

Summary of Impacts of the Trans-Alaska Oil Pipeline on Fairbanks

In 1974, after years of rumor and debate, construction work began on the Trans-Alaska Pipeline. The community most impacted during the construction period was Fairbanks, where in 1968, prior to the pipeline the area had an estimated population of just over 42,000 people. The population of Fairbanks began to slowly increase as a result of the pipeline starting in 1969 when the plan for construction was submitted to congress. Fairbanks had already experienced a few significant boom/bust cycles in its relatively short history so its residents had some idea of what sort of impact the pipeline project would have. Despite this knowledge the community was wary of putting too much energy and capital into preparations for the impending boom due primarily to two key factors: first, they lacked specific information regarding numbers of workers and timing of project approval, second, they didn't want to waste resources over-preparing. Already some local business people had prepared for the boom and lost money when it didn't happen on the anticipated schedule.

The preparations taken by local government and business were based on the assumption that the numbers and projections being fed to them by the Alyeska Pipeline Service Company were accurate. The original projection of peak workforce numbers during the construction phase was a maximum of 16,000 workers; the actual number of workers was an estimated 21,600 workers, 35 percent more than expected. The population of Fairbanks swelled by nearly 67 percent to roughly 70,000 people.

During peak construction Alyeska estimated that they spent \$800,000 per day in Fairbanks. This dollar amount includes salaries to workers in Fairbanks, freight including truck and aircraft, services bought directly by the company, fees to contractors, local materials and utilities and leases at Fort Wainwright.

In 1978 Westview Press, Inc. published a book written by Mim Dixon called "*What Happened to Fairbanks? The Effects if the Trans-Alaska Oil Pipeline on the Community of Fairbanks, Alaska*". The summary that follows is primarily drawn from information provided in Ms. Dixon's book. Other sources include technical reports by Minerals Management Services and a survey conducted by Jack Kruse in 1977 with the Institute of Social and Economic Research (ISER).

Education and Training:

Public Schools: Planners in Fairbanks expected 3,300 to 3,900 new K-12 students to enter the public school system. Plans were made, high schools began operating in shifts, buildings were built and the extra students never materialized. It turned out to be a fortunate mistake for the residents of Fairbanks since school facilities were already overcrowded and the people had failed to approve any school bond in several years. The largest portion of imported workers were between ages of 20 and 29 and most did not have children; those who did had younger children who were not of school age.

According to a 1977 report by Sue Fison, of the 25,673 newly hired pipeline workers only 549 new children were expected. Reasons for the low number included: lack of housing, high cost of living, remoteness of camps, long working hours and nationwide news reporting the Fairbanks housing shortage, high cost of living and high crime rates.

These factors together with the long and cold winters kept many workers' families away. In the school year 1974 to 1975 high school enrollment actually decreased by 20 percent. High school students were leaving school to go to work in positions in town vacated by pipeline workers, and sometimes to work on the pipeline itself. From August 1974 to December 1975 only 1 of every 97 persons hired to work on the pipeline brought family to Alaska. Of the children who did come to Alaska during the pipeline 82 percent were school age.

Training: State government provided very little in the way of workforce training to assist people in obtaining pipeline jobs until FY 1974-1975 when 1.6 million was allocated, \$1.1 million from the state and \$0.4 million from the Alyeska Pipeline Service Company. Training did not begin until into the second construction season and there was no recorded follow up with trainees so it is impossible to say whether or not those trained went on to get pipeline jobs.

Hiring practices during the pipeline were a point of contention during construction, and continue to be a topic of debate to this day. Most hiring was done through union halls and union members were first in line, even union members from out of state. At the peak of pipeline construction (December of 1975) Alaska residents comprised 41.4 percent of pipeline workers. The definition of Alaska resident was fuzzy however, so it is difficult to judge the accuracy of this number. Alaska residency could be proven in 1974 with an Alaska driver's license, a document easily obtained in one or two days from the local DMV. Women and Alaska Native people were the least employed groups on the pipeline. There were suggestions from government that Alyeska and the unions could do more to hire women and minorities for pipeline jobs but there was no bite to the state's bark and women and minorities continued to be underrepresented in the pipeline workforce.

Public Safety

Public Safety became a major issue during the construction period, the biggest problem being the severe shortage of police officers. Both the Fairbanks Police Department and the area Troopers lost many employees to the pipeline companies who were hiring them on for higher wages as security people. At the same time as police officer numbers were declining the population was soaring.

