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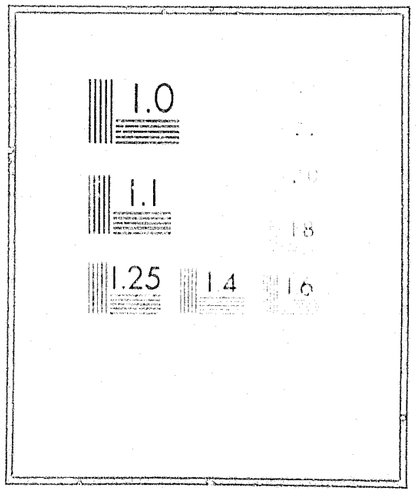

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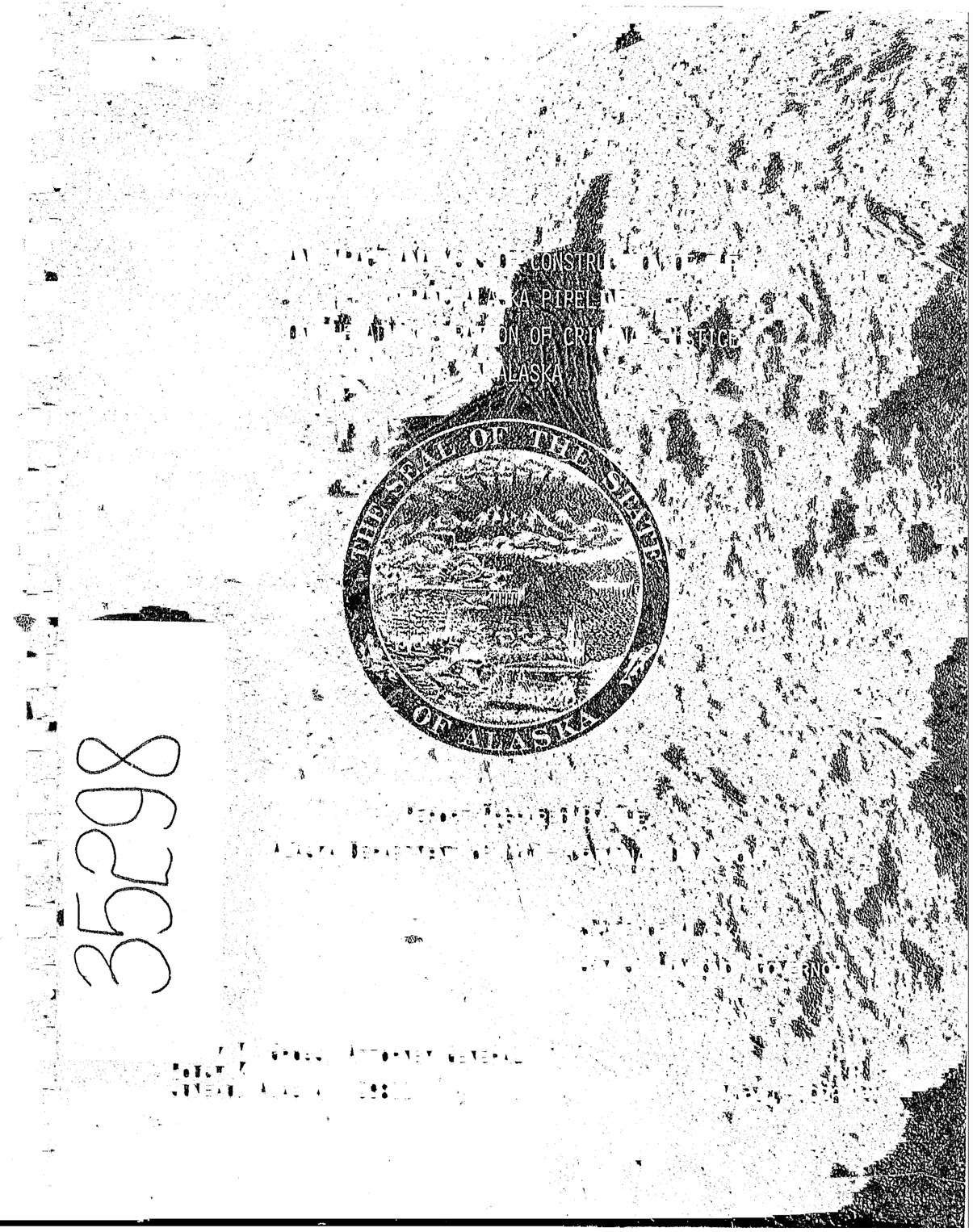

AN IMPACT ANALYSIS OF CONSTRUCTION OF THE TRANS-ALASKA PIPELINE ON THE ADMINISTRATION OF CRIMINAL JUSTICE IN ALASKA

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JUL 23 1976

ACQUISITIONS

A REPORT PREPARED BY THE ALASKA DEPARTMENT OF LAW - CRIMINAL DIVISION
IN ACCORDANCE WITH DISCRETIONARY GRANT NO. 73-DF-10-0008,
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STATE OF ALASKA

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MARCH, 1976

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ERRATA

Page 3, Paragraph 4, Line 9: Misspelling: "transiency";

Page 15, 2nd Footnote, Line 5: Misspelling: "effect";

Page 20, Paragraph 3, Line 4: Misspelling: "affect";

Page 34, Paragraph 2, Line 6: Typo: "pipeline";

Page 38, Paragraph 3, Line 7: Misspelling: "preceded";

Page 44, Paragraph 1, Line 5: "incompatible";

Page 64, Paragraph 3, Line 3: Typo: "pipeline";
Line 6: Typo: "slightly";

Page 74, Paragraph 2, Line 4: Typo: "justice";

Page 75, Paragraph 1, Line 4: Typo: "administrative";
Paragraph 2, Line 6: Typo: "uniformity";
Table 5-1--"Attorney Positions";

Page 76, Table 5-1--Under "Fourth Judicial District"--
"7 Assistant District Attorneys;

Page 79, Footnote 87, Line 10: Typo: "radical";

Page 80, Paragraph 3, Line 3: Misspelling: "input";

Page 83, Paragraph 1, Line 1: first word "and" should be omitted; it is a repeat;

Page 83, Paragraph 3, Line 11: Misspelling: "administrator";

Page 84, Paragraph 3, Line 8: Typo: "District";

Page 86, Paragraph 1, Line 5: Misspelling: "peculiarities";

Page 102, Last paragraph, Line 1: Typo: "track";

Page 103, Paragraph 2, Line 4: Typo: "approximately";

Page 105, Paragraph 3:

Line 2: Typo: "crime";
Line 4: "examination" should be substituted for "explanation";
Line 7: "9% should be substituted for "99%";
Line 8: "by December" should be substituted for "in December";

Page 154, Footnote, Line 2: Typo: "Construction";

Page 158, Figure A-4, Footnote: Add "e" to "Statewide" in Line 3 and 6

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INTRODUCTION

Alaska, as a result of construction of the Trans Alaska Pipeline in conjunction with other major factors of change in the state's economy, has experienced, and will continue to experience, significant increases in its population and work force and even more significant alterations in the characteristics of its population. The impact of pipeline construction and its attendant economic growth has been addressed in several studies. None of these studies, however, has attempted to address the impact of pipeline construction on the Alaska criminal justice system.

This report represents an effort to identify the demands which pipeline construction, within the context of a general population, work force and economic growth, will place upon the administration of criminal justice in Alaska through 1980. It is designed to assist criminal justice agencies in the state to respond to projected increases in criminal activity and resultant demands for criminal justice services.

The impact of pipeline construction on criminal activity in Alaska was determined in essentially a three step process: (1) utilization of an underlying economic base model to develop statewide population, work force, unemployment and other economic projections; (2) integration and regression of historical population and work force data with historical criminal activity data to derive a mathematical and predictive set of relationships; and (3) utilization of projections of population and work force variables and the mathematical relationships established to determine projected levels of criminal activity within the state during the period from 1974 to 1980. The mathematical relationship

between population and work force data and criminal activity data was uniquely developed for purposes of this study, has been entitled the Alaska Criminal Justice Model and is discussed at considerable length in Appendix B of this report.

Criminal activity projections have been developed for each of five regions of the state, as well as for the state as a whole. Projections have been adjusted to four levels of economic activity or estimates of pipeline construction impact, each of which can be translated into projected levels of population and work force. Three of the examined impact levels are derived from high, baseline (or medium) and low levels of economic activity related to construction of the pipeline. A fourth set of projections corresponds to a hypothetical Alaskan economy if the pipeline had not been constructed in order to provide a range of "pipeline impact" when contrasted with the other three levels.

The projections developed address themselves to three levels of criminal activity, divided according to the degree of processing that has occurred: (1) "reported" criminal activity (i.e., the report of a criminal offense, commonly referred to as "requests for service"); (2) "actual" criminal activity (i.e., a reported criminal offense that has been verified as such by a law enforcement agency); and (3) "arrests" (i.e., a verified criminal offense that has resulted in the arrest of one or more individuals).

Total population and work force growth projections are based not only upon increases that are directly attributable to pipeline construction, but also to normal increases due to

a significant level of other economic activity in the state, much of which is to some extent itself pipeline related, most notably state and local government expenditures, oil and gas exploration and extraction activity and anticipated and projected gas pipeline construction.

Alaska's population is projected to increase between a low of 27% and a high of 51% during the period 1974 to 1980. Baseline or medium projections indicate an increase of approximately 36% over the same period.

It is reasonable to anticipate that this increase in population will result in a significant increase in requirements for criminal justice related services from law enforcement through adjudication, including correctional programs and services. This will be particularly true in terms of offenses committed by males age 18 through 34 who comprise the statistically highest crime group and who compose a large majority of individuals attracted to Alaska in search of employment.

It is also not unreasonable to anticipate that the demand for criminal justice services will increase at a rate greater than the proportional increase in population, particularly in urban areas where there is an increasing concentration of people with a greater disparity between incomes and life styles. Moreover, Alaska's general population increase is occurring within the context of a significant alteration in the characteristics of the state's population in terms of urbanization, the degree of transciency and mobility, age levels, sex ratios, economic levels and unemployment rates, all of which contributes to a disproportionate increase in criminal activity.

CHAPTER I

SUMMARY OF FINDINGS AND CONCLUSIONS

Introduction

Any analysis of criminal activity statistics in Alaska must take into consideration several factors. First, the totals for any given year in the majority of index offense categories are sufficiently low that a relatively small numerical increase or decrease could cause an apparently significant percentage change. Second, variations in reporting practices and procedures by law enforcement agencies can in themselves generate significant percentage changes. Third, one or more agencies reporting offenses and arrests one year and not the next or failing to report one year and reporting the next can drastically alter year-to-year relationships between totals and percentages recorded. Fourth, an improvement in reporting or first-time reporting can also contribute to a misleading level of change, most often perceived as an increase in overall numbers and percentages of offenses and arrests. An effort has been made in this study to account and make adjustments for each of these caveats.

Previous studies conducted by individual state agencies and by the Alaska Criminal Justice Planning Agency have generally referenced the lack of a system-wide data base and the questionable data collection systems employed. Unquestionably, a great deal of valuable information has been collected and lost on a "one-time-only" basis due to an inadequate collection, maintenance, retrieval and analysis system. However, even given the present data limitations within the criminal justice system in Alaska, a subject

discussed at some length in this study, it is clear that statistical trends establish an overall increase in criminal activity.

The singularly fundamental conclusion of this study is that a substantial portion of identified and projected increases in criminal activity in Alaska can be attributed indirectly to construction of the Trans Alaska Pipeline as a result of overall population, work force and economic growth energized by pipeline construction. A very small percentage of projected increases in criminal activity can be directly correlated to the work force employed in pipeline construction, but a very large percentage can be attributed to the overall economic growth and alterations in the characteristics of Alaska's population which has and will continue to occur as a result of pipeline construction.

State and Regional Growth

Irrespective of pipeline construction, Alaska would have continued to experience an overall increase in population, work force, unemployment levels, general economic activity and criminal offense activity. As a result of pipeline construction, however, these factors will undergo an accelerated rate of increase.

Regionally, Anchorage will remain the population, work force, trade center and criminal activity center of the state. Population in the Anchorage area is projected to increase by 40% between 1974 and 1980. Part I index offenses, however, are projected to increase approximately 75% in the Anchorage area during the same period, representing approximately 55% of total Part I offenses statewide.

Major Forces of Change Influencing Growth

Population, work force and economic growth within Alaska during the period 1974 through 1980 will be influenced by three major factors: (1) construction of the Trans Alaska Pipeline; (2) the level of state government expenditures; and (3) construction of a gas pipeline. A major consideration in evaluating the impact of gas pipeline construction on population, work force and economic growth is the route alternatives. These alternatives plus several less important changes place 1980 population projections for the state in a range between 451,800 and 535,000.

Population and Work Force Projections Without Pipeline Construction

If the pipeline had not been built, projections indicate that between 1974 and 1980 the population of Alaska would have increased from 323,353 to 431,637. The attendant work force would also have been significantly smaller than that indicated under pipeline impacted projections.

Pipeline Impact On The Administration of Criminal Justice In Alaska

The entire series of projections developed by this study indicate a sizeable and abrupt increase in criminal activity during peak years of construction activity, from 1975 through 1977. Baseline projections indicate that in 1974 29% additional Part I offenses will occur statewide as a result of population, work force and economic growth associated with construction of the Trans Alaska Pipeline. In 1975, 1976 and 1977 these percentages rise to 48%, 53% and 45%, respectively, tapering off in 1980 again to 29%.

Substantial percentages of projected increases in

index offenses can be directly correlated with growth related to pipeline construction, particularly during peak years of construction activity. This growth represents significant cost related impact on the administration of criminal justice in Alaska.

Statewide Crime Trends

In 1970, the number of total Part I criminal offenses in Alaska was 11,891. By 1980, that number is projected to reach 28,700 under baseline projections for an increase of approximately 142%. This increase is projected to include some 6,200 Part I offenses that are attributable to growth associated with pipeline construction, which represents approximately 28% of the 1980 total.

The Part I statewide Alaska crime rate is projected to increase 35% between 1973 and 1980 to 5,967 Part I offenses per 100,000 population. Under baseline projections, Part I offenses closed by arrest are projected to increase 80% statewide between 1974 and 1980. Approximately 25% of this projected increase can be attributed to growth associated with pipeline construction.

Law Enforcement Agencies

The police function represents the initial contact point between society and the criminal justice system. Law enforcement agencies in Alaska have been affected by pipeline related growth not only first but, at least up to the present, the most severely as well. Part of the reason for this is attributable to this front line relationship as the initiator of activity for the criminal justice system as a whole. Beyond that factor,

however, there exists the twin problems posed by: (1) manpower depletions into pipeline related jobs both in the area of security services and construction activity, itself; and (2) the total time required to recruit and fully train new officers, which involves anywhere from eighteen months to two years, including the time it takes for a new officer to acquire an adequate level of on-the-job experience to be minimally qualified.

The greatest degree of impact has been centered within the population centers of Anchorage and Fairbanks and along the length of the pipeline corridor south of the Yukon River, particularly at the terminus site at Valdez. Law enforcment agencies responsible for providing police services in these areas of the state are absorbing a significant percentage of the impact identified in this study.

Prosecution: Alaska Department of Law - Criminal Division

The role of prosecution within the overall administration of justice has become increasingly important. A continuing increase in the incidence of criminal activity and the increasing complexity of criminal law will require special emphasis on an analysis of how the prosecutorial component of the criminal justice system is handling current and projected caseloads.

Given the premise that total Part I offenses resulting in an arrest are the most reliable indicator of law enforcement agency input into and impact on proseuction, it would follow that an 80% increase in prosecutorial capability will be required by 1980, over 1974 levels, if an acceptable level of service is to to maintained.

The difficulty, however, with this analysis is that it assumes an acceptable level of capability at the present time. During Fiscal Year 1975, the criminal division of the Alaska Department of Law experienced a 12.4% increase in total criminal offenses filed and a 56.6% increase in offenses pending. It is thus clear that, in terms of case processing, offense increases are generating a disproportionate increase in pending caseloads, and that the above analysis of future capability requirements are at best minimal.

It is imperative that the criminal division of the Department of Law develop a uniform system of procedures, policies and data collection. A statewide case management and disposition system should be developed to provide the information necessary to evaluate prosecutorial services, programs and policies. Information on recidivism, the plea negotiation policy, deferred sentencing, diversionary programs and conviction ratios by offense categories should be available in the interest of program development and resource allocation.

The Alaska Court System

The projections developed by this study suggest that significant increases in total case filings, and in particular, criminal case filings, would have occurred statewide over the next five years in the absence of pipeline construction. With pipeline construction, however, increased caseloads, particularly within the Third and Fourth Judicial Districts will clearly be substantial. In 1976, for example, 54% or 1,840 of the 3,408 additional projected criminal cases out of a total of 26,434 projected criminal case filings with the Alaska Court System are

estimated to be directly related to growth experienced as a result of pipeline construction.

The Alaska Division of Corrections

Along with other components of the Alaska criminal justice system, the Division of Corrections of the Alaska Department of Health and Social Services would have experienced a sharply increased workload even if the Trans Alaska Pipeline had not been constructed. However, projected increases in statewide population and work force along with general economic and criminal activity growth directly associated with pipeline construction will accelerate and significantly contribute to an overall increase through 1980 in total admissions to correctional programs.

In conjunction with legislative changes and the practices, policies and resources of law enforcement and prosecutorial agencies and the courts, pipeline related growth will directly affect both institutional and probation/parole programs and effectiveness.

In-state correctional populations have already reached maximum levels of institutional efficiency, at least on an annual basis. Projections indicate that total admissions to state correctional institutions will increase between 75% and 89% from 1972 to 1980, and that in 1980, for example, total admissions could be expected to be between 15% and 23% less if the pipeline had not been constructed.

Approximately 14% of all institutional admissions in Alaska involve juvenile offenders. Between 1972 and 1980 juvenile admissions to state correctional institutions would have increased 51% if the pipeline had not been constructed. This increase

will be as much as 96% under high impact projections.

The impact of pipeline related growth on the probation/parole services of the division will, if anything, exceed that on institutional programs. The projections indicate that total statewide admissions to probation and parole programs could increase as much as 158% and 85%, respectively, between 1972 and 1980. In 1980, between 24% and 43% of these additional probationary cases will be related to growth associated with pipeline construction.

In light of the fact that correctional admissions will increase at approximately the same rate as arrests, planning for additional impact must be initiated with a careful comparison of present institutional and probation/parole capabilities with projected future requirements. Along with an analysis of institutional and probation/parole capacities, present and future, the Alaska Division of Corrections has an extreme need for the development, in conjunction with the rest of the criminal justice system, of an adequate informational and statistical base both with respect to individual offenders and in terms of an overall assessment of program efficiency, caseload distribution and personnel effectiveness.

Data Collection

Historical criminal activity data relied on for this study was assembled from data collected from the Alaska Department of Public Safety, Division of Alaska State Troopers, and from twelve municipal police departments. Supplemental caseload activity data was also collected from the Criminal Division of the Alaska Department of Law, the Alaska Court System and the Alaska Division of Corrections. The data collected does not

provide a universe of criminal activity for the historical period examined, but it does provide a statistical base for the most heavily populated areas of the state and is estimated to represent in excess of 95 percent of total criminal activity processed in Alaska.

Statistics were obtained, to a large extent, from Uniform Crime Reports, submitted by municipal police departments to the Federal Bureau of Investigation. Additions were made from Alaska State Trooper detachment data in order to develop criminal activity trends during the historical period examined. Primary emphasis in data assimilations was placed on the development of a consistent statistical base for the state as a whole.

In general, the collection of historical criminal activity and processing data necessary for the preparation of this report was made difficult by the lack of an overall comprehensive and systematic process for collecting, maintaining, retrieving and anlayzing statistics generated by criminal justice agencies in Alaska. The data collection and assimilation phase of the project was originally expected to require approximately three months, but instead continued over almost six because of these difficulties.

With the exception of the Alaska State Troopers and the Anchorage and Fairbanks Police Departments, most police agencies in the state almost totally lack comprehensive criminal activity statistics. Some local police departments maintain incomplete records, with data that is available for one year, often missing the next. In addition, much of the data that was available was in a form that made it difficult to work with due to a lack of consistency in its collection and categorization.

