting, testifying at hearings, lobbying and preparation. The pipeline was seen as the key to Alaska's economic future with the jobs and capital base it would provide.

An economist from the University of Alaska's Institute of Social and Economic Research stated at a 1978 conference on Alaska's upcoming "Decade of Change" that whenever activity in the Alaskan economy has expanded the number of jobs available, the population (in-migration) has expanded with it, thereby keeping the unemployment rate relatively the same. Although the transAlaska pipeline required so many workers for a short but intense construction period the unemployment rate did indeed decline for a time, the construction project was, too, accompanied by an influx of job seekers from outside Alaska.

POPULATION GROWTH

There were estimates and projections made of the population growth that would occur as people came to Fairbanks to seek work on thre trans-Alaska pipeline. Many of the preparations for impact were based on these projections, and each new projection was based on the data of the one before it. There were several problems with all the estimates:

- They frequently were drawn from different regions, making comparisons difficult;
- The estimates of "actual" population from 1973 to 1976

vary so widely, it is difficult to compare the projections with them;

- The different governmental or private bodies making the estimates each had its own reasons for making them, and tended to come up with projections to support needs.

A report prepared by the head of Region X of the U.S. Department of Health, Education and Welfare, summarized government efforts to prepare for pipeline impact with this observation: "Each of these studies was skewed in the interest of the entity preparing the study. For example, the Mathematical Sciences Northwest, Inc., study minimized the impact, while the local community assessment maximized the impact" (Fison 1977, P XII-52).

Table 1 illustrates the differences in projections from different sources. For purposes of this report, figures for the Fairbanks North Star Borough planning areas will be used, since the borough is the entity responsible for planning decisions with regard to schools, land use, utilities, roads, services and so on. Although the City of Fairbanks lies within this area and provides many of these services, the borough performs the planning function for both the city and areas outside the city.

In the period from 1973 to 1976, although there was no door to door census taken, the borough planning department estimated the population of the borough grew from 50,450 persons to 72,037, a 43 per cent change. From 1970 to 1976, the change was 57 per cent--from 45,864 to 72,037 (Fison 1977 P, XII-28). During that period from .1970 to 1976, the borough absorbed more than 26,000 new people and increased its tax base 63 per cent (FNSB, 1976 Annual Report, P. 98), yet the requirements of 26,000

TABLE 1

COMPARISON OF POPULATION PROJECTIONS
AND ACTUAL ESTIMATES
ALASKA, INTERIOR AND FAIRBANKS
1973-1980

	1973	1974	1975	1976	1977	1980
Statewide						
Projected	330,000	357,200	386,600	NA	NA	448,400
Actual	330,365	351,159	404,634	413,289	NA	NA
Ratio	100	102	96			
Interior						
Projected	56,300	60,700	66,500	NA	NA	70,000
Actual	56,593	63,151	78,614	68,572	NA	NA
Ratio	99	96	85			
Fairbanks Labor Market Area						
Projected	NA	65,449	66,680	67,455	NA	NA
Actual	49,856	55,266	61,411	58,322	NA	NA
Ratio		118	109	116	-	-
Fairbanks North Star Borough						
Projected	48,488	49,395	50,319	51,734	53,189	57,807
Actual	50,450	58,007	62,355	72,037	69,578	NA
Ratio	96	85	81	72	76	-
Actual	45,571	50,762	55,517	51,511	NA	NA
Ratio	106	97	91	100		
Fairbanks North Star Borough - Civilian Population						
Projected	34,220	39,125	42,306	42,172	42,234	47,671
Actual	34,046		50,038	60,247	55,690	NA
Ratio	101		85	70	76	-

Source: Sue Fison
Impact Information Center, Final Report

people--housing, electricity, water, roads, police protection, schools, consumer goods, health care, recreation--were not improved much by the borough, the city, or private enterprise until the boom was underway. Some were not attempted until it was nearly over.

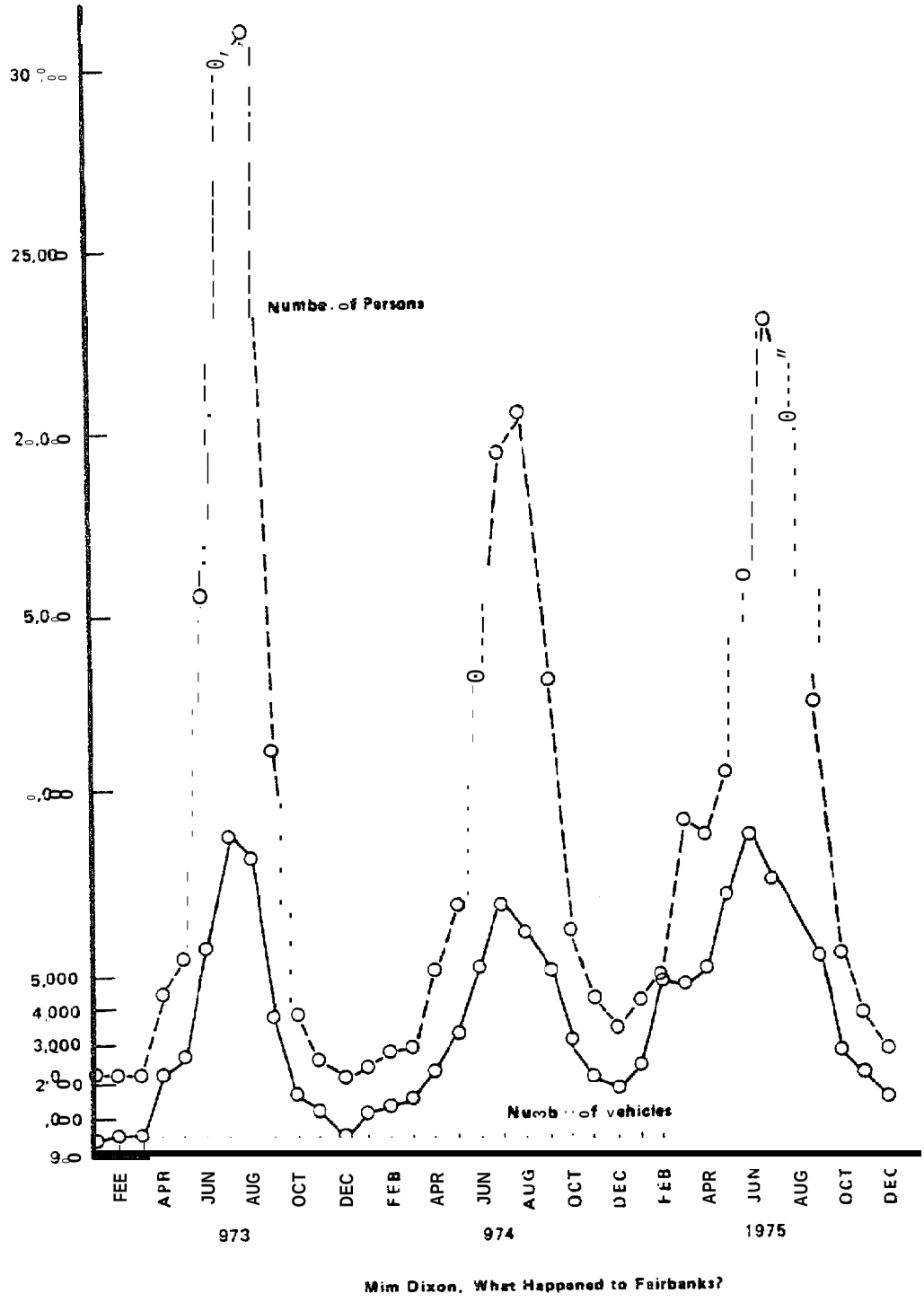
Although it is impossible to say precisely how many people were in Fairbanks from 1974 through 1976, it became clear early in the construction period that Fairbanks was not prepared to accommodate all of them comfortably. In the summer of 1975, the Fairbanks Daily News-Miner carried at least one story per week on lines, waits, traffic and general discomforts because of the crowds in Fairbanks. It became almost a contest to compare length of a wait at the Post Office or the bank, or how long it took to go five blocks on Cushman Street.

> Lines, lines. Before, you could get away. The pipeline brought more lines, continued them and extended them to 60 miles out of town. Some people like to get away and be alone. If increased population comes and the ordinary person needs to go 100 miles instead of 10 or 30, it's going to increase mental health problems. Getting away was one way we had before to cope. The more people you have, the further you have to drive to reach what people always liked about Fairbanks --that proximity to the wilderness (Straatmeyer 1978, personal communication).

Figures 1, 2, and 3 show the number of persons entering Fairbanks via the Alcan Highway, the number arriving and departing from Fairbanks International Airport, and the amount of traffic on Fairbanks roads and highways during the pipeline period. Although the summer peaks include tourists, whom Fairbanksans were used to accommodating in the summer months, the fluctuations in traffic patterns show that pipeline traffic accounted for a lot of the vehicles. It was during late 1974 and into

Figure 1

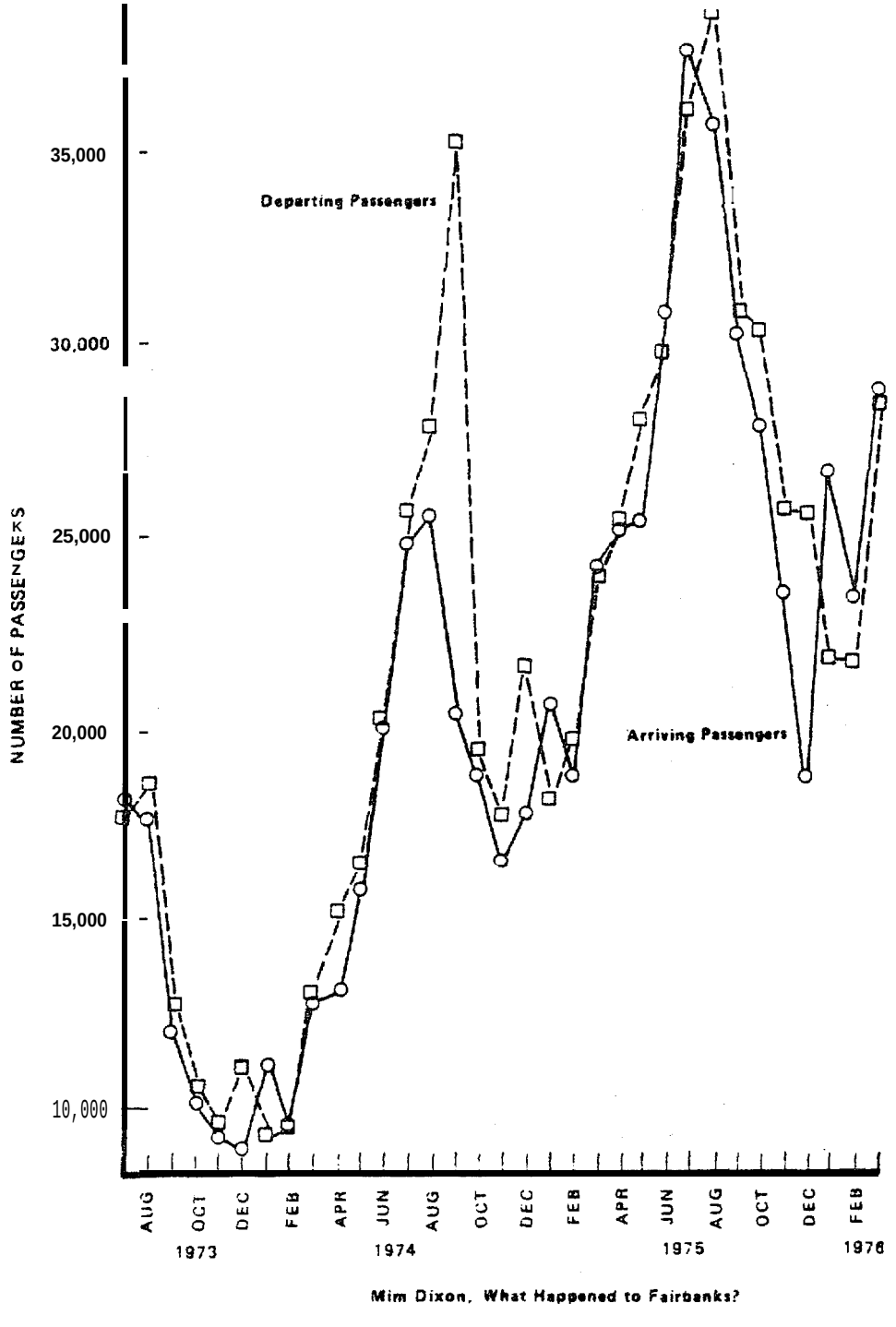
Perso and Vehicles Entering Alaska Via the Alcan Highway, 1973-1975



Mim Dixon, What Happened to Fairbanks?

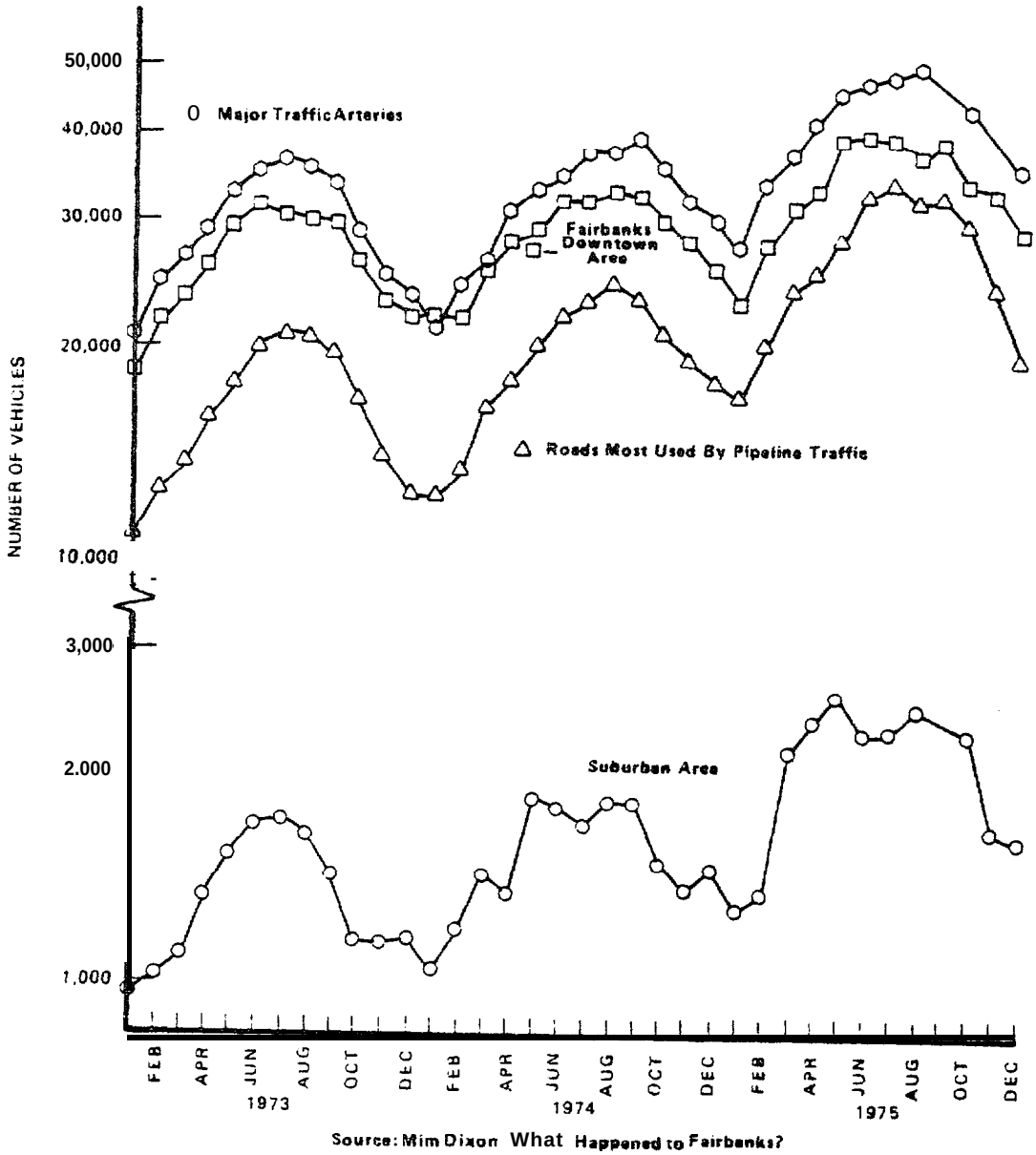
Figure 2

Passengers Arriving and Departing, Fairbanks International Airport



Mim Dixon, What Happened to Fairbanks?

Figure 3
Monthly Fluctuations in Traffic By Type Of Road, 1973-1975



Source: Mim Dixon What Happened to Fairbanks?

1975 that all the quips about "yellow trucks" surfaced among joke telling Fairbanksans, referring to the yellow color which Alyeska used to paint its trucks. It was not uncommon on a main artery in Fairbanks to be in three lanes of traffic with an Alyeska vehicle on every side of one's own vehicle. The airport, too, set the mood of a town taking in a whole new population oriented toward working on the pipeline:

> The visitor to Fairbanks is immediately confronted with the impact of the pipeline. The Alyeska Service Desk occupies a prominent position at the airport and handles all pipeline related passenger movement through the airport either to other aircraft or to buses waiting outside. The airport itself is constantly busy coping with far more flights than would normally be generated by a population the size of Fairbanks (Stokes 1976, P. 14).

But numbers alone did not cause the irritation felt by Fairbanksans at the prospect of the new population; much of it was a reaction to the appearance and attitudes of some of their new neighbors. "The reaction was one of fear, some of it justified," noted one observer. "The pipeline brought an element of people who were not a positive influence on this community" (Straatmeyer 1978).

Newcomers versus Oldtimers

"h'hat happens to neighborliness when you walk down the street and instead of knowing almost everyone, you recognize hardly anyone?" asked one oldtimer at a Community Forum on Growth (Mueller 1976, P. 1). Newcomers were viewed with suspicion at the least, and outright hostility at the worst. The number of years a person had lived in Fairbanks was worn as a badge of approval, acceptance, and license to comment on the state of the community. It was acceptable to complain about traffic, pipeliners,

phone service, prices or lines if you had lived in Fairbanks for awhile. But if you couldn't remember "The Flood," you were invited to go back where you came from. Newcomers who could not understand why telephones did not work, or why local government did not do something about traffic lights and patterns, for example, received a common response from Oldtimers: "if you don't like it, leave."

Jokes sprang up about Texans and pipeline workers, cowboy hats and Alyeska trucks. Bumper stickers abounded with phrases such as "Alaska for Alaskans," "Alaska resident, An endangered species," "Happiness is 10,000 Okies going South with a Texan under each arm." The attitude was held not just among the segment of the community that might be called conservative or "red neck." At a public forum on impact, Lieutenant Governor Lowell Thomas, Jr. told the audience:

> The overwhelming dilemma to me...is how to improve life in Alaska without attracting many more people up here? In other words, if we make this into a land of milk and honey, aren't the locusts just going to swarm in and devour us? I sense, too, that people here today feel that there should be some way to throttle things back a little and keep the hordes of stampeders from moving in on us. I guess there is no way to do that, and certainly no one really wants to stop growth and development" (Thomas 1975, P. 30).

Fairbanksans wanted the pipeline, they wanted pipeline jobs, pipeline income. They did not want inflation, traffic, air pollution, or higher taxes to pay for the increased demands on community services. And they especially did not want "Outsiders" taking jobs, income and goods away from them (Mueller 1975, P. 5). There were fears that people coming into Fairbanks would wind up on public assistance while waiting to get a pipeline job, would congregate in "squatter" communities where there

would be danger of epidemics, would get a pipeline job that could have gone to an Alaskan, and then would leave with the earnings--the "rip and run" phenomenon.

Most of these fears did not prove true. The campaign to warn people outside Alaska not to come unless they had a job or resources to maintain themselves until they got one, was one thing the community did to cut down on in-migration. But perhaps more than that, it was the type of people who came to Fairbanks, and the type of community Fairbanks already was, that prevented some of the above impacts (Dixon 1978, 'P. 108).

