

ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILES 86 / 2

455 SCOMM13: JOINT COMM. ON GAS PIPELINE IMPACT 1974-76

SCOMM 13: JOINT COMMITTEE ON GAS PIPELINE IMPACT, 1974-76
LIST OF FILES (PAGE 1)

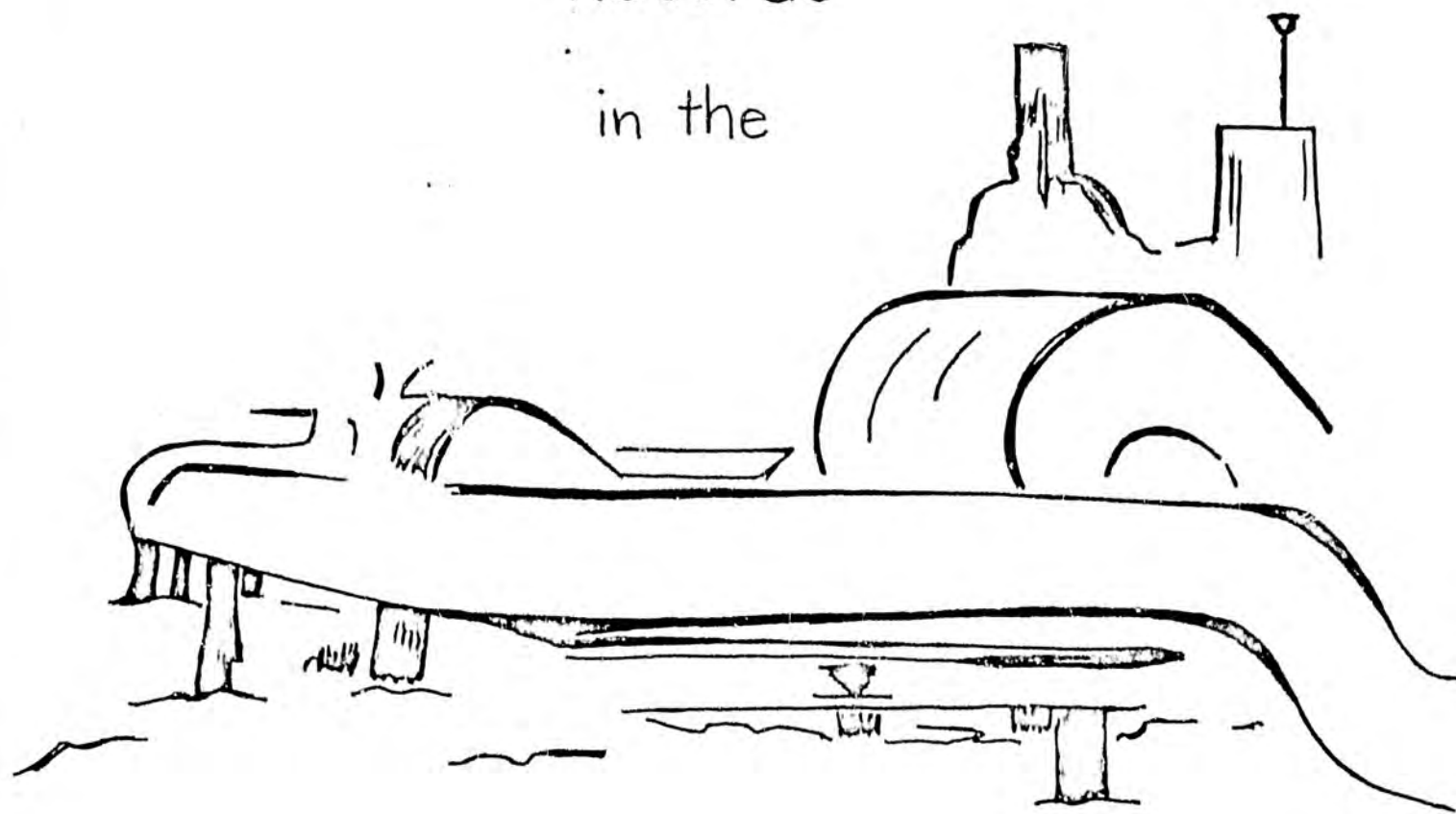
1. INVENTORY OF COMMITTEE RECORDS IN ALASKA
STATE LIBRARY
2. REPORTS
3. MEETINGS AND HEARINGS 1975
4. U.S. HOUSE HEARINGS. SUBCOMMITTEE ON PUBLIC
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5. RUSH MOODY REPORT AND LETTER
6. PIPELINE IMPACT COMMITTEE: MISCELLANEOUS
7. NEWSPAPER CLIPS, 1975
8. INTERVIEWS; MISCELLANEOUS
9. WALL STREET FINANCIAL REPORTS: WORTHEIM,
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10. LEGISLATION

SCOMM

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1972 Legislature
Energy & Crafts Committee Files

An Inventory of the
Joint Pipeline Impact Committee,
Alaska State Legislature
Records
in the



Alaska Historical Library

Juneau, 1972

Historical Scope Note

The Joint Pipeline Impact Committee was appointed March 3, 1971 following the request of Governor William A. Egan for a select legislative committee to study the pipeline in depth.

In the Senate Journal Supplement no. 6, March 3, 1971, the committee was appointed to work with existing state agencies and such other agencies the governor might request.

The committee reported to the Rules Committee chairman of both houses, and continued as an interim committee upon adjournment reporting to the Legislative Council.

Committee members are:

Senator Chancy Croft, Chairman
Senator Clifford Groh
Senator Willie Hensley
Senator Lowell Thomas, Jr.
Representative Mike Colletta
Representative Marty Farrell
Representative Andrew Warwick
Representative Edward Naughton

Because of the impact of the pipeline, the scope of the committee was broadly defined and asked to explore and report on the following:

1) The economic impact of the pipeline, prior to, during, and after construction, with particular attention to the effect on Alaska business, labor, government and our transportation and communication systems.

2) The environmental impact including Alaska's policy towards environmental protection and coordination with federal and local agencies. Particular emphasis should be given to the governmental structure designed to handle this area and any needed additional legislation.

3) Accruing state development including roads and highways, harbors and airfields.

4) Necessary governmental expansion including public facilities and governmental services such as schools, water and sewer systems, police protection, fish and game law enforcement, to mention a few.

5) State economic regulation of the pipeline generally and as it affects our royalty and severance tax income specifically, and control of potential abuses such as anti-trust restraint of trade and the inflationary aspects of construction.

6) Choices of action related to means of transporting oil and gas, their advantages and disadvantages.

7) The legal aspects of the proposals and their relation to other state problems and activities.

8) Alaska's natural resource policy including description of existing and potential resources, possible future development and their relationship to the proposed pipeline.

9) Such other areas as designated by the presiding officers.

RECORDS OF THE JOINT PIPELINE IMPACT COMMITTEE

4 drawer legal size vertical file.

Finding Aids:

Records include a "Guide to Pipeline Impact Committee Files; a Subject Index to the Administrative Records and Library Collection." This guide was prepared by the committee secretary.

A loose-leaf card file for authors of reports, legislative testimony, etc. is on top of vertical file cabinet.

I. Administrative records.

Contains correspondence, legislation, newspaper clippings, hearings and other material concerned with Committee activities.

II. Library Collection.

213 subject indexed publications. Includes a list of "Books and Other Publications" obtained by the Committee. (These have been added to the stacks of the State Library.)

Guide to Pipeline Impact Committee Files

<u>Subject</u>	<u>Filed Under</u>
General Correspondence	Alphabetically
Information and Data on Alyeska and its Member Companies	Alphabetically, A and Library
Consultants to Pipeline Committee	A, W, R and Library
Data on Environmental Impact Statement	E
Data on Environmental Impact Statement Hearings	E
Gas Pipelines (Proposed) for N.S. Gas	G, M, N and Library
Department of Interior	I and Library
Legislation	L
Cents Per Barrel	L
Strict Liability	L
Right-Of-Way Leasing Act	L
Regulatory Act	L
20 Mill Tax on Oil & Gas Transportation Equipment	L
Levy	L and Library
Department of Natural Resources	N and Library
Newspaper Clippings	N and L (Pipeline Regulations)
Pipeline Hearings on Pending Pipeline Legislation	P and Library
Pipeline Hearings/Meetings prior to Session	P and Library
Pipeline Ownership	P and Library
Pipeline Legislation	L and Library
Resident Hire Legislation	R and Library
Trans-Alaska Pipeline	A and Library
- Tapes of Pipeline Hearings & Meetings	Library

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*Subject

ALASKA,

Business
 Cost of Living,
 Urban
 Economic Base Studies
 Economic Development
 Education
 Employment (TAPS)
 Facilities and Physical Features
 Highway Construction
 Housing
 Insurance
 Land Claims
 Leasing Policy
 Local Hire (TAPS)
 Manpower Outlook,
 Methodology & Systems Document
 Mineral Policy
 Oil and the Environment
 Population
 Population and Workforce (Race)
 Revenues
 Revenue Projections,
 Oil and Gas
 Statistical Data
 Taxes,
 Property
 Timber Resources

Tourism

Trans-Alaska Pipeline, Impact on

ALASKA-JAPAN TRADE

ARCHEOLOGY,

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BIBLIOGRAPHIES,

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 Oil Pollution

Pipelines

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CANADA,

Alberta

Northwest Territories

Oil and Gas Exploration

Oil and Gas Pipelines

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 Alaska

Manufactures

Population,
 Alaska

Population and Housing

Population & Workforce (Race)

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COAL GASIFICATION

COASTAL ZONE MANAGEMENT

COST OF LIVING - Alaska

Urban

ECONOMIC DEVELOPMENT - Alaska

ECOSYSTEMS,

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Arctic

EDUCATION - Alaska

EMPLOYMENT - Alaska (TAPS)

ENERGY POLICY,

Administration

FIRE SUPPRESSION

GEOLOGY,

North Slope

GULF OF ALASKA

HIGHWAY CONSTRUCTION - Alaska

HOUSING - Alaska

INSURANCE - Alaska

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JOB TRAINING

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LEASING POLICY - Alaska

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Methodology & Systems Document

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Liquefied

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Definition of

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Valuation of Alaskan Crude

OLD AGE ASSISTANCE

PERMAFROST

PIPELINE CONSTRUCTION

PIPELINE IMPACT COMMITTEE,

Testimony

PIPELINES,

Alaska State Policy on

Alternate Routes for North Slope Oil

Bibliographies

Gas,
Financial and Operating Statistics

Gas (Proposed)

Joint Venture

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Operating Statistics

Oil,
Operating Statistics

Public Ownership of

Regulation of

Trans-Alaska Pipeline

POLLUTION,

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Cleanup Technology
Cook Inlet
Kodiak
Oil Terminals and Refineries

Oil (cont'd)
Prince William Sound
Tankers

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PROFIT PARTICIPATION

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PUBLIC WELFARE,

Old Age Assistance

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Regulations,
State and Federal

REGIONAL PLANNING

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REVENUE PROJECTIONS - Alaska

Oil and Gas

SHIP BUILDING ASSISTANCE

SHIPPING

STANDARD INDUSTRIAL CLASSIFICATION STATISTICS

TAXES - Alaska

Property

TIMBER - Alaska

TOURISM - Alaska

TRADE - Alaska

TRANS-ALASKA PIPELINE,

Ecological Studies

Employment & Local Hire

TRANSPORTATION,

Oil

Tank Ships

TREATIES

TUNDRA

TUNDRA BIOME

WELDING

WOLF

WORKFORCE ~ Alaska

BOOKS AND OTHER PUBLICATIONS

Alaska Natives and the Land, Federal Field Committee for Development Planning in Alaska

Alaskan Oil (Costs & Supply). M. A. Adelman, Editor

Alaska Pipeline Report, Alaska's Economy, Oil and Gas Industry Development, and the Economic Impact of Building and Operating the Trans-Alaska Pipeline, Arlon Tussing, George W. Rogers & Victor Fischer

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*American Pipe Lines, Their Industrial Structure, Economic Status and Legal Implications, George S. Wolbert, Jr.