Data collected from the Alaska State Troopers was the most apparently reliable and generally uniform in quality. In order to obtain better projections of criminal activity in the future, an improved data base is essential. The data format employed by the Alaska State Troopers would provide a good basis for a uniform system to be employed by all municipal departments, with the Alaska Department of Public Safety serving as the data collection and maintenance agency. It would clearly be beneficial to further research projects, as well as to overall agency management, to have a central reporting for the storage and analysis of criminal justice statistics.

The lack of adequate, timely and complete information prevents complete identification of many of the problems facing the criminal justice system in Alaska. Current information needs include: information on the extent and nature of crimes; more complete information on individual offenders; and management information such as judicial and prosecutor caseloads, time studies, etc. Specific information should be gathered, analyzed, and made available for managerial-level decisions. Data collected could then be used to define problems, develop alternative strategies for coping with those problems, and record the effectiveness of attempted, corrective policies.

An improved data source and collection, maintenance and retrieval system is desperately needed for future planning by all components of the Alaska criminal justice system. As the quality of the data base improves, so should estimates of future occurrences. While the art of forecasting is not an exact science, improvements can be made with more accurate input.

CHAPTER II

ALASKA'S CRIMINAL GROWTH PATTERNS

INTRODUCTION

Construction of the Trans-Alaska oil pipeline has initiated a population and economic boom within Alaska. The pressures of this boom are causing, and will continue to cause, a concomitant increase in criminal activity. This chapter attempts to describe and examine aspects of an increase in criminal activity observed and expected on both a statewide and regional level. It also addresses the projected impact of oil pipeline construction on criminal growth patterns in Alaska.

Projected impact has been quantified through the development of a mathematical model of criminal activity in the state. As with all models, these projections are an abstraction of reality and are intended to set forth tendencies or trends rather than precise numerical predictions. The importance of the projections developed from the model lies not so much in the isolation of critical forces and variables causing change as in projecting the direction and degree in which criminal activities will develop.[1]

1/ Appendices containing a detailed description of the methodology employed in this study, along with supporting information, definitions, data, and graphs for this chapter are found at the conclusion of this report as follows:

Appendix A Supporting Tables and Figures for Chapter II
Appendix B Criminal Activity Projections - Methodology
Appendix C Data Supplement To Chapter II

Each of these appendices contains its own table of contents, and should be reviewed by the reader (in particular Appendix B) in order to fully understand the observations and conclusions set forth in the present chapter.

Criminal activity projections have been developed for each of five regions of the state, as well as for the state as a whole. The regional breakdowns are described further in this chapter, as well as in Appendix B of this report, and have been delineated as follows: (1) Anchorage; (2) Fairbanks; (3) Southeastern; (4) Southcentral; and (5) Western & Northern.

Crime projections have been adjusted to and investigated within the context of four corresponding levels of economic activity or estimates of pipeline impact. Each of the four examined levels suggests a set of parameters,[2] associated with a specific level of economic impact estimate, which can be translated into projected levels of population and work force.[3]

Three different sets of parameters are associated with high, baseline (or medium) and low levels of economic activity related to construction of the trans-Alaska oil pipeline. A fourth set corresponds to a hypothetical Alaskan economy if the pipeline had not been constructed.[4] The determination of the values constituting a parameter consists of ascertaining at what level of activity

2/ A parameter is a set of determined values for background conditions which define the situation under study. More particularly, for purposes of this study a parameter represents a level of economic activity associated with a degree of pipeline impact. Through its affect on the independent, or externally determined, variables of the system, a parameter can set the limits or even determine the character of the system.

3/ See Appendix B, Section III, The Economic Base Model And Types Of Data Employed, supra at 172-175 of this report for a more thorough discussion of the methodology employed for deriving and utilizing these estimates.

4/ See Appendix B, Section IV-B, Major Forces Of Change, supra at 178-183 of this report.

major economic and industrial elements of Alaska will be operating given several possible degrees of oil pipeline construction impact. The co-ordination of levels associated with each element (i.e., multiplying through the various inter-industry feedbacks resulting from expanded mutual use of services and products) produces an economy-wide level of activity related to each degree of pipeline impact. This level of activity, or parameter, in turn provides the foundation to ascertain what potential employment will be offered and what population can be supported by the economy at that degree of impact.

STATEWIDE & REGIONAL PROJECTIONS OF POPULATION & WORK FORCE

Population and work force projections associated with pipeline construction, and included as independent variables in pipeline impact criminal activity estimates, are indicated and compared in this section. These projections have been generated from the economic base analysis.[5]

With Pipeline Construction

The population of Alaska is projected to increase between 27% and 51% during the period 1974 to 1980. The State's population

5/ For a full discussion of the economic base model, see Appendix B, Section III, supra at 172 of this report, which should be read in conjunction with the source study for that economic analysis: Human Resource Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions and Volume II, Technical Report, November, 1974. Briefly, the economic base model from which growth projections for population and the work force (i.e., employment, unemployment and size of the work force) were generated as values for the dependent variables (internally derived elements), forms the foundation for the Alaska Criminal Justice (ACJ) Model and its derivative criminal activity projections. Consequently, the analysis, is an integral part of the ACJ Model. The dependent variables of the economic model were assumed as the externally derived, or independent variables of the ACJ Model, with the criminal activity projections generated internally as values for the dependent variables of the ACJ analysis (i.e., characteristics of expected criminal activity such as number of reported cases or persons arrested).

in 1974 has been estimated at 354,900. Utilizing the baseline estimate of pipeline impact, population is expected to reach a figure of 481,600 in 1980, whereas low and high impact estimates project 1980 population figures of 451,800 and 535,000, respectively.[6]

A portion of the recently published Alaska 1976 Criminal Justice Plan prepared by the Alaska Criminal Justice Planning Agency, entitled Crime In Alaska, sets the 1974 population for the state at 351,159. This figure represents a 23.3% increase over the 1968 estimated level of 284,900, which is in excess of four times the national increase over the same period. The significance of such a dramatic increase in terms of its impact upon criminal activity and the criminal justice system is summarized as follows:

> This rapid population increase has several implications for Alaska's criminal justice system. Most obviously, it means that there are more people who may potentially be processed through or affected by the criminal justice system. More subtly, the population increase means shifts in the population's characteristics: age, race, economic level, urbanization, sex ratios, etc.[7]

6/ See Appendix A, TABLE A-9, Baseline Population Projections, supra at 151 ; and Figure A-1, Total Population Forecasts, supra at 155 of this report. For a more detailed analysis of the population projections relied upon in this study, see Human Resource Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions, November, 1974.

It should be emphasized, however, that the population projections set forth above and in Table A-9 and Figure A-1 begin with a 1974 pipeline impacted base. Anticipated construction of the Trans-Pipeline has been affecting Alaska's population growth since 1969. It is estimated that if the pipeline had not been built the population of Alaska would have been 323,353 in 1974 with an increase to 431,637 in 1980.

7/ Alaska Criminal Justice Planning Agency, Alaska 1976 Criminal Justice Plan, Crime In Alaska, Volume II at 16-17.

It is in an analysis of this critical shift in the characteristics of the population that the real impact of population growth for the administration of criminal justice in Alaska is to be found. For example, Alaska's high population growth is accompanied by an extremely high degree of mobility, instability and urbanization. The following table compares the mobility factor in Alaska with the United States as a whole.

TABLE 2-1

MOBILITY FACTORS[8]
United States and Alaska-1970

	ALASKA	U.S.
Percent of people (1970) born in their state of residence.	31%	65%
Percent of 1970 population (over 5 years of age) living in the same state in 1965.	50%	85%
Percent of 1970 population (over 5 years of age) living in the same house as in 1965.	27%	53%

In conjunction with this high rate of mobility and the overall transient quality of the Alaskan population, a constantly increasing rate of urbanization is generating a tremendously significant impact on criminal activity patterns in Alaska. In 1975, 46.5% of Alaska's population was concentrated in the Anchorage area.[9]

Not only is a large majority of the migrational growth from outside the state concentrated in urban areas, particularly Anchorage and Fairbanks, but many Alaskans from rural areas are also increasingly migrating to these urban centers. As noted and emphasized by the Criminal Justice Planning Agency:

8/ Ibid., at 17, derived from the United States Bureau of the Census, 1970.

9/ Ibid., derived from the United States Bureau of the Census, 1970.

> Cities have higher crime rates than rural areas. Explanations for this phenomenon usually include the larger number of criminal opportunities, the denser concentration of criminals, freer and more impersonal life styles, the sharp contrast between affluence and poverty, and others. The relationship between crime and urbanization in Alaska is complicated and deserves more study.[10]

Compounding the direct impact of an increasing degree of urbanization in Alaska, is the fact that most, if not all, of the phenomenon stemming from urbanization noted above are not traditional problems for which an arsenal of sophisticated responses have been developed.

Two additional and significant aspects of Alaska's population, examined by the Planning Agency in its study, are its youth and its disproportionate male concentration in relation to the United States as a whole. In 1970, the median age of Alaskans was 22.9 years, while the median age of all Americans was 28.1 years. At the same time, 64% of Alaska's population was under 30 years of age, compared to 53% of the United States as a whole.[11] Moreover, Alaska has a higher percentage of males in its population than the United States as a whole: 54% as compared with 49%. Within the higher incidence of criminal activity age bracket of 15-24, this proportional difference is even greater: 59% of the Alaska population as compared to 49% of the United States as a whole.[12]

10/ Ibid. at 17-18, citing Cressy and Ward, Crime in America, The President's Commission on Law Enforcement and the Administration of Justice.

11/ Ibid. at 18-19, derived from the United States Bureau of the Census, 1970.

12/ Ibid. at 19, derived from the United States Bureau of the Census, 1970.

Another significant characteristic of any population that has consistently been found to be a contributing factor to criminal activity is the rate of unemployment. Alaska's has been consistently higher than the United States as a whole. The following table provides a seven year comparison.

TABLE 2-2

UNEMPLOYMENT RATES
United States and Alaska, 1968-1974[13]

Year	Alaska	Total U.S.
1968	9%	2.5%
1969	8.5 -8.8%	2.5%
1970	9%	4.9%
1971	10.2 -10.4%	5.9%
1972	10.5 -10.7%	5.6%
1973	10.5 -10.9%	5.0%
1974	10%	5.6%

Factors which have been found to contribute to Alaska's high rate of unemployment include the incidence of seasonal employment, subsistence economies in many rural areas along with a lack of employment opportunity in bush areas and the influx of out-of-state migrants in search of employment that is pipeline related.[14]

Other characteristics of Alaska's population examined by the Criminal Justice Planning Agency in an attempt to identify and analyze those factors which, either separately or acting together, directly effect crime rates in the state were the racial composition and the incidence of arrest therein, the educational level, the abuse of alcohol, the severity of the environment, the divorce rate, the family structure and size, the incidence of child abuse, economic disparities among the population and the acute nature of the housing

13/ Ibid. at 21-22.

14/ Ibid.

shortage in Alaska. To summarize, however, Alaska not only exceeds the United States as a whole in terms of population growth, mobility and instability, the degree of urbanization, youthfulness and the unemployment rate, but also in alcohol abuse and the per capita consumption of alcohol, the size of families and the relative number of individuals residing in single households, the divorce rate and the extremity of climatic conditions.[15] All of these factors have some perceived relationship to the crime rate, some more than others and some less than others. Many of these factors have been, are being or will be directly affected by construction of the Trans-Alaska Pipeline, some to a significant degree, such as overall population growth, mobility and instability, the degree of urbanization, the unemployment rate etc.; and some not at all, such as the extremity of climatic conditions.

Throughout the forecast period addressed in this study, Anchorage area increases are expected to dominate overall population growth. The Fairbanks and Southeast areas are expected to maintain approximately the same relative population with some temporary fluctuation, while the Southcentral area population, which excludes Anchorage itself, is anticipated to increase rather slowly due to the prevailing influence of the Anchorage area trade center.

The work force in Alaska is projected to grow at an even faster rate than the population. The more rapid rate of growth of the work force can be attributed to a number of factors including the increasing number of women entering the work force

15/ Ibid. at 19-24.

and a lower set of dependency ratios[16] for pipeline construction workers and "boomers".[17]

The low pipeline impact estimate anticipates a 33% increase in work force, the baseline estimate indicates a 44% expansion, in contrast to a population increase of 36%, and the high impact estimate projects 62% growth. The work force in the State is expected to reach 213,100 in 1980 under the baseline impact estimate. In contrast, the low impact estimate projects an increase from a 1974 work force of 148,400 to 198,000 in 1980, while the high estimate suggests that the work force figure could approach a high of 240,600.[18]

The Anchorage area is expected to continue accommodating a major portion of the statewide work force; a share that could rise to 47% by 1980. The Southeast region is not expected to receive any direct pipeline workers or "boomers"; consequently, the work force

16/ Dependency ratios refer to the number of persons dependent in a tax status sense on a member of the work force. A dependency ratio is simply an indication of how many dependents a member of the work force has relying on him (e.g., a dependency ratio of 2, indicates that a worker has himself and one additional person dependent on his job for support). For a further discussion of dependency ratios and their role in developing population projections, see Appendix B, Section IV-C(1), Total Population, supra at 194 of this report.

17/ The term "boomers" as used in this study refers to that portion of the work force in Alaska who migrated into the state in search of employment associated with construction of the Trans-Alaska Pipeline. For a further discussion of their role in the economic base model which serves as a predicate of this study, see Appendix B, Section IV-B(8), Major Forces Of Change - Boomers, supra at 183; Also see Appendix A, TABLE A-8, Boomers, supra at 150 of this report.

18/ See Appendix A, TABLE A-9, Baseline Population Projections, supra at 151; TABLE A-10, Baseline Civilian Work Force Projections, supra at 152; and FIGURE A-2, Civilian Work Force Forecasts, supra at 156 of this report.

in that area is anticipated to grow at a lesser rate than that of the Fairbanks region. Higher dependency ratios in Southeast primarily account for its comparably greater population expansion.[19]

Growth industries during the forecast period are expected to consist of state and local government, construction, retail and wholesale trade, transportation and services.[20]

State and local government is expected to grow by 83% between 1974 and 1980. Most of this expansion can be attributed to an augmented demand for governmental services and increased oil revenues. This growth is anticipated to be steady throughout the forecast period.[21]

The remaining industry sectors of the state -- Federal government, mining, manufacturing, communications and utilities, finance, insurance and real estate, and non-categorized employment-- are expected to show relatively modest increases in overall growth and employment.[22]

19/ See Appendix A, TABLE A-10, Baseline Civilian Workforce Projections, supra at 152 of this report for a regional and yearly breakdown of work force projections under the baseline impact estimate.

20/ See Appendix A, TABLE A-5, Projected State Expenditures 1974 - 1980, supra at 147 of this report; Also see Appendix B, Section IV - B, Major Forces Of Change, supra at 178-183, and Section IV - C, Independent Variables Of The ACJ Model, supra at 183-190 of this report for a further and more detailed discussion of these components incorporated into the methodology of this study.

21/ See Appendix B, Section IV - B(3), Major Forces Of Change - State Government Expenditures, supra at 179-180, and Section IV - C(4) Independent Variables Of The ACJ Model - State and Local Government, supra at 185-186 of this report.

22/ See Appendix B, Section IV-C, Independent Variables Of The ACJ Model, supra at 185-190 of this report, for a further description and analysis of these industries and their effects on the Alaskan economy. Also see Appendix A, TABLES A-3 through A-7 supra at 145-149 of this report, for manpower estimates relative to the different impact estimates.

Without Pipeline Construction

Population and work force growth would have developed differently had pipeline construction not been undertaken. Future industrial development would probably have followed a pattern of constant increase between 1974 and 1980. The widest divergence, representing increasing dependency ratios, between population and work force figures anticipated with pipeline construction and those anticipated without pipeline construction, would have occurred in 1976, with the estimated difference tapering off thereafter.[23]

Industrial growth would also have been different. Besides, the obvious differences in construction activity and concomitant reductions in state and local government expenditures, other differences would have occurred such as in mining activity and Federal government expenditures.[24]

CRIMINAL ACTIVITY PROJECTIONS

Criminal activity specifically associated with pipeline construction is projected to be largely a result of sudden, general increases in population and those characteristics of the

23/ See Appendix A, TABLE A-11, Population Projections Without Construction of the Trans-Alaska Pipeline, supra at 153; FIGURE A-1, Total Population Forecast, at 155; TABLE A-12, Work Force Projections Without Construction of the Trans-Alaska Pipeline, supra at 154; and FIGURE A-2, Civilian Work Force Forecasts, supra at 156 of this report.

24/ See Appendix B, Section IV-B, Major Forces of Change, supra at 178-183 and Sections IV-C, Independent Variables Of The ACJ Model, supra at 183-190 of this report, for further discussion; Also see Appendix A, TABLE A-7, Hardrock Mining Employment, supra at 149 of this report.

Alaska population previously discussed and briefly analyzed and the instability created by dislocating changes in the economic structure of the state. The Alaska Criminal Justice (ACJ) Model attempts to predict how this level of criminal activity will alter with changes in critical economic forces. Initial projections are generated from a historical trend observed in data compiled by law enforcement agencies during the period 1969 through 1973.[25]

The projections, or output, of the ACJ Model have been categorized in several ways. Criminal activity data has been divided into two major groups keying upon the Federal Bureau of Investigation (FBI) classification into Part I and Part II offense reporting categories. Part I offenses include criminal homicide, forcible rape, robbery, aggravated assault, burglary, larceny-theft and auto theft. Part II offenses include simple assault, arson, receiving and concealing stolen property, forgery, counterfeiting, embezzlement, vandalism, prostitution, gambling and drug violations, among others.[26]

25/ See Appendix B, Section IV-F, Regional Allocation, supra at 198-199 , Section IV-G, Alaska Crime Forecasting Equations For The ACJ Model, supra at 199-202 , and Section V, Historical Data Collection, supra at 203-209 of this report, for a detailed analysis of the methodology employed in collecting and analyzing the criminal activity data relied on in this study. Also see Appendix A, TABLE A-1, Source of Crime Data By Region, supra at 143 of this report; and Appendix C, Section 2, Uniform Crime Reports By Region, 1969-1973, TABLES C-1 through C-10, supra at 213-223 of this report. Appendix C of this study contains the tabulated results and summaries of data collected as well as projections of criminal activity related to pipeline construction.

26/ See Appendix B, Section IV-E, Crime Type Allocation, supra at 192-197 of this report, for a more complete discussion of the FBI Uniform Crime Reports classification scheme.

Criminal activity projections have been further classified according to the level of processing that has occurred: (1) "Reported" - incidents of criminal activity reported to a law enforcement agency; (2) "Actual" - reported crimes that are confirmed as crimes by a law enforcement agency; and (3) "Arrests" - actual crimes that are closed through arrest by a law enforcement agency.[27]

Projections have been adjusted according to the appropriate level of impact estimate (high, medium or baseline, low or none), and can be tabulated for each of five regions and for the state as a whole.

The immediately following sections of this chapter are devoted to a summary presentation of statewide and regional projections that are set forth in considerable detail in Appendix A and Appendix C of this report.[28] Data has been presented comparatively. Pipeline impact estimates are constructed so as to suggest a range for criminal activity projections and the "without pipeline" estimate is comprised of a loose set of control predictions which indicate possible levels of pipeline impact when contrasted with the various impacted projections.

The underlying assumptions of the model employed are manifested in these comparisons. For example, relationships between

27/ See Appendix B, Section IV-D, Dependent Variables Of The ACJ Model, supra at 190-192 of this report, for a further analysis and definition of the levels of criminal activity utilized as dependent variables in this study.

28/ Projections are displayed in graphic form in Appendix A, FIGURES A-4, through A-12; and in Tabular form in Appendix C, Section 3, Forecast Data Series, TABLES C-11 through C-29.

levels of processing remain essentially the same throughout the forecast period, 1974 through 1980. This reflects a basic presupposition that effectiveness of crime control measures remains unchanged so only historically precedented trends will thus be reflected in the later, projected figures.[29]

Statewide Crime Projections

Under the baseline statewide projections, Part I crimes are projected to increase approximately 59% at each level of processing ("reported", "actual", "arrest") over a five-year forecast period from 1974 to 1978. Historical data collected for a comparable five-year period, from 1969 to 1973, show "reported" Part I criminal offenses increasing 38%, "actual" offenses 28% and Part I crimes resulting in an "arrest" 47%.[30] Figures for the entire seven-year projection period, from 1974 to 1980, indicate baseline increases of about 75% at all levels of processing; "reported" increases from 18,000 in 1974 to 31,200 in 1980, "actual" from 16,600 to 28,700 and offenses resulting in "arrest" from 4,000 to 7,200.[31]

Comparable high and low statewide Part I projections provide an indication of the possible range of pipeline impact. From 1974 to 1980, Part I offenses, at all levels of processing, could increase as little as 56% or as much as 102%. The control, or "without pipeline", projections for this same period, when compared with baseline figures, reveal an approximately equivalent rate of increase. However, baseline absolute figures are higher in all years at all levels of processing.[32]

Table 2-3 depicts relevant increases in "actual" offenses for the historical period, a comparable 5-year projection period and for the entire projection period.