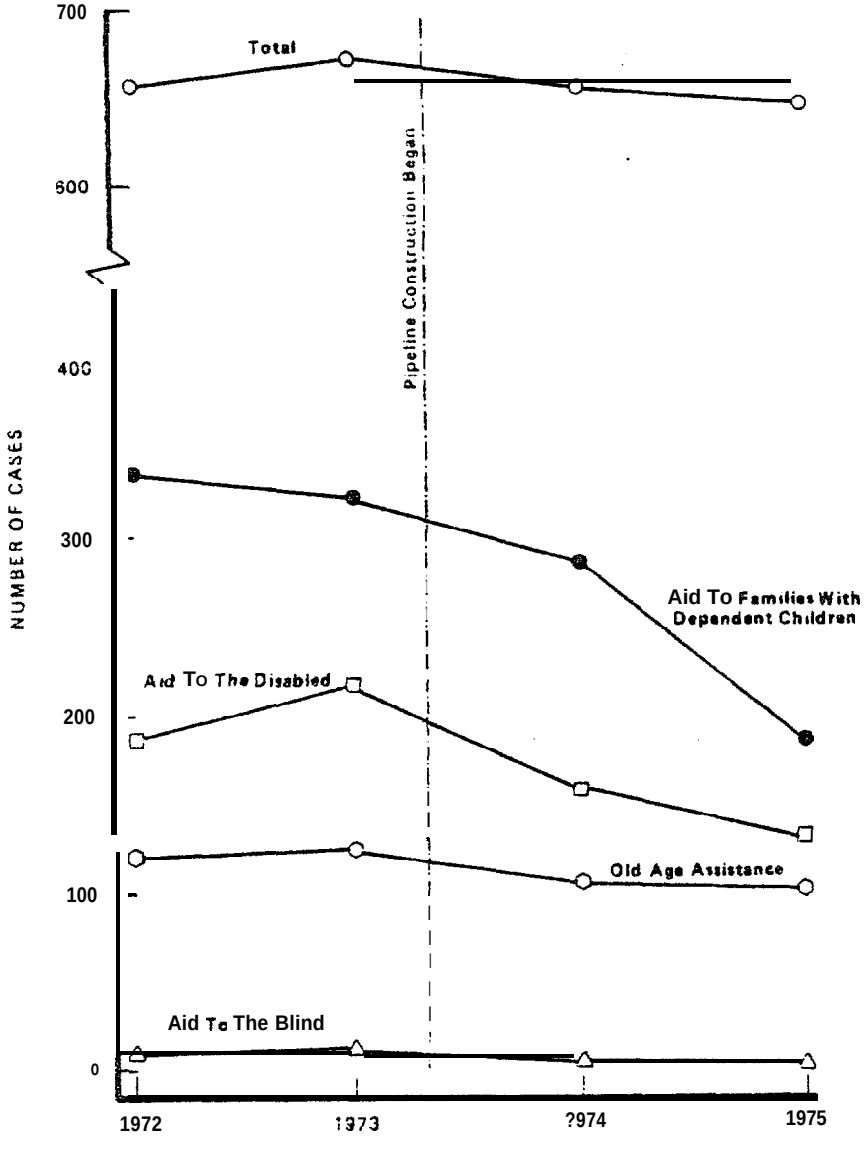
- Job seekers coming into Fairbanks were not the overflow of welfare recipients in the Lower 48. They were conservative, independent, working class people.
- Newcomers knew enough about the construction industry to come prepared for a wait. Either they brought a round trip ticket, enough cash to tide them over for the wait, or a "contact"--a person they knew who already lived in Fairbanks and could help with housing or employment.
- They did not bring their families. From August, 1974 to December, 1975, only one out of every 97 persons hired to work on the pipeline had brought a family to Fairbanks (Dixon 1978, P. 109).

In fact, from January, 1973 to January, 1976, there was a 90 per cent drop in the number of food stamp recipients in Fairbanks, and the number of public assistance cases declined by 36 per cent from 1973 to 1975. (See Figures 4 & 5) In many cases, it was not the Outsiders who were requiring assistance, but the Oldtimers.

The director of the Salvation Army rooming house in Fairbanks said more than half the people seeking housing and/or food assistance there and at

Figure 4

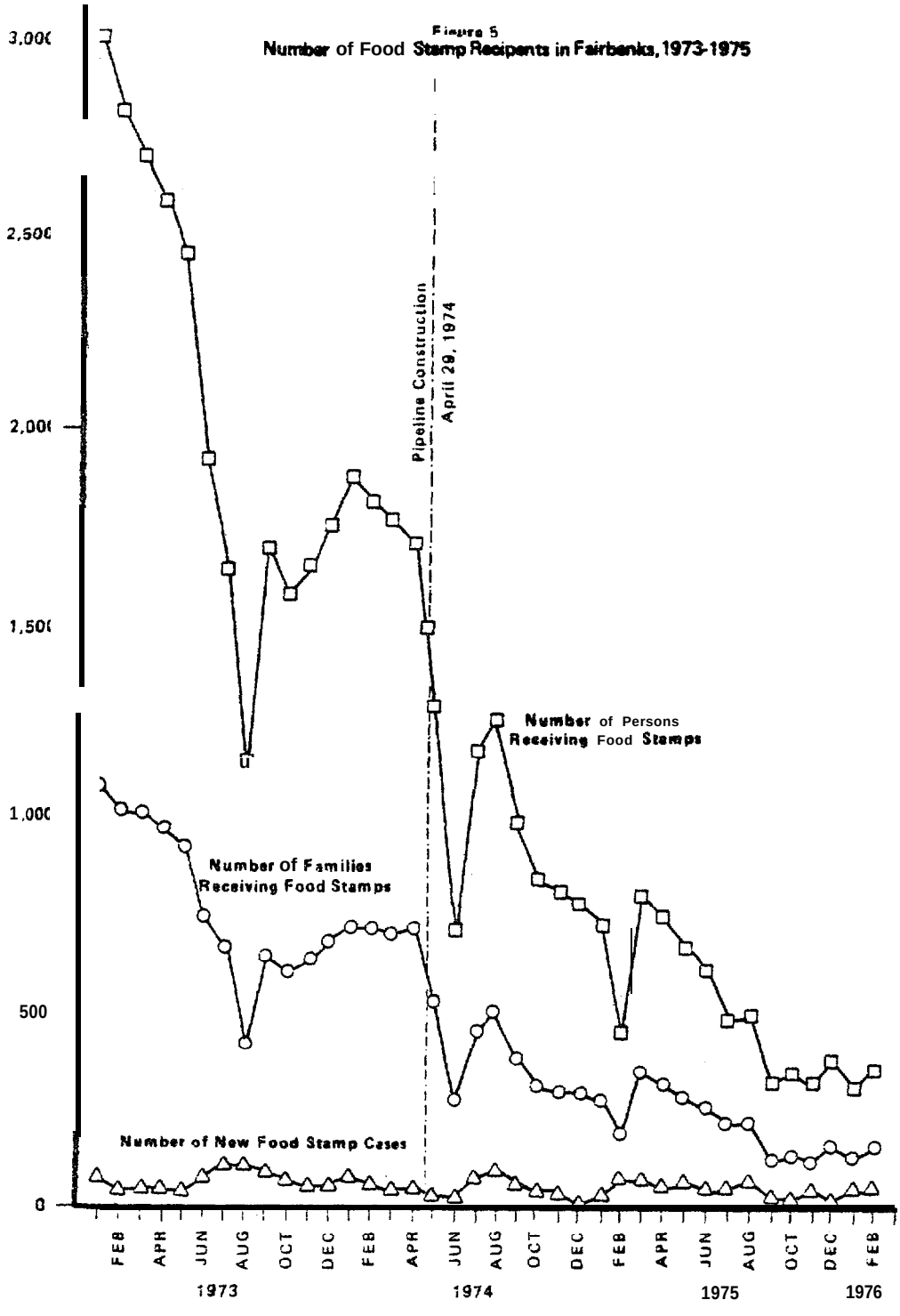
Public Assistance Cases in Fairbanks in October, 1972-1975



Source: Mim Dixon, What Happened to Fairbanks?

Figure 5

Number of Food Stamp Recipents in Fairbanks, 1973-1975



Source: Mim Dixon, What Happened to Fairbanks?

the Fairbanks Rescue Mission were Outsiders looking for pipeline jobs. The remainder were members of local families he described as "marginal people pushed over the edge" by the economic situation created by pipeline construct on. They were people who never had been able to hold jobs for long periods of time, and were driven to seek assistance because of the inflation, lack of child care, housing shortage and other problems related to the pipeline (Dixon 1978, P. 112).

Housing

Perhaps one of the impact conditions that aggravated hostilities in Fairbanks the most was the housing shortage. It was the subject of many newspaper stories, both local and national, and the source of some of the worst horror stories of the period.

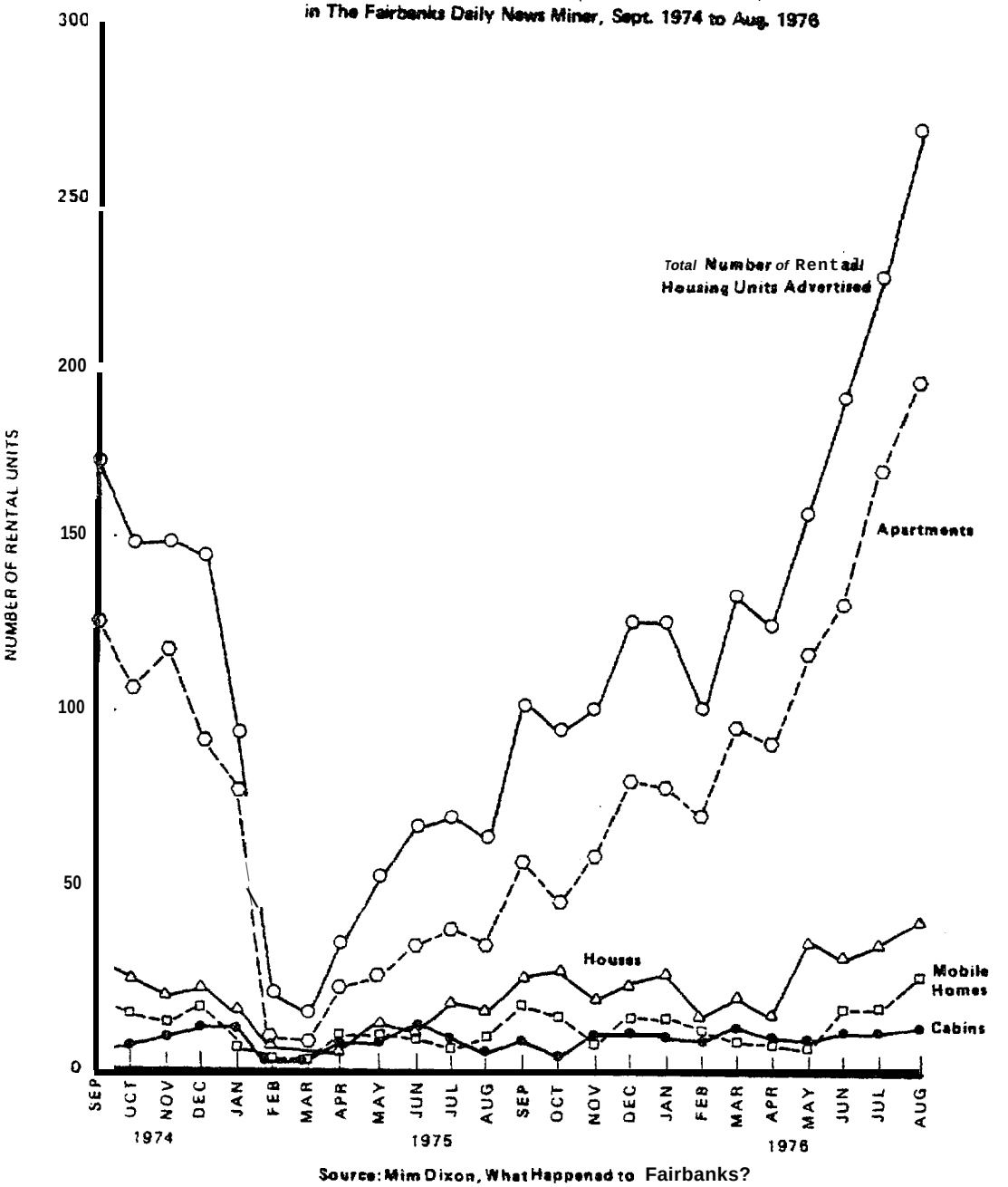
As was pointed out earlier, a City Center plan pointed out as early as 1972, that much of Fairbanks' housing was substandard. In the period from 1970 to 1974, new single family housing units authorized by building permits in the City of Fairbanks totaled 334; permits for units in the borough outside the city totalled 1,193. During that time 744 multi-family units were authorized by permit in the City and Borough. In Anchorage over the same period of time, by comparison, nearly 3,000 total housing units were authorized by building permits and public contracts (Fison 1977, PP 4647). The peak of housing construction permits issued occurred in 1975--during the pipeline construction boom--when nearly 1,000 permits were issued. In actual units constructed in the FNSB, the greatest number went up in 1975: 1,035 tots'1 units, one fourth

of the units constructed during the entire six year period. That was the year, however, when the shortage reached its most critical point. In March of 1975, only 18 housing units were advertised for rent in the classified section of the Fairbanks Daily News-Miner, compared to 170 in September, 1974, and 699 in December of 1976. It was at this point the governor declared a state of housing emergency in Fairbanks because of the vacancy rate, which by May, 1975, had fallen to .5 per cent according to a postal survey. In November, 1974, the vacancy rate was 2.2, down from 7.2 in September, 1973.

The housing emergency was not just a product of lack of housing, however. It was spurred by complaints of rent gouging and included not just a declaration of emergency, but the creation of a Rent Review Board to examine the complaints of tenants who felt their rents had been raised unreasonably. Some of the more exorbitant examples of rent gouging included a one-room cabin without plumbing for $500 a month, rent increases from $290 to $350 to $400 in a space of four months, a single increase of $225 bringing the rent on a threebedroom apartment to $750, an eviction on grounds that the building was about to be sold and the tenant learning later there was no sale, but the apartment was rented to another party for $135 more. per month plus utilities (Daily News-Miner .1975, selected articles; also Dixon 1978, P 139}. Figure 6 illustrates the fluctuation in available rental housing from 19.74 to 19.76.

Although the shortage was severe, the fear of residents that incoming people would set up in squatter communities did not come true. The same

Figure 6
Number of Rental Housing Units Advertised Monthly
in The Fairbanks Daily News Miner, Sept. 1974 to Aug. 1976



Source: Mim Dixon, What Happened to Fairbanks?

structure in Fairbanks that meant there was not sufficient new housing in town to accommodate the increase in population enabled the community to absorb many of the newcomers without the emergence of shanty towns.

- Many of the newcomers brought their own housing with them in the form of campers or trailers.

- There was already a mix of standard and substandard housing in Fairbanks. It was not uncommon to see a 50-year-old sinking log cabin in the same block as a new, $60,000 house, so there were no specific clusters of substandard housing or areas that could turn into a "shanty town."

- Loose zoning and building codes allowed many unoccupied, substandard structures to remain standing, and these were converted into living quarters by oldtimers and newcomers alike: garages, quonset huts, sheds.

- The attitudes of Fairbanksans, and to a great extent, the newcomers who joined them, about the frontier and the "Alaskan lifestyle" made living in a place without water or electricity not only acceptable, but somewhat romantic.

The only "new solutions" Fairbanks attempted to accommodate the increased population who needed shelter were mobile home parks and "sharing;" both temporary solutions. There was some suggestion that the state assist in the financing of purchase of mobile homes to be located on property owned by the borough, but private businessmen objected to government involvement in what they considered a private sector matter, even though the private sector was reluctant to invest in building homes for a short-run need (Mueller 1975, P. 13). Rooming houses took in dozens of people waiting to get out on the pipeline. One alumnus of a rooming house that reportedly bunked 45 people wrote in a letter to the editor of the newspaper:

> Granted that zoning regulations, fire codes, and requirements . . . are being violated to various degrees by boarding and rooming houses around the city, but let's not forget that these people are helping to alleviate a critical housing shortage. Sure they're making money, but so did Ford, Rockefeller, Hunt, Lady Bird and a lot of other people (Dixon 1978, P. 12}

Making money was one of the key components in the attitudes and atmosphere of Fairbanks during that time. The desire to make money exacerbated the housing shortage, added to hostilities between newcomers and oldtimers, and between oldtimers and their longtime neighbors and friends.

Cost of Living--Inflation or Greed?

Efficiency apartments renting for $350 a month, an oil change costing $50, a $4 price tag on a hamburger deluxe or a $15 haircut were facts of life in Fairbanks during the pipeline period. An observer remarked in 1975 that Fairbanks was on a three-year drunk. He noted that merchants in the community were taking the same attitude toward newcomers that they always had taken toward the military--they'd soon be gone so it didn't matter if one charged outrageous prices for goods and services. But this time the mark-up was not just on beer for GI's on a Friday night; it was affecting everyone who lived in Fairbanks.

In a parting shot at Fairbanks businesses the planning and zoning director for the borough told a reporter upon his resignation: "I am concerned about the greed that this community is showing and that greed is probably worst in the people who have been here the longest.. .It's not the pipeliners, it's not the newcomers, it's the people who have been here 5, 10, 15, 20

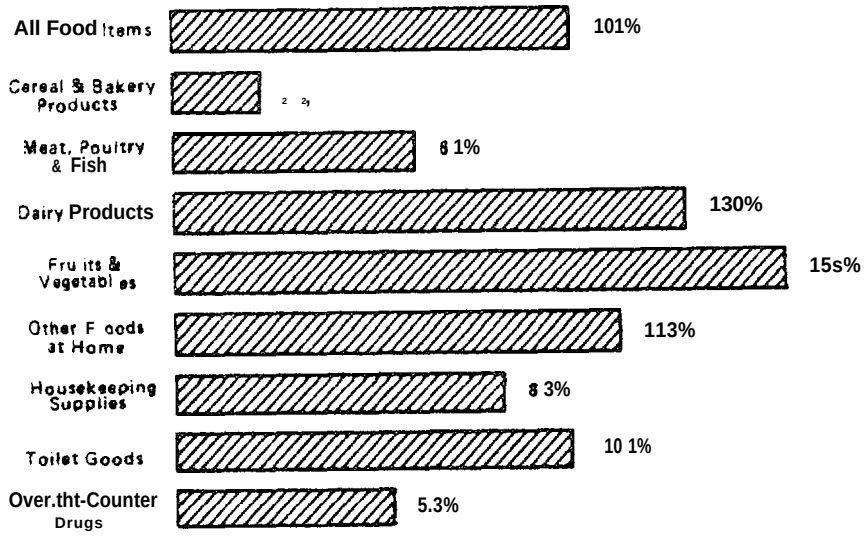
years. . . There are prices being charged here now that have no reason to be charged except for the lack of competition" (Dixon 1978, P. 141).

Lack of competition in Fairbanks, however, was not a new phenomenon. Nor were high prices. Even before the pipeline, the cost of nearly everything in Alaska was higher than elsewhere in the United States, and prices in Fairbanks, though not as high as those in remote villages, were believed to be somewhat higher than prices in Anchorage. Anchorage was the only city in Alaska, however, for which the U.S. Bureau of Labor Statistics conducted a Consumer Price Index during the pipeline period, so there is no accurate method of measuring inflation in Fairbanks during that time. But there are indications that consumer prices increased significantly. Some specific costs monitored by the Impact Information Center during the pipeline period showed increases in the price of heating oil, automobile repairs and food (Dixon 1978, PP. 36-37).