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Change in Alaska, People, Petroleum, and Politics, Edited by George W. Rogers

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Map Atlas (Pipeline and Roadway, Livengood to Prudhoe Bay), Alyeska Pipeline Service Company

Middle East Oil; A Study in Political and Economic Controversy, George W. Stocking

*(A) National Policy for the Oil Industry, Eugene V. Rostow

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Our Industry - Petroleum, British Petroleum

Petroleum Accounting Practices, Stanley P. Porter

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Petroleum Facts and Figures, 1971 Edition, American Petroleum Institute

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Pipeline, William Kilbourn

(The) Political Economy of International Oil and the Underdeveloped Countries, Michael Tanzer

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(Hearings on) Proposed Pipeline Legislation, March 1972, State of Alaska

Publications

ISEGR Review

Oil and Gas Journals

Oil Week

Petroleum Press Service

*Regulation of Pipe Lines as Common Carriers, W. Beard

SCOMM

#13:2

MEMORANDUM

December 10, 1973

TO: Senator Rettig
Senator K. Miller
Senator Groh
Senator Meland
Senator T. Miller
Representative McVeigh
Representative Warwick
Representative Fink

FROM: George Sharrock *GS*

SUBJECT: Preliminary Pipeline Impact Report

Enclosed is part of the first draft of the preliminary report to the Committee on the pipeline impact. This portion includes only the report and analysis of impact problems and costs which have been presented by several of the largest communities and school districts. Reports on others will be presented at the Seattle meeting, December 17th, and the summary and recommendations will be presented.

Also included are part of the Appendices that will accompany the preliminary report.

It has been difficult to get documented information from some communities, and we are yet receiving late information. Therefore, some of the statistical and other data are subject to change in the final draft to be prepared after the Seattle meeting.

GS/ta

Encls.

P.S. Be sure you bring your copy of this report to Seattle.

cc: ✓ Russ Mulder, LAA

S. Comm 13:2

Legislative Reference Library
Legislative Affairs Agency
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Juneau, Alaska 99811

Preliminary Report
On
ECONOMIC and SOCIOLOGICAL
IMPACT
of
TRANS-ALASKA PIPELINE CONSTRUCTION

By
Special Legislative
Petroleum Impact Committee

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SUMMARY

Magnitude of Pipeline Construction Job.

It has been said that the construction of the Trans-Alaska Pipeline is the largest job undertaken by private investors up to this time. Alyeska Pipeline Service Company has made more than one projection of the numbers of men they expect will be working on the line.

The peak employment figure has run from about 7,500 to 13,000. The latest figure is 12,000 to 13,000. If Phase I and Phase II construction are merged, so that upon completion of these phases through-put can begin immediately at the rate of 1,200,000 barrels of oil per day instead of 600,000, conceivably the workforce could be larger.

The increase in the number of workers, and the increased scope of the work, could therefore produce larger waves on the economy and everyday activities in much of Southcentral, Central and Northern Alaska.

Effects On Alaska.

Although much of the money spent for the pipeline construction will be spent for materials and supplies needed for construction, and its' transportation to Alaska, very large amounts will be spent in Alaska for labor and transportation in Alaska.

It is expected that a substantial portion of the manpower needed for construction will be imported from the other states; it can be expected that nearly all of the available local workers will be absorbed by the expanded economic activities, either directly on pipeline related jobs or others created indirectly.

Thousands of others will come to Alaska expecting to be hired for pipeline work. Most of those qualified will probably find work either on pipeline construction, or of another kind. However, many will not find

work and thereby create one of the undesirable effects of a large project such as this.

Although the announced Alyeska policy of prohibiting pipeline construction workers from bringing families to Alaska may discourage the majority from doing so, most people believe that strict enforcement of such a restriction will not be possible. Therefore, we should expect that some percentage of workers will bring families. These people, in addition to the families of thousands of other workers working in the service and trade industries, and new local and State government workers resulting from the increased economic activity, will place a large demand upon the housing market, schools, service and trade industry and the many government type services.

In general, the impact of the pipeline construction on the individual communities will vary in nature and extent, depending upon the proximity of the community to the actual construction work, and the relative importance of the community to the normal economic activities of the State.

Construction contractors policies regarding off-time of workers and where they will be transported for recreation will have a large bearing on the nature and degree of impact on certain communities. These off-time practices will determine the level of certain government services, including police manpower, in affected communities.

The Special Petroleum Impact Committee has expressed as its' concern the economic and social impact of pipeline construction, and its' after effects, on the communities of Alaska. The Committee wants to determine what the State Government can, or should, do to help meet the expected impact, and how aid could be administered.

IMPACT COSTS (\$000)

[illegible]

IMPACT COSTS (\$000)

[illegible]

IMPACT COSTS (\$000)

[illegible]

IMPACT COSTS (\$000)

[illegible]

IMPACT COSTS (\$000)

[illegible]

IMPACT COSTS (\$000)

CATEGORY CITY	OPERATIONS						CAPITAL IMPROVEMENTS					
	Requests			Recommendations			Requests			Recommendations		
	1974	1975	1976	1974	1975	1976	1974	1975	1976	1974	1975	1976
PUBLIC BUILDINGS												
City of Anchorage							5,000	4,000		1,800		
Valdez							150			150		
Totals							5,150	4,000		1,950		
ADMINISTRATION												
City of Anchorage	121	129	109	121	129	109						
North Pole				30	32	34				4	2	3
Valdez				276	302	344						
Cordova	200	200	200	200	200	200						
Totals	321	329	309	627	663	687				4	2	3
PARKS AND RECREATION												
Anchorage Borough	179	300	329	179	300	329	3,720			1,200	1,200	1,200
City of Anchorage	217	280	286	217	286	286						
Totals	396	580	615	396	586	615	3,720			1,200	1,200	1,200

IMPACT COSTS (\$000)

CATEGORY & CITY	OPERATIONS						CAPITAL IMPROVEMENTS					
	Requests			Recommendations			Requests			Recommendations		
	1974	1975	1976	1974	1975	1976	1974	1975	1976	1974	1975	1976
SCHOOLS												
Anchorage	1,745	3,473	4,128	1,514	2,684	3,144						
Fairbanks				197	647	832	6,100			6,100		
Valdez	546			546	546	546	570			600		
Delta Junction							1,500			1,500		
Totals	2,488	4,660	5,506	2,257	3,877	4,522	8,170			8,200		
LIBRARY												
Anchorage Borough	56	34	10	56	34	10						
City of Anchorage	56	34	10	56	34	10						
Totals	112	68	20	112	68	20						
HEALTH SERVICES												
Anchorage Borough	950	1,555	1,864	950	1,555	1,864	75			75		

IMPACT COSTS (\$000)

CATEGORY & CITY	OPERATIONS						CAPITAL IMPROVEMENTS					
	Requests			Recommendations			Requests			Recommendations		
	1974	1975	1976	1974	1975	1976	1974	1975	1976	1974	1975	1976
NORTH STAR BOROUGH												
Library	33	95	115	27	64	58	1,000	10	10	1,000	10	10
Parks and Recreation	20	73	89	21	50	45	160	150	150	160	150	150
Environmental Services	47	133	162	38	91	81	100			100		
Dog Coltron	13	33	46	11	26	23	25			25		
Administration	213	612	744	175	415	373	60			60		
Totals	332	951	1,156	272	640	580	1,345	160	160	1,345	160	160
Less: Impact Generated Revenues				356,400	522,200	319,130						
Net Recommended Impact				-0-	122,762	261,530						

Community Totals

IMPACT COSTS (\$000)

CATEGORY & CITY	OPERATIONS						CAPITAL IMPROVEMENTS					
	Requests			Recommendations			Requests			Recommendations		
	1974	1975	1976	1974	1975	1976	1974	1975	1976	1974	1975	1976
ANCHORAGE BOROUGH	1,432	2,306	2,564	1,432	2,306	2,564	3,959	1,192	1,587	1,439	2,392	2,401
CITY OF ANCHORAGE	1,806	2,066	2,286	1,563	1,936	2,157	13,051	8,451		5,550		
CITY OF FAIRBANKS	250	250	250	250	250	250	12,376			4,518		
FAIRBANKS SCHOOLS				197	647	832	6,100			6,100		
ANCHORAGE SCHOOLS	1,745	3,473	4,128	1,514	2,684	3,144						
VALDEZ SCHOOLS	546			546	546	546	570			600		
GLENDALEN	69	69	69	15	15	15	12			12		
NORTH POLE	276	341	395	253	281	287	839	131	43	830	103	14
VALDEZ	880	1,063	1,118	880	1,063	1,118	3,645			2,145	600	
HAINES							13			13		
CORDOVA	200	200	200	200	200	200						
FAIRBANKS BOROUGH	332	951	1,157	-0-	123	262	1,345	160	160	1,345	160	160
TOTALS	7,536	11,719	12,167	6,850	10,015	11,375	41,910	9,934	1,790	22,552	3,255	2,575

NET IMPACT COSTS* (\$000)

Anchorage Borough

<u>Year</u>	<u>O&M** Impact</u>	<u>CIP*** Impact</u>	<u>Impact Taxes</u>	<u>Impact Sh. Rev.</u>	<u>Impact Other Rev.</u>	<u>O&M Net Need</u>
1974	1,432	1,439	-	75	-	1,357
1975	2,306	2,392	524	323	-	1,459
1976	2,564	2,401	1,722	362	-	480

City of Anchorage

1974	1,563	5,550	-	74	55	1,434
1975	1,936	-	525	190	234	987
1976	2,157	-	978	206	320	653

City of Fairbanks

1974	250	4,518	-	60	255	-
1975	250	-	150	80	340	-
1976	250	-	350	80	340	-

City of Valdez

1974	880	2,145	43	9	95	733
1975	1,063	600	253	17	160	633
1976	1,118	-	964	24	209	-

North Pole

1974	253	830	-	14	8	231
1975	281	103	16	21	12	232
1976	287	14	24	21	12	230

Anchorage Schools

1974	1,514	-	-	-	-	1,514
1975	2,684	-	689	-	-	1,995
1976	3,144	-	2,275	-	-	869

* Revenues for other entities were too nebulous to make projections.

** Operations and maintenance.

*** Capital improvement program.

Possible Approaches To Impact Legislation.

The impact of the oil pipeline construction will be felt in varying degree by everyone in Alaska. The variations will be substantial between the areas of the State far removed from the pipeline, the population centers within commuting distance, and the settlements along the pipeline itself.

* The impact will fall on organized local governments; i.e. Anchorage, Fairbanks, Delta Junction, Valdez; on people in unincorporated settlements like Glennallen and Copper Center; on persons scattered along highways, and on Alaska natives organized as village corporations and regional corporations. In another sense the land itself will be subject to use pressure in the areas where it can be reached by people, primarily along the highways near the pipeline corridor.

{ The needs that will be generated in the affected cities and boroughs can be divided into capital needs and operational, or service needs.