TABLE 2-3
STATEWIDE ACTUAL OFFENSES
PART I CRIMES

Period	Impact Estimate	Increase
1969-73	N/a	28%
1974-78	W/O Pipeline	13%
1974-78	Low	42%
1974-78	Baseline	59%
1974-78	High	81%
1974-80	W/o pipeline	74%
1974-80	low	56%
1974-80	baseline	75%
1974-80	high	102%

29/ For instance, during the forecast period, 1974 to 1980, offenses that result in an arrest remain approximately 24% of actual offenses in this category, while actual activity is about 93% of all reported statewide Part I criminal activity. In contrast, the historical data alters randomly between levels of processing and shows no particular trend. Cases involving arrest were as few as 19% of actual offenses in 1969 or as much as 25% in 1972, while actual offenses were 88% of reported activity in 1973 and 95% in 1971. The projected data maintains relationships generated by smoothing out the random fluctuations of the historically compiled data. One consequence of this is that comparisons between projected and historical year data and comparisons between historical year and historical year data show random deviations in the relationships between levels, whereas comparisons between data of two forecast years reveals fairly consistent relationships between levels of processing and therefore similar rates of growth in the same period between levels.

30/ The fact that actual Part I offenses increased 28% during the period 1969 to 1973 while those resulting in arrest over the same period increased 47% suggests a dramatic improvement in the clearance rate for law enforcement agencies on a statewide basis during that period. Clearance rates as a measure of law enforcement effectiveness are discussed in Chapter IV, Law Enforcement Agencies, supra at 48-51.

31/ See Appendix C, Section 3(a), Forecast Data Series - Medium or Baseline Statewide Historical & Projected Criminal Activity, TABLE C-11, Baseline Historical & Projected: Total Part I Index Crimes - Statewide, supra at 226 of this report.

32/ See Appendix C, Section 3(b) Forecast Data Series-Alternate Statewide Projected Criminal Activity: Low, High and Without Pipeline Construction; TABLE C-14, Alternate Projections: Total Part I Index Crimes-Statewide, supra at 229 of this report. For example, baseline 1980 projections are 31,200 "reported", 28,700 "actual", and 7,200 "arrests", whereas the corresponding without pipeline figures are 24,200, 22,500 and 5,400, respectively; yet both series of projections yield rates of increase in the mid -70% range.

Part II offense projections, derived from Alaska State Trooper (AST) historical data, indicate an equally rapid rate of increase. Compared to the historical data years 1969 through 1973 and recorded increases of 46% in "reported" activity, 18% in "actual" offenses and 46% in offenses resulting in "arrest", baseline projections for the period 1974 through 1978 indicate a 64% increase at all levels of processing. This increase is projected to total 74% during the entire forecast period, 1974 to 1980.[33]

The high and low range of projections for AST Part II criminal activity for the period 1974 to 1980 is projected at approximately a 56% increase under the low impact estimate and a 106% increase under the high at all levels of processing. The control projections for the same period suggest a slightly below baseline rate of increase, at about 70% but substantially lower absolute levels of criminal activity at all levels.[34]

Regional Crime Projections

Criminal activity projections for each of the five regions of the state addressed in this study are described in this section.[35] Table 2-2 provides a cross-regional comparison of increases in Part I and Part II offenses within the "actual" classification for the period 1974-1980 under baseline impact estimates.

TABLE 2-4

PERCENTAGE INCREASES 1974-1980
PROJECTED BASELINE ACTUAL OFFENSES

Offense Group	Anchorage	Fairbanks	Southeast	Southcentral	Western & Northern
Part I	72%	71%	75%	69%	57%
AST Part II	71%	72%	85%	70%	60%

Anchorage Region. The Anchorage area has both the largest population and the predominant bulk of the state's work force. Historically, the Anchorage area has generated a majority of the total criminal activity in the state.

In 1969, the region accounted for 50% of "actual" Part I criminal activity surveyed. By 1973, this figure had risen to 55%. This trend is projected to continue with the Anchorage region accounting for 55% of Part I offenses at all levels of processing under baseline projections during the forecast period. Increases of about 75% in "reported", "actual", and "arrests" for Part I offenses are projected for the period 1974 through 1980.

Baseline AST Part II crime projections reveal a similar pattern of growth. 37% of the state's Part II offenses will be processed in this area, with an increase of about 71% at all levels of criminal activity. The regional distribution of offense type approxi-

33/ See Appendix C, Section 3(a), Forecast Data-Series -Medium or Baseline Statewide Historical & Projected Criminal Activity, TABLE C-13, Baseline Historical & Projected: Total Part II Index Crimes - Alaska State Troopers, supra at 228 of this report for data relevant to Part II AST projections.

34/ See Appendix C, Section 3(b), Forecast Data Series - Alternate Statewide Projected Criminal Activity: Low, High and Without Pipeline Construction, TABLE C-16, Alternate Projections: Total Part II Index Crimes- Alaska State Troopers, supra at 231 of this report.

35/ See Appendix A, FIGURE A-3, Five Study Regions, supra at 157 of this report. For the relevant data set by region for baseline projections, see Appendix C, Section 3(c), Medium or Baseline Regional Projected Criminal Activity, TABLES C-17 through C-19, supra at 232-234 of this report. Alternate regional projections are set out in Appendix C, Section 3(d), Alternate Regional Projected Criminal Activity: Low, High and Without Pipeline Construction, TABLES C-20 through C-28, supra at 235-243 of this report. Also see Appendix C, Section 4, Regional Projections By Crime Type Assuming Baseline Estimate, supra at 245-259 of this report, for a delineation under Part I Index Crimes of the projected range of criminal activity in each region.

mates the statewide pattern with the exception of a slightly lower percentage of assaults and a somewhat higher rate of larceny related offenses.

Fairbanks Region. 17% of total Part I offenses are projected to occur in the Fairbanks area during the forecast period under baseline estimates, and 24% of AST Part II offenses. Increases in "actual" Part I and Part II offenses are projected to be 75% and 72%, respectively, between 1974 and 1980.

Crime patterns in this region are expected to closely resemble the overall statewide mix by type of offense. The Fairbanks area represents the second highest region in level of offenses but may experience the largest relative increases in criminal activity according to baseline calculations.

Southeast. Criminal activity, for processed offenses in the Southeast area, is expected to increase 75% for Part I offenses and 85% for Part II offenses during the 1974 to 1980 period. These increases can to some extent be attributed to population expansion associated with state and local government.

Overall, the Southeast region will account for 14% of Part I offenses and 18% of Part II offenses, statewide. Property crimes are projected to be a major factor in projected increases.

Southcentral. In 1969, this region accounted for 10% of "reported" criminal activity surveyed. This percentage is expected to rise to 13% during the peak of pipeline construction in 1976, reflecting increases of 76% in Part I and 90% in Part II "reported" criminal activity during the forecast period between 1974 and 1980.

The distribution of criminal activity by crime types is expected to closely approximate that anticipated for the state, as a whole, with the exception of burglary. Baseline projections indicate that burglary will constitute a higher percentage of this region's total criminal activity than in any of the other four regions.

Western & Northern Region. The sparse population of this area accounted for only 2% of statewide reported criminal activity in 1969. This figure increased to 4% by 1973, an increase which is generally felt to be a function of increased activity on the part of AST detachments in this area, rather than an unprecedented rise in crime. The percentage of overall statewide criminal activity occurring in the Western & Northern region is projected to remain essentially constant throughout the forecast period, with some slight possible reduction in later years.

Reported Part I offenses are projected to increase 71% between 1974 to 1980, while reported Part II offense increases are projected at 60% during the same period. Crime distributions in the Western & Northern region differ markedly from that observed statewide. For example, rape and criminal homicide account for a much higher percentage of reported Part I offenses than at the statewide level.

PIPELINE IMPACT

The series of projections forecasting levels of criminal activity if the trans-Alaska pipeline had not been built begins several years prior to the impacted projections set forth in this report. In order to allow for activity generated in anticipation of oil pipeline construction, it was necessary to adjust historical

data downward. Since the starting point for "without pipeline" projections occurs prior to the starting point for impact projections, a comparison is more valuable in absolute terms.

Table 2-3 sets forth, by year throughout the forecast period, that percentage of projected criminal activity which is attributed to construction of the Trans-Alaska Pipeline.

TABLE 2-5

PIPELINE IMPACT[36]
STATEWIDE

Year	Statewide Part I Impact[37]	AST Part I Impact	AST Part II Impact
1974	29%	4%	8%
1975	48%	25%	30%
1976	53%	30%	35%
1977	45%	23%	29%
1978	40%	20%	25%
1979	34%	13%	17%
1980	29%	9%	12%

36/ See Appendix C, Section 3(e), Forecast Data Series - Pipeline Impact, TABLE C-29, PIPELINE IMPACT, supra at 244 of this report, which sets forth in absolute numerical terms, by year throughout the forecast period, projected criminal activity which is directly attributable to construction of the Trans-Alaska Pipeline. The percentages set forth in TABLE 2-5 above were derived by subtracting from "baseline" totals the "without pipeline" totals and subsequently determining the percentage the resultant figures (set forth in TABLE C-29) were of the "without pipeline" totals.

37/ The use of the term "statewide" in relation to Part I offense data in TABLE 2-5 above and throughout this study distinguishes that category from Part I offense data and projections derived soley from Alaska State Trooper historical data. The "statewide" data includes that collected from both the Alaska Department of Public Safety, Division of Alaska State Troopers, plus twelve municipal police departments throughout the state, and is estimated to represent in excess of 95% of total Part I criminal activity processed in Alaska. See Appendix A, TABLE A-1, Sources Of Crime Data By Region, supra at 143 of this report. Also see, Appendix B, Section IV-D, Dependent Variables Of The ACJ Model, supra at 190-192, and Section 5, Historical Data Collection, supra at 203-209 of this report.

The entire series of projections developed reveal similar general characteristics. In each of the series of projections which have been adjusted for the degree of pipeline impact, there is a sizeable and abrupt increase in criminal activity during the period 1974 to 1977. Baseline projections, adjusted for "without pipeline" growth by the subtraction of the control figures, indicate peaks during 1976. Baseline statewide Part I offenses, for instance, peak at a figure 53% greater than the comparable control projections, then drop by 1980 to 29%. Baseline Part II offense projections range from 8% greater than control projections in 1974, to 35% more in 1976, then decline to 12% more in 1980.[38]

The more gradual rate of increase in criminal activity through 1980, following initial abrupt increases, tends to approximate the smooth, continuous rate exhibited by the series of "without pipeline" projections. This suggests that a substantial percentage of projected increases in criminal activity after 1976 are independent of oil pipeine construction.[39]

CONCLUSIONS

Chapter II attempts to examine projected levels of expansion in population, the work force and criminal activity in Alaska that can be attributed to pipeline construction. Inferences which can reasonably be drawn are as follows:

38/ See Appendix A, FIGURES A-4 through A-12, supra at 158-166 of this report. These figures graphically depict projected rates of increase for Part I and Part II index offenses surveyed for each level of criminal activity processing (i.e., "reported", "actual" and "arrests").

39/ See Appendix C, Section 3(e), Forecast Data Series - Pipeline Impact, TABLE C-29, PIPELINE IMPACT, supra at 244 of this report, for the absolute differences between "baseline" and "without pipeline" projections for each year during the forecast period.

State and Regional Growth

Alaska, irrespective of pipeline construction, would have continued to experience an overall increase in its population and work force. However, as a result of pipeline construction, these factors will experience an accelerated rate of increase. Regionally, Anchorage is projected to remain the population, work force and trade center of the state. Population in this region is projected to increase by a factor of 40% between 1974 and 1980.

Major Forces of Change Influencing Growth

Population and work force growth within Alaska during the period 1974 through 1980 will be influenced by three major factors: (1) construction of the Trans-Alaska Pipeline; (2) the level of state government expenditures; and (3) construction of a gas pipeline. A major consideration in evaluating the impact of gas pipeline construction on population and work force growth is the route alternatives. Two gas pipeline routes from Prudhoe Bay have been proposed. One would proceed southward wholly through Alaska, parallel with the Alyeska trans-Alaska route; the other through Arctic Alaska and then eastward through Canada along the MacKenzie River. These alternatives plus several less important changes place 1980 population projections in a range between 451,800 and 535,000.[40]

Population and Work Force Projections Without Pipeline Construction

If the pipeline had not been built, projections indicate that between 1974 and 1980 the population of Alaska would have increased from 323,353 to 431,637. The attendant work force would

40/ See Appendix B, Section IV-B, Major Forces Of Change, supra at 178-183 of this report.

also have been significantly smaller than that anticipated under pipeline impacted projections.

Alternate Levels of Criminal Activity in Alaska

Between 1974 and 1980, "reported" Part I offenses are projected to increase 82% under baseline projections.[41] High and low projections indicate a range of increase for "reported" Part I offenses of 64% to 111%.[42]

"Without pipeline" projections, on the other hand, estimate 24,200 "reported" Part I offenses in 1980, a figure 29% less than the baseline projection of 31,200.[43]

Pipeline Impact On The Administration Of Criminal Justice in Alaska

TABLE 2-5, infra, sets out by year throughout the forecast period, that percentage of "reported" index offenses, under baseline projections, which can be attributed to growth associated with construction of the Trans Alaska Pipeline. A careful examination of those percentages gives rise to some interesting comparisons. For example, baseline projections suggest that in 1980, 29% of "reported" Part I offenses processed on a "statewide" basis will be attributable to pipeline construction, while only 9% of "reported"

41/ See Appendix C, Section 3(a), Forecast Data Series - Medium or Baseline Statewide Historical & Projected Criminal Activity, TABLE C-11, Baseline Historical & Projected: Total Part I Index Crimes - Statewide, supra at 226 of this report for the numerical projections from which percentages have been derived.

42/ See Appendix C, Section 3(b), Forecast Data Series-Alternate Statewide Projected Criminal Activity: Low, High and Without Pipeline Construction, TABLE C-14, Alternate Projections: Total Part I Index Crimes - Statewide, supra at 229 of this report.

43/ Ibid.

Part I offenses processed by the Alaska State Troopers will be associated with pipeline related growth, all of which serves to reinforce previous observations regarding the impact of an increasing rate of urbanization on criminal activity in Alaska and the predominant role of the Anchorage and Fairbanks area.

In any event, it is clear that substantial percentages of projected increases in index offenses can be directly correlated with growth associated with pipeline construction. This will be particularly the case during peak years of construction activity. This growth represents real cost related impact on the administration of criminal justice in Alaska. The implications for each component of the Alaska criminal justice system will be discussed in chapters that follow.

CHAPTER III

THE PIPELINE CORRIDOR

The Trans-Alaska Pipeline route runs 790 miles from Prudhoe Bay on the Arctic Ocean south to the city of Valdez on Prince William Sound (See Figure 3-1, supra at p. 42). The Yukon River flowing westward across Alaska to the Bering Sea, bisecting the pipeline route, provides a geographic division of the corridor in terms of accessibility, security forces, and law enforcement responsibilities.

The Alyeska Pipeline Service Company was formed as the management company for construction of the Trans-Alaska Pipeline. Alyeska itself is owned by eight parent oil pipeline companies and manages a variety of subcontractors. The two major construction contractors are the Bechtel Corporation, which was responsible for construction of the "haul road" and presently under the direct management of Alyeska the pipeline, itself, and the Fluor Corporation, responsible for construction of the pump stations and the Valdez terminal facility.

Activity North of the Yukon

Prior to the commencement of construction, there had never been a bridge built across the Yukon and the only existing roadways north of the river along the pipeline route were short, unconnected local sections around the villages of Bettles and Wiseman (1970 census populations of 72 and 12, respectively). Winter trails, "ice bridges", and airstrips on sand bars served what little commerce preceeded the exploration for oil. To facilitate construction of the pipeline, however, a "haul road" has been constructed along with a bridge across the Yukon River.

Fourteen construction camps, in addition to the Prudhoe Bay complex are located along the pipeline route north of Fairbanks, thirteen of which are north of the Yukon River. The only public airstrip is "Deadhorse State Airport" located at Prudhoe Bay. Private airstrips have been constructed at each camp to permit air supply of required materials as well as visits by authorized personnel.

Camp facilities and the "haul road" are restricted to construction workers and vehicles on official business. The camps are isolated and almost entirely self-suffieient. Employees work ten and twelve hour shifts for nine-week periods and then are flown out for one or two weeks of "rest and relaxation."

Activity South of the Yukon

South of the Yukon the pipeline route to a large extent lies adjacent to preexisting public roadways. It bypasses Fairbanks (14,771), Delta Junction (703). Glennallen (169), and Copper Center (151) to the terminal site at Valdez (1,005). (Populations, 1970 census).

Seven construction camps are located in proximity to public highways south of the Yukon River and, as such, are readily accessible to established communities.

Camp Security

Each construction camp is supervised by a camp manager representing Alyeska and one of the prime contractors or subcontractors. He administers the camp rules and is responsible for all camp discipline. A job foreman at each camp is in charge of construction activities.

Camp rules prohibit the use of firearms, liquor, drugs and gambling. From discussions and interviews with various camp

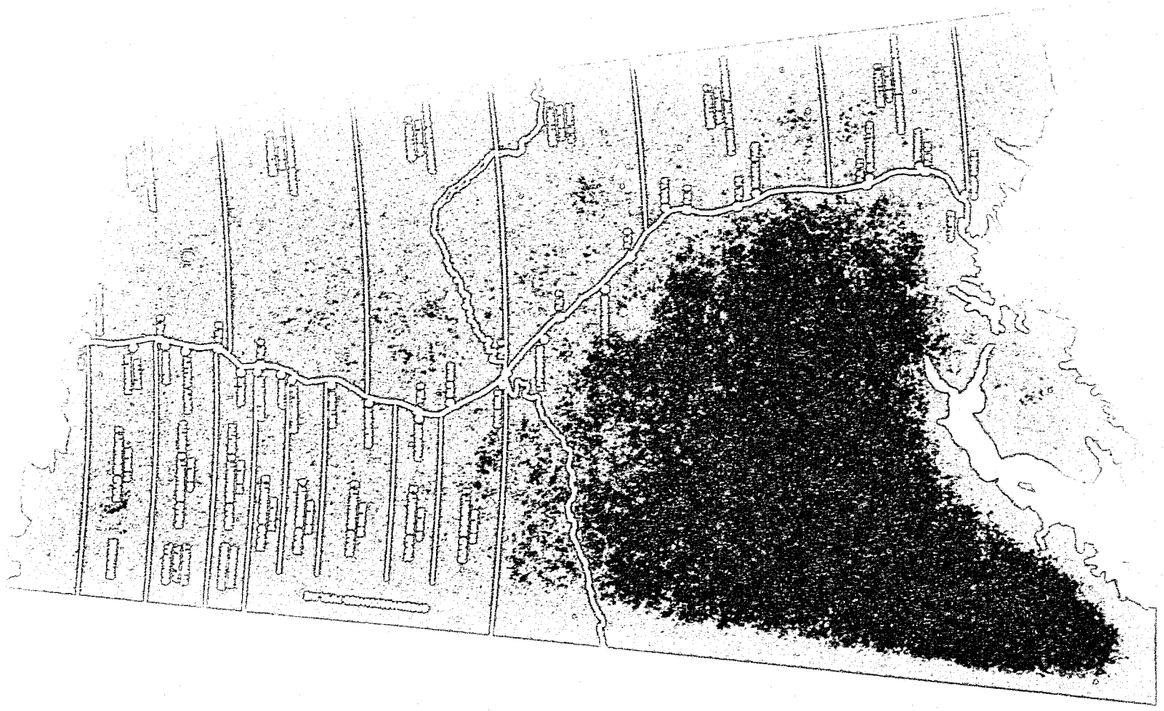
managers, Alaska State Troopers and camp workers, however, it appears that liquor is tolerated if not misused. Marijuana use appears to to be reasonably prevalent, with more serious drugs in very limited use. There is evidence of small stakes gambling and reports of some high stakes games occasionally run by professional gamblers who manage to qualify as regular employees of the camps.