The only survey comparing Fairbanks prices and Anchorage prices using the same methodology as the U.S. CPI was done by the Impact Information Center in October, 1976. Figure 7 shows the per cent difference between grocery items in those two cities, with a .10.1 per cent higher cost for food items, and an 8.6 per cent higher cost for nonfood items in Fairbanks. Figure 8 compares total annual budget costs for a four person family at the intermediate level of living in Anchorage and the urban U.S. from 1970 to 1976. While the difference fell from 36 per cent to 30 per cent from 1970 to 1974, the high rate of inflation which accompanied the pipeline boom period reversed the trend. By 1975, 'total annual intermediate

Figure 7

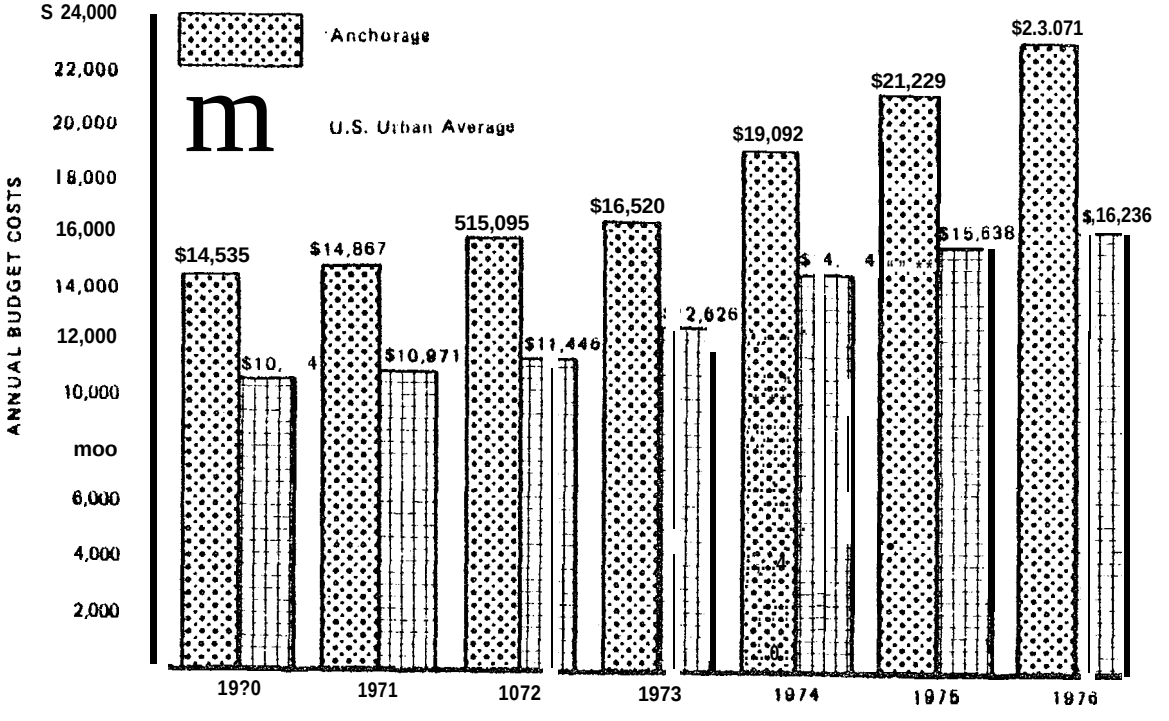
Percent Difference Between Anchorage and Fairbanks Food Prices Oct 1976



Source: Impact Information Center Survey of Four four major food retailers in both Fairbanks and Anchorage.

Figure 8

Total Annual Intermediate Budget Costs, 19701976



Source: Sue Fison, Impact In formation Center, Final Report, P. III 8

budget costs in Anchorage were $21,229 compared to $15,638 in the U.S., back to the 36 per cent difference. By 1976, the differential had widened even more, to 42 per cent (Fison 1977, P. 11117). It might be possible to draw some conclusions about the rate of inflation in Fairbanks during the pipeline by comparing the cost of living in Anchorage and using the percentage difference arrived at in the grocery survey to achieve some multiple for Fairbanks.

A survey of readership of impact information center reports indicated cost of living was the area of most interest, and the Community Survey conducted in 1976 by the Institute of Social and Economic Research showed residents believed cost of living to be the worst negative attribute of the community (See Table 2). If the inference were drawn that the pipeline caused the cost of living to increase in Fairbanks as residents perceived it did, what were accompanying perceptions of causative factors? Was greed an important element? Was there a “rip off” mentality that resulted from the pipeline boom? Was it simply a matter of pricing affected by a fixed supply and an unexpectedly high demand? For example, there was a period in early 1975 when antifreeze was impossible to come by at any price. When cases of antifreeze finally appeared on store shelves, the price was anywhere from $.50 to $1.00 more than it had been before. In Fairbanks in February, residents have no choice but to pay the price of antifreeze, so a new price was accepted as the norm.

A pastor in Fairbanks observed that attitudes about money and profits led to price gouging, that the feeling of "I can get it now, to hell with everybody,” applied not only to the business sector where proprietors

TABLE 2

TEN BEST AND TEN WORST COMMUNITY ASSESSMENTS FOR FAIRBANKS

Best Assessments	Percent Responding in Upper Third of Scale	Worst Assessments	Percent Responding in Lower Third of Scale
1. Local job opportunities	64.	1. Cost of living	77
2. Privacy in the home	62	2. Quality and cost of housing	74
3. Medical care	56	3. Time spent waiting on lines	71
4. Relations with neighbors	47	4. Telephone	69
5. Natural outdoor recreation	38	5. Traffic	67
6. Food and products available	37	6. Services (such as home and car repair)	62
7. Absence of social problems in neighborhood: Alcoholism, child neglect, drugs	37	7. Electricity	55
8. Absence of vandalism, theft, disorderly conduct in your neighborhood	34	8. Presence of wildlife in the Fairbanks area	50
9. Garbage disposal	33	9. Overall community mood	46
10. Communications with the outside	32	10. Availability of game and fish	39

Number of respondents - 380

Source: Jack Kruse Community Survey, ISER

were demanding high prices, but also to the employment sector where workers were demanding high wages. Inflation could be seen from this perspective, therefore, as an effect of two-sided pressure, perhaps influenced by greed: pressure on prices from the business side where short supply, increased demand and a willingness, especially on the part of pipeline contractors, to pay any price for a necessary item; pressure on wages from the employment side where permanent residents wanted to make the same wages in town as the pipeline workers were making on their construction jobs.

EMPLOYMENT

Because there was no cost of living or inflation information for Fairbanks, wage negotiations had no norm to go by. After pipeline construction started, the display of rolls of $100 bills and stories of paychecks of pipeline workers became the norm by which non-pipeline workers and their employers measured their incomes. Even before the pipeline, two economists from the University of Alaska found that the only wages that offset the high cost of living in Alaska were the construction and mining (principally petroleum and natural gas) industries (Dixon 1978 P. 38). In order to offset their own inflated cost of living, aggravated by the extra inflation of pipeline construction spending, shortages, and demands, Fairbanksans wanted to earn as much as the pipeline workers. Government employees negotiated increases, and private businesses had to boost wages to keep employees from leaving for the attraction of pipeline paychecks. One of the misleading things about those paychecks, however, was that they included large amounts of overtime, since most pipeline workers--construction

and clerical--were working "7-10's" or seven-day weeks, 10 hours a day. Table 3 shows comparative wages of pipeline and non-pipeline workers in November, 1974.

Pipeline Jobs

Even though the big paychecks meant putting in many more hours, or living in a remote camp, pipeline jobs were, for many people in Fairbanks, much to be desired. In Jack Kruse's community survey, it was found that 35 per cent of all persons interviewed were employed in the construction trades, and 30 per cent of the heads of households were currently working on or interested in working on the pipeline (Kruse 1976, P. 4). Table 4 shows distribution of employment and occupation of residents surveyed, including their sources of work satisfaction. "Despite the social desirability of attributing the primary source of work satisfaction to reasons other than the pay itself, a quarter of the Fairbanks adult population appears to be deriving most of their job satisfaction from the pay they receive" (Kruse 1976, P. 4).

This is not surprising in light of the statements Fairbanksans were making in the early 70's when they were supporting the granting of the permit for construction of the pipeline and the general attitude of people in Fairbanks seeking to increase their own incomes and profits. The state did several things to insure that as many Alaskans as possible would get a chance to reap some economic benefits from the largest private construction project in history.

The Alaska Plan, establishing a policy of preferential hiring for Alaskans,

TAB LE 3

Representative Wages in Fairbanks, November 1974

Job	Hourly Wage Non-Pipeline	Pipeline
Clerk	2.60-3.84	4.04
Intermediate		
Clerk-Clerk Typist	3.50-4.50	4,50
Senior Clerk-Secretary	3.50-4.68	4.79
Chief Clerk-Senior Secretary	4.04-5.59	5.42
Bookkeeper		
Jr. Accountant	4.04	5.42
Int. Accountant	4.61	6.52
Janitor	3.87	8.31
Maid-Bullcook	3.75	8.31
Cook	5.87	9.12
Dishwasher	3.68	8.31
Sales Person	2.60	---
Laborer	4.00-9.60	9.60

Source: Mim Dixon, What Happened to Fairbanks?

Table 4

Employment and Occupation
(Percent Distribution)

Employment Status	Head	Male	Wife	Female
Currently employed	83	87	50	52
Currently unemployed	9	8	6	7
Not in labor force	8	5	44	41
Occupation:				
Professional/technical	26	26	24	25
Manager/administrator	12	12	10	10
Sales	4	4	4	5
Clerical	7	3	36	35
Draftsman	22	26	6	5
Operatives (except transport)	8	9	2	2
Transport	8	9	2	1
Laborer	6	7	2	1
Service, other		4	14	16

Sources of Work Satisfaction	Head	Wife
Pay	27	25
Friends and associates at work	7	17
Lifestyle	8	7
Personal satisfaction	54	47
Other	4	4

Source: Jack Kruse, Urban Impacts of Oil Development

was passed by the legislature in 1972, and was incorporated into the state pipeline right-of-way lease. Additionally, federal and state laws regarding the hiring of minorities and women were brought to bear on the pipeline project, with specific emphasis on hiring and training of Alaska Natives to work on the pipeline.

Labor Unions

Despite these laws, it took more than walking up to a contractor and saying "I'm an Alaskan who wants to work" to get a job on the pipeline. Many of the jobs were in skilled trades, and it was known from the start that the number of Alaskans with those skills would only fill half the available positions. Additionally, the jobs were filled through the union halls; in Fairbanks, principally the Carpenters, Culinary Workers, Electrical Workers, Iron Workers, Laborers, Operating Engineers, Painters, Plasterers and Cement Masons, Plumbers and Steamfitters, Sheet Metal Workers and the Teamsters. The unions had their own internal hiring procedures, usually determined by experience and length of membership. There were cards ranging from "A" for cardholders with the most experience to "C" with the least experience. Within each of the cards, members were assigned numbers in order of signing up at the hall. When jobs were called in by the contractors, the A cardholder with the lowest number got first bid, and so on. Because of the affiliation of the Fairbanks locals with their international unions, it was possible for a person from Massachusetts to be holding an A card, while a person from Fairbanks, who only recently joined the union, would be holding a C card. On a trip to Prudhoe Bay as a reporter in 1976, this writer spoke with Operating Engineers dispatched from Local 302 in Fairbanks. Only one of about 30

was from Alaska, and the main topic of conversation that day was the furor over residency cards--only those who held them would not be laid off. (The state Department of Labor had required issuance of residency cards through the department because Alaskans were complaining that in 30 days a person from another state could get a driver's license and qualify as a "resident." The residency cards required more proof of residency and intention to make Alaska a permanent residence.) One man insisted that he was a resident of Washington and inteded to remain so, and further bragged that he sent all but $5 a week to his family in Washington and resented. spending even that much in Alaska.

There were tales told of contractors requesting relatives from out-of-state, money changing hads for a "better number," sexual favors granted to get a call, and so on. Since the Alaska Plan was voluntary, there was no way to insure that every Alaskan who wanted to work got a job on the line. Although many people who had not worked in construction before were able to get a pipeline job through the unions with the less skilled jobs--Culinary, Laborers, Teamsters--the unions which dispatched carpenters, plumbers and other skilled tradespersons had apprenticeship programs that were nearly impossible to get into. For example, Fairbanks Chapter of the National Organization for Women, received monthly reports from the Apprenticeship Outreach Program as part of its affirmative action program. The reports listed training and apprenticeship openings with the various unions, dates of openings, length of the program, and how many slots were available. From early 1975 to late 1976, the only openings in the programs were scheduled nearly a year from the date of the report.

Most of the programs listed had “closed” stamped across them.

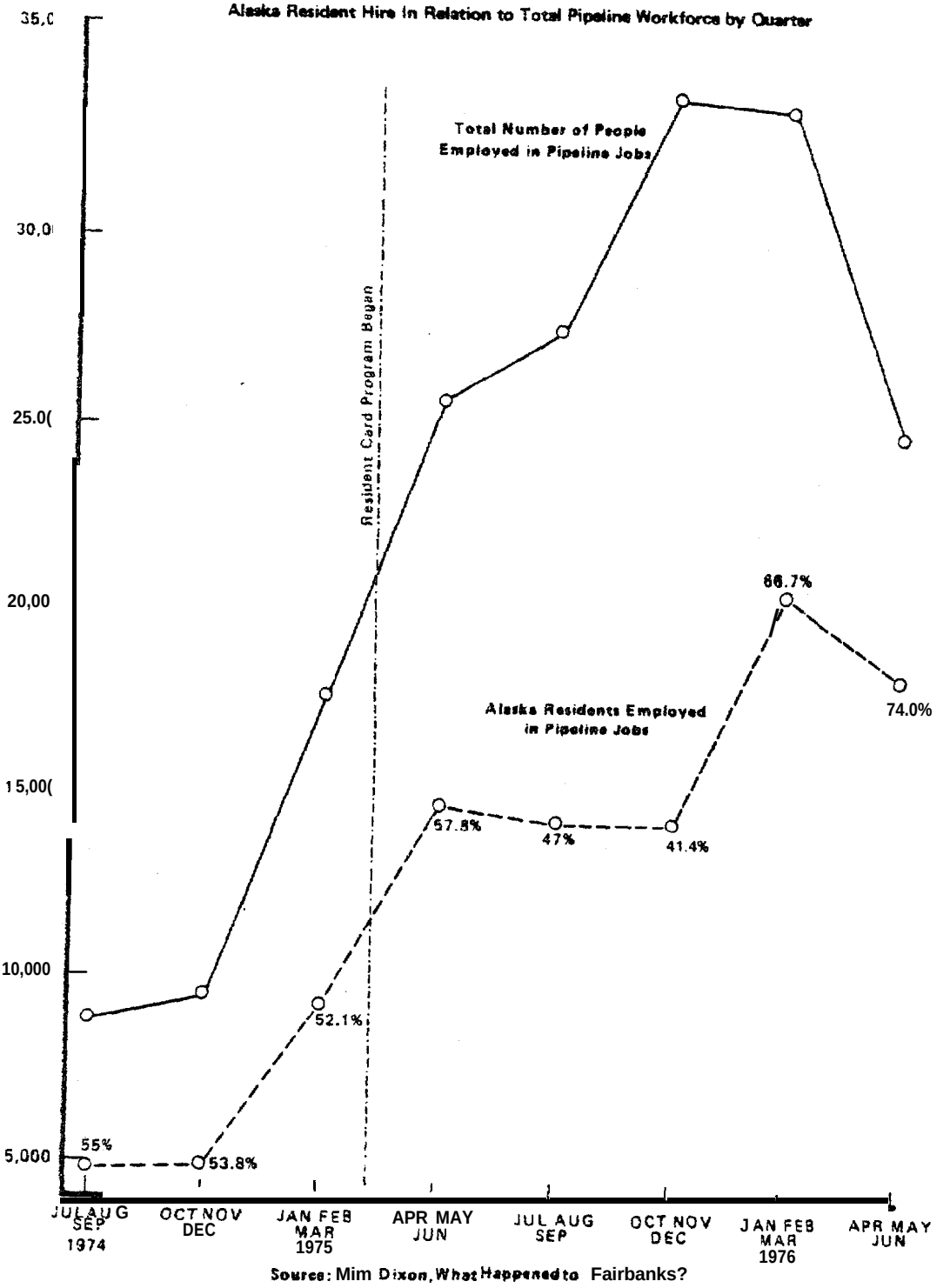
Despite problems with the implementation of the laws and plans, the gaps and loopholes in them that in some cases weren’t remedied until construction was nearly over, the overlapping and jurisdictional problems with the agencies enforcing them and the lack of control over internal hiring practices of unions and subcontractors, more Alaskans than anticipated worked on the pipeline project.

- Prior to the pipeline, Alaska construction union membership numbered about 9,000, less than 600 of them Natives.
- Before construction, Alyeska estimated that 2,000 Native Alaskans would be available for pipeline employment, and the Bureau of Indian Affairs estimated 2,470.
- By January, 1976, the Alaska Federation of Natives had referred 2,568 Native persons who wanted pipeline jobs.
- By that same time, Alyeska had trained 1,324 Native persons in institutional programs and 1,320 on the job. From April, 1974, to April, April, 1976, a total of 5,147 Native Alaskans worked on the pipeline project (Dixon 1978, PP. 80-81)

Figure 9 shows the number and percentages of Alaskans working on pipeline jobs in eight quarters of the construction period. Dixon cautions that the figures must be interpreted with care, however, because they may include persons who were hired more than once, they may include “residents” who were persons coming to Alaska to seek a job and had remained long enough to obtain a residency card, and “the figures were prepared by contractors, who are liable for compliance with the law, and not by an

Figure 9

Alaska Resident Hire In Relation to Total Pipeline Workforce by Quarter



Source: Mim Dixon, What Happened to Fairbanks?

independent auditing agency" (Dixon 1978, P. 77). But it can still be stated that Alaskans who never had worked in construction sought pipeline jobs, and may be assumed that if training and enforcement programs had been initiated sooner, it is likely that even more Alaskans would have worked on the pipeline (Dixon 1978, P. 77).

But what about those who did not get a pipeline job, those who stayed in town because they could not get a pipeline job, or did not want to?

Non-pipeline Employment

It was not uncommon in Fairbanks from 1974 to 1976 to see a new face at the bank teller's window every week. It was not uncommon, as a consumer going into a store to purchase something, to receive treatment from a clerk that indicated one's business was not only not welcome, but a downright bother. In a town where unemployment had been as normal as cold weather, it was not uncommon to note that the "Help Wanted" ads in the classified section of the newspaper took up three whole pages.

Employee turnover at businesses in Fairbanks was one of the greatest unexpected impacts of the pipeline. It permeated not only the traditionally low-paying jobs such as food service, retail sales and clerical, but professional ones as well. The Fairbanks Police Department lost its chief to a pipeline security job. The news editor and resource editor of the Fairbanks Daily News-Miner and the news director of Radio Station KFRB all joined the Alyeska public relations team. In 1975, the Post Office hired 150 employees for 210 jobs, with an average of 10 new mail carriers hired each month for only 30 carrier jobs. In the maintenance

services department at the University of Alaska in the first six months of 1975, 79 employees came and went through 77 jobs. For 34 positions at the Municipal Utilities System power plant there were 48 terminations and new hires in 1975.

What this meant for a Fairbanks already bending inder the pressure for more goods and services demanded by more people and activity was just more frustration: inexperienced employees who made mistakes, longer waits and lines while new clerks tried to find things, shoddy service and repairs in jobs that required training and skills, even “down time” and excessive maintenance at the power plant where untrained and inexperienced people were “putting in time” according to the supervisor, instead of devoting attention to the complex and expensive equipment that kept the light and the heat on in Fairbanks (Dixon 1978, P. 160).

While it was expected that newcomers would fill any local jobs vacated by Fairbanksans working on the pipeline, that did not happen. Although there was an influx of people to Fairbanks, it did not sustain the unemployment rate the community traditionally experienced. There were more job opportunities than expected on the pipeline, for both residents and non-residents (16,000 estimated compared to an actual 21,600 employed at one time at the peak of construction). Additionally, the newcomers were “mostly people fairly determined to obtain pipeline jobs” (Dixon 1978, P. 159). As was mentioned earlier, many came with sufficient income to sustain them while they waited for a pipeline job; some had unemployment insurance. If in-migrants could afford, with Fairbanks’ high cost of living to

take low-paying local jobs, they did so only temporarily. Either they left town because they couldn't wait any longer, or they were dispatched to the pipeline, creating exceptionally high turnover rates on in-town jobs.