Crimes such as child neglect increased as parents working out of town or in 10 to 12 hour shifts left the children unsupervised due to lack of adequate or affordable childcare. The incidence of aggravated assault doubled during the pipeline period. Burglary, larceny and vehicle theft all increased significantly as well. There was also a large and visible influx of prostitutes, pimps, drug dealers and users. Criminal homicide did not increase during the pipeline. It was expected that rape would increase during pipeline construction and while it is true that the rate of reported rape did not increase it is impossible to say what the true rate of rape was due to the large influx of prostitutes, a population that is both highly vulnerable to the crime of rape and highly unlikely to report it.

Summary of Part II Offenses Fairbanks Police Department 1973-1976

Crime	1973	1974	1975	1976
Non-Aggravated Assault	235	263	317	189
Assault on a Police Officer	15	57	55	19
Stolen Property	2	2	8	24
Drunkenness	230	540	173	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	34	67	142	101
Prostitutions & Commercial Vice	2	16	68	46
Sex Offenses, except rape and prostitution	30	57	50	33
Gambling	13	3	2	0
Offenses Against Family and Children	36	28	22	21
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	28
Runaway	99	173	234	194

[Sue Fison: Impact Information Center, Final Report]

Health and Social Services

Health Care: During pipeline construction significant impacts on health care shaped the future of health care delivery in Alaska. The influx of people produced more doctors in the Interior, brought specialists, increased pressure on the Fairbanks Memorial Hospital and led to the availability of more medical procedures being offered within the state.

The most obvious hospital impacts occurred in the emergency room:

- With no regular health care provider, many outsiders utilized the emergency room for routine medical care.
- The emergency room was thrust into the position of acting as a detox center for Fairbanks.
- From May 1, 1975 to April 30, 1976 there were 1,283 medical emergencies sent to the Fairbanks Memorial Hospital from pipeline camps. During this one year

period there were an average of 3.5 medical evacuations from pipeline construction camps per day.

In the decade before the pipeline, there were two clinics in Fairbanks and all of the doctors in town were working for one or the other. Doctors at the clinics were compensated with both a regular salary and a portion of the clinic's profits. Because of this compensation structure there was a lot of pressure to keep patients from going to the "other" clinic for services for fear that they might become regular customers there. If a patient had a malady for which there was a specialist at the competing clinic the patient was routinely referred to doctors in Seattle rather than across town. Routine referrals to Seattle set up what was to become common for Alaskans of going Outside for anything other than basic healthcare.

In 1968 there were 27 physicians in Fairbanks representing eight specialties. In 1973 in anticipation of the pipeline boom, the clinics increased staff and Fairbanks had 40 physicians representing 10 specialties; by 1976 that number had swelled to 57 physicians and 12 specialties. Of these 57 physicians more than one third practiced independent of the two original clinics. The clinics got large contracts to perform pre-employment physicals for the unions supplying the pipeline workforce.

Revenue to the health care industry from pre-employment physicals averaged \$1.2 million a year during construction. With the clinics busy providing for potential pipeline workers, the independent doctors were available to serve the local resident population. Additionally, the two-clinic system that had stymied development of the health care industry in Fairbanks no longer dominated the scene. Specialists began to treat patients locally, the hospital added capacity and a more mature health care system was born in the Interior.

Social Services: The local Salvation Army and Rescue Mission in Fairbanks saw dramatic increases in utilization as both a place to sleep and a source of meals. In 1974 the Salvation Army provided 3,773 nights and 9,890 meals. That same year the Rescue Mission provided 9,795 nights and 17,624 meals. By 1975 the number of Rescue Mission service recipients had swelled to 18,823 nights and 30,627 meals. To be sure, the high cost and extreme shortage of housing added to the numbers of people receiving services.

There was not however, the feared inflow of poor people and their families who would come to Alaska seeking jobs and end up on welfare. There was a 90 percent decrease in food stamp cases between January 1973 and January 1976; public assistance cases decreased 36 percent during that same time.

There were two very important populations that were not able to reap the benefits of pipeline impacts, the very young and the very young. These populations also had the most to lose from the kinds of social changes and dramatic inflation that occurred in Fairbanks during the pipeline. Very old people on fixed incomes are unable to adapt to changes in costs of goods by picking up additional work or negotiating a new salary.