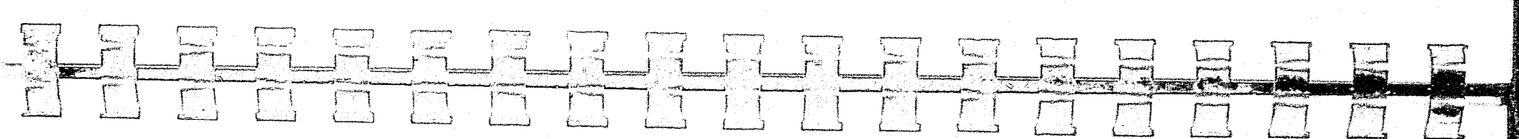
The camps are open so that workers who are off duty are free to leave, which increases the cash flow to and from the camps and aggravates security problems in those camps south of the Yukon.

In August, 1974, Alyeska Pipeline Service Company contracted with two firms to provide camp and pump station security services. North of the Yukon River the security contract was awarded to the Security Systems Division of the Nana Development Corporation, which consists of a present authorized security force of approximately 104 individuals. Their role is to provide for general camp security including fire watch, the protection of property, safety checks, limited search and rescue efforts, and constant surveillance for the presence of unauthorized individuals in the camps.

South of the Yukon River security is provided by Wackenhut of Alaska. A present authorized security force of 34 supervisory personnel and 103 security guards provide essentially the same services in pipeline construction camps and pump station sites south of the Yukon River and at the Valdez terminal site as do the Nana Security force. Security problems in this southern segment are compounded by relatively easy access to and from the Richardson Highway and surrounding communities.

All calls for law enforcement assistance within the camps are directed to Alyeska's Security Manager. The Security Manager





CHAPTER IV

LAW ENFORCEMENT AGENCIES

INTRODUCTION

An evaluation of the impact of pipeline construction and its attendant population growth on the various components of the Alaska criminal justice system must, of necessity, begin with an examination of law enforcement agencies inasmuch as they constitute the overwhelmingly predominate source of activity for the system as a whole.

Law enforcement agencies at the state level in Alaska consist primarily of the Divisions of Alaska State Troopers and Fish and Wildlife Protection of the Alaska Department of Public Safety and municipal police departments throughout the state. Combined, they are responsible for providing police protection to approximately 140 local government units in a state consisting of approximately 586,000 square miles with an estimated 1974 population in excess of 350,000. In 1974 there were 574 sworn police officers within the State of Alaska, excluding federal officers and officers of the Division of Fish and Wildlife Protection of the Department of Public Safety.

MEASURES OF EFFECTIVENESS

Law enforcement is the first and most heavily impacted component of the criminal justice system in terms of any appreciable shift in population characteristics and crime trends.[44]

44/ See Chapter II, Alaska's Criminal Growth Patterns, infra at 17-21, for a general discussion of those characteristics of Alaska's population identified as contributing and aggravating factors of criminal activity and their general relationship to pipeline related growth.

Measuring police efficiency, productivity and effectiveness is a very complex task. A variety of measurements have been developed. However, frequently incomplete and sometimes distorted views may result from a reliance on a single indicator or an uncompatible combination of indicators.

Some of the more commonly accepted measurements include crime rates, clearance rates, calls-for-service, response time to calls-for-service, and police officers and employees/population ratios. Because of the limited data initially available for statistical analysis and because of the limited scope of inquiry, this study has limited its focus to crime rates, clearance rates and officer and employee/population ratios.[45]

Crime Rate

The Federal Bureau of Investigation has developed a crime index for uniform crime reporting which divides criminal activity into two categories. Part I crimes are those which involve serious offenses against the person (murder, forcible rape, aggravated assault, and robbery) and high incidence offenses against property (burglary, larceny-theft and auto theft).

45/ For a preliminary analysis of some of the measurements discussed in the text above, see Alaska Criminal Justice Planning Agency, Alaska 1976 Criminal Justice Plan, Crime In Alaska, Volume II at 13-83. Some of the measurements set forth in the text would involve the collection of data far beyond the scope of this study, but would be essential in order to acquire an accurate picture of law enforcement effectiveness in Alaska. For example, a majority of calls for service to a police agency do not involve criminal activity and certainly not major crimes. The majority of such requests, particularly in an urban area, involve activities such as traffic accidents, family disturbances, lost children, road and highway obstructions, accidents in the home and at work, etc.

Part II crimes encompass all other offenses (other assaults, arson, forgery and counterfeiting, fraud, embezzlement, etc.)[46]

The crime rate under the FBI reporting system is defined as the number of "actual" index offenses of each type per 100,000 population.[47] Because of their relative significance, crime rates are most commonly analyzed for Part I index offenses.

Table 4-1 compares Alaska's Part I crime rate ("actual" offenses per 100,000 inhabitants) to those of the United States as a whole in 1973. With the exception of robbery and burglary, the Alaska rates are higher, and in some instances significantly so, than those of the United States.

TABLE 4-1

UNITED STATES - ALASKA[48]
1973 CRIME RATE COMPARISON - PART I ACTUAL OFFENSES

Crime	1973 Rate/100,000 U.S.*	Alaska**
Homicide	9	23
Forcible Rape	24	38
Robbery	182	66
Aggravated Assault	198	273
Burglary	1211	976
Larceny (all)	2051	2538
Auto Theft	440	507
TOTAL	4116	4420

46/ See Chapter II, Alaska's Criminal Growth Patterns, infra at 25-26, and Appendix B, Section IV-E, Crime Type Allocation supra at 192-197 of this report, for a more complete discussion of the FBI Uniform Crime Reports classification scheme.

47/ United States Department of Justice, Federal Bureau of Investigation, Uniform Crime Reports: 1973 at 2.

48/ *United States Department of Justice, Federal Bureau of Investigation, Uniform Crime Reports: 1973 at 2.

** Appendix C, Section 2, Uniform Crime Reports By Region: 1969-1973, TABLE C-5, Part I Index Crimes - Statewide: 1973, supra at 218 of this report. Rates have been calculated on the basis of a 1973 population base of 330,365.

The Crime In Alaska section of the Alaska 1976 Criminal Justice Plan includes a similar analysis of the 1974 Alaska Part I crime index rate and a comparison between 1973 and 1974 rates, relying on data reported by eighteen Alaska jurisdictions. The observation is made, as evidenced by the comparison set forth in Table 4-1 above, that most Part I crimes reported, both in Alaska and in the nation as a whole, constitute offenses against property. Table 4-2, taken from Crime In Alaska, is a 1974 comparison breakdown of Part I offenses into the "violent offenses against person" and "offenses against property" categories, with robbery treated separately since it includes elements of both categories.

TABLE 4-2

UNITED STATES - ALASKA [49]
1974 CRIME RATE COMPARISON - PART I
(18 Alaska Jurisdictions Reporting)

	U.S.	ALASKA	DIFFERENCE
TOTAL PART I CRIME RATE	4,821.4	5,239.8	+ 8.7%
Violent Rate (without robbery)	250.0	364.7	+45.9%
Robbery Rate	208.8	88.4	-57.6%
Property Rate	4,362.6	4,786.7	+ 9.7%

Alaska's overall violent crime rate is 45.9% higher than that for the nation as a whole. An analysis of individual offense rates indicates that "Alaska has the eighth highest rate of criminal homicide, the highest rate of rape, and the seventh highest rate of aggravated assault", while, on the other hand, "Alaska's property crime rate is only slightly higher than the nation's and Alaska's robbery rate is substantially lower". [50]

49/ Alaska Criminal Justice Planning Agency, Alaska 1976 Criminal Justice Plan, Crime In Alaska, Volume II at 26, Data for United States as a whole derived from United States Department of Justice, Federal Bureau of Investigation; Crime In The United States: 1974 at 58 and 64.

50/ Ibid.

Table 4-3 constitutes an absolute numerical comparison of Part I index offenses in Alaska between 1973 and 1974, again relying on data reported by eighteen Alaska jurisdictions. [51]

TABLE 4-3

[52]
PART I VIOLENT AND PROPERTY CRIME
ALASKA: 1973 - 1974
(18 Alaska Jurisdictions Reporting)

	1973	1974	CHANGE
TOTAL PART I CRIMES	16,313	17,658	+ 8.2%
Violent (without robbery)	1,048	2,229	+17.3%
Percent of Part I	6.4%	7.0%	
Robbery	221	298	+34.8%
Percent of Part I	1.4%	1.7%	
Property Crimes	15,044	16,131	+ 7.2%
Percent of Part I	92%	91.4%	

Of substantial significance is the fact that both violent crime and robbery increased significantly from 1973 to 1974, 17.3% and 34.8% respectively. Offenses against property, on the other hand, experienced a much smaller rate of increase, 7.2%. Overall, Part I offenses in Alaska increased 8.2% from 1973 to 1974, reflecting the fact that offenses against property constitute a significant majority of Part I crimes in a numerical sense.

51/ It should be noted that absolute numerical figures constituting historical year data collected for this study slightly exceed totals reflected in the Crime In Alaska analysis. For example, TABLE C-5, Part I Index Crimes - Statewide, Appendix C, Section 2, Uniform Crime Reports By Region: 1969-1973, supra at 218 of this report, indicates that 17,136 total "reported" and 15,027 total "actual" Part I offenses were reported in Alaska in 1973, while Table 4-3, above, indicates that 16,313 were reported for the same period with eighteen jurisdictions forwarding crime reports to the Federal Bureau of Investigation. An analysis of the raw data, however, indicates that differences are essentially in total numbers with trends and percentages remaining relatively constant.

52/ Alaska Criminal Justice Planning Agency, Alaska 1976 Criminal Justice Plan, Crime In Alaska, Volume II at 26.

Table 4-4 provides a 1973-1974 comparison of the total number of reported Part I offenses and crime rates in Alaska.

TABLE 4-4

CRIME RATE IN ALASKA[53]
1973-1974
(18 Jurisdictions Reporting)

	1973	1974	CHANGE
PART I CRIMES	16,313	17,658	+ 8.2%
Crime Rate per 100,000 Population	4,943.3	5,239.8	+ 6.0%

Clearance Rate

In terms of criminal activity statistics, a "clearance" is the resolution of a confirmed reported offense (i.e., an "actual" offense) through the arrest of a perpetrator. A single clearance might well involve the arrest of more than one offender (e.g., where two or more individuals commit a single burglary). On the other hand, an arrest of a single offender may result in more than one clearance (e.g., where it is established that an individual arrested for one offense has committed one or more prior offenses).

The Federal Bureau of Investigation defines "clearance rate" as that percentage of "actual" offenses that are closed by an arrest.[54] In terms of its role as a measure of police effectiveness, it is commonly felt that clearance rates, in themselves, have a significant effect on crime rates in that a law enforcement agency's clearance rate has a tendency to deter or encourage criminal activity as the case might be. One problem

53/ Ibid. at 27

54/ United States Department of Justice, Federal Bureau of Investigation, Uniform Crime Reports: 1973 at 121.

with relying on clearance rates as a measure of police effectiveness, however, is that data collected frequently contains clearances other than those made by an arrest. Another difficulty with relying on clearance rates to measure effectiveness is that they do not reflect the quality of cases referred for prosecution in terms of legal problems surrounding confessions, searches and seizures, sufficiency of evidence, etc. Nor do they reflect more practical problems such as the disappearance of witnesses or the refusal of victims to cooperate in a prosecution. All of these considerations tend to distort clearance rates as a measure of effectiveness. Consequently, the percentage of arrests leading to a conviction must be regarded as a necessary extension of the clearance rate measurement to evaluate the ultimate effectiveness of arrests.

The percentage of Part I offenses cleared by an arrest for 1973 in Alaska was approximately 23%, while the nationwide rate was 21%. Table 4-5 provides a comparison by crime type between Alaska statewide Part I clearance rates and the United States as a whole.

TABLE 4-5

UNITED STATES - ALASKA 55
1973 PART I OFFENSE CLEARANCE RATES

Part I Offenses	Cleared/U.S.*	Cleared/Alaska**
Criminal Homicide	79%	89.7% (78 offenses/70 arrests)
Forcible Rape	51%	30.5% (128 offenses/39 arrests)
Robbery	27%	22.4% (223 offenses/50 arrests)
Aggravated Assault	63%	63.9% (927 offenses/593 arrests)
Burglary	18%	18.5% (3,317 offenses/615 arrests)
Larceny-Theft	19%	21.5% (8,630 offenses/1,854 arrests)
Auto Theft	16%	13.5% (1,724 offenses/232 arrests)
TOTAL PART I OFFENSES	21%	22.9% (15,027 offenses/3,453 arrests)

55/ *United States Department of Justice, Federal Bureau of Investigation, Uniform Crime Reports: 1973 at 29.

** Appendix C, Section 2, Uniform Crime Reports By Region: 1969-1973 TABLE C-5, Part I Index Crimes - Statewide: 1973, supra at 218 of

Figure 4-1, which appears at the end of this chapter at p. 66, graphically portrays a numerical clearance comparison of projected 1974 Part I index offenses on a statewide basis. It indicates, for example, the projected number of "reported" offenses, the number of those which will be verified by law enforcement agencies ("actual"), the number of "actual" offenses which will be "cleared" or closed by an arrest and the number of "arrests" that will be prosecuted. A clearance rate of 22% is projected (4,000 offenses closed by arrest of 18,000 actual offenses), with 40% of those projected to result in a prosecution (1,600 of the 4,000 offenses closed by arrest).

Officer and Employee/Population Ratios

The ratio of peace officers to population served is an indicator of the level of law enforcement service in an area or community, but is of limited use in determining overall police effectiveness. When used in combination with other indicators however, this measurement provides a fairly good measure of the cost of effective police service.

Communities in Alaska are divided into those which provide for police protection, such as Anchorage, Fairbanks, Ketchikan, Sitka and Juneau, and those which rely heavily upon the services of the Alaska State Troopers. Several communities rely upon a combination of State Trooper manpower and one or two local officers.

55/ (continued)
this report. Data provided in Tables C-1 through C-10 will permit the formulation of clearance rates for each year of the historical period covered by this study (1969-1973) for total Part I offenses processed by law enforcment agencies statewide and for Part I offenses processed by the Alaska State Troopers.

In 1974 there were 574 sworn law enforcement officers within the State of Alaska, exclusive of federal officers and Fish and Wildlife Protection Officers. That number represents an average of 1.6 police officers per 1,000 population ranging from 2.2 in Anchorage to 1.5 in Fairbanks.[56] According to FBI statistics, the ratio of law enforcement officers per 1,000 population nationally averaged 2.1 in 1973 and 2.0 in 1972.[57] Table 4-6 contains ratios of the number of police officers and total law enforcement employees (commissioned officers plus civilian personnel) per 1,000 population for a number of Alaskan cities and compares those figures with those cities of equivalent size nationwide and in the Pacific region. For 1973 the FBI reports that the average number of law enforcement employees per 1,000 population (including civilian employees) was 2.4 nationwide.[58] In 1974 Alaska had an average of 2.2 total law enforcement employees, ranging from 3.0 in Anchorage to 1.5 in Kenai.[59]

56/ Based on an estimated statewide population of 355,000.

57/ United States Department of Justice, Federal Bureau of Investigation, Uniform Crime Reports: 1973 at 164.

58/ Ibid.

59/ Based on an estimated statewide population of 355,000.

TABLE 4-6

POLICE OFFICERS PER THOUSAND POPULATION[60]
Comparison with National Norms
(urban)

ALASKAN CITIES		OFFICERS/1,000 POPULATION CITIES OF COMPARABLE SIZE		
City	Population*	No. of officers**	officers/ 1,000 pop.	nation-wide***	Pacific***
Anchorage	78,929	133	1.7	1.6	1.4
Fairbanks	32,975	48	1.5	1.6	1.6
Ketchikan	7,468	17	2.3	1.9	2.5
Juneau & Douglas	8,072	18	2.3	1.9	2.5
Kodiak	3,923	9	2.3	1.9	2.5
Kenai	4,028	6	1.5	1.9	2.5
Sitka (entire borough)	6,700	12	1.8	1.9	2.5
Nome	2,488	4	1.6	1.9	2.5
POLICE EMPLOYEES PER THOUSAND					
Anchorage		193	2.4	1.9	1.9
Fairbanks		72	2.2	1.8	1.9
Ketchikan		21	2.7	2.2	3.1
Juneau		30	3.8	2.2	3.1
Kodiak		9	2.3	2.2	3.1
Kenai		6	1.5	2.2	3.1
Sitka		12	1.8	2.2	3.1
Nome		4	1.7	2.2	3.1

The ratio of Alaska State Troopers per 1,000 population served is 1.4 sworn officers as compared to a police/population ratio of 1.2 for counties nationwide. The ratio of total employees

60/ * Alaska Department of Community and Regional Affairs, Pipeline Impact Accepted Population Estimates - 1974. These estimates are derived from a number of sources independent of the United States Bureau of the Census. Military personnel in Anchorage and Fairbanks are included in the population totals.

** These figures were based upon estimates derived through personal communications with the respective departments. For Anchorage, Fairbanks and Juneau more up-to-date and complete information has become available.

*** United States Department of Justice, Federal Bureau of Investigation, Uniform Crime Reports: 1973 at 164.

per 1,000 population is 2.2 for the Troopers, while the national county ratio is 1.5.[61] These slightly higher ratios in Alaska are significantly diminished when the vast distances covered and the extreme weather conditions present are considered.

STATEWIDE CRIME TRENDS

In 1970, the volume of "actual" Part I crime in Alaska was 11,891. By 1980, that volume is projected to reach 28,700 for an increase of approximately 142%.[62] This increase is projected to include some 6,200 Part I offenses that are attributable to growth associated with construction of the Trans Alaska Pipeline.[63]

Table 4-7 displays "baseline" or medium projected increases in Part I index offenses in Alaska between 1974 and 1980.

TABLE 4-7

BASELINE PROJECTED INCREASES
PART I INDEX CRIMES - STATEWIDE[64]

Level Of Processing	1974	1980	Change
Reported Offenses	18,000	31,200	73%
Actual Offenses	16,600	28,700	73%
Offenses Closed by Arrest	4,000	7,200	80%

61/ Nationwide ratios were derived from the United States Department of Justice, Federal Bureau of Investigation, Uniform Crime Reports: 1973 at 164. Alaska ratios were calculated from data obtained from the Alaska Department of Public Safety, Division of Alaska State Troopers, and are based on an estimated population base within the direct jurisdiction of the Troopers of 156,000.

62/ See Appendix C, Section 3(a), Forecast Data Series - Medium or Baseline Statewide Historical & Projected Criminal Activity, TABLE C-11, Baseline Historical & Projected: Total Part I Index Crimes - Statewide, supra at 226 of this report.

63/ See Appendix C, Section 3(e), Forecast Data Series- Pipeline Impact, TABLE C-29, PIPELINE IMPACT, supra at 244 of this report.

64/ See Appendix C, TABLE C-11, supra at 226 of this report.

The Part I statewide Alaskan crime rate is projected to increase 35% between 1973 and 1980 to 5,967 offenses per 100,000 population.[65] These same ratios are expected to also hold true for the City of Anchorage, the greater Anchorage area and Fairbanks.

Under baseline projections, "reported" Part I offenses statewide are estimated to increase between 1973 and 1980 from 17,136 to 31,200 for an increase of 82%. During the same period, "actual" Part I offenses statewide are projected to increase from 15,027 to 28,700.[66]

Figure 4-2, which appears at the end of this chapter at p. 67, shows the projected increase in all crimes and arrests occurring within the jurisdiction of the Alaska State Troopers between 1974 and 1980. More particularly, it provides a comparison between projections derived for combined totals of Part I and Part II actual offenses and those closed by arrest under AST jurisdiction for 1974 and 1980. Figure 4-2 also portrays the projected percentage impact of pipeline construction on actual offenses and offenses closed by arrest within that

65/ Appendix C, Section 2, Uniform Crime Reports By Region: 1969-1973, TABLE C-5, Part I Index Crimes - Statewide, supra at and Section 3, Forecast Data Series - Medium or Baseline Statewide Historical & Projected Criminal Activity, TABLE C-11, Baseline Historical & Projected: Total Part I Index Crimes - Statewide, supra at 226 of this report. 1980 Part I index rate has been calculated on the basis of projected "actual" offenses of 28,700 and a projected population of 481,000.