Operational aid could be determined by estimating the additional services required for the added population less the added revenue generated by the new people. Such aid might be made available during the period of accelerated growth only, and not be necessary after normal growth resumed, the population stabilized, or actually decreased.

Aid for capital expenditures might be justified if, in order to meet the requirements of accelerated growth, expenditures were required over and beyond those required for normal growth, especially if such expenditures had the effect of significantly raising local per capita taxes. This might happen if revenues generated by the new population were either insufficient in amount or lagged the expenditures by several years. It could

happen if expenditures were required for only a temporary increase in population, and subsequently an excessive debt service remained for a reduced population.

A city being deluged with several thousand new residents will find it must not only expand water and power capacity, but also add new police officers, building inspectors, and other services.

The State could deliver money, service, and loan assistance by several methods:

1. Grants-in-aid.
2. Reinforcement of existing shared revenue allocations.
3. Shared revenue designated for impacted communities.
4. State loan fund for private utility expansion.
5. State loan fund for housing (and mobile homes).
6. Land leasing program.
7. Expanded State agency budgets for impacted areas.
8. State-sponsored training programs to assist Alaskan hire.

Pipeline impact legislation can be designed to deliver assistance to the affected groups by:

1. Grants-in-aid to boroughs for capital improvements.
2. Grants-in-aid to cities for capital improvements.
3. Shared revenue allocations to boroughs.
4. Shared revenue allocations to cities.
5. Shared revenue allocations to unincorporated communities.
6. Special impact appropriations to State agencies.
7. Special loan fund for utility expansion.
8. Special loan fund for housing mortgages (and mobile home loans).

9. Special fund to guarantee bond issues for cities and boroughs.

10. Legislative authorization to issue short-term leases for State selected and University owned land.

Because of the apparent difference in kinds and amounts of per capita needs in the impacted communities, a completely general formula may not be possible if the total outlay is to be kept within reason. It seems quite evident that some communities have greater needs than others. In some cases, perhaps through no fault of their own, they have not been able, on their own, to provide for the kind of growth anticipated. This may require some discrimination on the part of the Legislature if these cities are to meet the demands placed on them by the pipeline construction, and not make across-the-board per capita grants to all communities. If there are genuine limitations on the State's funds for the next four years, a general distribution might lead to the elimination of some aid needed in the more heavily impacted communities.

Assumptions.

The following assumptions are made in compiling this report, and in making the conclusions and recommendations which follow.

1. The Trans-Alaska Pipeline will be built, starting in early 1974 and be virtually completed late in 1976 or early 1977.

2. The numbers of workers on the pipeline and working on the North Slope will be approximately as projected by the principals involved.

3. Employment patterns and population/employment ratios will be substantially as they were in earlier boom periods.

4. Any Federal assistance programs to aid communities in public improvements will not be forthcoming in time to meet the immediate needs.

5. State government agencies will respond to service needs which

will be required in the communities and organized boroughs.

6. Pipeline workers within the boundaries of a local government are not considered as part of the local population, although the local government may include them as population for State revenue sharing purposes.

Conclusions.

The statements and testimony of the communities, and discussion with many individuals knowledgeable in their fields, have led to the following conclusions relative to the impact of pipeline construction.

They are drawn with the aim of placing in perspective the possible courses of action which may be open to the Committee and which are discussed later in this Summary.

1. The communities found it very difficult, in most cases, to determine what effects pipeline construction would have on their communities. Most did not have the staff to do research or make employment and population projections. They had very little information on the specific plans for the pipeline at a date early enough to be helpful.

2. The early impact will be that due to an influx of people, and the social and health problems created: law enforcement, recreation, unemployment, drugs, alcohol, and welfare problems. These matters will increase the operational costs of local governments with little potential revenues created. These problems will be associated with a transient population and with pipeline workers looking for recreation.

3. The more permanent kinds of population will place demands on schools, public facilities, housing, utilities and other government services which in some communities will be difficult to meet. Although revenues to the local government will rise, there will be a lag, especially

with property tax revenues. Some categories of State shared revenues will rise in proportion to population increases, and where sales taxes are in effect, the increase should be felt almost at once.

4. The effect of the increased population will have the effect of accelerating the need of many public improvements. This acceleration means the need of financing, in some cases quite substantial, at a date earlier than would normally have been necessary. In some cases this presents the community with a problem of meeting higher debt service payments, and a question in the minds of community leaders as to whether substantial tax increases will be required. Without some assistance, this may be the case in certain communities.

5. Population increases will occur in most cities in Alaska. The impact will be in proportion to the increase. However, the relative severity of the impact to any community will be more related to the percentage of population increase rather than numbers.

6. Some government leaders are concerned that public improvements made to meet demands during construction may lead to over-building and the debt be a burden on the community after the construction is finished. In nearly every case my conclusion is that the cities will not decrease substantially in population after construction is completed. Fairbanks, and especially Valdez will have a period of adjustment. Valdez should not build for the peak 1974-75 population.

7. Even with a lag in revenue receipts, indications are that by 1977 most community revenues will have reflected the population increase and further impact aid, per se, should not be required.

8. The agencies of the State Government will have an important

role in meeting many of the problems associated with the pipeline construction, both in the organized communities and in the unincorporated communities, and in the unorganized borough. The effectiveness of these agencies will depend upon the money available to them and the direction given by the Administration. We have been unable to determine the administrative plans to meet specific impact problems. The Committee or the Legislature will need to review these plans to determine their adequacy.

9. Some of the communities find themselves deficient in certain facilities or utilities and include funding of these deficiencies as a need to meet the impact. Even though there may be a deficiency, the community will find it necessary to arrange financing if it is to meet the demands of a large number of people. Therefore, the total demand for financing must be considered along with the amount needed only to meet the impact.

10. Some communities desire to provide at this time improvements which are in excess of the need for the impact alone. In these cases, the impact portion should be isolated, and the additional funds needed considered separately (see Appendices C & D).

11. There are capital improvement projects being accelerated because of pipeline construction, but which will be needed anyway within a reasonable period of time under normal growth conditions. Aid made available should be designed to help the community in short-range, interim period only, in meeting debt service, interest payments or other aid aimed to ease the burden of debt payments before compensating revenues are generated.

Communities which are required to make capital improvements many

years in advance of normal requirements may need a higher degree of immediate help, but not beyond the point when local revenues are created which will support debt service.

12. Inflationary pressures will be a factor in operational costs of local government. It is believed that this factor need not be considered except for the first year of the impact. (See Appendices C & D.)

13. State income taxes will increase substantially during the pipeline construction years (See Appendix F).

RECOMMENDATIONS

It has been suggested by several city officials that increases in State Revenue Sharing would provide aid needed by the local governments. This would be a simple solution, from the standpoint of ease of administration, assuming that a general increase in the various categorical formulae used in revenue sharing would provide the amounts of aid deemed necessary in the individual cases.

This method has been tested against the net needs of the five communities requesting the largest amounts of aid. Such an approach does not appear to be the answer if a general formula is to apply. The per capita needs for operational aid range from about \$15 per capita in the larger communities to almost \$250 per capita in the smaller ones.

Categorical grants could be made to the communities in response to formal applications. This could lead to many problems and would not provide a general solution covering all communities.

The first recommendation will be a tentative attempt to formalize grants for operational impact aid.

✓ Recommendation No. 1

As stated in Conclusions, it is believed the percentage increase in population is more significant to the community than the actual numbers. Therefore, a formula can be devised which would provide revenue sharing grant increases that will generally meet community needs and apply to all communities affected by population increases.

Assume that a 12% increase in population would warrant a \$20/capita grant, then ^a150% population increase would require a \$250 per capita grant. In order to fit the situation of the boroughs with service districts, the

grant should be broken down to percentage about as follows: 50% for general government, 17% police, 17% fire, and 16% roads.

✓ Recommendation No. 2

The revenue sharing grants for impact operational costs should be requested by the cities by formal application, with supporting evidence of need. } (c)

? Recommendation No. 3

The evidence is that generally the per capita impact costs drop in 1975 and again in 1976. The program should be reviewed for 1975 applications to determine the need, and if it exists, to establish a new per capita grant formula. } review (d)?

? Recommendation No. 4

Caution should be used in making substantial allowance for inflation because adjustments for inflation have been made in the past by passing on the costs to the beneficiaries. } ?

✓ Recommendation No. 5

Aid for capital improvement programs undertaken on an accelerated basis by the community, and which under normal growth conditions would be needed by 1976, should be in the form of a State loan or bond guarantee program. This program would be available to all cities, and would enable the smaller communities to obtain debt financing, which now may not be able to sell bonds, or if they can, a guarantee program should provide lower interest rates.

✓ Recommendation No. 6

VanDyke In cases where capital improvements will be needed now to meet the pipeline impact, but under normal conditions wouldn't be needed for over

five years, the State should set up a program to pay a portion of the debt service, or interest, for a period of time, not over three years.

✓ Recommendation No. 7

In those cases where debt limitation on G.O. bonds makes it impossible to sell bonds for a capital improvement necessary to meet the impact needs, the State should consider a grant program, if the need is very urgent. }

✓ Recommendation No. 8

In those cases where funds are urgently needed by a municipal utility and the earnings potential is such that the required debt coverage cannot be maintained, the State should set up a loan program, at reasonable interest rate, to cover the period until bonds can either be sold or utility rates increased to improve the earnings. If the State already has a grant program for facilities or utilities (water), grants under this program should be considered for impact aid.

? Recommendation No. 9 ? 10/23

Legislation similar to SB 235 should make available a loan program for municipal and cooperative electric and utility systems to use when other financial sources are unavailable.

✓ Recommendation No. 10

1970
legislation
The State needs a stronger program to make loans, or purchase mortgages for housing, to be used if normal financing sources are not available.

? Recommendation No. 11

Much of the impact aid must be administered through the services of the State departments. They will need funds to provide the health services and health nurses; state-operated schools; police protection; highway

maintenance in the impacted areas; airports and airstrip construction and maintenance; training programs; environmental health law enforcement; protection of fish and game along pipeline route; expansion of motor vehicle division; review of voter registration capability; review adequacy of court system in impacted communities, and the prosecution of crimes.

Without the advise of the various departments it was not believed a valid assessment could be obtained of the needs in the State administrative departments, except to note the beliefs of many of the communities that many services needed to be expanded.

? Recommendation No. 12

Aid amounts to district and borough schools varies to a great extent. The per student amounts range from over \$450 to over \$900. Since the Foundation Program and the other State contribution programs are quite intricate, I would recommend each of the communities needing school operational needs be met again by a formula based upon percentage increase of the student body and a per student formula.

? Recommendation No. 13

Some school districts request funds for either new construction or for temporary classrooms. ^{Consideration} Encouragement should be given to resort to double-shifting until the population trend is fully established. Where there is a clear need for more classrooms, temporary quarters should be provided until, again, the growth pattern is clear.

Recommendation No. 14

Action be taken, either legislatively or administratively to protect fish and game along the pipeline route, with one aim being to preserve the resource as a means of subsistence living for those who need it.

? Recommendation No. 15

The road north of the Yukon River not be taken over by the State until completion of the pipeline, or if it is, it be closed to traffic.

✓ Recommendation No. 16

Encourage the postponement of non-essential construction projects until after the peak of construction of the pipeline.

✓ Recommendation No. 17

Make State royalty oil and gas available to communities along the pipeline, if such will lower fuel costs for power or other uses.

Recommendation No. 18

? Legislature give consideration to training and employing native people as auxiliary police in the villages.