In 1975, yearly income was less than \$3,600 for 31 percent of elderly individuals, and 53.4 percent fell into the category of having yearly income below \$6,000. Young children were negatively impacted due to a severe shortage in childcare. Parents would often work 10 to 12 hours a day and childcare was extremely hard to find, leading to an

increase in child neglect. A survey conducted in Fairbanks (Kruse, 1977, ISER) found that 51.6 percent of female respondents who had children used a babysitter in the sitter’s home for childcare; another 20.3 percent used their spouse.

People with physical and social disabilities are also amongst those who were not able to fully benefit from the economic activity that the pipeline brought to Fairbanks. However, it was possible for people who experience disabilities, along with women and teenagers, to fill some of the in-town positions that had been vacated by people going to work on pipeline jobs. Much like factories in WWII, with the most desirable workforce otherwise occupied, opportunities for a previously overlooked workforce abounded.

Utilities and Transportation

In the 1970s Fairbanks lacked adequate infrastructure to support a 67 percent increase in population and a major industrial development project.

Road use in town and surrounding suburban areas closely matched the ups and downs of use of pipeline work roads. The state was left with the majority of the bill for repairing roads that were damaged by heavy industrial use. Ms. Dixon recommends that clear agreements be hashed out ahead of future development to determine who is responsible for the wear and tear on roads associated with heavy use and heavy loads.

With increased traffic on area roads came an increase in auto accidents.

Table 1 Auto Accidents in Fairbanks, 1973-1975 [Mim Dixon: What Happened to Fairbanks]

	1973	1974	1975	% Change 1973-1975
Number of Accidents	1,149	1,366	1,906	66%
Number of Persons Injured	179	203	353	97%

Use of electricity and water increased during pipeline construction. Increases in use came from residential users as population increased and from commercial users as industry came to town. Pipeline operations ran in longer than normal shifts and demand for utilities kept suppliers, particularly electrical suppliers, in a state of crisis management until GVEA added capacity in 1976.

Kilowatt Hours of Electricity Sold in Fairbanks

Year	KWH	% Change
1973	206.1	8.59%
1974	231.6	12.37%
1975	298.7	28.97%
1976	305.5	2.28%

Housing and Cost of Living

Housing: A severe housing shortage struck Fairbanks and the city scrambled to find an answer to the problem. In May 1975 Fairbanks had a 0.5 vacancy rate, down from a vacancy rate of 7.2 in September 1973. Increased demand drove up rents. Many anecdotal stories indicate ridiculously high rents sometimes doubling in mere months, and some tenants had rents raised to the point where they had to move out of their homes or take on additional work. The city worried that shantytowns would spring up; this did

not happen but there were many residents of the interior city who were living in sub-standard housing. Prior to pipeline construction there had been very little in the way of investment in infrastructure development that could have helped to avoid or minimize the housing shortage in Fairbanks. Individuals, businesses and government were wary of investing in housing facilities for fear that there would not be adequate demand to make it worthwhile. By the time it was painfully obvious to all that there was more than enough demand it was too late.

One factor that made it difficult for the community to rapidly respond once it was clear that there was demand for housing was the fact that at that time there were no commercial lenders in Fairbanks so all investment had to be private and/or come from outside Alaska. The vast majority of skilled trades-people were employed on the pipeline. Additional factors that exist to this day such as a short construction season and planning necessary to get materials to Alaska also played a role in slowing housing development. The housing shortage led to price gouging in both rents and selling prices of houses and property. One solution was to import pre-fabricated trailer homes: from 1974 to 1976 the number of mobile homes in Fairbanks increased from 2,237 to 3,482 and represented 49 percent of all new housing in the borough.

Cost of Living: There was no Consumer Price Index in Alaska outside of Anchorage during the pipeline period. The only record of increases in price comes from the Impact Center in Fairbanks that reported costs for food 10 percent higher in Fairbanks than in Anchorage in October of 1976 and costs for non-food items 8.6 percent higher.

Between 1973 and 1975 average household income increased 59 percent for Alaska residents (Kruse, 1977) defined as those who were living in Alaska prior to pipeline construction. According to data provided by the Bureau of Economic Analysis total yearly income for the city of Fairbanks increased 139 percent, going from \$286,449,000 in 1973 to \$776,009,000 in 1975 and per capita income rose by 149 percent from \$6,011 to \$14,991. There is no data available for wage changes in this period broken down by specific job, trade or industry.