66/ Ibid.

jurisdiction in 1974 and 1980.[67]

These projections indicate that the Alaska State Troopers can expect to respond to 75% more actual combined Part I and Part II offenses in 1980 than they did in 1974. In other words, from 1974 to 1980 there will be a 75% increase in overall crime within the jurisdiction of the Alaska State Troopers. The projections further suggest that in 1974 6% of actual AST offenses and 9% of AST offenses closed by arrest were attributable to pipeline related growth. Corresponding projections for 1980 indicate that 8% of actual offenses and 13% of offenses closed by arrest will represent pipeline impact.

The number of offenses closed by arrest in 1974 for combined AST Part I and Part II crimes is 37% of total actual offenses. Projections displayed in Figure 4-2 suggest that this clearance rate will increase to 43% in 1980.[68]

67/ Also see Appendix C, Section 3(a), Forecast Data Series - Medium or Baseline Statewide Historical & Projected Criminal Activity, TABLE C-12, Baseline Historical & Projected: Total Part I Index Crimes - Alaska State Troopers, supra at 227 of this report; TABLE C-13, Baseline Historical & Projected: Total Part II Index Crimes - Alaska State Troopers, supra at 228 of this report; Section 3(e), Forecast Data Series - Pipeline Impact, TABLE C-29, PIPELINE IMPACT, supra at 244 of this report. The projections set forth in these tables in absolute numerical terms will yield percentage increases for offenses "reported", "actual" offenses and offenses closed by "arrest" for each year during the forecast period, 1974-1980. They are also designed to provide for the calculation of projected clearance rates by year.

68/ Ibid.; The AST clearance rate for Part I offenses only in 1974 was projected at 21% and is expected to increase to 34% in 1980. The 1974 rate is lower than the statewide rate of 23%, but is the same as the national clearance rate for Part I index offenses. The projected 1980 clearance rate of 34% for the Alaska State Troopers is significantly higher than the projected statewide rate for all law enforcement agencies of 26%.

REGIONAL CRIME TRENDS

Anchorage

The Anchorage region, for purposes of this study, encompasses an area that falls within the jurisdiction of two law enforcement agencies: the Anchorage Police Department and "C" Detachment of the Alaska State Troopers.

Historically, the Anchorage region has accounted for the majority of criminal activity in the state. In 1969 it accounted for approximately 50% of "reported" Part I offenses, slightly in excess of 50% of "actual" Part I offenses and approximately 46% of Part I offenses closed by arrest.[69] By 1973, these figures had risen to 57%, 54% and 50% respectively.[70] Projections suggest that these percentages of statewide Part I activity will remain relatively constant throughout the forecast period with some fluctuation in the percentage share of offenses closed by arrest statewide suggesting a projected fluctuation in clearance rates in the Anchorage region.[71] Projections indicate that in 1980 Anchorage will account for approximately 15,800 or 55% of the statewide total of 28,700 "actual" Part I offenses.[72]

The crime rate for total Part I offenses in the Anchorage region in 1973 was 5,278 per 100,000 population. Actual Part I offenses are projected to increase 72% between 1974 and 1980.[73] The officer/population ratio for the region was 1.3 per 1,000 in 1974, compared to a nationwide ratio of 1.8 for cities of 100,000 to 250,000 population. The ratio of total law enforcement employees to population was 1.8 in 1974, while the equivalent ratio for the United States as a whole was 2.2.

Figures 4-3 and 4-4, which appear at the end of this chapter at p. 68 and p. 69, respectively, display graphically projected increases in actual Part I offenses (Figure 4-3) and Part I offenses closed by arrest (Figure 4-4), for the Anchorage region over the forecast period (1974-1980) in two year increments.[74] Figures 4-3 and 4-4 also portray, again in

69/ Appendix C, Section 2, Uniform Crime Reports By Region: 1969-1973, TABLE C-1, Part I Index Crimes - Statewide: 1969, supra at 214 of this report.

70/ Appendix C, Section 2, supra, TABLE C-5, Part I Index Crimes-Statewide: 1973, supra at 218 of this report.

71/ See Appendix C, Section 3(c), Medium or Baseline Regional Projected Criminal Activity TABLE C-17, Baseline Regional Projections: Total Part I Index Crimes - Statewide, supra at 232, and Section 4(a), Regional Projections By Crime Type Assuming Baseline Estimate (1974-1980) - Part I Index Crimes - Statewide: Reported, Actual and Arrests, 1974-1980, TABLES C-30 through C-36, supra at 246-252 of this report. TABLE C-17 consists of a rounded off summary of regional totals contained in TABLES C-30 through C-36. Calculations utilizing data contained in these tables will yield a percentage regional sharing analysis for each year of the forecast period that can be broken down by "reported", "actual" and "arrests."

72/ See Appendix C, Section 3(a) supra, TABLE C-11, Baseline Historical & Projected: Total Part I Index Crimes - Statewide supra at 226; Section 3(c), supra TABLE C-17, Baseline Regional Projections: Total Part I Index Crimes - Statewide, supra at 232; and Section 4(a), supra, TABLE C-36, Regional Baseline Projections: Part I Index Crimes - Statewide: 1980, supra at 252 of this report.

73/ See Appendix C, Section 2(a), supra at 214-218, and TABLE C-5, Part I Index Crimes - Statewide: 1973: supra at 218 of this report and Section 3(c), supra, TABLE C-17, supra at 232 of this report.

74/ Also see Appendix C, Section 3(c), supra, TABLE C-17, Baseline Regional Projections: Total Part I Index Crimes Statewide, supra at 232; and Section 4(a), supra TABLES C-30 through C-36, supra at 246-252 of this report.

two year increments over the forecast period, those portions of total actual Part I offenses and total Part I offenses closed by arrest within the Anchorage regions that are attributable to growth directly associated with construction of the Trans Alaska Pipeline.[75] In 1974, approximately 23% of total actual Part I offenses occurring in the Anchorage region and 22% of total Part I offenses closed by arrest were pipeline related. In 1980, 21.5% of total actual Part I offenses and 25% of total Part I offenses resulting in an arrest are projected to be pipeline related for the region. However, in terms of absolute increases that can be attributed to construction of the pipeline, 29.5% additional actual Part I offenses and 28.5% additional Part I offenses closed by arrest were experienced in the Anchorage region in 1974. Projections for 1980 indicate that there will be 26.6% additional actual Part I offenses occurring in the region and a 33.3% increase in Part I offenses closed by arrest. These later percentages reflect real criminal activity growth that is pipeline related.

75/ Also see Appendix C, Section 3(c), supra TABLE C-17, supra at 232, and Section 3(d), Alternate Regional Projected Criminal Activity: Low, High, and Without Pipeline Construction TABLE C-21, Alternate Regional Projections: Total Actual Part I Index Crimes - Statewide, supra at 236, and TABLE C-22, Alternate Regional Projections: Total Arrests Part I Index Crimes Statewide, supra at 237 of this report. Calculations utilizing projected data found in these tables will yield approximate absolute numerical projections by region of the total numbers of actual Part I offenses and Part I offenses closed by arrest that represent "pipeline impact" for any given year during the forecast period. For example, the projections for 1980 indicate that 3,400 actual Part I offenses and 800 Part I offenses closed by arrest will be attributable to pipeline related growth in the Anchorage region.

Figures 4-3 and 4-4 also provide a mechanism for determining projected clearance rates in the Anchorage region for Part I index offenses. For example, in 1974 Part I offenses closed by arrest constituted 19.5% of total actual Part I offenses. Projections for 1980 place the Part I clearance rate slightly higher at 20.3%.

Fairbanks[76]

The Fairbanks region has the second highest level of criminal activity in the state. In 1969, the region accounted for 23% of "actual" statewide Part I offenses. This share had decreased to 17% in 1973. Projections for 1980 indicate that of approximately 28,700 "actual" Part I offenses statewide, 4,800 will occur in the Fairbanks region.

Police services in the Fairbanks region are provided by the Fairbanks Police Department and "I" Detachment of the Alaska State Troopers. Figure 4-5, which is found at the end of this chapter, supra at p.70, displays graphically projected

76/ Historical year data cited or reduced to percentage comparisons can be found in Appendix C, Section 2, Uniform Crime Reports By Region: 1969-1973, TABLES C-1 through C-10, supra at 214 through 223 of this report. Projected data cited and reduced to percentage comparisons can be found in Appendix C, Section 3, Forecast Data Series, TABLES C-11 through C-29 supra at 226 through 244, and Section 4, Regional Projections By Crime Type Assuming Baseline Estimate (1974-1980), TABLES C-30 through C-43, supra at 246 through 259 of this report. TABLE C-17 consists of a rounded off summary of regional totals contained in TABLES C-30 through C-36; likewise for TABLE C-18 vis a vis TABLES C-37 through C-43. Calculations utilizing data contained in these tables will yield a percentage regional sharing analysis for each year of the forecast period that can be broken down by "reported" "actual" and "arrests" for total Part I activity in the region and for Part I activity processed by the Alaska State Troopers.

increases in actual Part I offenses and Part I offenses closed by arrest for the Fairbanks region in two year increments over the forecast period (1974-1980). As in Figures 4-3 and 4-4, the number of total actual Part I offenses and total Part I offenses closed by arrest that are attributable to growth related to pipeline construction are also set out.[77] In 1974, approximately 27% additional actual Part I offenses were pipeline related. This figure is projected to increase to 54% for 1976, declining thereafter to 26% in 1980. Overall Part I offenses are projected to increase 71% between 1974 and 1980.[78] The Part I clearance rate in the Fairbanks region was projected at 25% in 1974. Projections for 1980 place the same rate at approximately 26%.

The Part I crime rate for the region in 1973 was 4375 per 100,000 population. The officer/population ratio in 1973 was 1.3, while the total law enforcment employee/population ratio was 2.3.

"I" Detachment of the Alaska Troopers has the largest geographic area of responsibility and the most outlying posts of any trooper detachment. The pipeline corridor north of the Yukon River and a portion of that south of the river falls within its jurisdiction.

77/ Also see Appendix C, Section 3 (c), supra, TABLE C-17, Baseline Regional Projections: Total Part I Index Crimes - Statewide, supra at 232 ; and Section 3(d), supra, TABLE C-21, Alternate Regional Projections: Total Actual Part I Index Crimes - Statewide, supra at 236 , and TABLE C-22, Alternate Regional Projections: Total Arrests Part I Index Crimes - Statewide, supra at 237 of this report. Calculations utilizing projected data found in these tables will yield approximate absolute numerical projections by region of the total number of actual Part I offenses and Part I offenses closed by arrest that represent "pipeline impact" for any giver year during the forecast period. For the exact projections of regional totals summarized in TABLE C-17, the tables found in Appendix C, Section 4, supra at 246 through 259 should be consulted.

78/ See Appendix C, Section 2(a), supra, TABLE C-5, supra at 218 , and Section 3(c), TABLE C-17, supra at 232 of this report.

The projected increase in Part I crime in that portion of the Fairbanks region served by "I" Detachment is 70%.[79] In 1974, 11% of Part I crime was pipeline related. This percentage is projected to increase to 25% in 1977, decreasing to 6% in 1980.[80] The 1973 Part I crime rate for "I" Detachment was 4418.

The projected increase in Part I crime within the City of Fairbanks between 1974 and 1980 is 74%. In 1974, 32% of Part I crime was pipeline related, a figure that is projected to increase to 61% in 1977, declining to 33% in 1980.

Southeast[81]

In 1969, the Southeast region accounted for 15% of Part I crime in Alaska. By 1973, this share had risen only slightly to 16% and is projected to remain at approximately that level through 1980. The Part I crime rate for the region in 1973 was 4556 per 100,000 population in contrast to the nationwide rate of 4116.

Police services in Southeast Alaska are provided by combined "A"-"B" Detachment of the Alaska State Troopers, with headquarters at Ketchikan and Juneau, respectively, and by a number of municipal police departments, principally at Juneau, Ketchikan, Sitka, Petersburg, Wrangell, Haines and Skagway.

Figure 4-6, located at the end of this chapter, supra at p. 71 , graphically displays projected increases in actual

79/ See Appendix C, Section 3(c), supra, TABLE C-18, Baseline Regional Projections: Total Part I Index Crimes - Alaska State Troopers, supra at 233 of this report.

80/ See Appendix C, Section 3(c), supra TABLE C-18, supra at 233 , and Section 3(d) supra, TABLE C-24, Alternate Regional Projections: Total Actual Part I Index Crimes - Alaska State Troopers supra at 239 of this report.

81/ See Footnote 76, infra.

Part I offenses and Part I offenses closed by arrest for the Southeast region in two year increments over the forecast period. As in previous regional figures, differences are displayed between offense projections with and without pipeline construction.[82] The projections indicate that in 1974 the Southeast region experienced 26% additional Part I offenses as a result of pipeline related growth and that in 1980 there will be slightly in excess of 23.5% additional Part I offenses that are pipeline related.

The Alaska State Trooper/population ratio for Southeast in 1974 was 1.0 per 1,000 population with a total employee ratio of 1.4. The Juneau detachment experienced a 47% increase in Part I offenses between 1969 and 1973 and the Ketchikan detachment had an increase of 16% for the same period. The projected increase for both detachments between 1974 and 1980 is 75%, with a major portion expected in the Juneau area. The Part I clearance rate for the Juneau detachment in 1974 was 32%, which is relatively high compared to the statewide rate of 23%. The Part I clearance rate for the Ketchikan detachment was projected at 25% in 1974.

The officer/population ratio for municipal police departments in Southeast in 1974 was 2.8 per 1,000 population, which compares favorably with the nationwide ratio of 2.5 for communities of equivalent size. The ratio of total law enforcement employees/population for Southeast police departments was 3.4 as compared to 3.1 nationwide. Local police departments in Southeast have all experienced minor increases in criminal activity with the exception of Juneau and to some extent Haines, which have had relatively significant increases.

82/ See Footnote 77, infra.

Southcentral

In 1973, the Southcentral region of Alaska (excluding the Anchorage area) accounted for 9% of total Part I offenses statewide. This percentage is projected to remain relatively constant throughout the forecast period with some minor fluctuation. However, the total of Part I offenses within Southcentral that fall within the jurisdiction of the Alaska State Troopers constitute approximately 14% of Part I offenses processed by AST statewide.

The Part I crime rate for Southcentral Alaska was 3418 per 100,000 population in 1973. The officer/population ratio was approximately 2.1 per 1,000 population and the total employee/population ratio was 2.7.

Figure 4-7, which can be found at the end of this chapter, supra at p. 72, depicts projected increases from 1974 through 1980 in actual Part I offenses and in Part I offenses closed by arrest. It also portrays the percentage impact of pipeline construction on both categories. In 1974, approximately 24% additional Part I offenses were pipeline related; this figure is projected to be 23% in 1980. Overall, Part I offenses are projected to increase approximately 76% between 1974 and 1980.[84]

Western & Northern Region[85]

This region includes the remaining area of the state not included in the Anchorage, Fairbanks, Southeast and Southcentral

83/ See Footnote 76, infra.

84/ See Footnote 78, infra.

85/ See Footnote 76, infra; also see Appendix A, FIGURE A-3, Five Study Regions and Their Labor Market Areas, supra at 157 of this report, for a depiction of the geographic area of Alaska covered.

regions. It includes the entire North Slope, a majority of Interior Alaska, and all of western and southwestern Alaska. Population is relatively sparse spread throughout numerous villages and a number of small commercial centers such as Bethel, Nome, Kotzebue and Barrow. In 1973, the Western & Northern region accounted for only 4% of Part I criminal activity and the projections developed suggest that this percentage is not expected to change during the forecast period. However, Part I crime in the region is projected to increase 57% overall between 1974 and 1980.[86]

The Part I crime rate for the region in 1973 was 1706 per 100,000 population. The officer/population ratio was approximately .8 per 1,000 population while the total employees/population ratio was approximately .9. Clearance rates in the Western & Northern region have been quite high in recent years. For example, the 1973 Part I clearance rate for "F" Detachment of the Alaska State Troopers located at Bethel was approximately 70%, while "J" Detachment, located at Nome, had a clearance rate of 73%. Projections indicate a regional clearance rate of 43% in 1974 and approximately 55% in 1980.

Figure 4-8, which is found at the end of this chapter, supra at p. 73, depicts Part I actual and arrests, and the portion of each which represents "pipleine impact." In 1974, some 31% additional Part I offenses were attributable to pipeline related growth. This figure is projected to increase to approximately 51% in 1976, declining thereafter to slighly less than 26%.

CONCLUSIONS

While it is clear that each component of the Alaskan

86/ See Appendix C, Section 3(c), supra, TABLE C-17, supra at 232 of this report.

justice system has been and will continue to be affected by population, work force and economic growth associated with construction of the Trans Alaska Pipeline, it is equally clear that law enforcement agencies have been affected not only first but the most severely as well. Part of the reason for this, of course, is attributable to the front line position law enforcement agencies occupy as the initiator of activity for the criminal justice system as a whole. Beyond that factor, however, there exists the twin problems posed by: (1) manpower depletions into pipeline related jobs both in the area of security services and construction itself; and (2) the total time required to recruit and fully train new officers, which involves anywhere from eighteen months to two years, including the time it takes for a new officer to acquire an adequate level of on-the-job experience to be minimally qualified.

The greatest degree of impact is centered within the population centers of Anchorage and Fairbanks and along the length of the pipeline corridor south of the Yukon River, particularly at the terminus site at Valdez. Police agencies charged with law enforcement responsibilities in these areas of the state are absorbing a lion's share of the impact identified in this study.

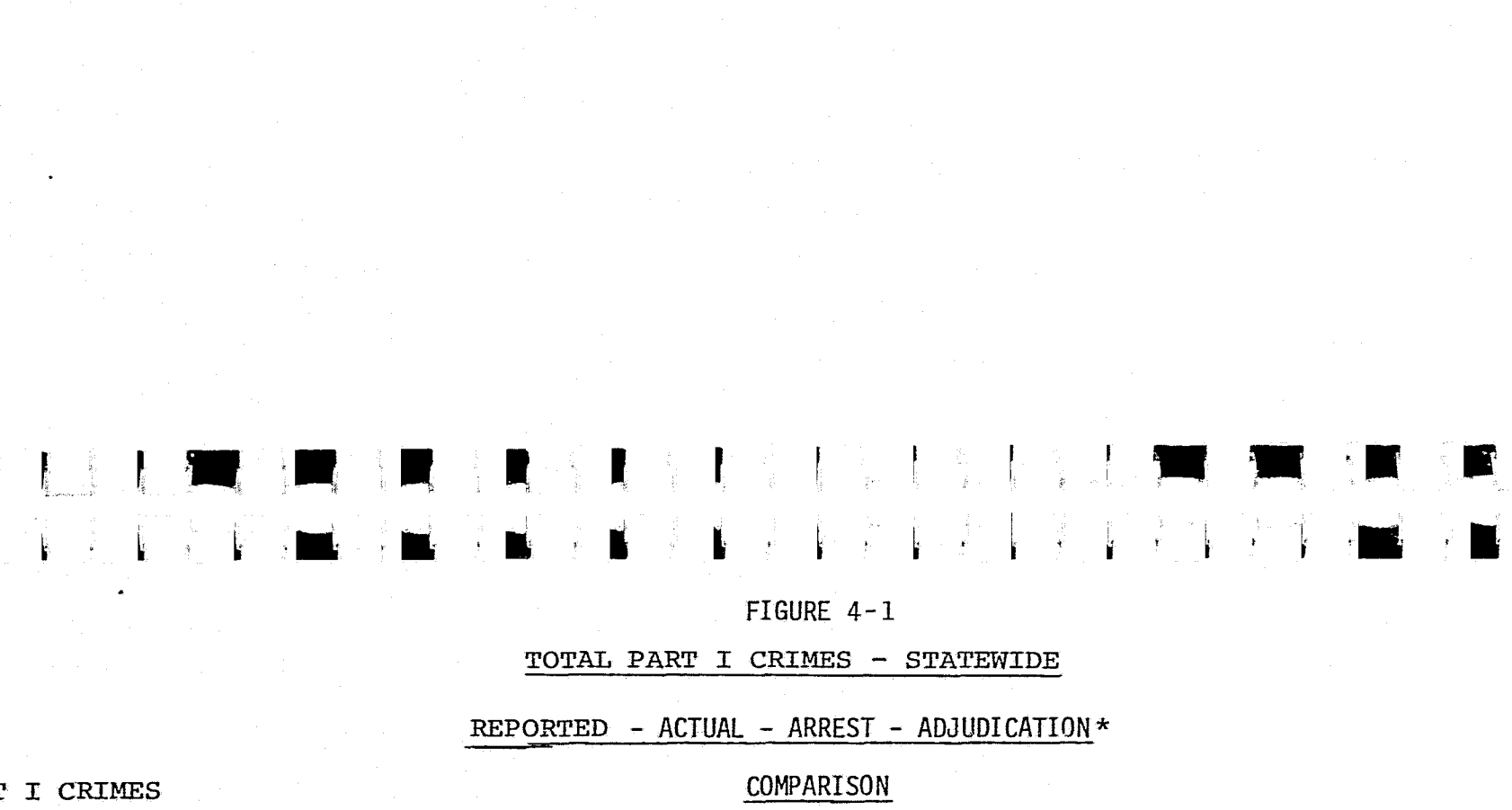
FIGURE 4-1

TOTAL PART I CRIMES - STATEWIDE

REPORTED - ACTUAL - ARREST - ADJUDICATION*

COMPARISON

1974



*Totals have been rounded to the nearest hundred; Also see Appendix C, TABLE C-11, Baseline Historical & Projected: Total Part I Index Crimes - Statewide, supra at 226 ; TABLE C-14, Alternate Projections: Total Part I - Index Crimes - Statewide, supra at 229 , and TABLE C-30, Regional Baseline Projections: Part I Index Crimes Statewide, supra at 246 (TABLE C-30 contains exact numerical projections summarized to nearest hundred in TABLE C-11 and set out above).