Recommendation No. 19

? Consideration be given to extending Egan Avenue in Valdez and relocating the Ferry Terminal.

Recommendation No. 20

? That State pilots be required on tankers before entering the entrance waters of Valdez Arm.

? Recommendation No. 21

The Legislature authorize, if appropriate and necessary, the University of Alaska to lease U of A land for temporary housing at places where private land is not available.

COMMUNITY IMPACT ANALYSES

COMMUNITIES SURVEYED

Most of the communities contacted have indicated some form of impact caused by the pipeline construction. The form and extent of the impact is not always the same, however, it has been most often in the form of added operational costs and/or the need for accelerated capital expenditures. It has also been stated that part of the impact will be from inflated costs, shortage of competent labor, inadequate transportation, the social consequences of crime, and the feared degradation of a family-type community.

Despite problems, the majority favored the pipeline and the consequent development and benefits for Alaska. Most think the problems can be overcome with the State aid they hope to receive.

There is not complete agreement on the extent of the economic impact involved, nor how long the effects could be considered as an added burden to the local community. Some believe the accelerated growth will last during the pipeline construction years, and thereafter; if the increased population becomes permanent, increased local revenues will normalize the situation. Others believe the burden on the local government will continue for several years, and aid will be needed for longer periods.

Aid for operational costs can be justified by assuming that the needs for some public services will be greater than the revenues generated by the added population.

It is generally believed that the per capita revenue figure, as far as local government is concerned, will fall, at least in the period of pipeline construction.

It should be borne in mind that most of the agencies asked to submit statements did not have an abundant amount of time to prepare them. For these reasons, it has been found that some important factors may have been overlooked and others more heavily weighted than warranted, because of the lack of time needed to do the necessary study and preparation.

In Appendix A is a list of communities contacted and asked to submit a statement. Not all responded, so it is assumed, for the purposes of this report, that the local officials did not expect any significant impact, or did not have sufficient information to determine what it would be.

Many individuals were interviewed whose job or position was such that he could be expected to give valuable information on certain social or economic aspects of accelerated growth. Separate reports have been made on most of these interviews; and information gained has been incorporated in the following sections as contributing to information about community problems or in recommendations for their solution.

The following analyses made of the individual communities were based upon the best information available, and that could be obtained in the time permitted. The information was inadequate in many respects to make an intelligent review or analysis. However, attempts were made, where possible, to document or verify information given.

The statements submitted by the local governments have been analyzed with respect to relevance to pipeline construction, costs, validity of projections, comparison to normal growth needs, and other factors believed to be important in supporting the requested aid.

SECTION I

GREATER ANCHORAGE AREA BOROUGH

Description of Area.

The Greater Anchorage Area Borough is composed of the so-called Anchorage Bowl Area, between the Knik River, Knik Arm, Turnagain Arm and the Chugach Mountains, from the Knik River Bridge to and including Girdwood.

Population.

The Borough Area is roughly 160 square miles, exclusive of the State parks. The 1970 population, exclusive of those on the military bases, was roughly 104,000, and is estimated to be 124,200 in 1973.

There are several projections of the population growth with considerable variation.

TABLE I-1 (Less Military Bases)

<u>Year</u>	<u>MSNW*</u>	<u>Anchorage Borough</u>	<u>Impact Committee</u>
1973	118,314	-	124,200
1974	128,500	135,900	134,200
1975	141,416	150,800	150,040
1976	145,266	158,500	158,400

*Mathematical Sciences Northwest Study for Alyeska.

It will be noted that my projections are quite close to those made by the Borough. (For calculation of my methods, see Appendix B.)

Services.

Government services within the Borough are provided through several channels:

1. Special services by service areas and the City of Anchorage.

2. Borough-wide services such as schools and sewers, etc.
3. Contract services with the City for specific services in a specific area or Borough-wide outside the City.

Taxing.

This complicated system of delivering services makes a complicated taxing system and one difficult to estimate both impact costs and additional revenues created by the pipeline impact.

Three of the service areas outside of the City of Anchorage are being taxed at mill rates almost as high as the City's, and are receiving urban-type services. However, two of them are not providing their own police protection and rely on State Trooper service.

Debt.

The total debt of the Borough is as follows:

G.O. Bonds - Sewer Utility	\$ 30,395,000
G.O. Bonds - General	11,385,000
G.O. Bonds - Schools	95,931,000
Total Bonds	<u>137,711,000</u>
Long Term Contracts	6,255,278
Grand Total-----	<u>\$143,966,278</u>

**

This bonded debt is 7.17% of the total assessed valuation of the Borough (\$1,919,614,490).

Impact - General.

Although not many pipeline workers themselves will live in the Anchorage Area, a large percentage of the other jobs created by the economic boom will probably be located in Anchorage, if the past experience is repeated (see Appendix B on employment projections). Anchorage will continue to be a transportation hub, the financial center, and the

** This percentage applies only on property outside the City of Anchorage. (For debt picture of Anchorage, see Anchorage Section.)

administrative center for much of the oil and pipeline related activities. This means more people and all the facilities and services they will need.

Employment is expected to increase by a great amount, particularly during the three years of construction. Following past boom periods the population of the Anchorage Area did not drop drastically. The number of jobs here has continued to climb and no significant reduction is anticipated after the pipeline is completed, even if no other large project is started immediately.

Therefore, the impact, though significant, will be an acceleration of normal growth, and necessary expenditures for capital improvements will not likely create any over-building which might result in a burden following the construction period.

There will be additional local government operating costs over and above normal which will be a direct result of the influx of people. Not a little of these costs will be because there will be many unemployed and their families looking for work. There probably will be more temporary, seasonal workers (See Peak Populations in Appendix B).

Specific Impact.

Employment projections for the Anchorage Borough Area Are:

TABLE I-2 (Civilian Employment Only)
Annual Averages

<u>Year</u>	<u>MSNW</u>	<u>Impact Committee</u>
1973	50,636	55,700
1974	54,485	61,000
1975	59,946	68,200
1976	61,844	72,000

Note: See Employment Projections, Appendix B.

Housing.

Housing needs during the pipeline construction years are as follows, based upon Anchorage Borough housing estimates:

TABLE I-3

<u>Year</u>	<u>Borough Area</u>	<u>City</u>	<u>Total</u>
1974	2,000	2,000	4,000
1975	2,600	2,600	5,200
1976	1,352	1,248	<u>2,600</u> 11,800

It would be expected that some of the needed units will consist of mobile homes and trailers.

Presently there are an estimated 6,000 (Anchorage Borough estimate) mobile homes in the Borough. This represents about 13% of the 46,000 housing units estimated to be in the Borough. If the new housing was to be similarly proportioned, we would need 1,534 mobile homes. A survey of mobile home park owners indicated a maximum potential capacity during the next two years for mobile home spaces would be about 1,850. If the plans go through for the additional spaces, they should be adequate, unless there is a greater demand than in the past.

The mobile home park owners do express concern for a number of problems associated with mobile home parks and with getting mobile homes for the spaces.

1. Land is difficult to get.
2. Borough approval is difficult to obtain and can be approved only by exception. Time for approval is almost one year.
3. Zoning laws require a density lower than R-2, and close to R-1.
4. Alaska has the toughest construction code regulations in the Nation and it amounts to a performance code.

5. Most manufacturers are not anxious to comply with the Alaska code because of the small market and the special requirements. Only 17 manufacturers out of some 3,400 have seen fit to comply, or whose product has been approved by the State. A big problem of construction code approval has to do with the requirement that State inspections must be made during construction. Whereas most mobile homes are made in the other States, this has not been practical.

6. Because of a feared transportation shortage, mobile home dealers are concerned with getting new mobile homes to Alaska.

7. Financing of mobile homes is difficult to get through most present means, even harder than that for conventional homes.

The Anchorage Homebuilders Association is more optimistic about the ability of homebuilders to meet the conventional housing need. There are about 250 homebuilding contractors in the area, of which 50 are capable of building 100 homes each season. They do not expect a labor shortage, but are concerned with the transportation of materials to Alaska. They are also worried about land with satisfactory soil conditions for home building and sewer and water connections, as the subdivisions are farther away from the present urban areas. Eagle River and Palmer will become more attractive for subdividers.

One big problem homebuilders face is that of obtaining interim financing, especially at feasible rates.

Other facilities needed for new housing will now be considered.

Sewers.

Sewer services are a Borough-wide function and the tax is Borough wide. The Borough estimates additional sewer-line costs due to the pipeline impact as follows. The capital improvements are required because of trunkline construction one year ahead of normal need. The Borough Impact Statement says operational costs will be balanced out by the additional revenues created. Therefore, these costs are not shown here.

TABLE I-4

<u>Fiscal Year</u>	<u>Increased O & M Costs</u>	<u>Capital Improvements</u>
1974-75	\$7,035	-
1975-76	15,925	\$400,500
1976-77	7,035	400,500

Water.

The City of Anchorage provides some water service to areas outside the City. The impact on this system will be discussed under the City impact section. Central Alaska Utilities offers services in other Borough areas.

Central Alaska Utilities is financially capable, they say, to provide water service to new areas and subdivisions. Their plan of operation calls for new wells to be drilled where water is needed. Good water must be available at a nearby site in the necessary quantities.

A joint investigation between the City and Central Alaska Utilities as to future source of raw water is now under way. They are again looking at damming the headwaters of Ship Creek and if this proves unfeasible to determine if wells in the Eagle River Valley may be a source.

All the answers are not yet available, but more information should be available before the Legislature convenes.

The Borough does not yet have water powers, but it may be necessary to consider such a move if adequate water supply is to be assured the expanding urban areas.

Building Safety.

An increasing pace of building construction in the Borough will mean more building inspectors. This is a function of the Borough and the costs

are included in the Borough General Fund appropriations. The function will be important to insure compliance with building codes and zoning laws. Following is the Borough estimate of operational needs caused by the accelerated building, mostly personnel costs. The additional costs will be largely borne by an increase in license and permit fees, so only the excess is shown here.

TABLE I-5

Building Inspection Impact Cost

<u>Year</u>	<u>Excess Cost</u>
1974	22,630
1975	4,070

Roads and Drainage.

Only those road and drainage projects outside the City will be considered here. The expenditures will be for operation and maintenance and for capital improvements. An additional Civil Engineer to handle subdivision review and street design is included in their impact operational costs. The Borough cost figures are based on a 12% increase in roads above the normal need, and increased maintenance because of increased use. Although the Borough shows increased costs extending into 1979, for the purposes of this report those shown for the rapid population build-up are shown here. (See Appendix B for rationale.)

TABLE I-6

Roads and Drainage Pipeline Impact Costs

<u>Year</u>	<u>Capital Improvements***</u>	<u>Operations & Maintenance</u>
1974	150,000	-0-
1975	755,000	22,500
1976	1,137,500	67,000

*** Borough Public Works could not identify specific areas, but said the pattern of housing development would determine.

The roads and drainage function is performed only in those service areas taxing themselves for this purpose. Increased revenues would accrue to these areas because of increased property assessments (providing millage rates remained the same).

Special Services.

The special services category, as defined by the Borough Impact Statement, includes such things as placement and repair of signs, park maintenance, maintenance of buildings and grounds, and the administration of the public works program. Only those costs outside the City of Anchorage are included in this report section and only those through the construction years.

TABLE I-7

Special Services Impact Costs

<u>Year</u>	<u>Operational Costs</u>
1974	13,625
1975	35,530
1976	47,660

Fire Protection.