On the positive side, the high turnover rate in local jobs and the large numbers of people who left town for pipeline jobs opened up the job market for people who either had never participated, or had participated at a lower level and were able to move up: women, handicapped persons and teenagers. According to Kruse's community survey, a greater percentage of employed females were in the top two white collar occupational categories in 1976 than in 1970. The percentage holding professional-technical jobs rose from 19 per cent in 1970 to 25 per cent in 1976. In contrast, the change from 1950 to 1970 had only been from 17 to 19 per cent. Additionally, working wives liked the money, although they were working not only to counteract the high cost of living--only 22 per cent responded that cost of living was the major reason for working (Kruse 1976, P. 6).

Vocational rehabilitation counselors observed that the pipeline made it more likely for disabled persons to find jobs on their own and gave them a chance to prove themselves on the job. "Perhaps as a result of greater job opportunities, public assistance to the disabled declined by 30 per cent from 1972 to 1975" (Dixon 1978, P. 162). But perhaps the group that took the most advantage of the availability of in-town jobs were young people.

Impacts on Youth

"It's a comedown to have a paper route anymore." That commentary came from a 16-year-old who, during the pipeline period was able to take a job in a local department store and earn more than $5 an hour. The pipeline affected teenagers in many ways, in employment opportunities, in crowded schools, in relationships to their families.

In the spring of 1974, just before pipeline construction began, the Fairbanks North Star Borough School District operated 13 primary schools, two junior high schools, one high school, a career extension center and a vocational school. The district employed 633 persons, 437 certified and 196 non-certified. "The schools were overcrowded since no school bonds had received voter approval in eight years" (Fison ,1977, P V-l).

It had been projected that the impact of the pipeline on schools would be one of the severest and most visible, and armed with studies, projections and budgets, the district set out to prepare for an estimated enrollment of from 3,300 to 3,900 new students in the 1974-75 school year. Plans called for purchase of relocatable classrooms, capital improvements at existing schools, and construction of a new high school, two new junior high schools, and a new elementary school. In October, 1973, the voters approved three school bond issues, The district expected the remainder of the costs of the additions to be paid for through special legislative impact funds. When the 1974 school year began, there were changes in all but two of the district's facilities to accommodate the impact. Students were bused and shifted to other schools to avoid crowding, one elementary

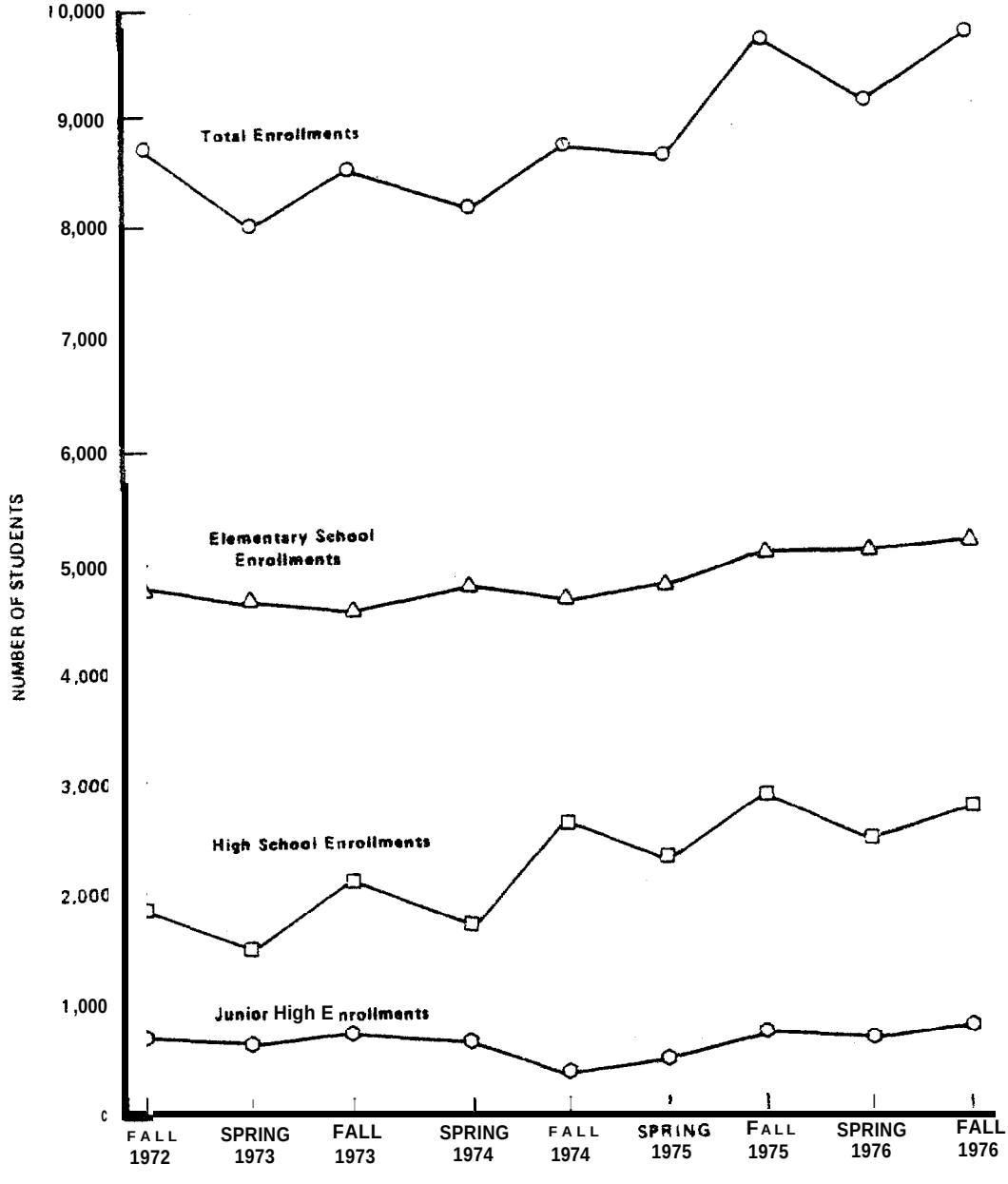
school was double shifted, and the high school became two schools: "East" and "West" Lathrop, with in-town students attending a morning session from 7 a.m. to noon, and out-of-town students attending afternoon sessions from 1 to 6 p.m. The new schools were under construction, the changes were underway, but the students did not materialize. Figure 10 shows the difference between predictions and the actual school enrollments. The assumptions planners made about population and employment on the pipeline did not prove true:

- Because of the Alaska Hire requirements a very high percentage of the pipeline workforce would be filled by permanent local residents and most of the local jobs they vacated would be filled by newcomers.
- A moderate proportion of the incoming pipeline workers and most of the newcomers filling local jobs would bring their families to Fairbanks.
- A high proportion of the newcomer households would have school age children.

Later research has offered some reasons why these assumptions were incorrect. Kruse's community survey found that 1) a higher proportion of newcomers were working on the pipeline or interested in working on the pipeline than were permanent residents--those who had lived in Fairbanks before 1973; and 2) the largest proportion of newcomers to the Fairbanks area during the pipeline period were between 20 and 29 years of age--typically unmarried or newly married with preschool , not school age children. Additionally, a joint survey conducted over a 1½ year period by the Impact Information Office and Alyeska Pipeline Service Company found that among 25,673 newly hired pipeline workers, only 549 new children were expected in the community (Fison 1977, P. V-9). Fison offers the following reasons for workers choosing not to bring their families:

Figure 10

School Enrollment by Semester
Fairbanks North Star Borough School District, 1972-1976



Source: Mim Dixon, What Happened to Fairbanks?

- Unavailability of housing;
- High cost of living;
- Remoteness of camps and long hours preventing workers from spending time with families if they were in Fairbanks;
- Nationwide news coverage of Fairbanks housing shortage, high cost of living, and high crime rates;
- The State's campaign to discourage persons from coming to Alaska unless they had jobs already;
- Long, cold winters.

Yet another factor that was not built into the assumptions and planning of the school district was a nationwide trend in declining school enrollments due to a declining birthrate. In fact, enrollments in Fairbanks had shown virtually no increase between 1970 and 1973, and elementary school enrollments had actually gone down. "Thus the estimates which assumed 1.4 school age children per household were unrealistic. The ISER survey found that Fairbanks had an average of 2.9 persons per household" (Fison 1977, P. v-lo).

But because the new students did not materialize did not mean that existing students were rattling around in empty buildings. The schools were crowded before the pipeline, and changes in areas of residence in Fairbanks (from in town to out of town) put more students in different areas--not necessarily corresponding to where the classroom space was, And the new schools were only under construction during the peak of the pipeline period. The elementary school at Fox opened in 1974 with prefabricated, relocatable classrooms, Tanana Junior High School opened in 1975, Wood River Elementary School, North Pole Junior/Senior High School and West Valley High School

did not open until the 1976-77 school year.

Students who were double shifting found they had either mornings or afternoons free, depending on whether they attended the morning or afternoon session at the high school. A survey conducted by the Impact Information Center discovered that high schoolers grew tired of spending that free time "hanging out" after a few months, and they started taking some of the in-town jobs vacated by adults who went to work on the pipeline. "Unlike adults who could not afford to live in Fairbanks on the wages of the low-paying local jobs, teenagers who were already supported by their parents found those jobs attractive. The jobs provided a challenge, a learning experience, a source of income, and an adult role in the community" (Dixon 1978, P. 164).

In a joint effort between a high school economics class and the Impact Information Center, 1,018 students of 2,396 in grades freshman through senior were surveyed to determine the extent of their participation in the local job market. Table 5 shows employment rates by high school. The following tables, 6, 7, and 8, illustrate the extent of students' participation in the Fairbanks job market, hours worked, type of jobs held, and hourly wages.

But besides creating the opportunity to work, the double shifting caused problems for students and their families. Students had to be up at 5 a.m. and some did not return home until nearly 7 p.m. Transportation and child care became difficult to manage for families with children in double

TABLE 5

TEENAGE EMPLOYMENT RATES BY GRADE AND SCHOOL

	Morning School		Afternoon School		Total	
Class	Number Employed	Percent Employed	Number Employed	Percent Employed	Number Employed	Percent Employed
Freshmen	39	38.2	73	44.8	112	42.3
Sophomores	60	45.1	40	32.2	100	38.9
Juniors	94	59.1	52	45.2	146	53.3
Seniors	105	72.9	41	52.5	146	65.7
TOTAL	298	55.4	206	42.9	504	49.5

TABLE 6

REPORTED NUMBER OF HOURS WORKED EACH WEEK
BY HIGH SCHOOL STUDENTS SURVEYED

Hours Worked Per Week	Number in Sample	Percent of Employed Teenagers in Survey	Percent of all Teenagers in Sample
Less than 10	47	9.3	4.62
10 - 20	127	25.2	12.48
21 - 30	118	23.4	11.59
31 - 40	68	13.5	6.68
More than 40	38	7.5	3.73
It Varies	25	5.0	2.45
No Answer	81	16.1	7.96
TOTAL	504		

TABLE 7

JOBS HELD BY HIGH SCHOOL STUDENTS SURVEYED

Job	Number in Sample"	Percent Employed Teenagers in Sample	Percent of all Teenagers in Sample
Salesperson	51	10.1	5.01
Stock-person	34	6.7	3.33
Secretary-Clerical	34	6.7	3.33
Cook-Waitress	30	6.0	2.95
Janitor	25	5.0	2.46
Vehicle Repair	17	3.3	1.67
Boxboy	17	3.3	1.67
Dishwasher	13	2.6	1.28
Gas Station Attendant	9	1.8	.88
Maid	9	1.8	.88
Bookkeeper	9	1.8	.88
Other	177	35.1	17.38
No Answer	79	15.7	7.76
TOTAL	504		

TABLE 8

HOURLY WAGES FOR HIGH SCHOOL STUDENTS
SURVEYED IN DECEMBER 1974

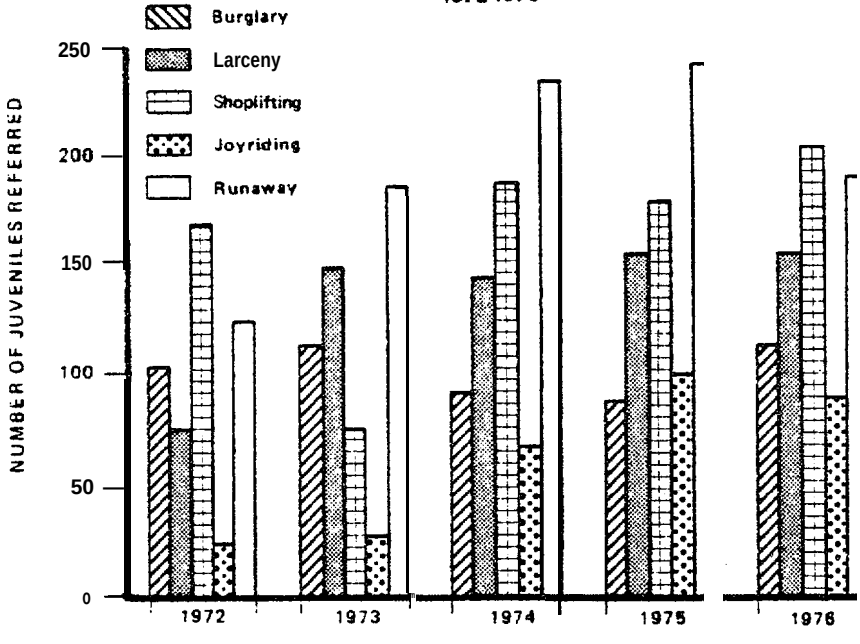
Hourly Wages	Number in Sample	Percent of Employed Teenagers in Sample	Percent of All Teenagers in Sample
Less than $2.60	79	15.7	7.76
$2.60- 3.00	149	29.6	14.63
$3.01 - 3.50	74	14.7	7.26
$3.51 - 4.00	66	13.1	6.48
$4.01 - 6.00	53	10.5	5.21
More than $6.00	18	3.6	1.77
No Answer	65	12.9	6.39
TOTAL	504		

shifting schools. Teachers remarked that more students were falling asleep in class. Increasing numbers of students tended either to graduate early in their senior year or to drop out of school. During the 1974-75 school year, high school enrollment declined by 331 students, or 20 per cent. Some of the students left school to take pipeline jobs (Dixon 1978 P. 170).

Some parents feared that young people were getting an inflated and inaccurate picture of their earning potential. Fewer graduating seniors were applying for college. One student remarked to a reporter when asked about his future plans: "I just want to get a laborer's job where I can do nothing all day and make $10 or $12 an hour like everybody else" (Unpublished article by Julie Stuart, Fairbanks Daily News-Miner reporter).

Attitudes about money were not the only pipeline attitudes teenagers were picking up from their parents and other adults in the community. A disregard for property, especially property belonging to the pipeline companies, was prevalent in Fairbanks. "Even though the pipeline employees were well paid, many had the feeling that the pipeline company had a surplus of supplies, and that a few items wouldn't be missed" (Dixon 1978, P. 175). Young people sensed that attitude. Figure 11 shows trends in major juvenile offenses in Fairbanks during the pipeline period. While crimes against property compose a large portion of the offenses, "runaways" (one of the offenses that would not be a crime if the person committing it were not a juvenile) nearly doubled from 1972 to 1975. Many runaways never were reported to the police, and others established networks for not getting

Figure 11
Trends in Major Juvenile Off
1972-1976



Source: Sue Fison, Impact information Office, Final Report

caught--they travelled from house to house where there were no adults at home because of pipeline jobs and managed to get food and shelter without ever returning home. Some juveniles classed as "runaways" turned out to have been "kicked out" of the house by their parents. "The Juvenile Intake Officer who handled most cases of teenage crime and saw both the teenage offenders and their families held parents responsible for their children's behavior. 'The buck is so important to them that they overlook problems with their children,' he said" (Dixon 1978, P. 176).

The pipeline impact was changing attitudes about money, attitudes about property, and attitudes about family. These changes in the way people lived their lives--long hours, little time spent with family, increased time and importance placed on job and earning power--built up stress in the community. They amplified the stress brought on by mere population growth. People and services in Fairbanks were being squeezed from two sides: from the outside as more people entered the community and tapped its utilities, goods and services, and from the inside as Fairbanksans tried to keep up with the cost of living, long hours and disrupted life styles. Something had to give.

BREAKING POINTS

The following narrative is offered not as a source of data on measuring impact, but as a true story representative of some of the pressures residents in Fairbanks had to cope with during the pipeline:

> On a weekend in January, 1975, a resident of Fairbanks was working overtime at her non-pipeline job when she received a phone call informing her that her home had been levelled

by fire. The neighbor making the call and said there was nothing anyone could do to stop the flames--the house was 30 miles north of Fairbanks, out of the reach of any fire protection services, and it was an old cabin that caught quickly and burned rapidly. The woman had been living in that type of structure because there was no other housing closer to town that she could afford on her non-pipeline wages. That night she was staying in the home of a co-worker until she could find other housing, and during the evening a car struck a power pole and caused an outage in the Golden Valley Electric Association system. The home in which the woman was staying was served by Golden Valley and was blacked out along with hundreds of other residences in the Fairbanks area. The temperature in Fairbanks that night was -60 degrees F. and the damage caused by the car accident, coupled with the heavy drain on the system from electrically heated homes, lengthened the outage to several hours. The temperature in the home in which the burn-out victim was staying dropped to just below 60 degrees before the power came back on.

When the woman returned to her job Monday, she was assigned the task of writing a news story about the weekend casualties of the power outage and the cold temperatures. She spent the morning trying to get through the overloaded phone system to speak to victims of the blackout. For two hours she listened to irate residents describing freeze-up damage: crumbled walls, burst pipes and so on. She spent the afternoon trying to find a place to rent, deciding finally that the only housing available to here was a house on a shared basis with three other people. All four individuals recently had been divorced and none could afford to rent a house or apartment in Fairbanks.

The above story is a personal one and not exaggerated at all. It was not an uncommon one in Fairbanks, illustrating the kid of pressures residents found themselves subjected to during pipeline impact: inflation, inconvenience, lack of services, personal pressures, discomfort not just from the cold, but the failure of the Fairbanks infrastructure and utilities to handle damands placed on them.

Shortages, Outages and Outrages

Pipeline shortages ranged from anti-freeze to particular brands of cigarettes to sugar to telephones to water. Some were more serious than others. Some were caused by the demands pipeline impact thrust on the community, and some were due to inefficient ordering practices by new, inexperienced employees in Fairbanks.

The more serious ones, such as telephones and water, were caused directly by demand from increased population, but occurred because of lack of planning and action by the community. Telephones caused the first obvious pipeline impact crisis. It was noted earlier the City Council was not willing to raise rates to provide the financial back up to improve the city's bonding capacity, even though rates had not been raised in years and the telephone system had been lacking for years before the pipeline. Just three months before pipeline construction officially began, the Municipal Utilities System (MUS) announced that it had "run out of telephone numbers." Not only were there no new numbers for Alyeska Pipeline Service Company and other new pipeline related offices, there were no phones for the new state office building or other expanding businesses in town. Additionally, the existing numbers were overloading the outdated system. Service deteriorated to the point that some frustrated consumers initiated a referendum to sell the MUS telephone department to a private company. It was not until November, 1974, that MUS allocated $11,000 to purchase central telephone office equipment to provide Alyeska with its own trunk line and ordered a $3.5 million switching system to alleviate the pressure on the existing system. The installation date for the new switch that MUS officials claimed would

solve all the telephone problems was not scheduled until 1976.

From May 1974 to May 1975 the number of telephone trouble reports increased by 69 per cent. The number of persons waiting for telephone installation increased by 125 per cent (Dixon 1978, P. 123). Table 9 gives a picture of telephone service from 1970 to 1976. After the new switch was installed in June, 1976, the phone company had a way to measure the number of calls attempted in the city. According to a report in the Fairbanks Daily News-Miner the day after the switch was installed: "MUS Telephone Division Manager Earl Land was shocked at the number of calls going through the system. He likened the cutover of the new switch to 'uncorking a champagne bottle that was really a 55-gallon drum'." Estimates of the number of calls attempted before the new switch. was installed were between 100,000 and 135,000 per day. The "55-gallon drum" effect was in reference to the 400,000 calls attempted by Fairbanks residents that Monday in June.