FIGURE 4 -

ALASKA STATE TROOPERS

TOTAL PART I AND II ACTUAL - ARREST COMPARISON

1974-1980

PART I and PART II CRIMES

THOUSANDS

25.0

20.0

15.0

10.0

5.0

22,200

20,500

8%

PIPELINE IMPACT

12,700

11,900

6%

PIPELINE IMPACT

ACTUAL 1974

ACTUAL 1980

4,700

4,300

9%

PIPELINE IMPACT

ARREST 1974

9,400

8,300

13%

PIPELINE IMPACT

ARREST 1980

227

----With Pipeline

----Without Pipeline

*Rounded to Nearest Hundred; Also see Appendix C, TABLES C-12, C-13, C-15 and C-16, supra at 231 through 234 of this report.

FIGURE 4- 3

PART I - ACTUAL OFFENSE FORECAST

1974 - 1976 - 1978 - 1980

ANCHORAGE *

(Rounded to nearest hundredth)

PART I CRIMES

Thousands

15.0

10.0

5.0

9200

7100

13,100

8500

14,500

10,300

15,800

12,400

1974

1976

1978

1980

*Also see Appendix C, TABLES C-17 and C-21, supra at 232 and 236 and TABLES C-30, C-32, C-34 and C-36, supra at 246 through 252 for the exact numerical projections summarized to the nearest hundred in TABLE C-17 and set out above.

----With Pipeline

----Without Pipeline

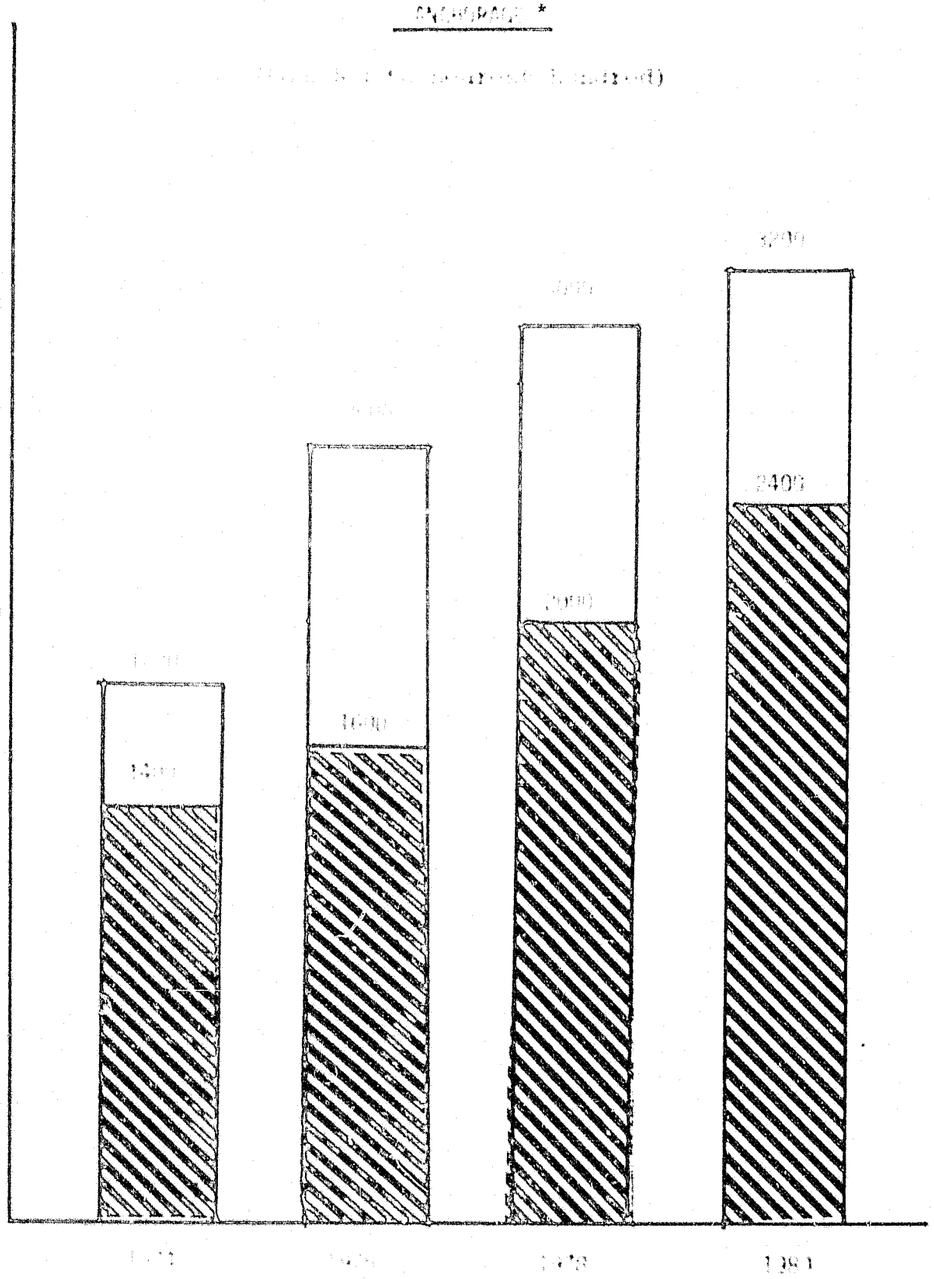
FIGURE 4-4

[illegible] ACTUAL OFFENSE-ARREST FORECAST

[illegible]

[illegible] *

[illegible]



[illegible]

[illegible] summarized to the nearest hundred

[illegible]

FIGURE 4-5

PART I ACTUAL OFFENSE-ARREST FORECAST

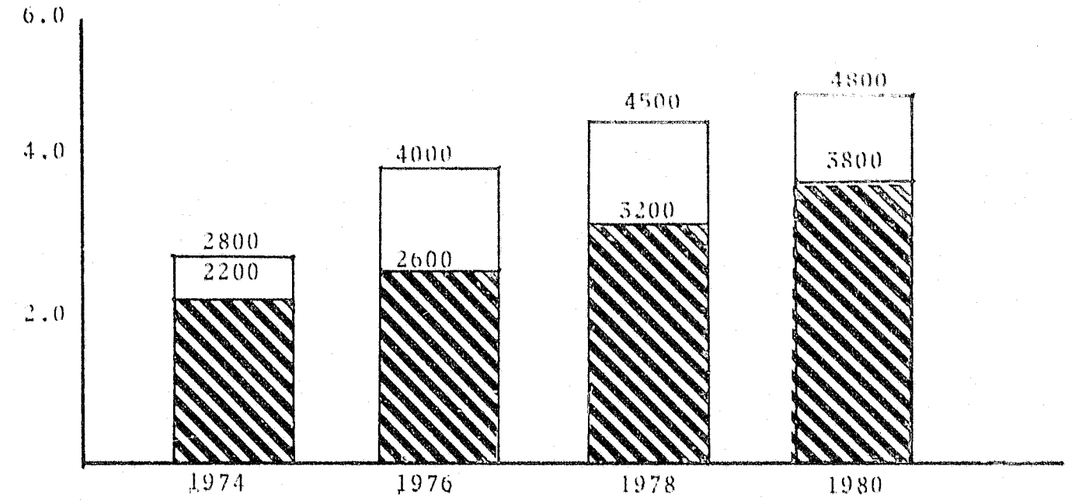
1974 - 1976 - 1978 - 1980

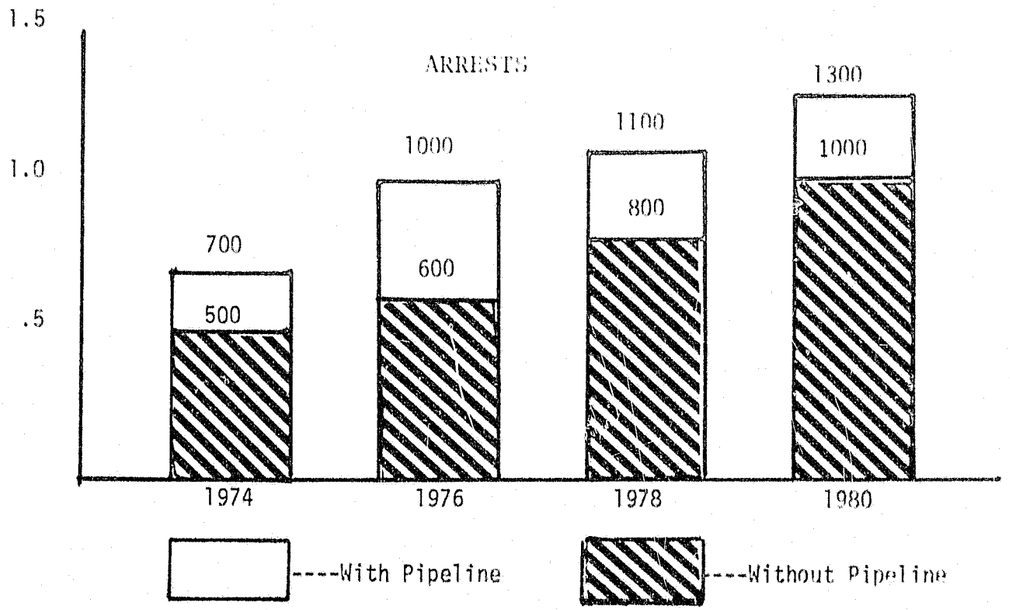
FAIRBANKS *
(Rounded to the nearest hundredth)

PART I CRIMES

THOUSANDS

ACTUAL OFFENSES





*See Footnotes to Figures 4-3 and 4-4, infra.

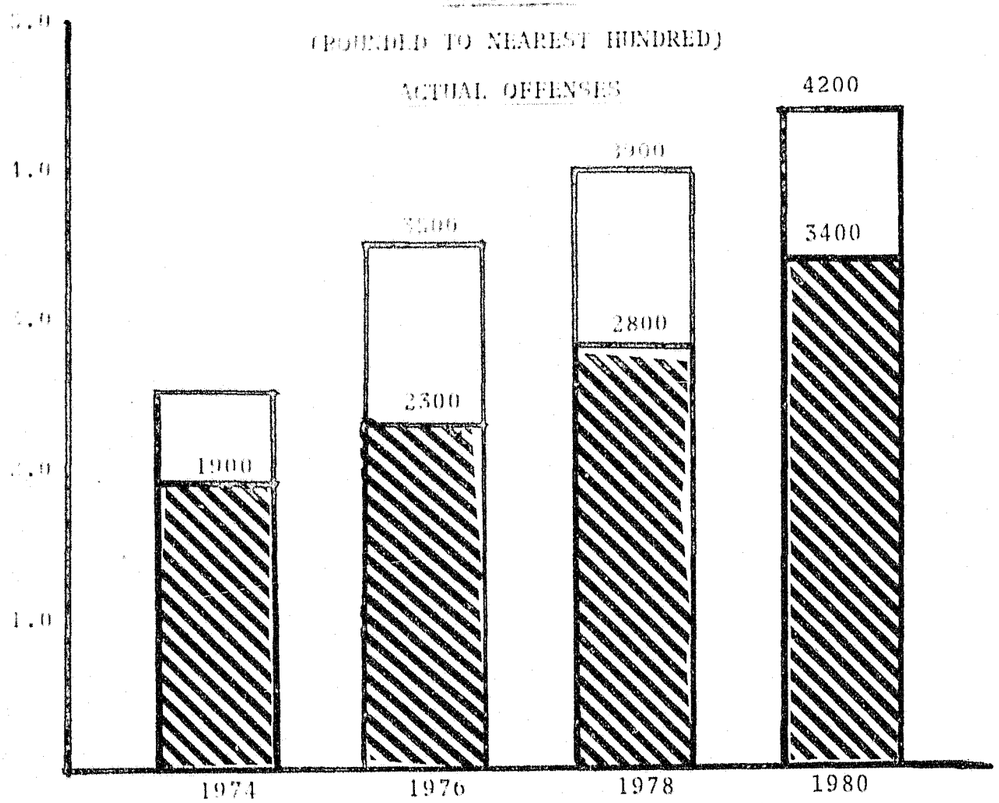
FIGURE 4- 6

PART I ACTUAL OFFENSE - ARREST FORECAST

1974-1976-1978-1980

SOUTHEAST

(ROUNDED TO NEAREST HUNDRED)



ACTUAL OFFENSES

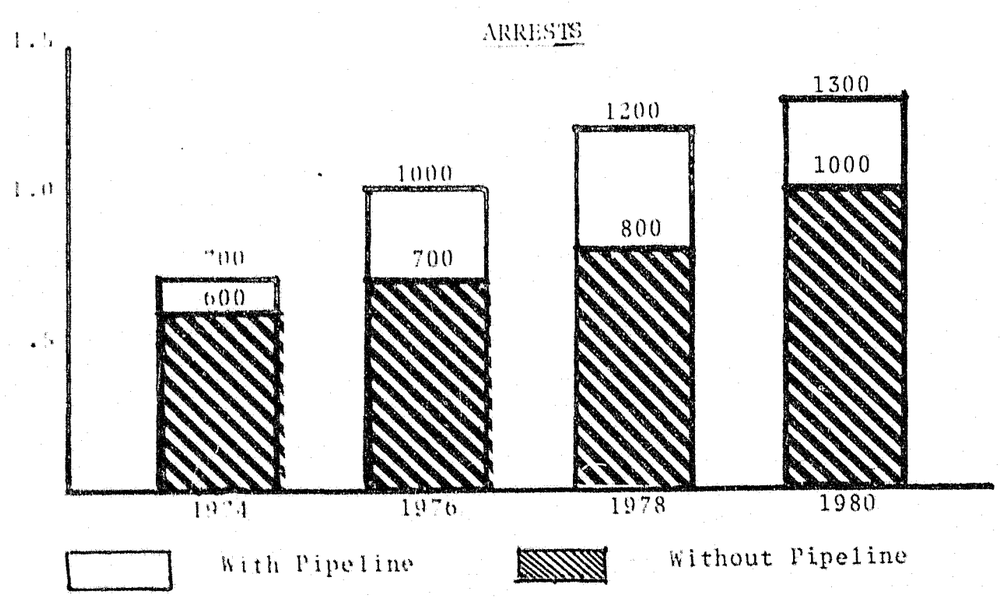


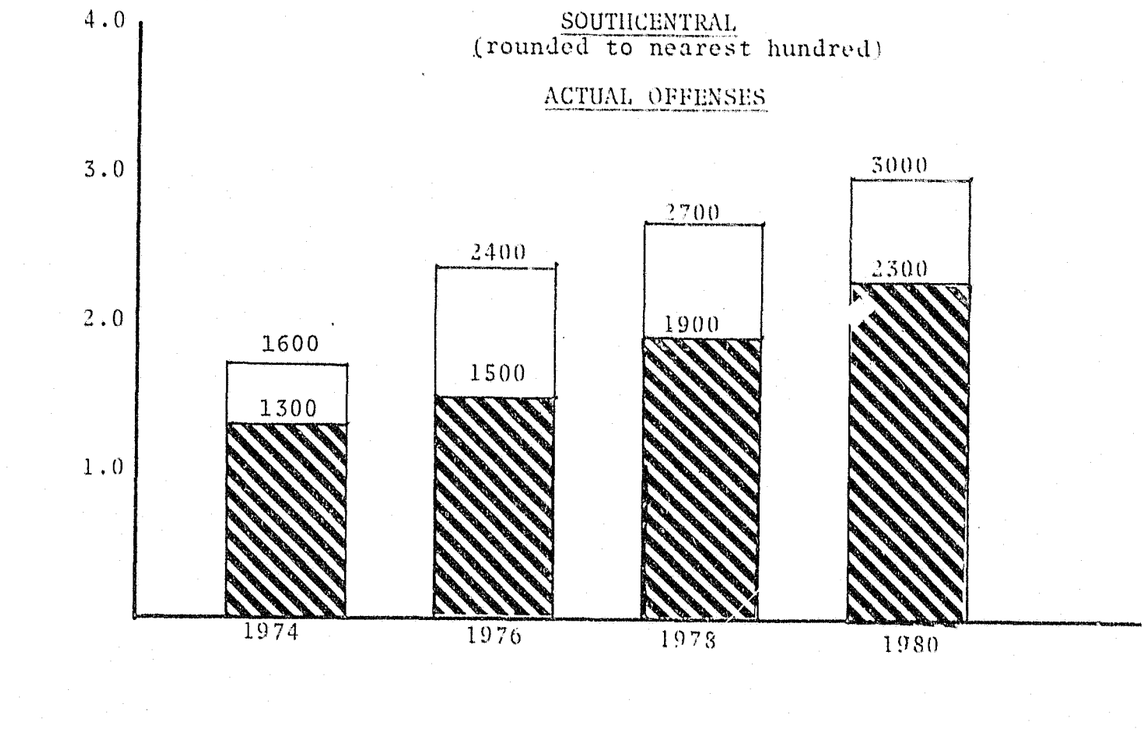
FIGURE 4-7

PART I ACTUAL OFFENSE - ARREST FORECAST

1974 - 1976 - 1978 - 1980

SOUTHCENTRAL
(rounded to nearest hundred)