Fire protection is not a Borough/^{wide}function, however, service areas tax themselves for this purpose. According to the Borough financial report for 1973, six service areas do have fire protection services. Three are a volunteer type department, whereas the larger areas, Spenard, Muldoon, and Sand Lake, have a paid fire department, merged and it operates under one Chief. Stations are located so that coverage of the three contiguous areas is possible.

Costs are covered by local, service area taxes and State shared revenues. The Borough, in its' Impact Statement, treats fire protection in one category only, and not as six departments. Limited protection is provided to non tax-supported areas on a fee basis. The projection of fire-fighting needs is based on the assumption that operational costs for fire protection are increasing at the rate of 19% per year, based upon experience of the past five years. It seems reasonable to assume that part of the increased costs of the past are probably due to population increases.

Following is an analysis of the Borough fire protection impact costs:

TABLE J-8

Anchorage Borough Fire Protection Impact
Operational Costs (\$000)

<u>Year</u>	<u>Outside City Population****</u>	<u>Projected Total Costs</u>	<u>Increase From Previous Year</u>	<u>Impact Costs</u>
1973	63,800	1,456	234	-0-
1974	70,500	1,735	279	134
1975	78,000	2,060	325	228
1976	82,000	2,460	400	240

**** Population projections based upon split between City and outside City population as predicted in Borough Impact Statement.

Police.

Police protection is not a function of the Anchorage Borough, however, the government is concerned with the adequacy of protection. Within the Borough the City provides police within the City limits, and on a contract basis with the Spenard Service District through the Borough administration. Other areas in the Borough are under the jurisdiction of the State Troopers.

The Borough government believes the Troopers are not manned to handle present problems and will be extremely understaffed to meet the problems of pipeline impact. They present three alternatives to meet the situation:

1. State Trooper strength be expanded to provide adequate protection.
2. State Troopers increase their strength to meet the impact the first year. In the interim, the Borough would attempt to obtain area wide police powers through a vote of the people.
3. The Borough assume area-wide police powers by State legislative action during the next session.

With the large influx of new workers and residents, many temporary workers, and hundreds looking for work, there is bound to be many law enforcement problems. In addition, this kind of a boom attracts those engaged in illegal activities which itself requires a higher level of enforcement. Therefore, the contention that more police officers are needed directly because of the pipeline construction can be supported.

The U.S. Chamber of Commerce recommends about 2.5 police officers per 1,000 people in a metropolitan area. The City of Anchorage (including Spenard) had until recently about 1.8 officers per 1,000 population. New officers are being added which will increase this ratio.

The Borough Impact Statement based their police requirements on 1.25 officers per 1,000. They have since increased the ratio to 1.5/1,000.

The recommendation of the Borough government for impact aid is shown in the table below. I include only those for Spenard and the Borough Area outside the City. The Borough computations, they say, are based on police costs of \$60. per capita. This comes close to the City's costs, which were over \$61^{per}/capita in both 1971 and 1972.

TABLE I-9Police Costs Induced By Pipeline Construction
And Personnel Needs

<u>Year</u>	<u>Personnel*</u>		<u>Costs (\$000)</u>	
	<u>Spenard</u>	<u>Balance of Borough</u>	<u>Spenard</u>	<u>Balance of Borough</u>
1974	2+1	9+3	60	342
1975	3+1	14+5	102	579
1976	3+1	16+5	103.8	645

* Personnel are broken down as to officers and support personnel. They are not cumulative, but represent needs above normal for the year shown.

The analysis would indicate that the increase of officers indicated for the Spenard service area is about correct, based upon our estimate of the population increase in Spenard (see Appendix B).

There are presently 25 sworn officers for protection in the areas outside the City and Spenard. For the estimated 40,600 population in the area they cover, this would be 0.6 officers per 1,000 people. (This ratio is probably a little low because only officers assigned to field duty are included.) This coverage is no doubt low, especially in the Muldoon, Lake Otis and Sand Lake areas. With the additional officers recommended by the Borough, and the increased population expected, the ratio rises to 0.73 officers per 1,000 population.

Since it is estimated roughly 70% of the population outside the City and Spenard lies in the Sand Lake, Muldoon and the so-called South Lake Otis Area, a higher level of police protection is probably warranted in these areas. It would appear that in these more densely populated areas a ratio of at least 1 to 1.25 officers per thousand might be required during the impact period. At a ratio of 1.0 per 1,000 in the more dense

urban areas, the figure would be about 10 more officers than the Borough recommends.

Health Services.

The Anchorage Borough believes that health problems will create the greatest impact resulting from pipeline construction. They attribute this to the type of people who are expected to come to work and who will be attracted for other reasons.

The Borough breaks down the types of services for which aid will be required, including both those in the public health field and the environmental health area.

TABLE I-10

Health Services - Pipeline Induced Costs (\$000)

<u>Category</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>
Administration	68	70	70
Home & Health Specialties	120	140	150
Family Services	66	132	197
Family Planning	25	76	70
Addictions	125	454	454
Early Intervention	130	140	145
Mental Health	200	300	500
Forced Expansion of Facilities	30	50	60
Other Health-Related Activities	136	147	157
TOTALS	<u>900</u>	<u>1,503</u>	<u>1,803</u>

The record shows that the costs of all the health services administered by the Anchorage Borough have risen at the rate of 49.7% a year, average, since 1970. I understand part of these increases are the result of taking

over other health functions from the State, and that there are yet others which may be turned over to the Borough. It may be expected that in the next few years that the increase may be almost as high.

Another factor that must be considered is that the costs of health services will be in proportion to the maximum population and not the annual average that we use for most of the economic calculations. Maximum population in the Anchorage Area could run as high as 164,000 in 1974, 184,000 in 1975, and 194,000 in 1976. These additional people will consist of those looking for work, seasonal workers, their families, and other visitors. (See Appendix B, Population Peaks.)

This, coupled with the fact that the type of people the Borough expects will create per-capita costs higher than normal.

The health service costs have been about 75% funded by State funds, and the last two years even more than that.

Emergency Medical Services.

The Borough provides emergency medical services on a borough-wide basis, and therefore, it is funded from the Borough General Fund. The Borough projects the impact costs to be as follows:

TABLE I-11

Expenditures For Emergency Medical Services (\$000)

<u>Year</u>	<u>Impact</u>	<u>Capital Expenditures</u>
1974	50	75
1975	52	-0-
1976	61	-0-

Only \$75,000 can be identified as a capital expenditure-construction. The other costs are in line with present per capita expenditures for this service.

Library.

The library function is not an Anchorage Borough function and the Borough contracts with the City of Anchorage. It is funded by a special levy in Service Area 30, which is outside the City. The City government also made projections for the impact cost on the Borough library and arrived at slightly higher figures.

TABLE I-12

Borough Library Impact Costs (\$000)

<u>Year</u>	<u>Impact</u>
1974	56
1975	34
1976	10

The total costs will average out to about the same per capita costs as library costs are now outside the City.

Parks and Recreation.

With the additional population that will be living in the Anchorage Area in 1974, 1975 and 1976, present parks and organized recreational activities will be inadequate according to the Borough. They say that there should be 2-1/2 acres each for neighborhood and community parks, and an additional 5 acres of large urban parks for each 1,000 population. This amounts to a total of 10 acres/1,000 people.

The following Table shows the requested impact aid for park land acquisition and development:

TABLE I-13

Park Acquisition & Development (\$000)

	<u>Acreage</u>	<u>Acquisition</u>	<u>Development</u>	<u>Maintenance</u>
Outside City	124	2,480	1,240	114

Based upon the desired acreage per 1,000 people, the peak impact population of 12,480 in the Borough outside the City would indicate the additional acreage to be in line. The costs of land is estimated to be \$20,000 per acre in the urbanized areas. A real estate man's opinion confirms this possibility.

The maintenance cost is an annual cost based upon \$7,000 per year per neighborhood park, for 12 parks (\$84,000) and \$10,000 per year per community park, for 3 parks (\$30,000). This appears to be the total cost of maintaining the 15 parks per year, for total population use. Following is a Table allocating the appropriate portion to the so-called impact population.

TABLE I-14

Park Maintenance Cost Allocation (\$000)					
<u>Year</u>	<u>Requested</u>	<u>Total Population</u>	<u>Impact Population</u>	<u>%</u>	<u>Impact Maintenance</u>
1974	114	72,900	6,700	9.19	10.5
1975	114	79,250	11,350	14.32	16.3
1976	114	83,000	12,480	15.03	17.1

Recreational program costs per year requested are shown in the following Table.

TABLE I-15

Recreation Program Costs Due to Pipeline Impact (\$000)				
<u>Year</u>	<u>Requested</u>	<u>Impacted Population</u>	<u>P/Capita</u>	<u>Cost @ 25.00 P/Capita</u>
1974	217	6,700	32.38	168
1975	368	11,350	32.42	284
1976	373	12,480	29.88	312

The amount requested appears to be somewhat high since per capita costs are higher than City of Anchorage program costs. Using the City per capita cost, the total needs are as shown. The Borough per capita cost was only \$4.50 in 1973 and the 73-74 budget shows approved amounts amounting to a per capita cost of about \$17.00. It is recognized that Borough recreational programs till now have probably not been adequate. However, it was presumed that the Borough budgets for the next three years would not rise significantly above the \$25.00 per capita amount.

Borough Revenue Projections.

An attempt is made to project revenues that are created by the impact population which would help meet the impacted costs as presented by the community involved (in this case the Anchorage Borough). This is done by projecting the assessed valuation of the jurisdiction which contributes to the costs.

The additional homes needed to house the impact population are allocated to the different areas in the amounts which appear to be reasonable. Housing units are assumed to cost \$30,000^{*} per unit. Only half of the new homes constructed in a given year are assumed to be on the tax rolls for the next taxing year. This amounts to an 18 month lag between construction and tax revenues on the property accruing to the taxing jurisdiction.

Only residence property is projected, since business property projections were not attempted. Therefore, assuming the housing develops that is expected, any business property additions would improve the revenue figures.

Projections of State shared revenues, and other State aid, are calculated using the projected impact population figures and the present formulae.

* Based on estimated 20% units being mobile homes.

New housing property tax revenues are estimated in the Table below. The 1973 millage rates are used. Personal property tax is estimated to be 25% of the real property tax.

TABLE I-16

Borough New Property Tax Projections & Allocations (\$000)

Year	Assessed Value	9.19* Schools	1.66 Svc. Area 30	0.60 Svc. Area 40	0.33 Library	2.67 Gen. Fund
		Real P/P**	Real P/P	Real P/P	Real P/P	Real P/P
1974	120,000					
1975	156,000	551+138	100+25	36+9	20+5	160+40
1976	78,000	1,820+455	329+82	119+30	65+16	529+132
1977		2,895+724	523+131	189+47	104+26	841+210
1978		3,253+813	588+147	212+53	117+29	945+236

* 1973 Mill rates.

** Personal Property.

Taxes shown in the above Table for 1977 and 1978 are for perspective only, and are not used as a deduction against impact costs.

Tax revenue projections for the service areas are projected on the same basis as the Borough as a whole -- estimated assessed valuation in the service area, at the 1973 mill rate for the service area, and allocated in the same proportions as the average for 1972 and 1973 to police, fire, and roads.