In August, 1975, MUS reported that its water treatment units had been operating in excess of their rated capacities for a period of 13 days the month before. One of the water treatment units averaged 122 per cent of its rated capacity of one million gallons per day for the entire month of July. The combined rated capacity of MUS' two water treatment units was three million gallons per day; on one day they peaked at four million gallons. Fairbanks avoided a water shortage because MUS had a capability of storing two roil"lion gallons of treated water, tapping the stored water at peak times, and filling the storage tank again during hours of low consumption.

TABLE 9

TELEPHONE STATISTICS
FAIRBANKS MUNICIPAL UTILITIES SYSTEM
1970-1976

	1970	1971	1972	1973	1974	1975	1976	% Change 1973-1976
Telephones								
Main Telephone Stations:								
Business	3,053	3,202	3,310	3,635	4,502	5,208	5,517	52%
Residence	6,536	6,764	7,030	7,033	7,513	8,643	8,896	27%
Coin	119	120	118	128	138	111	156	22%
Sub-Total	9,718	10,086	10,458	10,796	12,149	13,962	14,569	35%
Extension Telephones:								
Business	9,175	9,411	?0,033	10,245	10,929	12,185	12,650	24%
Residence	3,152	3,308	3,465	3,631	3,887	4,100	4,359	20%
Sub-Total	12,327	12,719	13,498	13,876	14,816	16,285	17,009	23%
Total Telephones	22,045	22,805	23,956	24,672	26,965	30,247	31,578	28%
Trouble Reports (average monthly)	601	578	688	1,173	1,186	1,882	2,399	1 05%
Installations (average monthly)								
Orders Worked	279	291	286	220	318	352	296	35%
Orders Held - no facilities and/or equipment	212	150	134	162	259	265	459	183%

Source: Sue Fison
Impact Information, Final Report

Table 10 shows the number of water utility customers and consumption from 1972 to 1976. The only new lines to city water that were made during the pipeline period were to a mall and two subdivisions. The only significangly large additions to existing lines during the period were two hotels and a few new businesses. The large increase in consumption from 1974 to 1975 was not, then, due to new customers. In 1976, the city provided water services to four recently annexed areas, increasing the number of customers to whom services were provided, yet the consumption did not increase as much as it had the previous year. The only way to account for the large increase in consumption without the increase in customers is the sharing and doubling up of people in one house or one apartment during the 1975 pipeline peak--the result of the housing shortage.

The scarcity of housing began to ease in late summer and fall of 1975 with the addition of mobile homes and some new housing in the community. Just in time for winter, as people were more successful in finding a place to be warm, a localized fuel shortage hit and a bumper sticker declaration "Freezing in the Dark Builds Character" almost had a chance to be tested.

A large amount of construction of new housing in rural areas during the pipeline period--much of it heated by electricity--caused a jump in the number of kilowatt hours of electricity sold by the Golden Valley Electric Association (GVEA). Figure 12 shows the kilowatt hours of electricity sold by GVEA from 1965 to 1976. Also among GVEA'S customers were pipeline Pump Stations 8 and 9, the pipeyard and the North Star Terminals warehouse complex. From 1974 to 1975, at the peak of the pipeline boom, GVEA customers increased electrical consumption by 29 per cent (Fison 1977, P. XIII-9).

TABLE 10

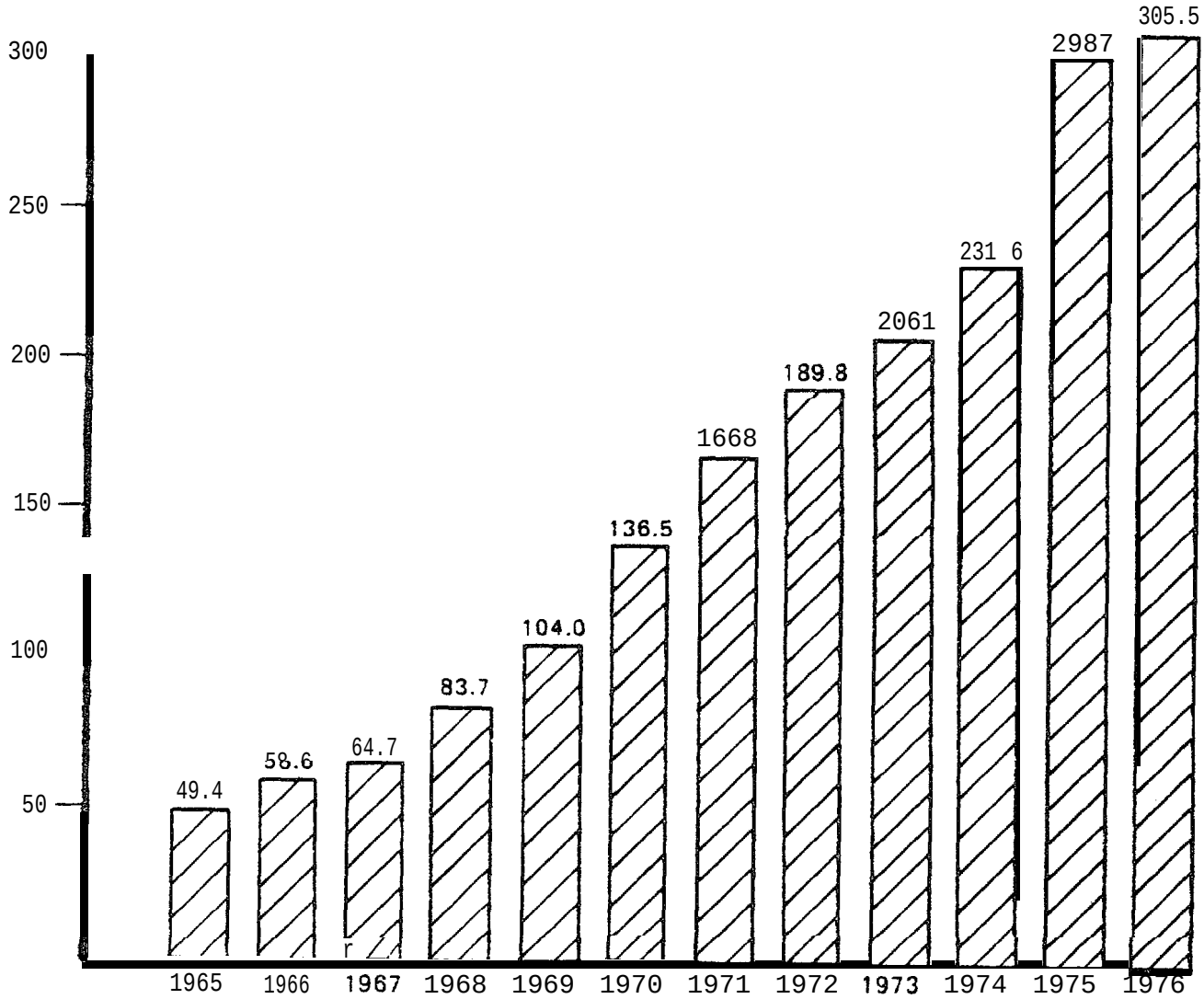
WATER UTILITY CUSTOMERS AND CONSUMPTION
FAIRBANKS MUNICIPAL UTILITIES SYSTEM
1972-1976

	1972	1973	1974	1975	1976
Cutomers					
Residential	2,269	2,396	2,497	2,590	3,107
Commercial	698	682	697	694	779
Other	130	130	132	80	82
Total	3,097	3,208	3,326	3,364	4,064
Annual Increase		3.6%	3.7%	1.1%	20. 8%
Consumption					
Million Gallons Sold	493	570	620	726	840
Annual Increase		15.6%	8.8%	17.1%	15.7%

Source: Sue Fison
Impact Information Center, Final Report

Figure 12

Kilowatt Hours (KWH) of Electricity Sold, 1965- 197'6

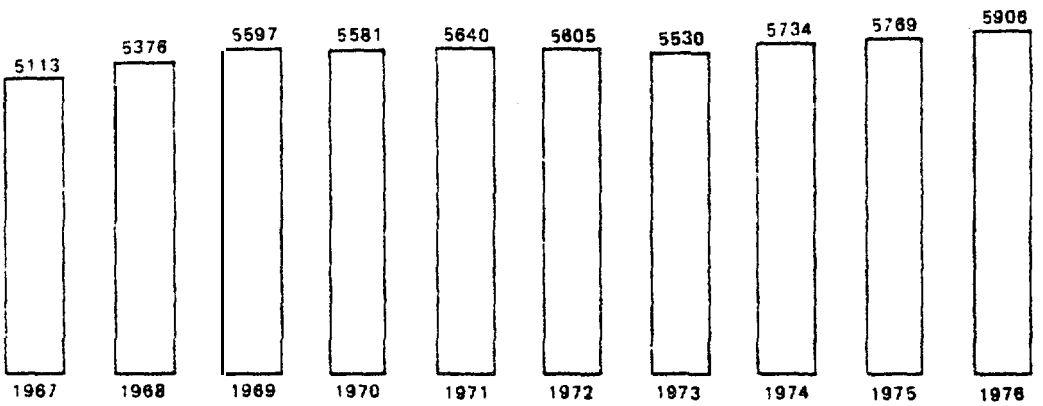


Source: SueFison, Impact Information Center, FinalReport

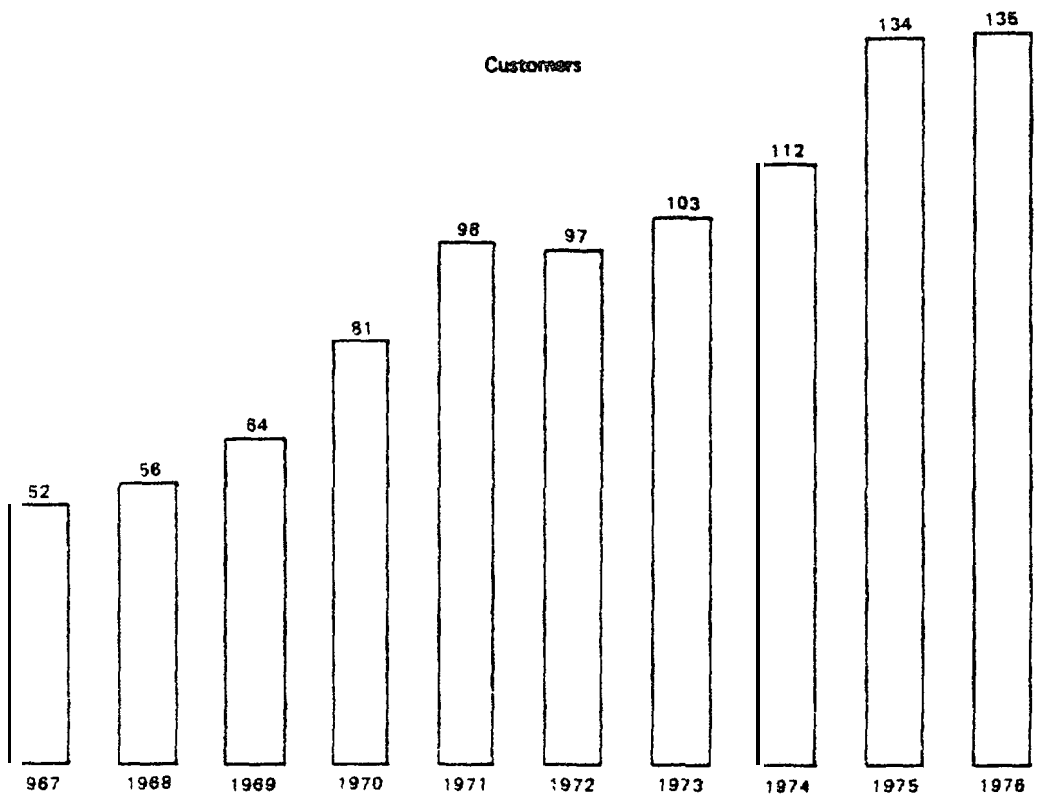
At that point GVEA's total generation capacity was 98,000 kw, and expansion plans did not call for additional generation capacity until 1976. (Before the boom started, the addition was scheduled for 1977, but GVEA management moved it up after it became clear the demand would hit before 1977) At the same time, the Municipal Utilities System in the city of Fairbanks had a generation capacity of about 40,000 kw. The two utilities had cooperative arrangements to "power pool" when one or the other had problems. Figure 13 shows the number of customers and consumption of electricity for MUS from 1967 to 1976. While GVEA added customers, the number of MUS customers remained relatively constant, but consumption increased 20 per cent. Some of the increase was attributable to the same cause as the water usage--doubling up in residences--and some was due to long hours and shifts in pipeline related offices, warehouses and in businesses in general. In 1975, at the peak of pipeline construction activity, neither the Golden Valley Electric Association nor the Municipal Utilities System had the capacity to meet peak demands (Fison 1977 P. XIII-15). In addition to unprecedented electric demands and extremely cold temperatures in the winter of 1975-76, a fuel shortage entered the picture. In November 1975, GVEA's supplier of fuel oil announced it could not supply enough oil to meet the utility's needs. If that happened, half the Associations capacity would have been shut down, creating black-outs on a rotating area-by-area basis.

The problem with the fuel supplies was that GVEA's consumption of oil had increased from 600,000 gallons in November 1974 to 1.3 million for the first 14 days of November, 1975. The crisis was averted by power

Figure 13
Electric Operations



Customers



MILLION KWH SOLD

Source: FMUS, Annual Report, 1976

pooling arrangements and emergency fuel allotments from other sources, but less than two weeks later a combination of extremely cold weather and generator troubles caused GVEA to issue peak load alerts asking residents to curtail power usage. The crisis-to-crisis situation in electrical generation did not really subside until November, 1976, with the addition of a new 70,000 kw diesel fired generator to the GVEA system.

Social Problems

In this atmosphere of wondering what was going to break down next, it is remarkable that more individuals didn not break down themselves. The frontier attitudes of Fairbanksans mentioned earlier may have lent a sense of adventure and excitement to occurrences like power outages and shortages, Crises sometimes served to draw the community together against a "common enemy" instead of remaining as isolated individuals. Yet the period was not without its casualties.

Dixon uses a concept of community mental health developed by Francis T. Miller of the University of North Carolina School of Medicine, and measures it by examining the events that cause changes in the balance of rewarding, stressful and neutral events in an individual's experience. "If the balance between stresses and satisfactions is greatly altered, the individual's capacity to cope may prove inadequate, and he may need mental healthor other helping services" (Dixon 1978, P". 196). Some of the indicators of change include births, deaths, marriages, divorces, suicides, hospital admissions, ambulance and rescue calls, utilization

of social services and mental health facilities, alcohol consumption and crime. Appendix A contains tables and figures giving a numerical picture of these indicators of change. How the community viewed them, and responded to them, can be determined to some extent from Kruse's 1976 survey. Community attributes or characteristics which changed the most from 1973 to 1976, received the worst assessments from respondents to the survey: congestion, crime and a variety of services, including telephone and electric power supply (Kruse 1976, P. 11). While respondents felt the economy and government of Fairbanks had come through the pipeline period without much change for the worse, they felt the "social" and natural characteristics of the community had suffered. On a personal level, respondents perceived their family lives had changed for the worse, as well. Although economically, many were better off, they felt their time spent with family and in leisure activities had suffered. Tables 11 and 12 show perceptions of community and family changes during the impact period.

One of the concerns early in the pipeline period was that stresses on marriages and families caused by both parents working, long working hours, and other community changes and stress would contribute to increased instances of divorce. The number of divorces filed annually during the pipeline period, compared to the three years previous, shows an increase of 58 per cent. (See Appendix, Figure A-2) Fison cautions, however, that this may be attributable to a number of factors besides pipeline impact: 1) increase in population; 2) population in the 20-39 year age group which nationally has the highest marriage and divorce rates; 3) national trend toward higher divorce rates. Divorces did increase at a faster rate

TABLE 11

PERCEPTIONS OF THE MOST IMPORTANT COMMUNITY CHANGES

Categories of Community Change	Percentage of Total Mentions
1. Increase in the cost of living	30
2. Overcrowding (in stores, in lines, on roads)	?9
3. Deterioration of the natural environment	12
4. Scarcity of goods and services	9
5. Improved economic conditions	8
6. Increase in crime, hostility, distrust	8
7. Change to more hurried lifestyle, more concern with money	5
8. Physical growth of Fairbanks (highways, buildings)	2
9. Little has changed	2
?0. All other changes	5
	100

Source: Jack Kruse
Community Survey, ISER

TABLE 12

PERCEPTIONS OF FAMILY CHANGE

Family Changes	Percentage of Total Mentions
) No Change	16
Worse of economically; job has not kept up with inflation; wife now has to work	14
3. Better off economically; more economic opportunity	13
4. Family apart more	5
5. Life busier, less privacy, lower quality of life	5
6. Moving into or out of Fairbanks	5
7. Worsening services	4
8. Type of people moving up are different; growing hostility between groups	4
9. School scheduling problems, overcrowding	3
10. Family together more, talk more	3
11. Moved to new housing	3
12. Housing costs increased	2
13. Personal family changes (divorce, marriage, retirement, childbirth)	9
14. All other changes	14
	100

Number of respondents 376

Source: Jack Kruse
Community Survey, ISER

than marriages, but the effect the pipeline had on the numbers is not possible to quantify (Fison 1977, P. XII-46).

Yet another fear linked to impact of the pipeline was an increase in crime, and crime on the streets of downtown Fairbanks was the subject of national news coverage during the pipeline period. Kruse's survey revealed that 46 per cent of the households surveyed had been victimized by crime within the previous year, yet despite all the publicity about Fairbanks' notorious Second Avenue, 67 per cent of the crimes occurred in the victim's own home or neighborhood, 17 per cent elsewhere and only 16 per cent in downtown Fairbanks (Fison 1977, P. IV-49). Statistics from Alaska State Troopers I Detachment and Fairbanks City Police indicate some other trends in crime during the pipeline period:

- Criminal homicide and forcible rape during the pipeline period approximated pre-pipeline levels.
- Aggravated assaults registered the largest numerical increase in violent crimes against persons, doubling during the period of pipeline construction.
- Burglaries, larcenies and vehicle thefts all increased significantly during the pipeline period.\ (See Appendix)

While much of the negative publicity generated about Fairbanks during the pipeline dealt with such criminal activity as prostitution and gambling, a statewide survey by the Criminal Justice Planning Agency found that Alaskans, particularly in Fairbanks, felt those activities should be matters of personal morality rather than criminal offenses (Fison 1977, P. IV-59). The reader is directed to Fison's Final Report, Chapter IV for a detailed examination of crime, law enforcement and the criminal justice system during pipeline impact. See also Appendix A, pp. 115-118.

Other added indicators of community mental health for Fairbanks might be components of the natural environment and lifestyle that residents view as “Alaskan” or "frontier"--things like proximity to the wilderness. In his community survey, Jack Kruse examined perceptions of change in these areas. “Those in the community who share an orientation to the Alaska lifestyle tend to hold a number of other attitudes in common. . . members of the Alaska lifestlye group tend to evaluate community change in Fairbanks in more negative terms and are more likely to feel that they are bearing the costs of pipeline impact” (Kruse 1976, P. 15).