ACTUAL OFFENSES



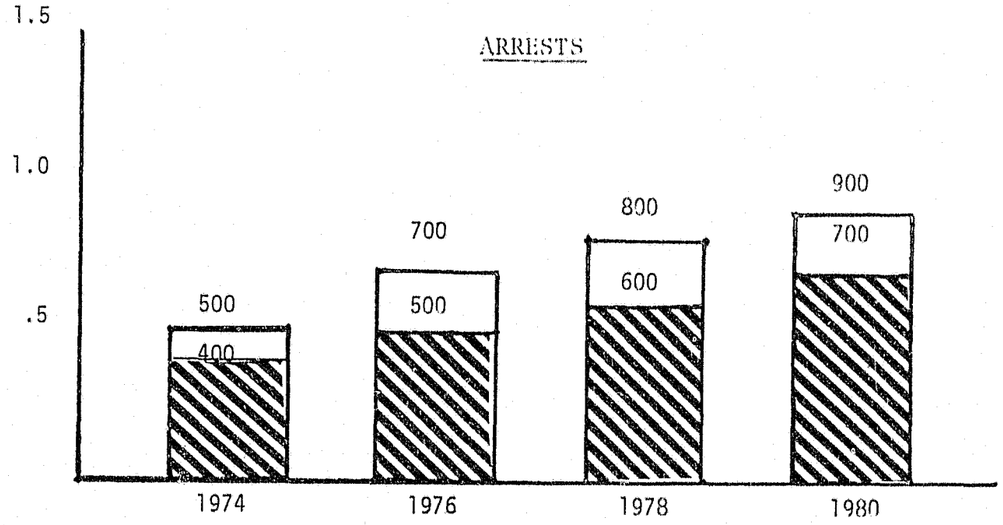


FIGURE 4-8

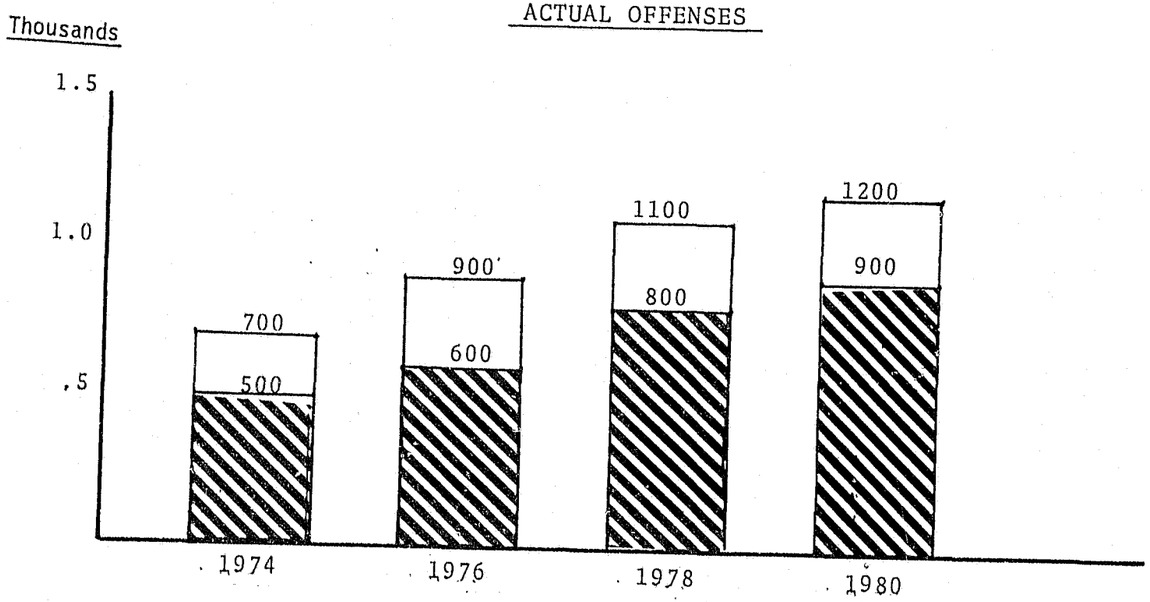
PART I ACTUAL OFFENSES - ARREST FORECAST

1974 - 1976 - 1978 - 1980

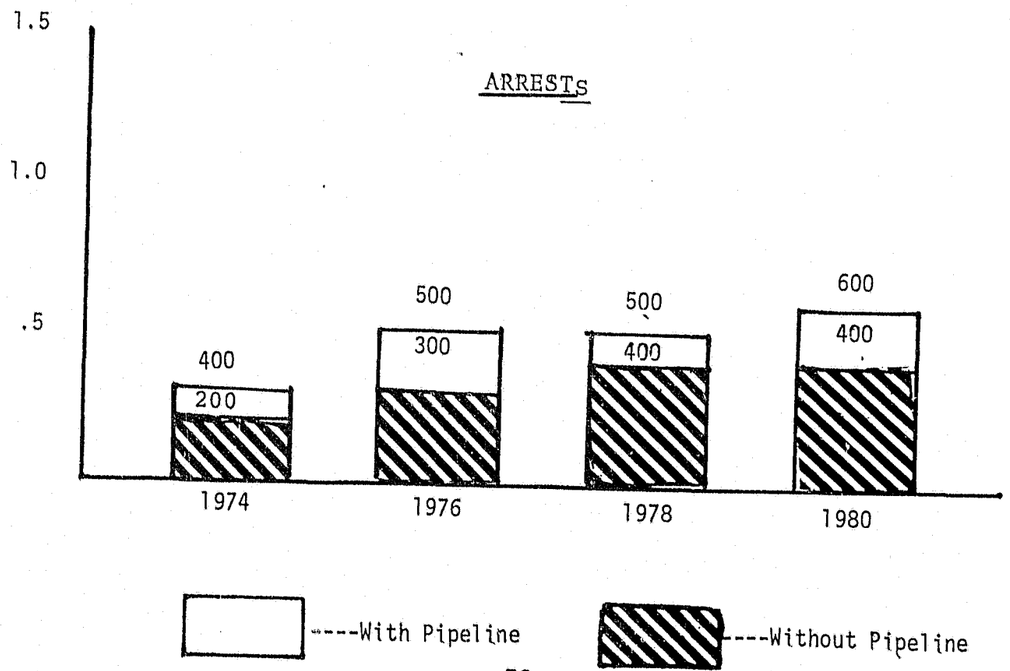
NORTHERN - WESTERN REGION
(rounded to the nearest hundredth)

PART I CRIMES

ACTUAL OFFENSES



ARRESTS



CHAPTER V

ALASKA DEPARTMENT OF LAW

CRIMINAL DIVISION - PROSECUTION

The Criminal Division of the Alaska Department of Law has as its primary function responsibility for the prosecution of all criminal offenses in Alaska cognizable under the Alaska Statutes. The prosecution responsibility of the department is essentially concerned with the delivery of services as required and as such the department has minimal control over inputs which determine the level of service required. Those inputs include the crime rate; the level of enforcement services provided by police agencies at both the state and local level; appellate court decisions that affect the nature, scope and complexity of criminal prosecution; legislative enactments that have the same effect as well as those which create new categories of violations; revisions in the Rules of Criminal Procedure; increases in population and alterations in the characteristics of the population of a community; and any increase in the enforcement activities or change in enforcement policies of other state departments or agencies charged with responsibility for regulating activity that can be the subject of criminal penalties.

While there is little the department can do to directly affect the majority of these external factors, it can, through its prosecution component, attempt to constantly improve the administration of criminal jutice in Alaska both internally and externally through general legal assistance and policy level guidance to the other various components of the Alaska criminal justice system.

The Department of Law's prosecution program is implemented through attorneys and support staff based in six regional

district attorney offices throughout the state located in Ketchikan, Juneau, Kenai, Nome, Fairbanks and Anchorage with resident Anchorage sub-offices located at Kodiak and Bethel. Centralized supervision, planning, policy implementation, adminsitrative direction and the general furnishing of legal services to other components of the Alaska criminal justice system are based within the Office of the Attorney General in Juneau under the direction of the Deputy Attorney General for Criminal Affairs.

The Department of Law has recently been reorganized, formally dividing responsibilities between the civil and criminal divisions. This reorganization reflects an effort to provide a supervisory level between the Attorney General and the six District Attorney Offices throughout the state to increase coordination and uniforminity of prosecutorial programs and policies within the State of Alaska.

Table 5-1 reflects present staff distribution within the Criminal Division, including the transfer of two Assistant Attorneys General positions from the civil to the criminal division to incorporate therein those traditional responsibilities of the department generally associated with the delivery of legal services to other state criminal justice agencies.

TABLE 5-1

CRIMINAL DIVISION PERSONNEL

	Attorney Postions	Support Positions
Headquarters Staff - Juneau	1 Deputy Attorney General 2 Assistant Attorneys General	1 Administrative Assistant

First Judicial District	Attorney Positions	Support Positions
Ketchikan District Attorney's Office	1 District Attorney 1 Assistant District Attorney	2
Juneau District Attorney's Office	1 District Attorney 2 Assistant District Attorneys	2
Second Judicial District		
Nome District Attorney's Office	1 District Attorney	1
Third Judicial District		
Anchorage District Attorney's Office	1 District Attorney 15 Assistant District Attorneys	11
Kodiak Office	1 Assistant District Attorney	.5
Bethel Office	1 Assistant District Attorney	.5
Kenai District Attorney's Office	1 District Attorney	1
Fourth Judicial District		
Fairbanks District Attorney's Office	1 District Attorney 7 Assistant Attorneys	5
Total Personnel:	Attorneys: 36	Support Staff: 24

In 1974, the Criminal Division processed slightly in excess of 11,000 criminal charges which involved some 9,400 defendants (approximately 3% of the state's population). This caseload represented an increase of 12% over 1973. The conviction rate in 1973 was 76% overall, which compares favorably with the national rate for the same year of 58.8%. Most recent statewide statistics compiled by the department continue to depict significant overall increases in the number of cases prosecuted.

During Fiscal Year 1975, from July 1, 1974, through June 30, 1975, the Criminal Division filed a total of 15,095 criminal offenses statewide, as compared with 13,433 in Fiscal Year 1974, which represents a 12.4% increase. A total of 12,600 criminal offenses were closed during Fiscal Year 1975 as opposed to 12,371 in Fiscal Year 1974 which represents a 2.4% increase. More significantly, however, a total of 6,735 criminal offenses remained pending on June 30, 1975, as opposed to 4,300 on June 30, 1974, which represents a 56.6% increase in cases pending at the close of the fiscal year.

Table 5-2 consists of a numerical breakdown of offenses opened and closed during Fiscal Year 1975 by individual district attorney office. Bethel statistics are included under Anchorage, whereas Kodiak's appear under Kenai inasmuch as the Kenai District Attorney had responsibility for Kodiak prosecutions until near the end of the fiscal year.

FUTURE GROWTH

There are at least two possible measures that might be used in attempting to assess the impact of pipeline construction on the prosecutorial ability of the State of Alaska. First, determine the present ratio of prosecutors to population and then simply project the number of prosecutors that would be needed to maintain that ratio for 1980's projected population. Second, project the number of offenses closed by arrest that will occur in 1980 and, assuming, that a proportional increase in prosecutors will be needed to process this increased number of offenses and defendants, project the number of prosecutors that will be required in 1980. This would appear to be a more appropriate measure since it is assumed that

TABLE 5-2

CRIMINAL DIVISION OFFENSE SUMMARY
FISCAL YEAR 1975

Misdemeanor Offenses	Juneau	Ketchikan	Nome	Anchorage	Kenai Kodiak	Fairbanks	Totals
Pending July 1, 1974	91	230	60	801	232	1,269	2,683
Filed in FY 75	2,215	636	486	5,667	922	3,045	12,971
Closed in FY 75	2,022	614	477	4,238	890	2,715	10,956
Offenses tried by Court	44	17	1	191	21	74	348
Found Guilty	36	10	1	156	17	41	261
Found Not Guilty	8	7	0	35	4	33	87
Offenses tried by Juries	6	7	1	52	33	37	136
Found Guilty	2	3	0	28	22	10	65
Found Not Guilty	4	4	1	24	11	27	71
Defendant Pled Guilty	1,410	416	177	2,455	699	1,851	7,049
Defendant Forfeited Bail	180	2	0	263	27	115	587
Dismissed	382	172	298	1,277	110	638	2,877
Pending June 30, 1975	284	252	69	2,230	264	1,599	4,698
Felony Offenses							
Pending July 1, 1974	39	84	4	1,262	62	166	1,617
Filed in FY 75	182	163	72	1,071	106	530	2,124
Closed in FY 75	129	185	73	733	100	484	1,704
Offenses tried by Court	0	0	0	13	0	6	19
Found Guilty	0	0	0	9	0	3	12
Found Not Guilty	0	0	0	4	0	3	7
Offenses tried by Juries	3	3	0	13	7	57	83
Found Guilty	2	1	0	11	4	48	66
Found Not Guilty	1	2	0	2	3	9	17
Defendant Pled Guilty	72	68	16	203	27	128	514
Reduced to Lesser Charge	19	8	3	82	21	60	193
No True Bill Returned	1	4	2	20	13	12	52
Dismissed	34	102	52	402	32	221	843
Pending June 30, 1975	92	62	3	1,600	68	212	2,037

crime, and hence arrests, will not simply increase proportionally with the population, but will increase at a greater rate than the population due to the several factors previously discussed in Chapter II, Alaska's Criminal Growth Patterns, infra.[87] However, both of these possible measures will be briefly analyzed.

Prosecutors/Population

As previously noted, the population of Alaska is projected to increase between 27% and 51% during the period 1974 to 1980. The state's 1974 population has been estimated at 351,159 to 354,900. Under the medium or baseline set of projections developed, the population is expected to reach 481,600 in 1980, while low and high estimates project 1980 population in a range of 451,800 to 535,000.[88]

87/ See Chapter II, Alaska's Criminal Growth Patterns, Statewide & Regional Projections Of Population & Work Force - With Pipeline Construction; infra at 16 through 23, and Criminal Activity Projections - Statewide Crime Projections, infra at 27 through 29. Also see, Appendix B, Section IV-B, Major Forces Of Change, supra at 178 through 183 of this report. Particular attention should be devoted to the discussion in Chapter II, commencing at p. 17, which addresses the impact upon overall criminal activity which a rapid population increase has, particularly in conjunction with radial alterations in the characteristics of Alaska's population, attributed in large measure to pipeline construction, such as increased mobility, instability, urbanization, relative youthfulness and unemployment rates.

88/ See Chapter II, Alaska's Criminal Growth Patterns, Statewide & Regional Projections of Population & Work Force - With Pipeline Construction, infra at 16-17. Also see, Appendix A, TABLE A-9, Baseline Population Projections, supra at 151; FIGURE A-1, Total Population Forecasts, supra at 155, for a comparison of the range of impact projections as well as a "without pipeline" projection; and Appendix B, Section IV-C(1), Independent Variables Of The ACJ Model - Total Population, supra at 184 of this report. For a more detailed analysis of the population projections relied upon, see Human Resource Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions, November, 1974.

Utilizing the 1975 baseline population estimate of approximately 400,000 (406,100)[89] and a prosecutorial staff of 34 attorneys (excluding the two Assistant Attorneys General assigned to the Criminal Division), the 1975 prosecutor/population ratio in Alaska was .85 per 10,000 population. Assuming that this is an acceptable prosecutor/population ratio, a minimum statewide prosecutorial staff of 48 attorneys would be required in 1980 in order to maintain the same level of service as in 1975. This projected ratio is predicated upon a baseline population estimate of 481,000 in 1980.[90]

Prosecutors/Arrests

As noted previously in this report, actual Part I offenses statewide are projected to increase 73%, between 1974 and 1980. Total statewide Part I offenses resulting in an arrest, however, are projected to increase 80% over the same period indicative of an improved Part I clearance rate statewide. Both of these projections assume a medium or baseline estimate of pipeline impact.[91]

Given the premise that total Part I offenses resulting in arrests is the most reliable indicator available of law enforcement agency input into and impact on prosecution services, it would follow that an 80% increase in prosecutorial capability would be required between 1974 and 1980 if an acceptable level of service is to be maintained. Such an increase would require a minimum statewide prosecutorial staff of 61 attorneys.

89/ Appendix A, TABLE A-9, supra at 151 of this report.

90/ See Footnotes 88 and 89, infra.

91/ See Chapter IV, Law Enforcement Agencies, Statewide Crime Trends, infra at 53-55 of this report. Also see, Appendix C, TABLE C-11, supra at 226 of this report.

CONTINUED

1 OF 3

One difficulty with both of these projections is that they assume an accepted level of prosecutorial capability in the years 1974-1975. As previously noted, however, the criminal division experienced a 56.6% increase in cases pending during Fiscal Year 1975 as opposed to a 12.4% increase in criminal offenses filed. (Table 5-2). Consequently, it is clear that in terms of case processing, offense increases are generating a disproportionate increase in pending caseloads. Clearly then the impact suggested within the prosecutor per projected total Part I offenses that result in an arrest analysis would seem to represent minimal requirements if even a marginally acceptable level of service is to be maintained.

CHAPTER VI

THE ALASKA COURT SYSTEM

INTRODUCTION

The Alaska Court System is one of the first, and to a large extent the most completely unified state court system in the United States. Both administrative and judicial responsibility for the entire court system in Alaska are vested in the Supreme Court of Alaska. There are three judicial levels within the system, consisting of the Supreme, Superior and District Courts. In addition, magistrates serving as judicial officers of the District Court have been appointed. The tasks and areas of responsibility of each of these levels are delineated in detail in Title 22 of the Alaska Statutes.

The Supreme Court of Alaska, composed of the Chief Justice and four Associate Justices, has final appellate jurisdiction in all actions and proceedings brought before the courts of the state. In addition, the Supreme Court is charged with the constitutional authority to adopt rules governing the administration of all courts in the state as well as rules governing practice and procedure in all cases.

The Superior Court for the State of Alaska, divided into four judicial districts is the trial court of general jurisdiction. In addition the Superior Court sits as an intermediate appellate court to which appeals from the District Courts are taken, as well as appeals from orders entered by administrative agencies of State government.

In criminal matters, the District Court has jurisdiction concurrently with the Superior Court over all misdemeanors and

and over violations of municipal ordinances. In civil matters, the District Court may entertain cases for the recovery of monetary damages not exceeding $10,000, except in auto injury cases wherein damages may not exceed $15,000. The District Court also has jurisdiction over presumptive death proceedings, to serve as coroner and recorder, to take custody of a decedent's estate until the appointment of a legal guardian and to conduct preliminary hearings and arraignments of all persons accused of a felony.

In many remote and semi-rural areas of Alaska, magistrate posts have been established where the services of a full-time District Court are not available. Magistrate posts have been created in most urban areas as well to assist the District Court in various capacities. In general, magistrates are judicial officers who act on behalf of or substitute for the District Court in matters generally requiring less legal training.

At present there are 64 authorized magistrate positions in communities throughout the state. They are selected by and serve at the pleasure of the presiding judge of the Superior Court in their district. The jurisdiction of magistrates is concurrent with that of District Courts for most matters while being more restricted in others. Their civil jurisdiction extends to small claim matters under $1,000. They may give judgment upon conviction or guilty plea for misdemeanors, try state misdemeanor cases with the consent of the defendant, hear cases involving violations of local ordinances, and act as coroner, recorder and public adminstrator. Magistrates may also take custody of a decedent's estate until the appointment of a legal guardian and may hear presumptive death matters.

JUDICIAL DISTRICTS

The State of Alaska is divided in four judicial districts, created in territorial days and continued after statehood, which define judicial jurisdictional boundaries.

1. The First Judicial District encompasses the southeastern portion of the state and includes the communities of Craig, Haines, Hoonah, Kake, Ketchikan, Petersburg, Sitka, Pelican, Juneau, Angoon, Skagway, Wrangell and Yakutat -- all of which have magistrates. District Court judges sit at Ketchikan, Sitka, Wrangell, and Juneau. Superior Court judges are located at Juneau and Ketchikan. The present Chief Justice of the Supreme Court of Alaska is also located in Juneau.

2. The Second Judicial District encompasses the entire North Slope region and the northwestern quarter of Alaska. Magistrates are located in Barrow, Buckland, Emmonak, Gambell, Hooper Bay, Kiana, Kotzebue, Mt. Village, Mekoryuk, Nome, Noorvik, Point Hope, Savoonga, Selawik, St. Marys, Teller, Unalakleet and Wales while both a Superior Court and a District Court judge reside in Nome. Although included geographically in the Second Judicial Distirct, the community of Barrow has recently been established as a judicial service area with Superior and District Court services provided from the Fourth Judicial District at Fairbanks.

3. The Third Judicial District includes the Aleutian Chain, the Bristol Bay area, Anchorage, the Matanuska Valley, the Kenai Peninsula, Kodiak and Cordova. Magistrates are located in Anchorage, Cold Bay, Cordova, Dillingham, Glennallen, Homer, Kenai, Kodiak, Naknek, Palmer, Sand Point, Seldovia, Seward, St. Paul, Unalaska, Valdez and Whittier. The Superior Court is

headquartered in Anchorage with resident judges at Kenai and Kodiak. Three Supreme Court justices are located in Anchorage as are the Administrative Director of the Alaska Court System and his staff.

4. The Fourth Judicial District encompasses the interior and eastern sections of the State. Magistrates serve in Aniak, Bethel, Cantwell, Delta Junction, Fairbanks, Fort Yukon, Kasigluk, Galena, Manley Hot Springs, McGrath, Nenana, Nulato, Rampart, Tanana, Tok and Tununak. Four District Court judges sit in Fairbanks, with a fifth judge resident at Bethel. There are three Superior Court judges in Fairbanks, including the presiding judge, and one Supreme Court justice.