The following Table gives the estimates:

TABLE I-17

Service Area New Property Tax Projections & Allocations (\$000)

Spenard	1973 Mill Rate	1974	1975	1976	1977	1978
Assessed Val.	5.23	9,000	11,700	6,090	-0-	-0-
Total Tax		-0-	24+6*	78+20*	124+31*	140+35*
Police		-0-	11.1	36.3	-0-	-0-
Fire		-0-	8.7	28.5	-0-	-0-
Roads		-0-	10.2	33.2	-0-	-0-

<u>Sand Lake</u>	<u>1973 Mill Rate</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
Assessed Val.	5.30	18,000	23,400	12,180	-0-	-0-
Total Tax		-0-	48+12*	157+39*	252+102*	284+71*
Fire		-0-	21.9	71.5	-0-	-0-
Roads		-0-	38.1	124.5	-0-	-0-

Muldoon

Assessed Val.	5.10	12,000	15,600	8,100	-0-	-0-
Total Tax		-0-	31+8*	101+25*	161+40*	182+46*
Fire		-0-	14.9	48.3	-0-	-0-
Roads		-0-	24.1	77.7	-0-	-0-

* Personal property tax, estimated as 25% of real property taxes. Tax estimates for 1977 and 1978 are given only for perspective.

Revenue Sharing.

Revenue sharing increases are computed using the existing grant formulae, at 78% of eligibility, and applying them to those items that will most clearly be affected by the population increase. The items are further narrowed by limiting the increases only to those functions for which the Borough is requesting aid, namely, Health Services and Parks and Recreation for Borough-wide functions, and Police, Fire and Roads & Drainage for the service areas. It is recognized that other funds received from the State will increase in proportion to population, however, no attempt was made to factor in these items since they were not part of the so-called Revenue Sharing and usually smaller in magnitude.

TABLE I-18

Borough Revenue Sharing Projections for Impact Population (\$000)

<u>Year</u>	<u>Impact Population</u>	<u>Air/Water Pollution</u>	<u>78%</u>	<u>Parks - Recreation</u>	<u>78%</u>	<u>Hospital Beds</u>	<u>78% Health</u>	<u>Increase</u>
1974	6,900	13.4	10.4	33.5	26.1	422	329	-0-
1975	11,350	22.7	17.7	56.7	44.2	636	496	167
1976	12,480	25.0	19.5	62.4	48.6	636	496	167

Although there will be two new hospital facilities in 1975, the additional grant revenue is not shown.

TABLE I-19

Service Area Revenue Sharing Projections for Impact Population.

Spenard

<u>Year</u>	<u>Impact Population</u>	<u>Police</u>	<u>78%</u>	<u>Fire</u>	<u>78%</u>	<u>Miles Roads</u>	<u>Road Grant</u>	<u>78%</u>
1974	900	9.0	7.0	4.5	3.5	75.47		
1975	2,070	20.7	16.1	10.3	8.0	75.47	(no additions)	
1976	2,679	26.8	20.9	13.3	10.3	75.47		

Sand Lake

1974	1,800	-	-	9.0	7.0	40.31	60.4	47.1
1975	4,140	-	-	20.7	16.1	46.01	69.0	53.8
1976	5,358	-	-	26.8	20.9	57.47	86.1	67.1

Muldoon

1974	1,200	-	-	6.0	4.7	44.87	67.3	52.4
1975	2,760	-	-	13.8	10.7	48.67	73.0	56.7
1976	3,570	-	-	17.8	13.9	56.27	84.4	65.8

It will be noted that no attempt has been made to determine what increases might be expected for Federal grants.

SECTION II

CITY OF ANCHORAGE

Description of Area.

The City of Anchorage presently covers an area of about 51.1 square miles, according to the City Engineering Department, and now includes the military bases.

Population.

There have not been as many population projections of the City itself as there have of the Borough. The following Table shows those of the Impact Committee.

TABLE 2-1

Population Projections for Anchorage
(Exclusive of Military Bases)

<u>Year</u>	<u>Impact⁺ Committee</u>	<u>City Government</u>
1970 U.S. Census	48,081	48,081
1973 "	57,000	58,718
1974 "	65,600	-
1975 "	72,750	-
1976 "	74,520	-

* Based on a normal growth of 3.4% + impact population breakdown presented by the Borough.

Services.

The City provides all the normal urban-type services, except those that have been assumed by the Borough, namely, sanitary sewers, planning and zoning, tax assessment and collection, and dog control.

Taxing.

The City residents are subject to taxes for some Borough-wide functions, namely, schools, sanitary sewers, and the general operating costs

of the Borough government. In addition, the City residents pay taxes for the City services.

Debt.

The General Debt for the City of Anchorage is as follows:

G. O. Bonds	\$25,796,606
Special Assessment Bonds	31,242,547
Total General Debt	<u>57,039,153</u>
Utility Revenue Bonds	96,199,828
Total Bonded Debt	<u>\$153,238,981</u>

The general bonded debt is 6.77% of the total assessed valuation of \$841,736,695 in 1973.

Impact General,

Anchorage will not only house and service large numbers of new workers whose jobs will be created directly or indirectly by pipeline construction, but will be the administrative center of much of the oil related and construction activities. It will be one of the few transportation hubs serving the north and central areas of oil related activities.

Many of the pipeline workers, and those seeking work of any kind, will come to Anchorage for recreation or for short periods. Most of the impact will be on services such as police protection, housing, schools, public facilities and recreation.

Since the City provides services such as water supply to much of the area, a seaport, telephones, and electrical power, an influx of large numbers of new residents will require expansion of most of the services.

To meet demands placed on the services, operational costs will increase and some capital improvements will be required earlier than normal.

For employment projections in the Anchorage Area, see Section I on the Anchorage Borough, Page ____.

Housing.

For housing projections for the City, see Section I, Anchorage Borough, Page _____. The Borough figures for housing are used rather than those of the City, because the Borough used an average of three persons per housing unit while the City used four. It is believed that three may be more accurate for the added population.

Police.

The City expects a large increase in the incidence of crime and other illegal activities to accompany the increase in population, particularly in the central city area. The City claims this impact has already hit the area.

The additional costs of law enforcement will be in the operational budget and can be attributed mostly to additional manpower.

As of November 1, 1973, the City had 139 sworn officers for Anchorage and Spenard, making about 1.8 officers per 1,000 population. Since then more officers have been authorized, bringing the total to 160.

The manpower estimates of the City are shown in the following Table.

TABLE 2-2

Estimated Impact Police Manpower Needs

<u>Year</u>	<u>Sworn Officers</u>	<u>Support</u>	<u>Total</u>	<u>Total Cost (\$000)</u>
1974	31	10	41	793
1975	31	10	41	872*
1976	39	10	49	1,066*

* Amounts added by Impact Committee Staff based upon 10% annual increase in costs.

The City Impact Statement includes their estimates on manpower needs for the Service District of Spenard. The Service District contracts, through the Borough government, with the City for police protection. The level of protection and the amount of the contract must be acted upon by the Borough Assembly. It is assumed that the Borough government is knowledgeable as to the level of service needed and desired by the Spenard people, and therefore, the Borough figures were used instead of those of the City in determining the impact on Spenard police, even though there was a large discrepancy. This discrepancy was called to the attention of the Borough, and they revised their figures upward. Both the City and the Borough's revised police manpower impact requirements are shown in the next Table, for your information.

TABLE 2-3

Estimated Impact Police Manpower Needs - Spenard

<u>Year</u>	<u>City Estimate</u>	<u>Borough Estimate</u>
1974	16	3
1975	19	4
1976	16	4

The City estimates would make 7.2 officers per 1,000 population, at the peak, using our estimates of the impact population for Spenard. The Borough estimate would make 1.4 officers per 1,000 for the added population, a more reasonable estimate, it seems.

Fire Protection.

The City Impact Statements do not document too well the fire protection needs. They say that a new nine-man engine company will be needed in the eastern section of the City, and a new twelve-man company in the downtown

area because of increased activity at the Port and industrial areas and an increase in high-rise structures.

The following Table has been constructed using information supplied by the City for the year 1974 only.

TABLE 2-4

Estimate of Impact Costs of Fire Protection (\$000)

<u>Year</u>	<u>Estimated Manpower</u>	<u>Impact Population</u>	<u>Costs</u>	<u>Cost Per Capita (present 36.96)</u>	<u>Cost @ 40.00 Per Capita</u>
1974	25	6,700	511	76.26	268
1975	28*	11,350	629*	55.41	499*
1976	28*	11,520	692*	60.06	557*

* Impact Committee Staff figures, based upon 10% increase of manpower the peak years, and 10% annual increase in costs.

It will be noted that in the above Table that the projections of additional fire costs attributed to the impact are considerably higher per capita than the per capita costs of the revised 1973 budget. The last column reflects a lower per capita cost, since the cost appeared to^{be} entirely operational. If the City projections were intended to cover the cost of two new fire engines, it is understood that a pumper and a ladder truck can be obtained for about \$100,000 for the two. Because of the long life of such equipment, for the purposes of this report, they should be treated as a capital investment, the same as other public improvements.

Water Utility.

The impact of the pipeline will require the City to accelerate the addition of new sources of supply by two to three years. The peak demand during 1973 was 22 million gallons per day. The maximum capacity, they say, is 10.5 million gpd from the treatment plant and 14.5 million gpd from wells.

Another well will be on the line in 1975 and add two million gpd. An additional well or two may be added to meet the demand, however, if the construction of a dam on Ship Creek proves engineeringly feasible, this will be the course taken by the City, and will provide a source of supply that could provide up to 50 million gpd. This would meet the need for a population three times the present one.

The average use at present is 16 million gpd. The City now has total water storage capacity of 5,500,000 gallons. The plan is to increase storage capacity so the peak demands can be better met.

The City presently supplies about 65% of the customers within the City and 35% of those outside the City, with room for expansion of the system both inside and outside the City.

To meet the impact need the main problem with the City is in financing. The accelerated program will require substantial funds, about \$16,000,000, almost immediately, the City says.

It had planned for 50% from the Federal Government and 25% from the State. By the time the improvements would normally be needed, two or three years from now, the City expected earnings to be such that they would support the sale of bonds for the other 25%.

The following Table will give a picture of the net income for 1973.

TABLE 2-5

Total operating revenues	\$3,029,500
Total operating expenses	<u>1,246,880</u>
Net operating income	1,782,620
Total non-operating revenue	<u>120,000</u>
Net income	1,902,620
Assessment collections	<u>600,000</u>
Net available for debt service	\$2,502,620
1973 debt service	\$1,961,032
Bond coverage	1.28

Revenue bond buyers require a coverage of at least 1.4 to 1, and usually want it higher. City projections see the debt coverage declining for the next five years. Under these conditions, it is not expected that bonds could be sold at this time, and the impact with new customers doesn't appear to improve the earnings situation, unless a substantial rate increase should be made. To realize the minimum of a 1.4 to 1 bond coverage, it would require a rate increase of about 5.4% in 1974 and an additional increase of 15.6% in 1975. This assumes that bonds will be sold to meet the needs as they arise. These percentage increases are my own and do not reflect the policy or intent of the City of Anchorage in connection with rate increases.

It should be noted that the City does not anticipate revenue increases in 1976, 1977, and 1978. This may or may not be realistic, however, it does not appear that the City has taken into account probable inflation of costs in their projections of operating expenses. (See Appendix C, Inflation.) If costs are increased substantially because of inflation, the debt coverage would be lowered and the rate increases higher, or customer revenues must increase much more than projected by the City.

The capital improvement aid as submitted by the City in the Preliminary Impact Statement of August 17, 1973, and the revised statement of October 19th are shown in the following Table.