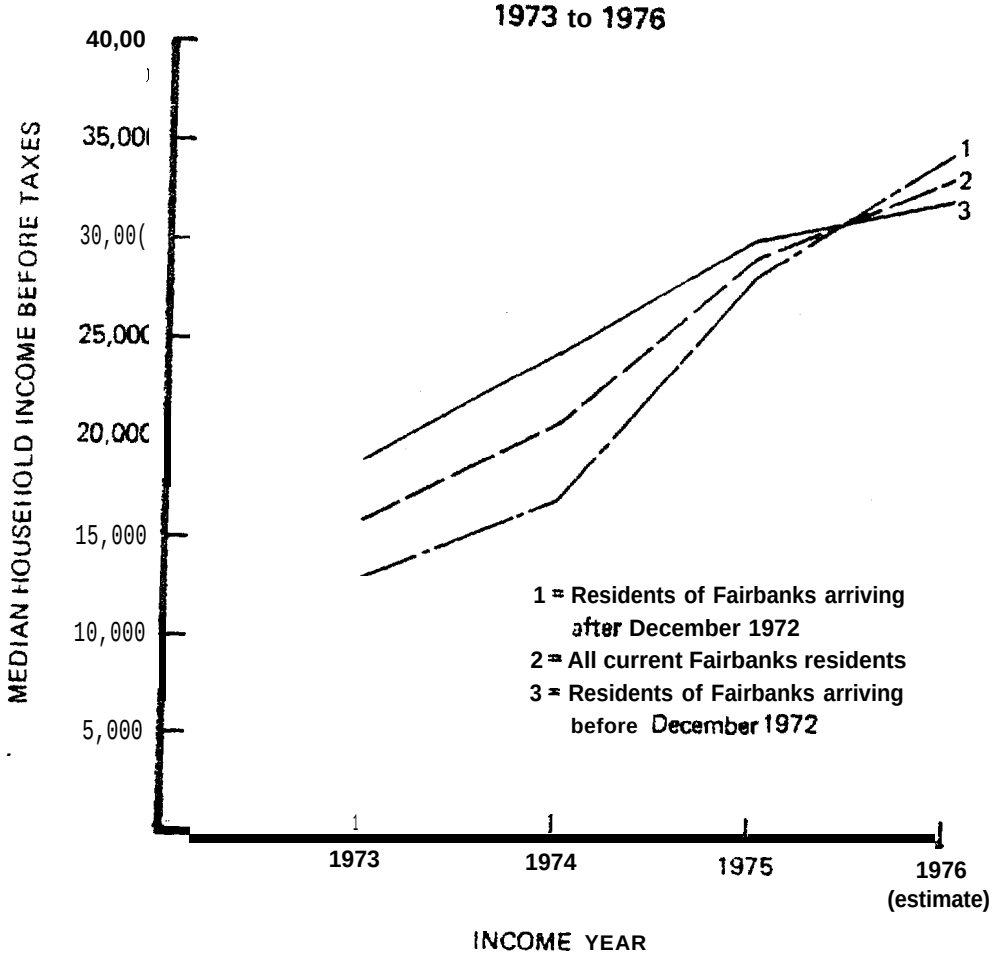
Perhaps one of the most significant changes in people’s lives during the impact period was income. Household incomes in Fairbanks rose 59 per cent from 1973 to 1975; for recent arrivals, incomes increased more than 120 per cent (Figure 14). But residents did not perceive the gains in income as occurring without sacrifice. They viewed such things as less time spent with family and for recreation as costs to achieve the benefit of increased income. Some residents viewed the pursuit of more income as a negative community attribute in itself:

> For example, child neglect. It came about because of an attitude toward money--make it while the makin's good. There was no day care. What little there was cost a lot. People went to work anyway, leaving children unsupervised. It all led to a distortion of values based on the attitude that “money will solve our situation” (Straatmeyer 1978).

At a community forum on growth, one participant remarked that money and how to make it were taking precedence over family unity (Mueller 1975, P. 15). The discussion group on families and children made this recommendation at the end of the forum: “... that parents recognize that their

Figure 14

Average (median) Income for Fairbanks Residents
1973 to 1976



Source: Jack Kruse, Institute of Social and Economic Research

responsibility of raising children means providing love and security through personal attention even more than through material goods" (Mueller 1975, P. 16).

The indicators of change show a community, for the most part, with a lot more of everything: more hospital admissions--perhaps because more people had money for elective surgery or because the hospital was more able to deal with special cases than ever before; more marriages, divorces, births and deaths. According to Dixon, it is difficult to interpret all these indicators because 1) there is only raw data, 2) some of the data lack time depth, 3) some figures may be attributed to changes in the structure of the community rather than changes in the mental health of the community, 4) some indicators may be reflections of national trends rather than localized pipeline impact, 5) there is a problem of weighting when considering the data collectively.

"A general review of the various mental health indicators," she writes, "does not suggest a sweeping picture of emotional devastation. Enduring the vicissitudes of pipeline impact was probably not as traumatic as some of the crises which humans have survived. ..The question here is not how much stress humans are capable of enduring. Ratherwe are faced with the problems of considering how the construction of the trans Alaska oil pipeline affected the quality of life and emotional well-being of the residents of Fairbanks, and how Fairbanks residents doped with changes in the community" (Dixon 1978, P. 217).

Fairbanksans coped with the pipeline in several ways:

- They worked on it and viewed decreases in time spent with family or at recreational activities as short term sacrifices to achieve long term benefits.

- They viewed it as just one more exciting boom in Fairbanks' boom-bust history. They made a game of comparing lines and congestion, watching prostitutes and making fun of Outsiders.

- They chose to look at the pipeline as a temporary disruption in lifestyle and assumed Fairbanks would "go back to normal" after construction ended.

Indeed, stressful memories seem to be dimming with time. In January 1978, the administrative assistant for Golden Valley Electric Association commented that he thought the utility had come through the pipeline period with "flying colors." One resident who had an intimate view of the pipeline wrote the following in response to the Impact Information Center's final report and reader evaluation:

> The pipeline itself goes through our property on Gilmore Trail, but the job was completed neatly, efficiently, and quickly and the experience was not nearly as bad as I had anticipated. Also, I had real fears at the peak of activity--to sell out and move to New England because I thought the pace and atmosphere of, say, a year or two ago, would continue. Thank God I decided to stay and thank God I was wrong and thank God it's over--at least for awhile! (Fison 1977, P. XX-16).

WHOSE PROBLEMS ARE IMPACT PROBLEMS?

While Fairbanks residents may have found internal coping mechanisms for getting through the mental stresses of pipeline impact, there were actions that had to be taken to deal with community-wide crises that were more than just irritations. What were those actions, who took them, and why?

COMMUNITY PERCEPTIONS OF ALYESKA'S RESPONSIBILITY

Alyeska Pipeline Service Company had a community relations office to keep Fairbanks informed of the progress of construction, to answer questions and serve as the company's representative to the community at forums and on boards. Still, the consortium was quite separate from the community, and residents did not often look to Alyeska for solutions to the problems pipeline construction was causing in Fairbanks. This might have been because the community recognized the mistakes government and private enterprise had made in planning for the pipeline, and expected those sectors to do something about impact.

Right from the beginning, Alyeska made it clear to all Fairbanks that the consortium of oil companies was in Alaska to build a pipeline, not help Fairbanks take care of its social problems. In some cases, however, residents turned to the pipeline company for some answers.

When the Municipal Utilities System announced it had no new phone numbers, and the overloaded system was making telephoning a daily trauma, Alyeska agreed to pay for the equipment and installation cost of a trunk

line for its headquarters facilities on Fort Wainwright. It also relinquished some railroad tanker cars to GVEA when the utility faced a fuel shortage in 1975. On the other hand, when several persons asked Alyeska to provide either space at Fort Wainwright for day care, or transportation in its company buses for children, the answer was a resounding "no."

Alyeska provided some training for Native Alaskans, who without it might not have been able to take pipeline jobs. The training, however, was mandated by the state and federal governments.

When the pipeline company tried to conduct a public safety advertising campaign with regard to the high volume of truck traffic on the Steese and Elliott Highways, it got an enraged response from the community, including a counter-campaign mocking the language of the Alyeska ads and warning the pipeline company to stay off those same highways because "the people who paid for them" were going to be driving on them. Alyeska did agree, however, to make sure the pipe trucks hauling 80-foot lenghths of the 48-inch pipe would not travel the Steese Highway during the hours the school buses were making stops along that road.

It is interesting to note that the highways around Fairbanks that were in poor condition after the heavy pipeline traffic are being resurfaced or repaired with federal and state funds, while the Alaska Highway, which was used to some extent by pipeline traffic and will be used by the company building the trans Alaska gas pipeline, is also deteriorated, but the gasline company is being asked to put forth some money to repair it.

PERCEPTIONS OF GOVERNMENT RESPONSIBILITY FOR IMPACT

One observer has noted that while Fairbanksans may indicate an aversion to planning by government, they equate"planning" with “planning and zoning.” Planning as it pertains to roads, utilities or schools is viewed more as management or administration, he pointed out. While planning as planning and zoning is looked upon as restrictive and contrary to the independence many people sought in their move to Alaska, administrative or management planning is seen as good sense. This observation has not been tested to any great extent, although Kruse's community survey does indicate Fairbanks residents approve of individual planning activities such as planningfor schools and roads.

The survey also indicates people’s perceptions of the way government dealt with services didn’t change too much from before the pipeline to after the pipeline. The overall evaluation of government services showed 26 per cent of the respondents felt that before the pipeline, government services were “as good as could be expected,” and after the pipeline, 30 per cent felt they were as good as could be expected. It is difficult to tell whether government services improved during the pipeline, or whether people’s expectations dropped. It should be noted that another researcher criticized the wording of this particular item because people in Fairbanks didn’t have very high expectations of government anyway. but Fairbanksans did turn to local and state government for some solutions to the problems of pipeline impact:

- When the housing shortage reached crisis proportions, Fairbanksans were not willing to let government provide trailer space or loan money to buy mobile homes, but

they did welcome the establishment of a rent review board. It did nothing to solve the shortage, but it did eliminate rent gouging.

- The federal and state governments intervened in a fuel crisis that threatened to shut down the Golden Valley Electric Association in 1975. The governor's office, the Alaska Railroad, the Air Force and the Rural Electrification Administration all contributed to the final solution of finding alternate suppliers of fuel oil and shared power to get the utility through the crisis.

- The State of Alaska provided emergency impact funds to both the city of Fairbanks and the Fairbanks North Star Borough to be spent to alleviate problems caused by pipeline construction. Tables 13 and 14 illustrate how these funds were spent.

It becomes apparent after looking at the expenditure of impact funds and the timing of solutions to impact problems that much of what government did to alleviate the stresses of pipeline impact was too little, too late. The telephone switch was not installed until 1976. Additions to electric generation capacity did not come until 1976 for both MUS and GVEA. Water and sewer additions to areas that were annexed even before the pipeline did not get under construction until the midst of the boom--driving costs up--and some are not completed yet. Widening and rerouting of the Steese Highway was not underway until after the last pipe truck had rumbled north, and it was not until 1976 that the U.S. Congress appropriated $70 million to repair Alaskan highways that had been torn up by pipeline construction traffic. Fairbanks is still waiting for its first Consumer Price Index though the federal legislation to reinstate it was passed during the pipeline period, A program of subsidies to working parents to help pay for the high cost of child care did not begin until 1976, though it was introduced to the Alaska legislature a year before when space in day care centers, if available,

TABLE 13

CITY OF FAIRBANKS IMPACT FUNDS

	Direct Grant (Ch. 147)	Discretionary Grant (Ch. 8)	Total
Total Appropriations	$606,000	$2,070,000	$2,676,000
Itemized Appropriations			
Operating Expenditures	424,894	1,986,345	2,411,239
Capital Expenditures	181,106	83,655	264,761
Appropriations Itemized by Government Activity			
Public Works & General Govt.			
Dept. of Public Works	323,847	217,464	541,311
Street Maintenance	101,047	150,000	251,047
General Government	0	117,024	117,024
Engineering	0	62,296	62,296
Building Inspection	0	55,536	55,536
Capital Expenditures	0	18,700	18,700
Total	424,894	621,020	1,045,914
Municiapl Utilities System			
Telephone Department	0	443,390	443,390
Water & Steam Department	0	99,000	99,000
Electric Department	0	30,000	30,000
Total	0	570,390	570,390
Fire Department			
Operating Expenditures	0	229,905	229,905
Capital Expenditures	140,000	64,955	204,955
Total	140,000	294,860	434,860
Police Department			
Operating Expenditures	0	154,640	154,640
Capital Expenditures	41,106	0	41,106
Total	41,106	154, 640	195,746
Alcoholism Program			
Detoxification Program	0	242,730	242,730
Emergency Shelter	0	113,730	113,730
Emergency Service Patrol	0	14,920	14,920
Outreach Services	0	21 ,060	21,060
Total	0	392,440	392,440
Heal th and Sanitation	0	36,650	36,650

Source: Mim Dixon
What Happened to Fairbanks?

TABLE 14

FAIRBANKS NORTH STAR BOROUGH IMPACT FUNDS

	Direct Grant (Ch. 147)	Discretionary Grant (Ch. 8)	Total
Total Appropriations	$3,030,000	$?,665,900	$4,695,900
Itemized Appropriations			
Operating Expenditures	1,093,700	1,147,500	2,241,200
Capital Expenditures	1,885,950	400,000	2,285,950
Green Belt Purchase	50,350	118,400	168,750
Appropriations Itemized by Government Activity			
Education			
Operating Expenditures	500,000	1,004,300	1,504,300
Capital Expenditures	1,885,950	400,000	2,285,950
Total	2,385,950	1,404,300	3,790,250
Parks and Recreation			
Operating Expenditures			
Regular Programs	39,859		39,859
Fbks Native Association	0	113,10:	113,100
Acquisition of Green Belts	50,350	118,400	168,750
Total	90,209	231,500	321,709
Assessing, Taxation, Finance	241,163		241,163
Planning and Zoning	83,984	20,00:	103,984
Impact Information Center	49,198	10,100	59,298
Environmental Services	44,300	0	44,300
Animal Control	39,478	0	39,478
Engineering	29,713	0	29,713
Mayor's Office	21,743	0	21,743
Libraries	17,530	0	17,530
Election Office	13,750	0	13,750
Borough Assembly	12,982	0	12,982

Source: Mim Dixon
What Happened to Fairbanks?

as at a premium price. The 1976 legislature passed a revolving loan fund for expansion, remodeling and improvement of buildings to be used as day care centers.

PRIVATE RESPONSES TO IMPACT

While local government searched for solutions to carry the town's infrastructure from one impact crisis to the next, individuals were searching for their own solutions to personal pipeline problems. During the winters when electric power demands were pushing GVEA and MUS to the limit of their generation capacity, the utilities appealed to consumers to reduce consumption during peak hours. GVEA also suggested that its subscribers buy home generators to use when the power went out. In an Association newsletter, management called the purchase of a generator "insurance."

Individual solutions to the housing shortage have been discussed in an earlier chapter. In late 1976 and 1977, developers began construction of several apartment complexes. At present, they are conducting elaborate advertising campaigns to attract renters.

The churches took up a lot of slack in aiding the "new needy''--Fairbanks residents oppressed by pipeline inflation, but who did not have pipeline jobs and were too proud or had incomes slightly too high to get on welfare.

Private businesses were caught in the anticipation of pipeline construction and the false boom between 1969 and 1971, Those who expanded lost money when the environmentalists' injunction delayed the pipeline, and by the time construction did start, inventories were not stocked up to

handle the demands of the pipeline companies and contractors. The response to an expanded consumer market (both in terms of more consumers and consumers with more money to spend) did not come until late 1976 and 1977, when three new shopping centers opened.

The chain of events that taxed Fairbanks during the pipeline era began with the false boom after the discovery of oil. The town did not use the lull of the injunction for preparation for the real boom, but rather bemoaned the losses it suffered because construction did not start in 1972. The failure to expand infrastructure and supplies at that time led to a situation in 1974, 1975 and 1976 in which the community faced demands for which it was not prepared. Its responses began in the middle of the period, when the impact was being felt the most intensely, but the completion of the efforts, because of lag time for capital expansion and construction, did not occur until after the boom was over.

WHAT LIES AHEAD FOR FAIRBANKS?

At the peak of pipeline construction it is estimated there were 21,600 people employed on the line. At this writing the line at the unemployment office in Fairbanks snakes through the halls of the State Regional Office Building and estimates from the Alaska Department of Labor put the unemployment rate at 17.6 per cent for December, 1977.

"Several of the shops in the new malls have closed already, and many others are reported to be in financial difficulty. A major women's clothing store that occupied a prime corner during the pipeline packed up and left Fairbanks in January. Second Avenue has several newly-painted bar fronts--part of a half-hearted campaign to "clean up downtown," but the streets seem very quiet in comparison to the summer nights of 1975 when prostitutes and spectators paraded up and down. One Fairbanks barfly commented recently: "Things have gone back to the way they were before 1974. There's been little effect on the segment of the population I deal with. I can go into Tommy's now and the people who were buying rounds during the pipeline are back to mooching beers the way they used to" (Personal communication with author, Jan. 1978).

The talk now is of the construction of the trans Alaska gas pipeline and establishment of a petrochemical industry in Fairbanks. Community leaders are speaking at meetings encouraging the development of some permanent industry, such as petrochemicals, to get Fairbanks out of its boom-bust cycles. The same people who were active in urging Alyeska to establish

its headquarters in Fairbanks now are courting Northwest Alaskan Pipeline Company, the firm that will construct the gasline. A special task force has been created by the Chamber of Commerce to show Northwest the benefits of living and locating in Fairbanks (as opposed to Anchorage), and a few community "boosters" have put together an Economic Development Conference to place on display all the industrial and resource potential the town has.

The former Impact Information Office is now the Community Information Center and is engaged in assembling material to present to Northwest. It also was involved, along with the UA'S Institute for Social and Economic Research, in conducting a survey to assess community opinions on the development of a petrochemical industry in Fairbanks. The report, released in April, 1978, indicates strong support on the part of borough residents for the location of a petrochemical plant in Fairbanks.

What happens to Fairbanks now is dependent on several factors: whether the population changed significantly during the pipeline period, whether community leaders' attitudes and approaches changed as a result of the impact experience, whether people's expectations about the community have changed significantly.

POPULATION GROWTH--WHO LEFT? WHO STAYED?

Borough Mayor John Carlson, speaking about government services and residents' demands for services, observed that people in Fairbanks have changed, that there are more people in Fairbanks now who have lived in

communities where local government provided services. These new people expect services, want them, and are willing to pay for them. The Mayor used fire protection as an example--in a small survey conducted by the borough through a newspaper pull-out and public hearings, a majority of respondents indicated they wanted the borough to provide fire protection and that they were willing to assume a higher tax burden to pay for it. However, when borough assembly members conducted their own public hearings, they determined voters were not willing to pay for fire protection, and the assembly voted against putting the issue of fire protection on a ballot. At present, the assembly is engaged in trying to cut the Mayor's proposed budget so the millrate will not have to be raised. The areas under the most vehement attack are public transit, parks and recreation, the library and the schools.

There are no definitive figures yet, but Kruse's community survey of 1976 indicated that of the respondents who had lived in the community less than three years, 62 per cent intended to leave Fairbanks: 21 per cent within six months, 20 per cent within two years, and the remainder "at some time in the future." In the groups of residents who had lived in Fairbanks before the pipeline, 62 per cent in the 3 to 10 year group had no plans to move, and 67 per cent of those who had lived here more than 10 years had no plans to move. This would seem to indicate the population is not changing that much; the same people who lived in Fairbanks before will still be living there, and many of the new people will have left.

Why they left--if they did--might have some relationship to the reasons they came in the first place. Kruse surveyed reasons for coming to Alaska and found the attractions of the "last frontier" were changing in importance in 1976. "While a chance to be independent and to start something new has not lost its pull, the more recent immigrants (associated with the pipeline boom) are noticeably more attracted to immediate income gains, a challenging or exciting job, and less attracted to a self-reliant life style" (Kruse 1977, P. 12). They are also twice as likely as long term residents to want a great deal of growth in Fairbanks and feel that more commercial development will increase the quality of life there. At the time of the survey, these people comprised 41 per cent of the population.

The more recent petrochemical development survey indicated 67 per cent of the respondents think the Fairbanks North Star Borough should invite petrochemical companies to make proposals and should aid in developing the kind of information required by petrochemical companies. Kruse speculates this number of respondents includes both those who think petrochemical development would make Fairbanks a better place to live (28 per cent) and those who think it would not affect Fairbanks one way or the other (43 per cent). "survey results also show that residents who are staying in Fairbanks primarily for economic reasons tend to expect the community to become a better place to live, while those who are staying in Fairbanks primarily to take advantage of the surrounding wilderness environment expect Fairbanks will become a worse place to live over the next 10 years" (Kruse 1978, P. 4).