Total Annual Income: Fairbanks

Year	Total Income	% Change
1973	\$286,449,000	7%
1974	\$412,104,000	44%
1975	\$776,009,000	88%
1976	\$832,112,000	7%

According to Technical Report #14 published by Minerals Management Services professions with extremely high turnover resulting from pipeline included public relations and security people, non-professional positions with very high turnover included food service, laundry, and cleaning people. Other low paying jobs such as retail were also impacted as these employees were able to hop into higher paying jobs in support service positions for pipeline workers and camps. This evacuation of low skill and wage jobs opened them up to women, the disabled and young people.

During the construction period it was possible for workers to job-hop on a fairly regular basis as the market was experiencing a shortage of workers. Pipeline paychecks also had the effect of forcing some organizations, including state and local government, to raise the wages they paid their employees in order to retain them.

The table below demonstrates the difference in hourly wages for positions in town versus on the pipeline. The real difference in pay however, was due to the overtime hours that pipeline workers earned working non-traditional shifts longer than eight hours per day.

Hourly Wage Fairbanks 1974

	Non-Pipeline	Pipeline	Difference
Clerk	\$3.22	\$4.04	25.47%
Intermediate Clerk - Clerk Typist	\$4.00	\$4.50	12.50%
Senior Clerk-Secretary	\$4.09	\$4.79	17.11%
Chief Clerk-Secretary	\$4.82	\$5.42	12.56%
Bookkeeper Jr. Accountant	\$4.04	\$5.42	34.16%
Int. Accountant	\$4.61	\$6.52	41.43%
Janitor	\$3.87	\$8.31	114.73%
Maid-Bullcook	\$3.75	\$8.31	121.60%
Cook	\$5.78	\$9.12	57.79%
Dishwasher	\$3.68	\$8.31	125.82%
Laborer	\$6.80	\$9.60	41.18%

Tax

The biggest jump in population came between 1973 and 1976 when the population grew from 50,450 to 72,037, an increase of 43 percent. Over the same period the tax base increased 63 percent. The January 1, 1973 total assessed value of property in the Fairbanks North Star Borough was \$344,987,500. Two years later on January 1, 1975 total assessed value had increased 77 percent to \$610,249,995. Borough taxes increased 81 percent from 1973 to 1975. Both the city and the borough governments had small sales tax at the time. The sales tax along with increases in property taxes significantly increased the revenues realized by local government.

Social and Perceived Impacts

The state of Alaska funded a public information campaign to run in the lower 48 states in an effort to keep job seekers from coming up. The information campaign attempted to discourage people from coming to Alaska to work on the pipeline unless they already had secured a job position. This information campaign may have kept some job seekers away but word of mouth about the money to be made brought many more. Still, some residents of Fairbanks became resentful of the outsiders coming up and taking the high paying pipeline jobs. Much of this resentment could have been avoided had training and workforce development prepared more of the local population for the skilled pipeline jobs. Those locals who were not able to benefit from the high paying jobs available working on the pipeline were left only to feel the sometimes negative impacts the project had on the community.

A survey conducted in 1977 (Kruse) provides the information on residents' perceptions of the most important community changes that resulted from the pipeline in the table below.

Category	Percentage of Total Mentions
Increase in cost of living	30%
Overcrowding (in stores, lines and roads)	19%
Deterioration of the natural environment	12%
Scarcity of goods and services	9%
Improved economic conditions	8%
Increase in crime, hostility, distrust	8%
Change to more hurried lifestyle, more concern with money	5%
Physical growth of Fairbanks	2%
Little has changes	2%
All other changes	5%

This same survey provides the following information:

- 62% of those workers who were imported from the lower 48 intended to leave the state when their work was over
- 38% of people who were in Fairbanks for 3 to 10 years reported that they planned to leave.
- Of those respondents who had been residents of Interior Alaska for more than 10 years 33% reported that they planned to leave when pipeline work was complete.

Many people felt, based on the results of this survey, that the dynamic or personality of the community of Fairbanks would not change very much; that the newcomers would go home in large part and the old timers would remain. The truth of the matter is that many people who moved to Alaska seeking employment on the pipeline have stayed and made it their home. Still others returned as tourists with family and friends.

Changes in Corporate Culture

Much has changed in American corporate culture on the last 30 years. There is an expectation nationally and in Alaska that corporations will play an active role in the communities in which they do business – corporate social responsibility was not a major consideration in the 1970's and now it is. During TAPS construction and before, Alyeska made it clear that they were in town to build a pipeline, not to provide social services to the community and government.