TABLE 2-6

	Water System Capital Improvements Impact Need (\$000)					
	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>Total</u>
Costs	17,075	(12,245)	(55,000)	(1,250)	(1,375)	2,150
Revised	17,075	(12,245)	-	-	-	4,830

Credits for normal construction needs are not projected beyond 1975 in the second statement. Because the proposed Ship Creek dam will provide water supply capacity for long into the future, and because of pipeline construction it may be required earlier than normal, aid could be either in the form of loans, or payment of early debt service. Because of the low earnings capability at present water rates, the Legislature should explore the possibility of loan guarantees, or set up a loan program to be effective until the system earnings could be increased. It is apparent that the City must provide for long-range needs in conjunction with the pipeline impact and may now be in the position of being unable to do so immediately.

The general question of aid for accelerated capital improvements will be covered in the Summary Section. The Legislature has some program already available for aid on water projects and^{it} should be used in this case, if applicable.

Because of the difficulty of tapping a large source of water supply near Anchorage, and because of the increasing costs of water system supply investments, the City may have to face the metering of water to reduce consumption. Fairbanks has metering and has a per-capita daily consumption of 81 gallons. We understand that part of the difference is accounted for by higher industrial use, however, it seems evident that metering would reduce consumption.

Electrical.

Electrical energy in the Anchorage Area is provided by the City of Anchorage, Chugach Electric Association (REA) and the Alaska Power Administration (Eklutna Hydroelectric Plant). The two military bases supply their own generation. There is a tie-in capability for all entities, although

there is no working pool arrangement.

The City and CEA both use gas fuel for the majority of energy generation. CEA has a total of 224 megawatts capacity with a load of about 175 megawatts. This leaves them with a minimum reserve capacity. CEA plan to add another 70 MW unit at Beluga which will be on early 1975, or possibly late in 1974. The City has presently a total of 106 MW capacity with a load of 80 MW. The reserve capacity is also minimal.

Below is a Table showing the expansion plan of the City, however, because of the pipeline construction impact, this schedule is apparently being set ahead.

TABLE 2-7

Generation Expansion Schedule

<u>Year</u>	<u>Capacity</u>	<u>Load</u>	<u>% Increase</u>
1973	106 MW	80 MW	12%
1974	148 MW (add 40 MW)	92 MW	15%
1975	167 MW (add 19 MW)	106 MW	15%
1976	167 MW	122 MW	15%
1977	226 MW (add 59 MW)	142 MW	15%
1978	226 MW	163 MW	15%
1979	264 MW (add 38 MW)	187 MW	15%
1980	264 MW	215 MW	15%

Generation must be added in increments that will provide economical power. A reserve capacity at least as large as the largest unit is considered to be essential in the industry. The units shown as added in 1974 and 1975 just provide the required reserve in 1976.

The City plans funding for the expansion through 1975 as follows:

TABLE 2-8

Debt Funding For Electrical Generation (\$000)
Effects On Debt Service

<u>Bond Issues</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
2/1/73 6,500	358	544	544	544
12/1/73 3,100	180	266	266	266
4/1/74 2,300	104	200	200	200
3/1/75 4,200	-	210	392	392
Totals*	642	1,220	1,402	1,402

* The totals are additions to debt service in respective years.

The following is derived from the City's projection of earnings and expenses through 1978 to show the probable bond coverage induced by the above bond issues. It does not consider the effects after 1977 of additions planned in 1977 and later because investment amounts are not known.

TABLE 2-9

Electrical Earnings and Debt Coverage (\$000)

<u>Year</u>	<u>Operating Revenues</u>	<u>Operating Expenses</u>	<u>Available For Debt</u>	<u>Debt Service Projections</u>	<u>Debt Coverage</u>
1973	7,131	4,479	3,034	1,767	1.72
1974	8,900	5,600	3,640	2,000	1.82
1975	9,800	6,300	3,840	2,587	1.48
1976	10,800	7,100	4,040	2,769	1.45
1977	11,600	7,800	4,140	2,769	1.49
1978	11,600	8,000	3,940		

It would appear that investments made in 1977 would create debt service that would not give the 1.4 to 1.0 debt coverage required, unless

revenues will be higher than projected, or electrical rates are increased.

It is evident from Table 2-9 that the earnings projections indicate a declining debt coverage.

The City's earnings projections are based upon a 10% annual increase in revenues and a 12% annual increase in expenses.

The City shows the following to be assistance needed in funding the expansion program, accelerated because of pipeline construction.

TABLE 2-10

Impact of Pipeline On Electrical Generation Program (\$000)

	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>Total</u>
Capital Improvements	300	4,200	(4,500)	-	-	-0-

This has since been revised to delete the credit in 1976 and the City indicates the full \$4.5 million to be an amount needed at an earlier date than would be the case under normal growth. Based on the expansion schedule, it would appear that no great amount of acceleration is being made, perhaps no more than one year.

Streets and Storm Sewers.

The City will need to accelerate construction of storm drains and street paving in new subdivisions. Below is a Table showing the City estimates of capital improvements attributable to the impact of pipeline construction.

TABLE 2-11

Pipeline Impact On Subdivision Development (\$000)

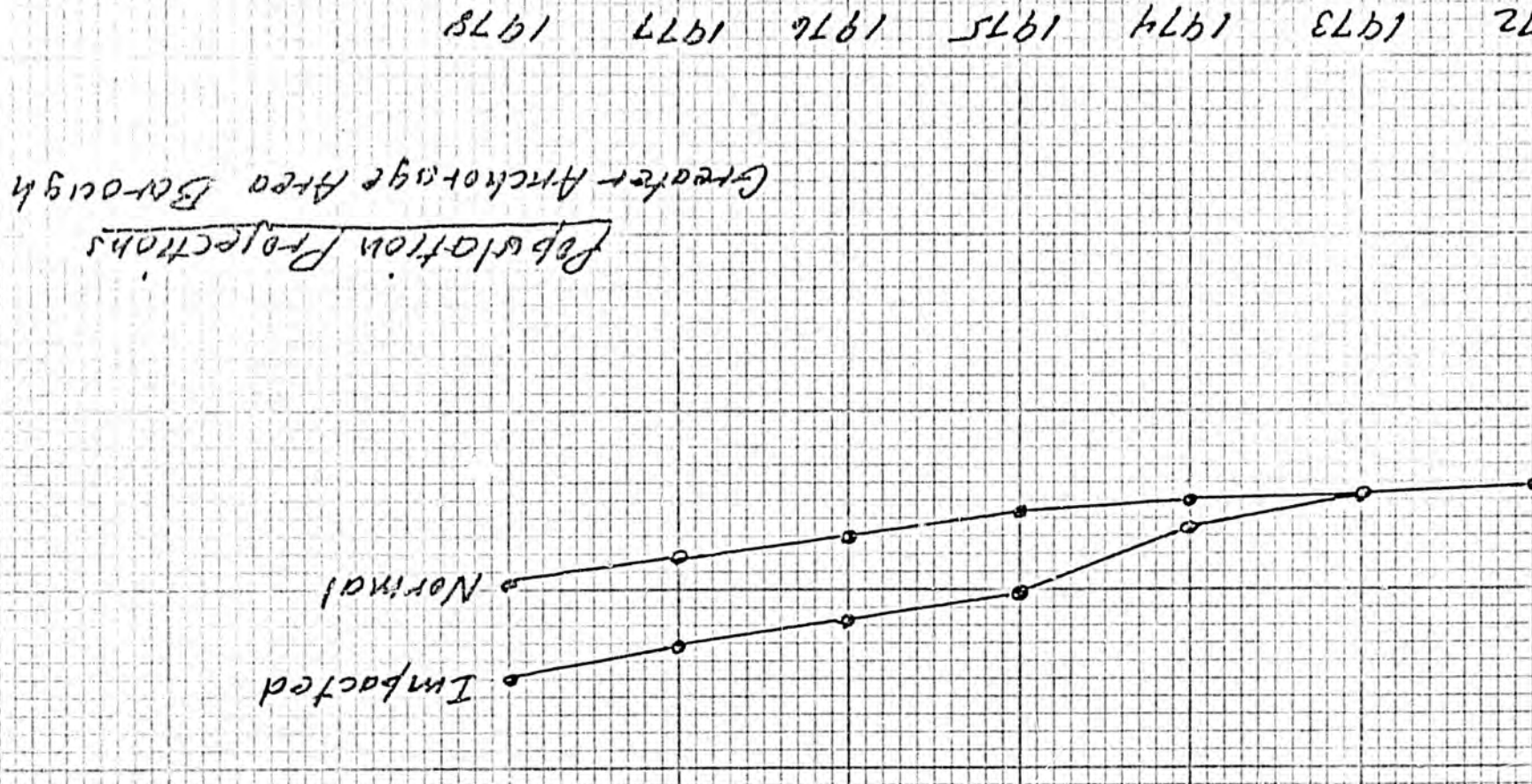
	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>Total</u>
Storm Sewers	2,093	188	(225)	(175)	(985)	895
Paving	728	63	(75)	(65)	(345)	305

Population - Excluding Military Base (000)

85

CINAMION LINE NO. 010

CROSS SECTION - 10 SQUARE INCH



The revised statement made for the Special Session of the Legislature did not show credits made to the projects in the years 1976, 1977, and 1978. It should be noted that these improvements are being required at an earlier date than would normally be required and that the impact is the requirement of capital funds at an earlier date than would be necessary under normal growth conditions. Please refer to the attached graph of population projections of the Anchorage Area. It will be noted that the population projected for 1974 would, under normal growth, be reached in 1976. The population projected for 1975 would have been reached in 1978. The graph depicts two things: First, that the impact occurs in the first two years, and that thereafter, a normal, parallel growth curve resumes. Secondly, the acceleration of the need of services and facilities to meet the jump in population is about three years, or three and one-half years at the most. This suggests that assistance in meeting the costs of accelerated capital improvements projects may be related more to the method of local funding, the ability to meet debt service payments, and when, and if the project is needed for normal growth. (See Appendix D, Capital Improvements, Financing and Inflationary Factors.)

Building Safety.

Permits and fees do not fully cover the costs of building inspection. Past records show from 65% estimated for 1974 up to over 80% for 1972. Using the \$3.20 per capita to cover the deficiency, the calculations are shown in the following Table of the City's request.

TABLE 2-12

Impact Building Safety Costs (\$000)

	<u>1974</u>	<u>1974*</u>	<u>1975*</u>	<u>1976*</u>
Costs	39	21	36	37

* Impact Committee Staff projections based upon the projected population increase in the City and the City's per capita subsidized cost of the 1974 budget estimate of building inspection costs and revenues.

Library.

The estimates of the additional library costs shown below are those related only to the libraries within the City. The Borough libraries, although under contract with the City, are covered in the Anchorage Borough Section.

TABLE 2-13

City Library Impact Costs (\$000)

	<u>1974</u>	<u>1975</u>	<u>1976</u>
Costs	56	34	10

The City estimates that Public Works street maintenance costs will rise during the impact period. These costs are projected in the following Table.

TABLE 2-14

Street Maintenance Due To Impact (\$000)

	<u>1974</u>	<u>1975</u>	<u>1976</u>
Maintenance Costs	45	54	46

Parks and Recreation.

The Preliminary Impact Statement submitted by the City indicated only an insignificant impact cost for the parks and recreational programs. The revised statement indicated the following as the impacted costs.