Could these residents be the "new" population the mayor was speaking about? Although 67 per cent of the respondents agreed that the borough should invite proposals from petrochemical companies and assist them with information, " the majority of Fairbanks residents does not support such possible economic incentives as tax breaks, the sale of municipal revenue bonds to help finance development, or the sale of State royalty gas at less than full value" (Kruse 1978, P. 6).

It is not clear yet whether the newcomers of the pipeline era actually followed through with their plans to leave Fairbanks. The petrochemical survey seems to indicate that there are still those here--a third of the respondents--who came to Fairbanks for the economic benefits rather than the "Alaskan lifestyle" of earlier immigrants.

WHAT DID FAIRBANKS LEARN FROM THE PIPELINE?

One of the innovative things Fairbanks did with its state impact funds during the pipeline construction period was open the Impact Information Center. Fairbanks had a chance to learn a lot about impact, but leaders did not fund the impact office soon enough to get a grasp on conditions before the pipeline, would not let the office make any predictions or projections, and changed its function before it could gather any data or make any analyses about what was happening to the community after the pipeline. The existence of the center was even questioned during the pipeline, and its funding was at the whim of political forces in the borough assembly.

The attitudes that have characterized Fairbanks throughout its history did not change during pipeline impact. Leaders were reluctant to raise taxes. Voters were reluctant to approve bond issues. Even at a time when public services were in greater demand thatn ever and the tax base was higher than ever, municipal government seemed bent on one activity: keeping the budget and the tax rate down.

In Fairbanks, there is a reluctance among long-term residents to spend money to do things for people. The ethic in Fairbanks is that people are supposed to do things for themselves. Keeping the mil rate down means a direct, into-the-pocket benefit for the individual taxpayer. If the taxpayer then wants to spend that money to improve his life, that is his choice. But it is not up to the government to do it for him, so the thinking goes.

The people who make decisions in Fairbanks today are, for the most part, in the segment of respondents in Kruse's 1976 survey who have been in Fairbanks for more than 10 years, residents who came for "a chance to be independent. " Although most people living in Fairbanks today are not building cabins in the wilderness or "living off the land," those values of self-reliance are carried over into urban living. The frontier values have less to do with an independent existence vis a vis the natural environment than with independence from other people and the community (particularly "the government"). It may be difficult to use the word community in talking about Fairbanks. There is a large number of people living in geographical proximity to one another, but there is very little

sense of community --a sense of working together for some common good. The principal motivating force seems, instead, to be a sense of working toward an individual good. And if the "community" does anything as a whole, it fights tenaciously to retain each individual's right to do what he wants to do for his own good,

The desire to maintain individual sovereignty was apparent from the time oil was discovered on the North Slope until the first oil flowed past Fairbanks on its way to Valdez. It was apparent in the testimony supporting the granting of the pipeline permit and is apparent in the actions Fairbanks is taking now to prepare for the gasline. At a recent meeting of the board of directors of the Fairbanks Chamber of Commerce, several businessmen who profited greatly from the oil pipeline made comments to a representative from the borough administration that it was "up to government" to provide incentives for industry, particularly petrochemicals. They suggested tax incentives such as municipal bonds, delayed payment of property tax and others. Not one suggestion came forth regarding "incentives" in the form of land sales, rents or private financing. (Personal communication with author, April 17, 1978).

In an interview in 1977, Borough Mayor John Carlson said one thing he thought Fairbanks learned from the pipeline experience was that-the community--through government--needs to welcome industry, prepare for it, expand the infrastructure to accommodate it. "All we got from the pipeline," he said, "was the ability to tax it and service it. The oil is going right by us lickety split."

"All we got from the pipeline" was a one-third increase in the tax base of the borough, tax base that could support development of roads and utilities that would make the area more attractive to industry, or services that would make it more attractive to people. But Fairbanks did not get a petrochemical industry and a continuing source of jobs--things that benefit individuals over a long period of time.

Before the pipeline, the municipal governments were unwilling to spend money because they were not sure the permit for the pipeline right-of-way would be granted. During the pipeline, government was so busy coping with crises it had not prepared for, it did no planning for the future. Now that pipeline construction is over, the local government is trying to cut the budget for services because tax payers are not willing to support an increase in the mil rate. The presiding officer of the borough assembly told a public hearing the reason the school budget was so high was that for years programs had been cut to allow for the capital expansion necessary. Now the schools are trying to expand programs, she said. Even though a major concern in Fairbanks is that the town is "overbuilt," the schools, for example, are not empty. The school expansion during the pipeline was seen as a "mistake" because newcomers did not bring their families to fill the schools, but now the community has an asset in its schools, and residents' children are indeed filling them. Fairbanks also has, now, a telephone system that works, improved roads, expanded office and warehouse facilities and a selection of consumer goods that has offered purchasers not only variety, but sometimes pricing that is competitive with Anchorage.

But the attitude is that the major changes in the community as a result of the pipeline were negative, according to Kruse's survey. People felt they had benefitted as individuals, but Fairbanks overall was a worse place to live.

> Did we learn anything? I have a real question about that. I'm sure we have. But I feel that in between pipelines should be the time to reflect, enumerate and articulate what we have learned so we can use the knowledge for the second go-round. I served on one committee to get Alcan (Northwest Alaskan Gas Pipeline) here and I hear the same terminology. You don't worry about problems, the economy is all that counts. Jobs and money will take care of the rest of the problems. That says we didn't learn anything (Straatmeyer, Jan. 20, 1978).

> My concern is that people are uninformed. For example, they think the gasline will save us. They aren't aware that employment levels will only be one third to one fourth of what oil pipeline employment was. The expectation levels are unreasonably high. ..The pipeline put us in a psychology of wanting an unattainable high, a cycle of expecting a panacea from construction projects, a boom/bust attitude that as long as you have something in the future, you don't have to worry about the present (Fison, Jan. 13, 1978).

> A lot of people feel we didn't get a hell of a lot out of the pipeline. I suspect there were big revenues, but not great profits. Management was inefficient and was not prepared to handle that amount of cash. People are not going to let that happen again. Alyeska never made a commitment to Fairbanks. There must be a way to capture long term benefits (Smetzer, Dec. 29, 1977).

Mim Dixon, in the final chapter of her book What Happened To Fairbanks? offers some recommendations for planners and criticisms of the lack of information, planning and action that came from the oil industry, federal, state and local governments. The recommendations are directed

at private industry and government alike, and if followed, might minimize such impacts as housing shortages, road deterioration and family stress. Many of her suggestions--such as more and better information--were areas cited by local government for its failure to plan and act for the oil pipeline. She also offers some questions about communities, their leaders, and their structure:

> Now, let us assume that the people of Fairbanks could have the benefit of learning from the trans-Alaska pipeline experience and could bring their insights from that experience to start anew making decisions about their future. What if the community decided to do everything the same way again?

Fairbanks has a chance in the next two years to learn and act on the basis of its experience. The Northwest Alaskan Pipeline company has indicated it will locate its headquarters in Fairbanks. Officials of the company have demonstrated, thus far, a willingness to listen to residents of communities that will be impacted by gasline construction, to impart information to those communities regarding the construction company's plans, and to work together with those communities in finding joint solutions to problems before they arise. In a forum on gas pipeline impact in the Tok area, for example, a vice president of the gasline corporation used words such as "responsibility to the residents" in speaking of the company's role during construction. Yet the decision makers in Fairbanks are taking the same adversary posture toward Northwest they took toward Alyeska, and are clinging to the same "what can we get out of it" attitude.

In this writer's opinion, the answer to Ms. Dixon's question is: They do and they have.

APPENDIX A

INDICATORS OF CHANGE IN COMMUNITY MENTAL HEALTH

TABLE A-1

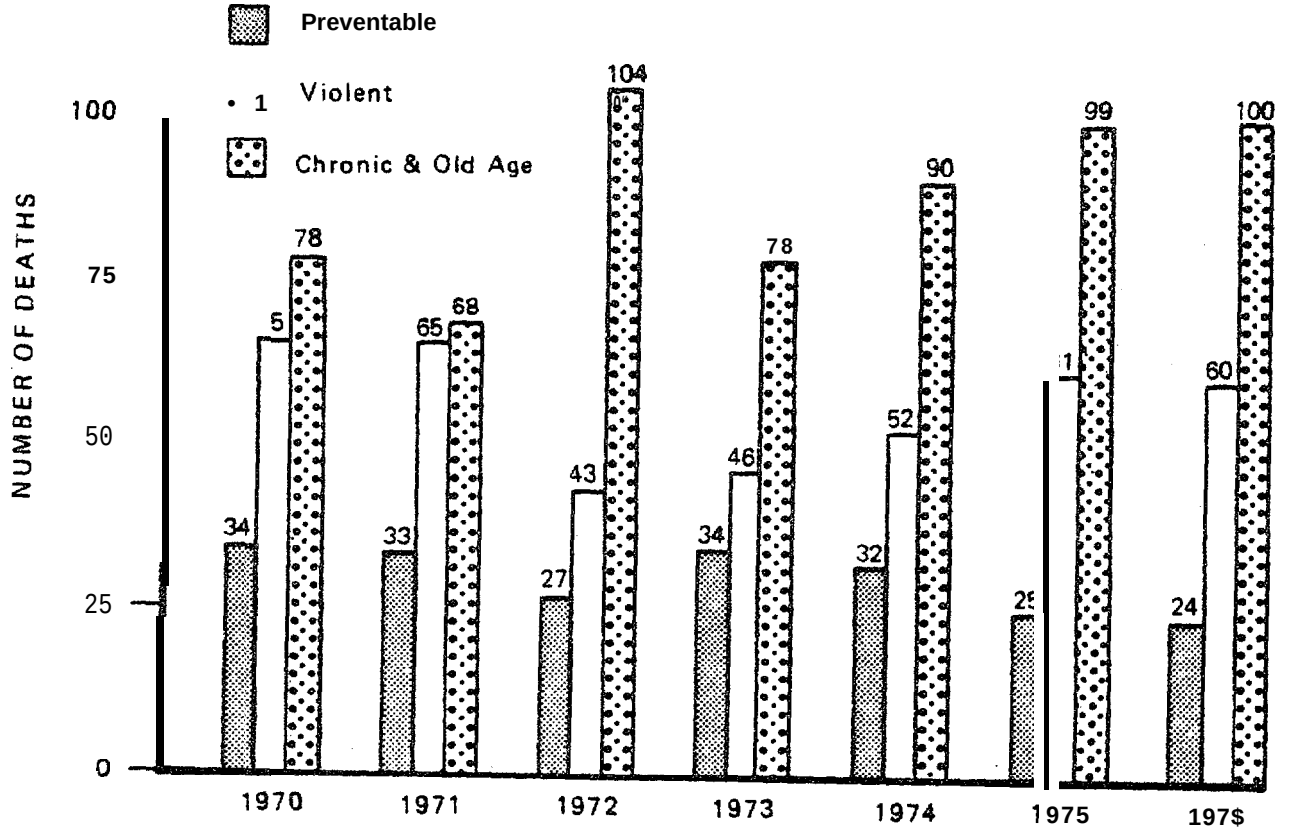
BIRTHS AND DEATHS
FAIRBANKS AND SOUTHEAST FAIRBANKS CENSUS DIVISIONS
1970-1976

	1970	1971	1972	1973	1974	1975	1976
Births							
Fairbanks Census Division	1,330	1,267	1,163	1,098	1,075	1,191	1,308
Southeast Fairbanks Census Division	116	121	113	93	106	97	126
Total	1,446	1,388	1,276	1,191	1,181	1,288	,434
Deaths							
Fairbanks Census Division	177	166	174	158	174	85	84
Southeast Fairbanks Census Division	12	14	15	8	19	11	19
Total	89	180	189	168	193	96	203

Source: Sue Fison
Impact Information Center, Final Report

Figure A-1

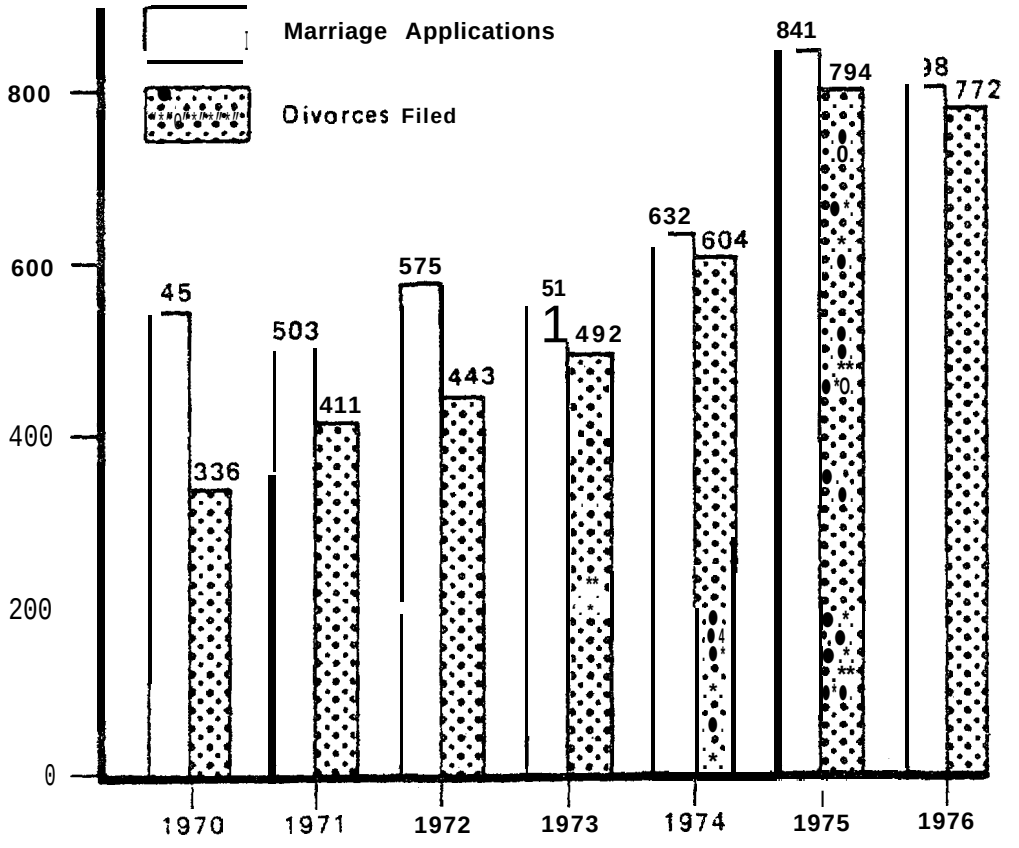
Deaths by Cause, 1970-1976
Fairbanks Census Division



Source: Sue Fison, Impact information Center, Final Report

Figure A-2

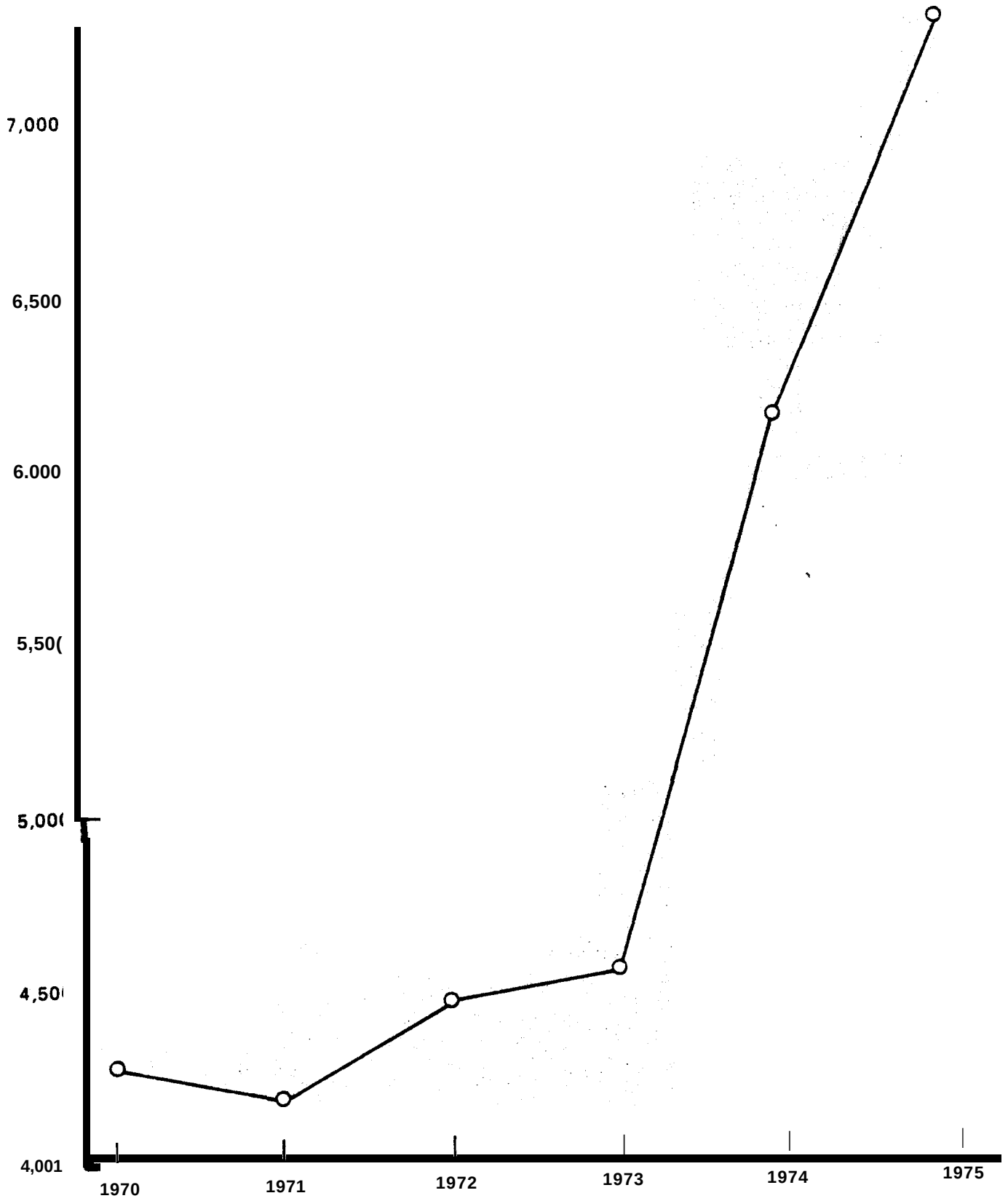
Marriages & Divorces
Fairbanks. Alaska
19701976



Source: Sue Fison. Impact Information Center

Figure A-3

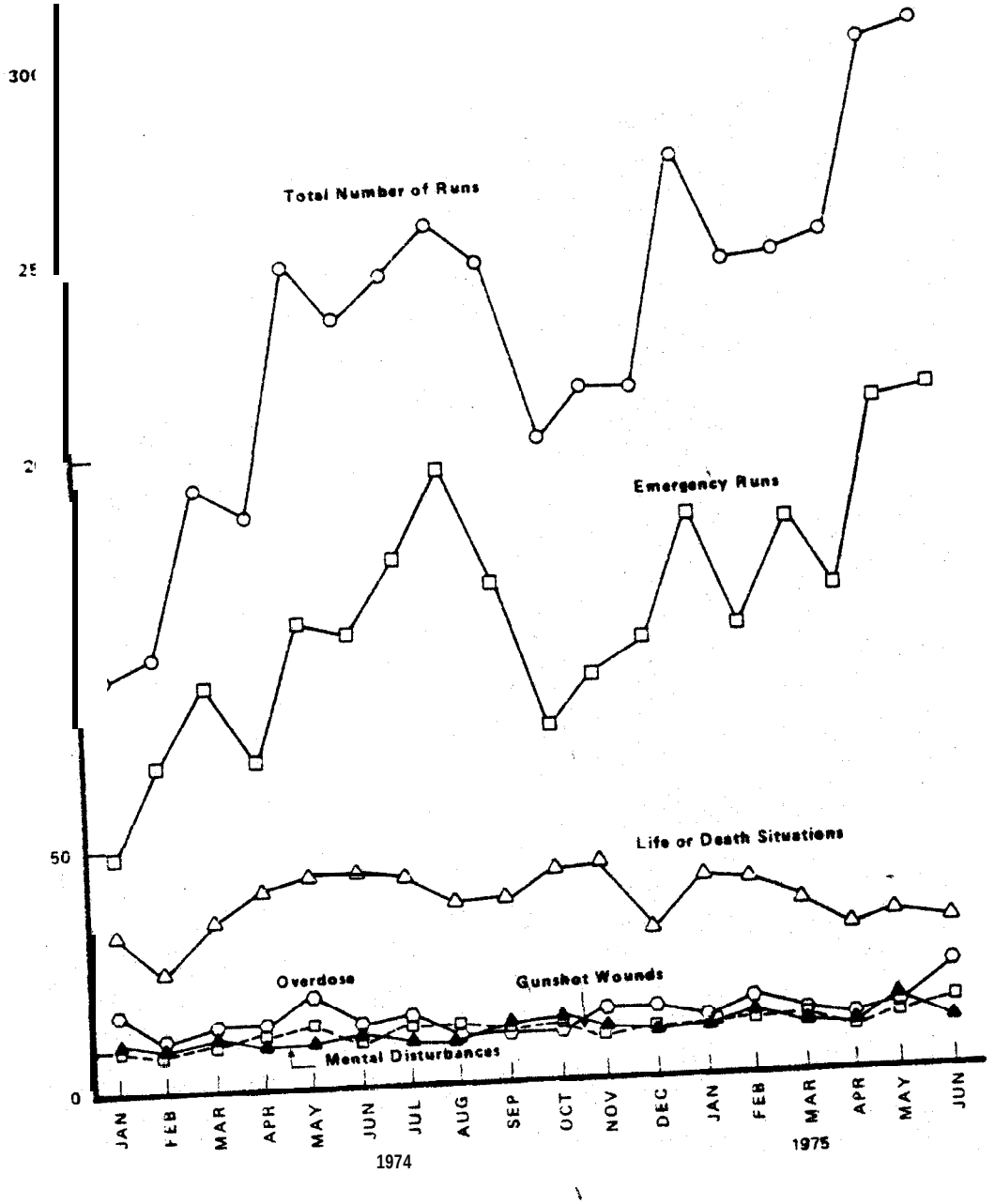
Admissions to Fairbanks Memorial Hospital, 1970-1975



Source: Mim Dixon, Whet Happened to Fairbanks?