Another part of corporate culture that has changed is tolerance for drug and alcohol use. With a project like the building of a gas pipeline there is an expectation of a zero tolerance policy toward drinking and doing drugs. During the building of the trans-Alaska pipeline drug and alcohol use was rampant. Alcohol purchases in Fairbanks increased 43 percent from FY 1973-74 to 1974-75. It is highly unlikely that this behavior will be tolerated to the degree that it was in the 1970s. However it is important to realize that any time a large amount of money and a large transient population get together there will likely be some drug and alcohol use and abuse.

Assumptions & Recommendations

The following examples of incorrect assumptions are followed by actual outcomes. There were a number of assumptions made when trying to predict impacts of the trans-Alaska pipeline that turned out to be inaccurate and misleading. The wrong assumptions paraphrased below are from “*What Happened to Fairbanks?*” by Mim Dixon.

- *Rules and regulations concerning camp residency and other restraints will not keep people from bringing their families with them to Alaska:* in fact many people did not bring their families, many fewer than had been anticipated.
- *Family immigration will occur when people are more familiar with the area:* it does not appear that after familiarizing themselves with the area and community very many workers sent for their families.
- *Families of workers between miles 0 and 602 will be in Fairbanks; families beyond 602 will be in Anchorage and Valdez. – workers’ habits and the frequency of their visits for goods and services will be directly affected by the distance from camp to town:* as it turned out, those in camps farther away from Fairbanks were just as eager to get into town on their time off as those located closer to town.
- *People will travel the same amount regardless of the means of transportation, the direct correlation is between distance and frequency of visits:* people traveled more by road, if they had to fly they were less likely to go.
- *Fairbanks will receive major impacts of those on short-term leave, Fairbanks will lose out to Anchorage and the lower 48 in terms of impacts during longer furloughs:* in fact many people on longer furloughs stayed in the Fairbanks area.

When planners were trying to predict the behavior of the pipeline workforce they failed to look at like workforces. Instead projections were made based on industries with older, more settled populations who are far more likely to be averse to the idea of being away from family and friends.

Ms. Dixon’s book includes some examples of types of stipulations to consider as conditions for construction permits. The stipulations require industry to provide the following (taken from Pg 295-296):

- **Housing Stipulations** regarding the percentage of housing which industry is to supply to its employees and the disposition of that housing after the construction period has terminated may help to avert a housing shortage and give the local community greater certainty about the future housing market.
- **Highway Repairs:** Industry could be required to reimburse state and local governments for the cost of repairing roads and highways that experience inordinate deterioration due to industry traffic.
- **Infrastructure Cost Sharing:** Industry could be required to bear some of the costs of expanding the infrastructure to meet its additional demands for communications, electricity, water, etc.
- **Employment Regulations:** Stipulations with regard to employment of minorities, women and local residents, as well as forbidding discrimination, were included in the trans-Alaska oil pipeline right-of-way agreements.

- **Industrial Alcoholism:** Industrial alcoholism programs associated with massive construction projects may help improve safety records, as well as avoiding putting the responsibility for these problems on the local community.
- **Employee Child Care:** A day care program for children of employees could attract more female employees, relieve stress on community resources, and minimize disruptions to children and families.
- **Car-pooling:** Industry initiated car-pooling or other transportation programs may reduce traffic congestion and air pollution.
- **Use of Local Volunteer Organizations:** Industry should be discouraged from using local volunteer organizations. When the services of these organizations are used, they should be compensated through donations of money or other types of contributions. (i.e. no pipeline workers going to get free first aid certification provided by Red Cross)
- **Information Sharing:** A stipulation forcing industry to gather and disclose information would assist in averting, ameliorating, or coping with social impacts. This could include information about the characteristics of the labor force, expenditure patterns in the local community, and industry plans and requirements with affect the local community.

As a result of the lack of preparation on the part of the community there were a number of major negative impacts along with the obvious benefits associated with the dramatic increase in economic activity. Due to the dramatic increase in population and money flowing through the community, there were few if any facets of life in Fairbanks that were not affected or impacted during the pipeline construction period. Impacted areas included housing, utilities, roads, police, consumer goods, health care and recreation.

It is important to remember that prior to the pipeline Fairbanks was a small community that had failed to invest in adequate infrastructure to support itself, let alone a project with the magnitude of the Trans-Alaska Pipeline.