TABLE 2-15

Parks and Recreational Impacted Program Costs (\$000)

	<u>1974</u>	<u>1975</u>	<u>1976</u>
Costs	217	286*	286*

* The City did not make projections beyond 1974. These estimates have been added by the Impact Committee Staff, based upon the impact population and the present per capita costs of the City's parks and recreation programs (\$25.23).

Traffic Engineering.

The City's estimate of additional costs created by pipeline construction in the traffic safety division is as follows:

TABLE 2-16

Impact On Traffic Safety & Engineering (\$000)

	<u>1974</u>	<u>1975</u>	<u>1976</u>
Costs	24	41	41

Although the City did not project a need in 1975 and 1976, the Staff has projected figures based upon the same per capita cost as the City projects in 1974.

Other Operational Costs.

The City includes in their impact costs an administrative charge for personnel and time chargeable to the several services affected by the pipeline construction. This request is shown in the following Table.

TABLE 2-17

	<u>1974</u>	<u>1975</u>	<u>1976</u>
Administrative Costs	121	129*	109*

* These figures were supplied by the Impact Committee Staff in the same proportion as those shown for 1975 and 1976 in the original City Impact Statement.

Public Buildings And Other Facilities.

In the revised Statement of the City there is included an additional impact factor which covers public buildings and facilities. I am told this item is mainly to cover the second phase cost of the Port of Anchorage Terminal 3. Other costs are for library construction and office space.

These capital items will be needed about three years ahead of normal schedule and, therefore, come under accelerated funding program.

Revenue Projections.

The following Table shows the City's projections of revenue attributable to pipeline construction. Checks have been made on the principal items and they indicate that the projections are reasonable and probably will be realized. The property taxes are a little higher than my projections indicated, particularly in the first year, however, I made no provision for increased taxes on new commercial or industrial property.

TABLE 2-18

New Revenues Generated By Pipeline (\$000)

	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
<u>Property Taxes (7.9 mills)</u>				
Real		408,825	762,350	1,093,360
Personal (25%)		102,206	190,588	273,340
<u>Taxes - Other</u>				
Gas & Elec.		13,500	25,000	36,500
(% incr. Prop. Tax)				
<u>Licenses & Permits</u>	13,500	45,500	40,000	15,000
(% incr. Population)				
<u>Fines & Forfeitures</u>	33,000	111,500	98,000	36,500
(% Population)				
<u>Business Licenses</u>		46,000	154,500	136,000
(% Population)				
<u>Aviation Fuel Tax</u>		2,000	2,500	2,500
<u>State Shared Revenue</u>	73,500	189,750	206,000	188,500
<u>Federal Shared Revenue</u>				
<u>Recreational</u>	8,500	29,000	25,000	9,500
Totals	128,500	948,281	1,503,938	1,791,200
Population	2,940	7,590	8,240	7,540
Per Capita	44	125	182	238

Inflation.

The City has included a statement of added costs of capital improvements and operations due to inflation for the years 1974, 1975, 1976, and 1977, as shown in the next Table.

TABLE 2-19

General Government Capital and Operating Budgets
Inflation Increase 10% Per Year

	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>Total</u>
Population*	61,650	68,150	70,570	72,110	272,480
CIP	21,529,600	19,470,400	8,519,780	5,192,560	54,712,340
Inflation	2,152,960	4,088,784	2,820,046	2,409,367	11,471,657
Per Capita Increase	35	60	40	33	42
Operations	20,779,323	21,558,495	22,420,834	23,317,667	88,076,319
Inflation	2,077,932	4,527,283	7,421,294	10,821,727	24,848,236
Per Capita Increase	34	66	105	150	91
Total Inflation	4,230,892	8,616,067	10,241,340	13,231,594	36,319,893
Per Capita Increase	69	126	145	183	133

* Population excludes 17,892 military annexed in 1973.

It probably is a valid assumption that continuing inflation will increase all costs, including those of government. However, the costs of inflation are normally adjusted for by passing along the additional costs to the consumer, or in the case of governments, to the taxpayers or users of services (see Appendix C, Increased Costs Due To Inflation).

For the purposes of this report, it is presumed that normal methods will need to be used by local governments to meet inflationary costs, and that if any aid is undertaken by the State it would be only for a year to allow the local government to adjust income to the higher costs.

SECTION III

ANCHORAGE BOROUGH SCHOOL DISTRICT

The construction of the pipeline will induce population in Anchorage Borough, which will of course load the School District with additional students. Added student load produces increases both in operational expenses and in capital improvement programs. However, in ABSD, impact enrollment projections are not triggering a school plant expansion program.

During the last five years, ABSD has been expanding its school plant, and now has sufficient classrooms to house the present enrollment comfortably, and even to accommodate 4000 more students within the theoretical capacity. Still more could be handled through slightly increasing class size, double-shifting, or going to a year-around school program. Therefore, we do not consider capital costs or debt service as an impact item.

School operational costs will be directly affected by increased enrollment, however. The budget impact for each year can be calculated by multiplying the per pupil cost by the student enrollment generated by the impact population. From this amount should be subtracted the fresh tax revenue that will be generated by the impact population, to arrive at a net impact cost.

While the method of arriving at net impact cost is fairly simple, the process itself is not. The percent of population enrolled in school, the real cost per pupil for operations (which changes each year), and the assessed valuation that will be added by the new population.

According to the impact projection of Mathematical Sciences Northwest, Anchorage Borough will receive 13,400 persons in 1974; 22,700 in 1975; 24,000 in 1976 (figures not cumulative). The Borough, City and School District are all using this projection.

At the present time, 34,519 students are enrolled in Anchorage schools, or 25.4% of the total population of 135,900. Historically, the ratio of students to population in Anchorage has been:

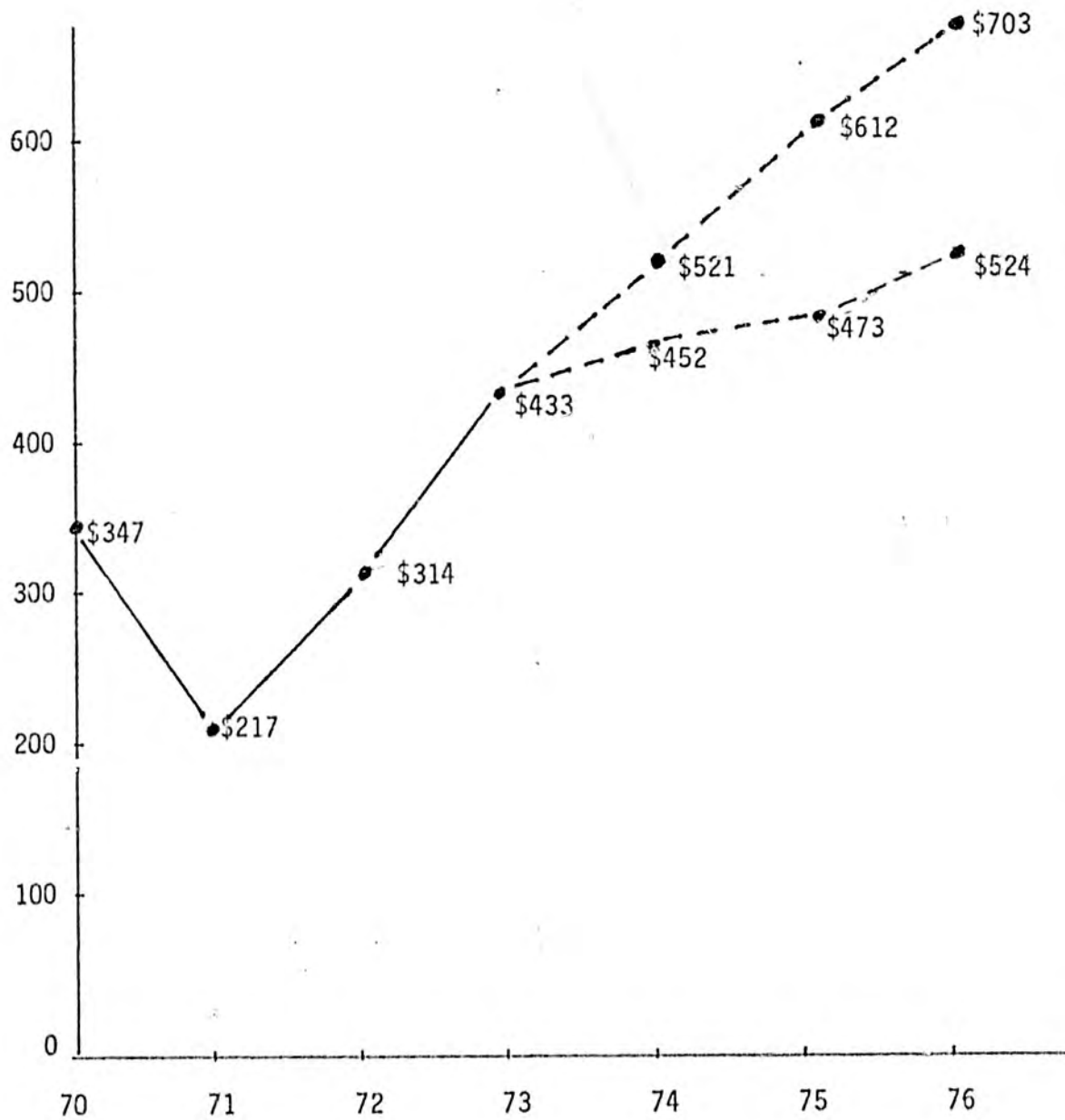
1950	-----	9 %
1960	-----	19 %
1968	-----	28.5%
1970	-----	28.0%
1972	-----	26.0%
1973	-----	25.4%

The ratio reached a peak in 1968, and forced a building expansion program. Since that time, it has been slowly dropping, and ABSD now uses 25.0% for future projections.

For comparison, Fairbanks North Star School District has a current student-population ratio of 27.3%. For projecting student enrollment and operational impact costs over the next three years, we will also use 25.0% for each year.

The cost per pupil for operations to be met from local taxes is a figure obtained by dividing the total enrollment into the local tax contribution needed for that year from the operations budget. Since the operation budget is funded some 75% through the state foundation grant, a short-fall in the state contribution causes radical variations in the local contributions from year to year. The graph below shows local per pupil costs for operations since 1970, and projected by extrapolation to 1976. The estimates of \$512 in 1974; \$612 in 1975; and \$703 in 1976 were supplied by ABSD, and were obtained by extending the trend since 1971.

COST PER PUPIL FOR OPERATIONS



In the foregoing graph, the Impact Committee staff has calculated an alternate per pupil cost estimate for 1974 (1974-75 school year). The method used here was to take the estimated cost of a "maintenance-level" budget for next year, assume no change in the foundation grant, and divide by the forecasted total assessed valuation of \$2,264,813,000. This produces a projected mill rate of 10.30, compared to a 1973 rate of 9.19 for operation and debt service. The dollar amount for this rate for operations would be \$16,623,700. Fifty percent of this amount, plus fifty percent of \$15,068,000 (the current year levy) produces the amount of \$15,846,000 to be raised from local taxes. This figure divided by the projected 1974-75 enrollment of 35,126 produces a per pupil cost figure of \$452.

The above described process would become too tenuous for a second-year projection, because of the large number of variables involved. For 1975, we assumed a \$2.5 million increase in local tax contribution to operations, and for 1976, another \$3.0 million. Using the same method of dividing by the projected student enrollment, we arrived at per pupil costs of \$473 and \$524 respectively.

TABLE I shows projections for the years 1974, 1975, and 1976, using ABSD estimates. Item (7) shows the calculated amounts of impact cost due to pipeline induced population.