Figure A-4

Ambulance Runs, City of Fairbanks Fire Department



Source: Mim Dixon, What Happened to Fairbanks?

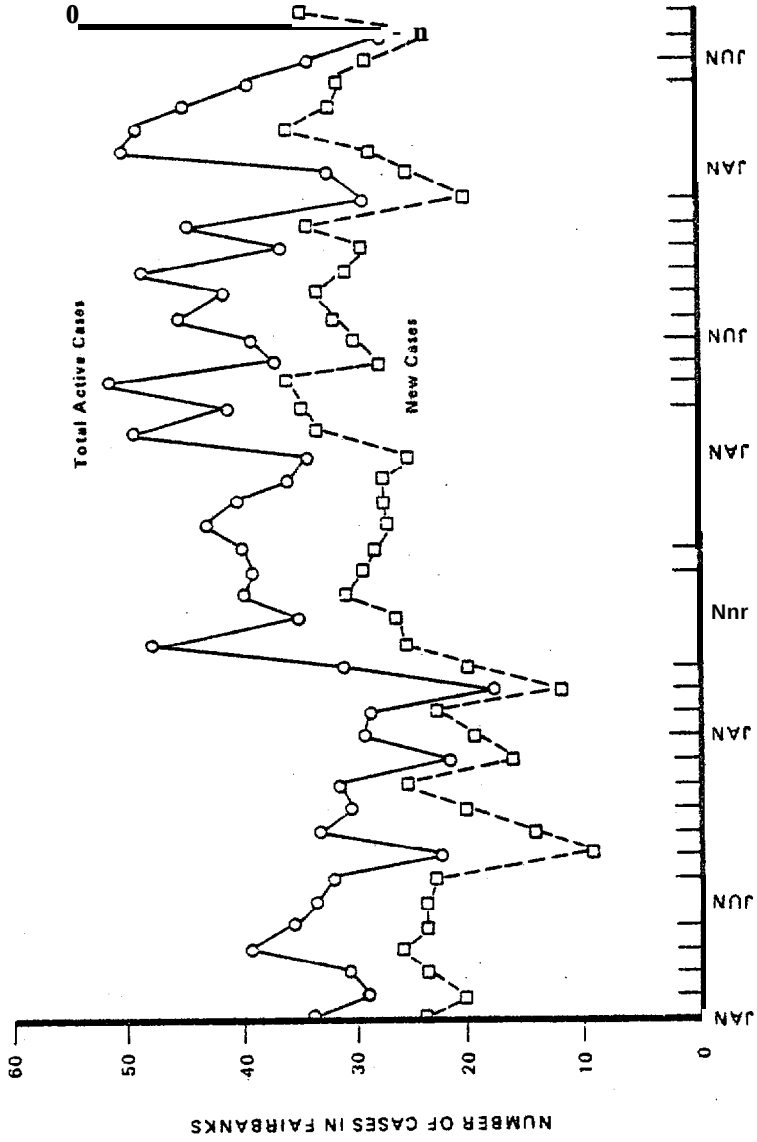
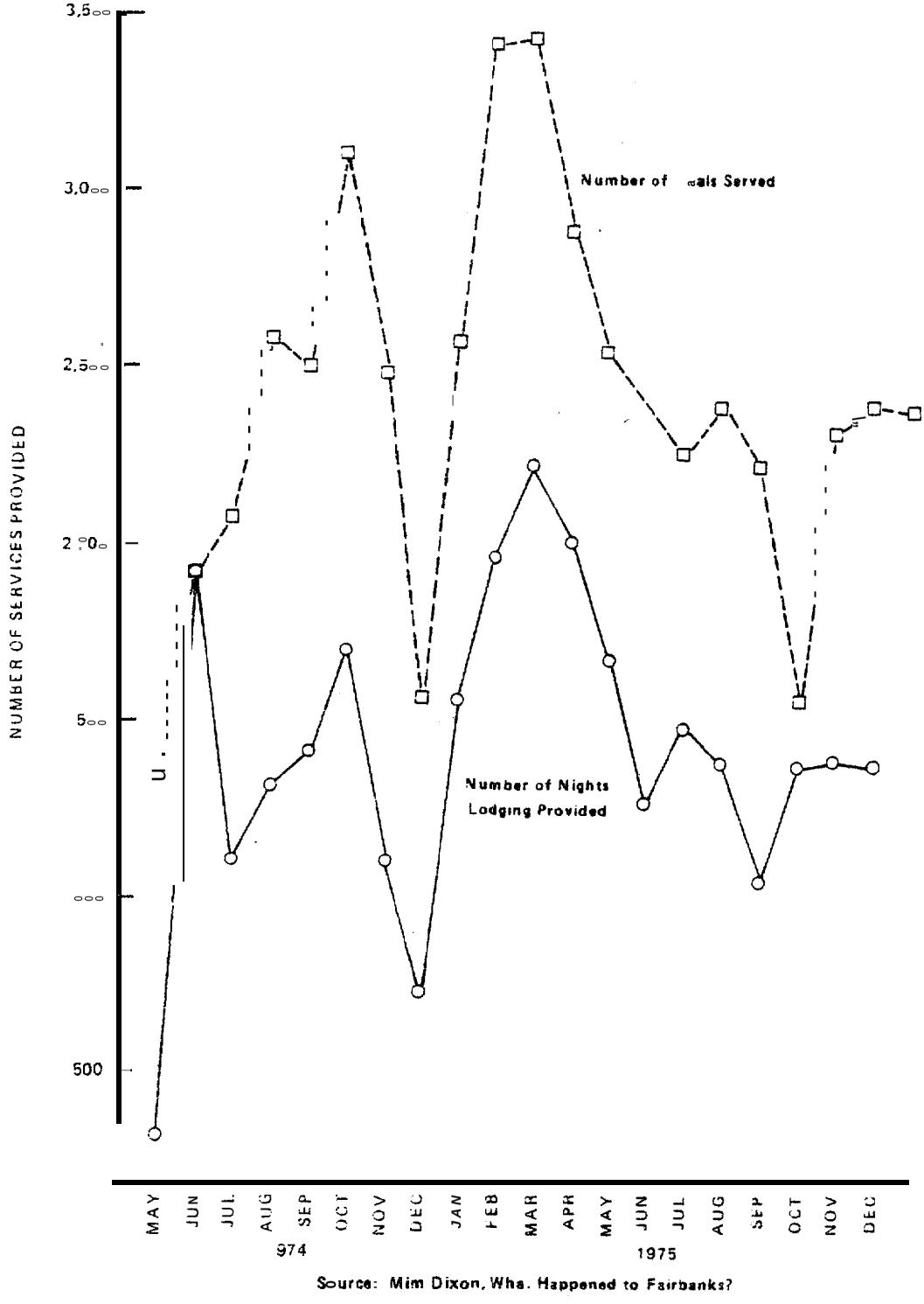


Figure A-5
Mental Health Clinic Caseload, 1973-1976

Source: Mim Dixon, What Happened to Fairbanks?

Figure A-6

Fairbanks Rescue Mission Activities, 1974-1975



Source: Mim Dixon, Wha. Happened to Fairbanks?

TABLE A-2

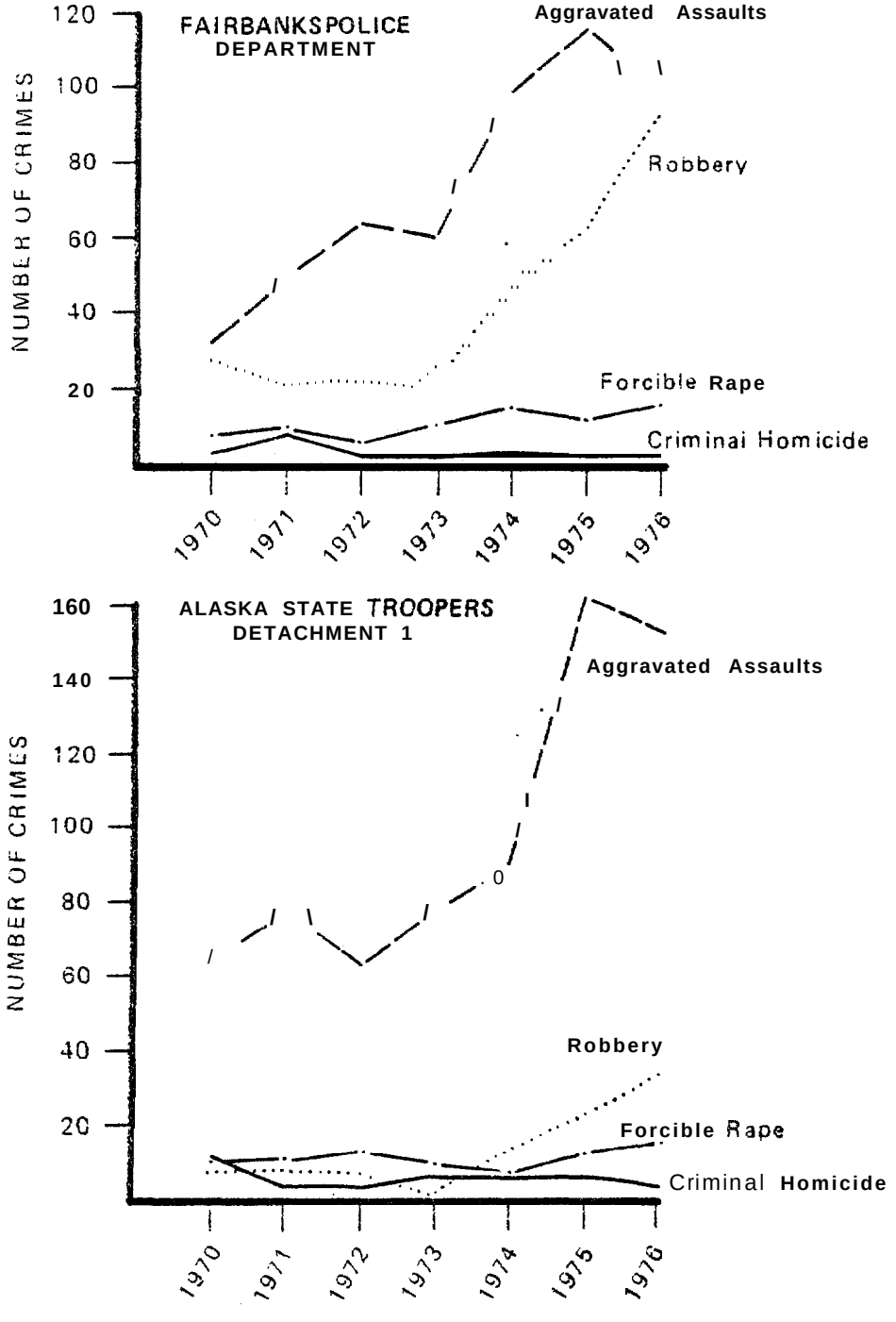
GALLONS OF ALCOHOLIC BEVERAGES SOLD IN FAIRBANKS

	1970-71	1971-72	1972-73	1973-74	1974-75
Liquor	166,919	170,391	166,752	154,740	234,272
Wine	103,393	114,127	124,333	117,956	134,777
Beer	1,001,101	2,329,601	1,197,998	1,169,281	1,695,966
TOTAL	1,271,413	2,613,119	1,489,083	1,441,977	2,065,015

Source: Mim Dixon
What Happened to Fairbanks?

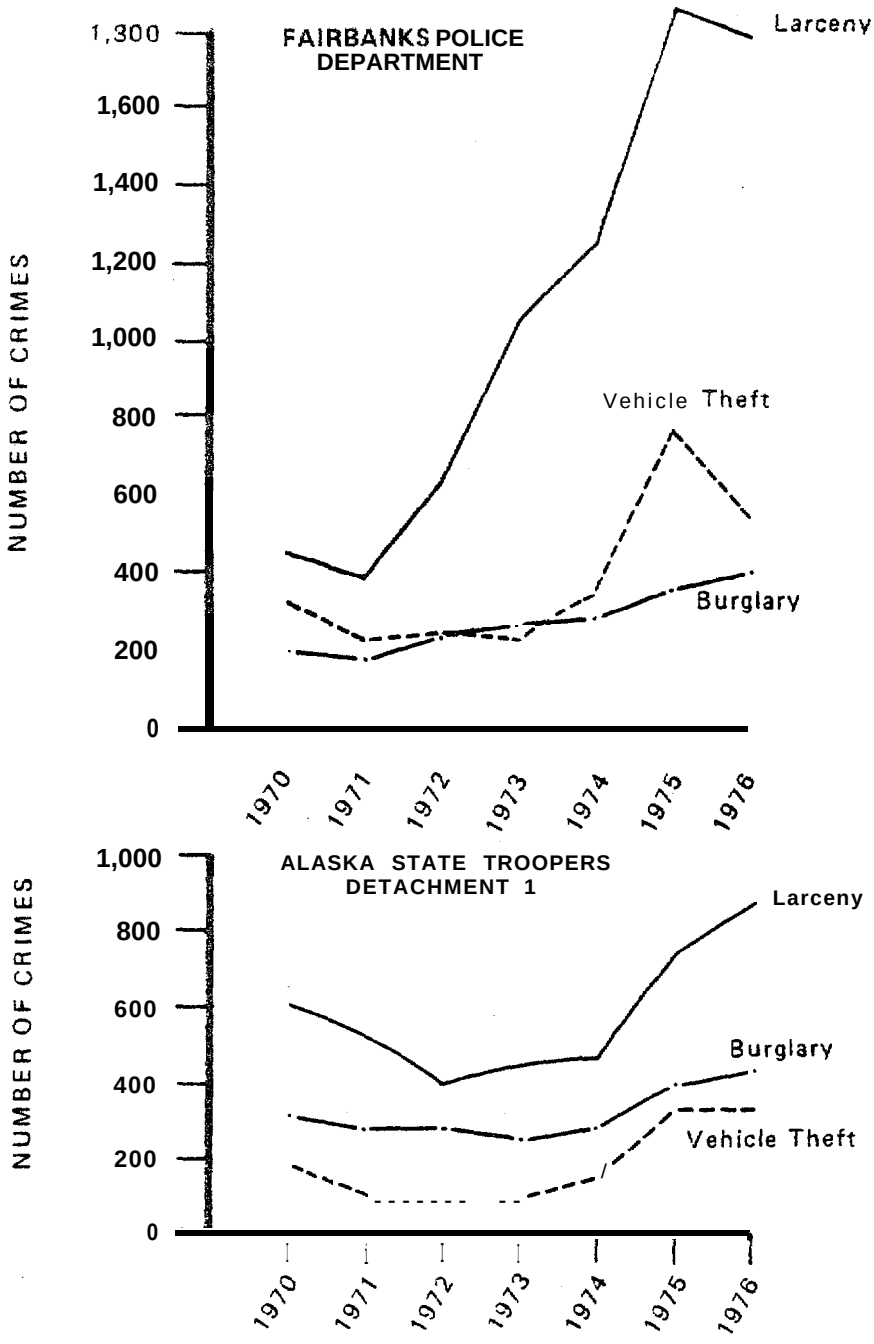
Figure A-7

Violent Crimes Against Persons, 1970-1976



Source: Sue Fison, Impact Information Center, Final Report

Figure A-3
Major Property Crimes, 1970-1976



source: Sue Fison, Impact Information Center, Final Report

TABLE A-3

SUMMARY OF PART II OFFENSES
ALASKA STATE TROOPERS
DETACHMENT I - FAIRBANKS
1973-1976

	1973	1974	1975	1976
Non-aggravated Assault	101	104	212	190
Forgery and Counterfeiting	10	13	11	11
Embezzlement and Fraud	40	34	35	34
Stolen Property	8	10	11	16
Weapons	48	40	51	62
Prostitution and Vice	0	0	3	2
Sex Offenses	19	27	29	20
Offenses Against Family	12	8	12	6
Narcotic Drugs	59	78	108	52
Liquor Laws	25	23	22	15
Drunkenness	23	24	3	0
Disorderly Conduct	29	32	36	48
Vagrancy	1	0	0	0
Gambling	0	0	5	1
Operating a Motor Vehicle Intoxicated	471	459	335	334
Other	236	339	649	476

Source: Sue Fison
Impact Information Center, Final Report

TABLE A-4

SUMMARY OF PART II OFFENSES
FAIRBANKS POLICE DEPARTMENT
1973-1976

	1973	1974	1975	1976
Non-aggravated Assault	235	263	317	189
Assault on a Police Officer	15	57	55	19
Stolen Property - Buying, Receiving, Possession	2	2		24
Drunkenness	230	540	17;	0
Liquor Laws	108	186	123	221
Driving Under the Influence	159	197	261	253
Narcotic Drug Law Violations	182	276	221	127
Forgery & Counterfeiting	29	16	33	51
Fraud	46	62	83	55
Embezzlement	17	21	15	29
Arson	20	17	19	19
Vandalism	215	251	386	340
Weapons - Carrying, Possessing, etc.	34	67	142	101
Prostitution & Commercial Vice	2	16	68	46
Sex Offenses, except Rape & Prostitution	30	57	50	33
Gambling	13	3	2	0
Offenses Against Family & Children	36	28	22	.2~-
Disorderly Conduct	123	244	354	293
Attempted Suicide	29	25	17	4
Suicide	3	1	1	4
Interfering with a Police Officer	8	6	33	8
Kidnapping	2	2	3	1
Missing Persons	103	81	125	69
Bomb Threats	8	5	10	14
Defrauding an Innkeeper		16	31	15
Minor in Need of Supervision	51	43	31	
Runaway	99	173	234	1$:

Source: Sue Fison
Impact Information Center, Final Report

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