As with the community of Barrow, a judicial service area has been created for Bethel because of transportation facilities whereby Superior Court jurisdiction is provided from the Third Judicial District.

CASELOAD PROJECTIONS

It is difficult to determine the number of cases a judge should or can be expected to process annually as the variables affecting this are numerous. The Colorado School for Court Administrators estimates that as a national average a Superior Court judge should be able to process 200 criminal and 300 civil cases annually. A Superior Court judge handling only criminal cases can reasonably be expected to handle 600 to 800 cases, while if only civil cases are heard, such a judge should be able to manage 700 to 800 cases.

The applicability of these suggested standards to Alaska is probably tenuous at best. As a result of Alaska's size, weather, and geography, a substantial amount of a judge's time, as well as that of attorneys, is frequently devoted to travel. In addition, pecularities of the Alaska trial process, such as omnibus hearings, further draw in question the applicability of caseload standards to Alaska.

Table 6-1 summarizes the projected percentage increase in criminal cases for the Alaska Court System from 1974 through 1980.

TABLE 6-1

PROJECTED INCREASES IN CRIMINAL CASE FILINGS[92]

1974	1975	1976	1977	1978	1979	1980
11.7%	23.9%	14.8%	6.1%	4.1%	5%	4.4%

Even though the percentages set out in Table 6-1 are derived exclusively from projected criminal case increases, they could reasonably be applied to all court case types. Quite obviously, unless an increase in offenses is met with increased arrests by law enforcement agencies that lead to an increase in offenses prosecuted, the court system will not experience a concomitant impact. It is assumed, however, that such a response will occur and that other types of cases (traffic, civil, juvenile, probate, etc.) will also increase during the forecast period. Inasmuch as criminal activity projections are predicated upon projections developed for the population and the work force, among

92/ See Appendix C, Section 3(a), Forecast Data Series - Medium or Baseline Statewide Historical & Projected Criminal Activity, TABLES C-11 through C-13, supra at 226 through 228 of this report.

other variables, it would not seem unreasonable to apply them to all case types.

One caveat is in order, however. Because many out-of-state job seekers attracted to Alaska as a result of construction of the pipeline will not bring with them either their families or automobiles, application of the projected, percentage increases set out in Table 6-1 to juvenile and traffic caseloads may result in slightly inflated projections. This same result may occur in probate and other civil caseloads due to the highly transitory nature of many newcomers to Alaska.[93] However, application of criminal activity percentage increases to all cases will at least provide a figure that should depict maximum projected baseline increases in overall court system caseloads through 1980.

Table 6-2 depicts overall projected court system caseloads from 1974 through 1980 through an application of the projected percentage increases set out in Table 6-1 to the actual 1973 caseloads.

TABLE 6-2
STATEWIDE CASELOAD PROJECTIONS

	1973	1974	1975	1976	1977	1978	1979	1980
Traffic	49,070	54,811	67,911	77,963	82,718	86,109	90,414	94,393
Criminal	16,638	18,585	23,026	26,434	28,047	29,197	30,657	32,005
Civil	13,000	14,521	17,992	20,654	21,914	22,813	23,953	25,007
Probate	1,254	1,401	1,735	1,992	2,114	2,201	2,311	2,412
Juvenile	1,695	1,893	2,346	2,692	2,857	2,974	3,123	3,248
TOTAL	81,657	91,211	113,010	129,735	137,650	143,294	150,458	157,065

93/ See Chapter II, Alaska's Criminal Growth Patterns, Statewide & Regional Projections of Population & Work Force, infra at 17-21; also see, Appendix B, Section IV-B(8), Major Forces Of Change - Boomers, supra at 183, and Section IV-C(1), Independent Variables Of The ACJ Model-Total Populations, supra at 184 of this report for a discussion and definition of dependency ratios assigned to out-of-state job seekers attracted by pipeline construction.

The projections set out in Table 6-2 have proven to be fairly accurate when compared with 1974 and 1975 actual case filings. In 1974, there were a total of 90,108 actual case filings and during the first seven months of 1975 approximately 55,000 cases were filed, including those filed at magistrate locations.[94]

Table 6-3 depicts the percentages of projected increases in criminal caseloads set out in Table 6-2 that are attributable to growth associated with pipeline construction. The absolute numerical criminal caseload figures representing pipeline impact are also indicated.

TABLE 6-3

CRIMINAL CASE FILINGS - PIPELINE IMPACT
(i.e., Percentage of Caseload Increase and Number of Criminal Cases that are Pipeline Related)

	1974	1975	1976	1977	1978	1979	1980
% of:	29.6%	48%	54%	46.6%	40.4%	33.2%	27.5%
Total:	576	2,132	1,840	752	465	485	371

The projections developed by this study suggest that significant increases in total case filings, and in particular, criminal case filings, would have occurred statewide over the next five years in the absence of pipeline construction. With pipeline construction, however, increased caseloads, particularly within the Third and Fourth Judicial Districts will clearly be substantial. In 1976, for example, 54% or 1,840 of the 3,408 additional projected criminal cases filed with the Alaska Court System are estimated to be directly related to growth experienced as a result of pipeline construction.

94/ Alaska Criminal Justice Planning Agency, Alaska 1976 Criminal Justice Plan, Volume I at 49.

CHAPTER VII

CORRECTIONS

INTRODUCTION

Total admissions to the Alaska correctional system numbered over 13,000 persons in 1974. With a projected increase in Part I offenses resulting in arrest of 80%, an admission caseload of approximately 23,400 persons is projected by 1980.[95] (see figure 7-1). This will affect institution capacities, probation programs, and the division's general effectiveness in providing services to persons who fall within its jurisdiction.

The Division of Corrections of the Alaska Department of Health and Social Services is an integral part of the criminal justice system in Alaska with a potential capability for crime deterrence as well as public protection and rehabilitation of offenders.

The division provides services to approximately 95% of all persons entering institutions on federal and municipal charges as well as to all persons detained under Alaska state charges. Local municipalities in Alaska do not generally have proper facilities for long-term detainment and usually transfer offenders to state institutions as soon as transportation can be arranged.

Responsibility for aligning institutional and probation/parole programs lies with the director of the Division of Corrections. Coordination between program areas is necessary to provide for continuity so that probation/parole services are responsive to institutional rehabilitation programs.

95/ See Chapter IV, Law Enforcement Agencies, Statewide Crime Trends, infra at 53-55 of this report. Also see, Appendix C, TABLE C-11, supra at 226 of this report.

At present, Alaska state-operated correctional institutions can accommodate a total of 714 persons.[96] Whether this will be adequate in view of population growth and pipeline impact will depend upon a number of factors, predominant among which are law enforcement, prosecutorial, judicial and legislative policies, caseload turnover and the rated capacity of correctional institutions. These factors will be examined separately, and should be kept in mind as indicators that are not always strictly quantifiable, but which can result in substantial changes in the number and type of admissions to institutions and probation/parole services.

It is not the objective of this study, and in particular this chapter, to measure the rehabilitative success of programs implemented by the Alaska Division of Corrections, but rather to attempt to assess whether present correctional methods will be adequate in view of an anticipated growth in population and criminal activity due to construction of the pipeline. An analysis of recidivism and probation/parole revocation rates and their relation to specific crime categories has not been made because the existing statistical base is inadequate to develop long-range projections into every facet of crime composition.

Because the Division of Corrections is charged with statewide responsibility, an examination of institution policies, probation/parole programs and divisional program management will be on a statewide basis. An evaluation of pipeline impact on corrections, on the other hand, particularly as it relates to crime

96/ Statistics derived from the Alaska Division of Corrections; also see, discussion regarding the capacity of correctional institutions in Alaska, supra at 98-101.

rates and admissions to correctional programs will be regional. Projections are based on institution admissions and probation average monthly caseloads for the years 1972 through 1974 and projected total arrests on a statewide basis from 1972 to 1980.

Division of Corrections statistics for the years preceding 1972 were available but are not reflected here due to changes in record maintenance. In 1972, the division changed from a manual tabulation system to a computerized system. Admission statistics before then are somewhat unreliable as institution records frequently reflected double counted transfers and probation/parole records often included inactive caseloads.

OPERATION VARIABLES

Law Enforcment Practices and Policies

Law enforcement policies and practices, in all probability, affects the Division of Corrections to a greater degree than any other component of the criminal justice system. Police agencies and individual officers exercise a broad range of discretion in making arrests, not only in specific crime categories but also with respect to the ages of persons arrested. Factors of police activity that directly impact division caseloads include efficiency in response time, officer/population ratios, population and offense clearance rates.

For a variety of generally unquantifiable reasons an arrest will or will not be made depending upon the particular situation with which an officer is confronted. A comparison between total Part I actual offenses and Part I offenses that resulted in an arrest for the years 1970 through 1974 indicates

that approximately 24% of actual offenses reported resulted in arrests.[97] Although a comparison of actual juvenile crime and juvenile arrests is generally beyond the scope of this study, it should be noted that estimates suggested that in excess of 40% of total Part I offenses in Alaska were committed by juveniles.

There are specific crime categories that for one reason or another have proven exceptionally difficult to resolve through an arrest, as reflected in the previous discussion of clearance rates.[98] Some of these reasons are the level of police surveillance, officer response time and the time and resources available for an adequate investigation. For example, of the 1,564 total actual auto thefts that occurred in Alaska in 1971, only 12.5% resulted in an arrest. In 1973, approximately 13.5% of all actual auto thefts statewide were closed by arrest.[99]

On the other hand, in 1971, approximately 80% of Alaska State Trooper actual road and driving offenses were "closed by arrest", and in 1973 78% of disorderly conduct offenses resulted in an arrest. The conclusion is inescapable that law enforcement effectiveness and efficiency in response time, investigation and arrest closure is frequently, if not, generally,

97/ See Appendix C, Section 3(a), Medium or Baseline Statewide Historical and Projected Criminal Acitivty TABLES C-11 through C-13, supra at 226 through 228 of this report, for the source of percentages cited.

98/ See Chapter IV, Law Enforcement Agencies, infra at 48-50 of this report.

99/ See Appendix C, Section 2, Uniform Crime Reports By Region: 1969-1973, TABLE C-3, supra at 216, and TABLE C-5 supra at 218 of this report.

related to crime type.

Officer/population ratios also have a large impact on the level and kinds of admissions to correctional programs in Alaska. A small or relatively stable population with a high ratio of law enforcement personnel can substantially affect the number of arrests and consequently, correctional admissions, because police are able to detect offenders more readily, and thereby generally increase arrest rates at least with respect to certain offenses. A brief comparison between total burglary arrests in Juneau and Anchorage provides a good example. In 1972, 55% of all burglaries reported resulted in arrests in Juneau as compared with only 12% in the Anchorage area. The burglary clearance rate in Juneau in 1973 was 28% as compared with 12% in Anchorage.[100]

Data employed by the Division of Corrections does not indicate specific crime type as a basis for quantifying law enforcement influence on division caseloads. An indicator is present, however, in the types of arrests police generate, and the assumption can be made that the categories relate directly to correctional admissions.

Prosecutorial Practices and Policies

In conjunction with law enforcement, prosecutorial policies and practices have a substantial impact on admissions to correctional programs, both in absolute numbers and in types of offenders. Prosecutors by law exercise an absolute direction in

100/ Statistics for each municipality were derived from Juneau Police Department, Uniform Crime Reports: 1972-1973, and Anchorage Police Department, Uniform Crime Reports: 1972-1973, respectively.

determining what if any criminal charge will be filed with a court in a particular case referred for prosecution. Among prosecutorial variables that traditionally have had an impact on correctional programs and services are total prosecutorial resources available, the concentration of resources by type of offense or offenses, charging policies and bail and sentence recommendation policies, among others. A number of these variables must be analyzed in conjunction with judicial policies and practices since to a large extent the adjudicative process as a whole impacts correctional programs and services.

An example of a prosecutorial policy that has a substantial affect on correctional programs and services is the recently adopted policy within the Alaska Department of Law with respect to plea negotiations. On July 3, 1975, the Attorney General issued a memorandum of policy directing District Attorneys in Alaska to refrain from engaging in plea negotiations with defendants, commencing with offenses filed on or after August 15, 1975, that are designed to arrive at an agreement for entry of a plea of guilty in return for a particular sentence recommendation by the prosecutor pursuant to Rule 11(e) of the Rules of Criminal Procedure of the State of Alaska. In the majority of cases, prosecutors at the sentencing phase of a criminal case are not to make a particular sentence recommendation but rather, bring to the court's attention all factors relevant to a proper consideration of sentence.

As a result of this policy, substantially more criminal cases are proceeding to trial as a result of which different sentencing patterns could emerge that will have a direct and substantial

effect on the Alaska Division of Corrections in terms of total admissions, the length of incarceration and probation/parole supervision and caseload turnover. At the very least, the Department of Law's plea negotiation - sentence recommendation policy has made the pre-sentence report, prepared for a sentencing court by probation officers, a much more important phase of the adjudicative process.

Judicial Practices and Policies

Sentencing practices and patterns and pre-trial release policies substantially affect correctional programs with respect to total admissions to institutions and probation/parole supervision and the caseload turnover rate in both institutions and probation/parole services. Judicial caseloads, pre-trial release policies and pre-trial procedural practices all affect the amount of time required to dispose of a criminal case and consequently, the total number and length of stay of individuals held in custody awaiting final disposition.

Correctional programs are also impacted as a result of lower court and appellate decisions that alter the way in which criminal cases are processed and more directly, by decisions that prescribe procedural and substantive requirements for institutional and probation/parole activities and procedures.[101]

Additionally, court rules of procedure sometimes have a substantial impact on correctional workloads. For example, in 1974, Rule 32(c) of the Rules of Criminal Procedure of the State of Alaska was amended to require pre-sentence investigations

101/ See e.g., McGinnis et. al. v. H.C.R. Stevens, _____ P.2d _____, Opinion No. 1207 (Alaska December 1, 1975).

and the preparation of pre-sentence reports by the probation service in all felony cases.[102]

Legislative Enactments

Changes to existing statutes concerning the operation of the correctional system can have a substantial impact on the number of persons admitted to correctional facilities and probation/parole supervision and the total period individuals remain within the correctional system. In 1974, for example, AS 33.15.080 was amended to provide that no person sentenced to a term of imprisonment may be released on parole unless he has served at least one-third of the sentence imposed, or in the case of a sentence of life imprisonment, at least 15 years.[103] AS 33.15.230 (a)(1) was also amended to allow a sentencing court to specify a minimum term of imprisonment before which a prisoner can be eligible for parole, which shall be at least one-third of the sentence imposed. Previously, a sentencing court could not restrict eligibility for parole by more than one-third of the sentence imposed.[104]

Presently, proposals providing for a mandatory determinate sentencing scheme for second, third and subsequent felony offenders involving mandatory minimum sentences as well as alterations in statutory "good time" provisions are pending before the Alaska

102/ Rule 32(c)(2) of the Rules of Criminal Procedure specifies in considerable detail the scope of a pre-sentence investigation and the information that is required to be included in a pre-sentence report.

103/ § 1 ch 110 SLA 1974

104/ § 3 ch 110 SLA 1974; Also see, Annotation to AS 33.15.230.

Legislature and the Alaska Criminal Code Revision Commission.[105] All of these proposals will have, if enacted, a substantial impact on correctional programs and services in terms of the number of total admissions, the length of both institutional and probation/parole supervision, caseload turnover rates, and the capacity of institutions and probation/parole programs.

Caseload Turnover

In 1972, there were a total of 13,232 admissions to Alaska correctional institutions and on a monthly basis institution admissions were 62% higher in September than in January and 32% lower in December than in September. In 1973, of a total of 12,804 admissions, there was a 53% increase in September over January admissions and a 9% decrease in December from September.[106] Seasonal population shifts account for a significant rise in admissions during summer months and a subsequent decrease in the winter. Whether a seasonal influx of population results in a substantial rise in misdemeanor as opposed to felony arrests is not specifically determinable, although the drop in admissions through December tends to suggest that this is the case.

An analysis of institution and probation/parole turnover is important in recognizing and preparing for seasonal increases in the number of admissions and, also, in coordinating programs

105/ See e.g., House Bill No. 600, Legislature of the State of Alaska, Ninth Legislature - Second Session (1976); and Alaska Criminal Code Revision Commission, Alaska Criminal Code Revision: Preliminary Report, at 133 through 189, January, 1976, and Addendum dated February 1, 1976, at 2-3.

106/ Alaska Division of Corrections Statistics, 1972-1973.

between short-term and long-term offenders. High probationary turnover rates can result in a significantly complex workload, since each newly admitted case requires the preparation of an investigation report as well as a preliminary court report, and involves other administrative procedures associated with intake and referral. Average monthly caseloads are computed in order to determine the number of offenders per probation officer. If average length on probation is not taken into consideration, a probation officer may appear to have a low average monthly caseload and still have a substantial workload due to a high caseload turnover rate.

Institutional Capacity

In-state Alaska correctional facilities have a total emergency housing capacity of 833 units. Of this total, 119 units are considered "special service holding units" that include infirmaries, isolation units, admission and orientation units, etc. These special holding units are not ordinarily utilized for long range, non-emergency housing. Subtraction of them from the emergency housing capacity leaves an optimum institutional accommodation capacity of 714 units, of which 148 are designed for handling juvenile offenders, leaving a total of 566 optimum level units designed for adult offenders. Of these, 537 are designed to accommodate male offenders and 29 are for females. Both sentenced and detention populations are accommodated within the 566 available adult units.[107]

107/ Alaska Division of Corrections Statistics, 1974; also see Alaska Criminal Code Revision Commission, Alaska Criminal Code Revision: Preliminary Report, at 136, January, 1976.

The Alaska Division of Corrections utilizes a concept referred to as "rated capacity" to determine the extent to which an institution can operate efficiently and, at the same time provide rehabilitative programs. It also allows for the flexibility necessary to allow for the admission, transfer and discharge of offenders.

Table 7-1 indicates by correctional institution emergency, optimum and "rated" capacities. It also sets out the number of special holding units for each institution and breaks the optimum housing capacity for each down by adult and juvenile and male and female. Additionally, the efficiency rate for each institution is indicated, which when applied to "optimum capacity" yields a "rated capacity" for each institution.

According to statistics furnished by the division the overall rated capacity of correctional institutions in Alaska is approximately 88% of optimum institutional accommodation.[108] Although this percentage varies by institution to some degree, it is a means by which population growth and institutional capabilities can be measured to provide for effective and efficient implementation of programs and services. At the McLaughlin Youth Center, for example, rated capacity is only 80% of optimum housing because of the organizational structure of that institution, inasmuch as differential treatment programs exclude use of all portions of the institution simultaneously. At the Southeast Correction

108/ Alaska Division of Corrections Statistics, 1974.

TABLE 7-1

ALASKA DIVISION OF CORRECTIONS
STATE OPERATED CORRECTIONAL CENTERS
OPERATING STANDARDS FOR HOUSING CAPACITY

Correctional Facility	Emergency Capacity	Special Holding Units	Optimum Housing	Optimum Housing Units Juvenile M	Juvenile F	Adult M	Adult F	Efficiency Rate	Rated Capacity
Ketchikan State Jail	30	4	26	-	-	26	-	.90	23
Ketchikan Detention Home	17	1	16	8	4	-	4	.50	8
Southeast Regional Correctional Center	125	20	105	8	6	87	4	.90	94
Northern Regional Correctional Center	139	24	115	4	4	102	5	.90	103
Southcentral Regional Correctional Center	84	12	72	-	-	72	-	.90	65
Anchorage Annex	137	31	106	-	-	90	16	.90	95
Palmer Adult Conservation Camp	70	-	70	-	-	70	-	.95	66
State Correctional Center at Eagle River	103	13	90	-	-	90	-	.95	85
McLaughlin Youth Center	128	14	114	71	43	-	-	.80	91
	833	119	714	91	57	537	29	.88	630

Center, on the other hand, rated capacity is 90% of optimum due to a predominantly adult male population.[109]

The rated capacity of correctional institutions statewide is 630 of the 714 total housing units representing optimum institutional accommodation.[110] The rated capacity of the 566 units available for adult offenders, however is 514 which is 90.8% of optimum institutional accommodation, an efficiency factor substantially higher than the accepted national norm of 80%.[111]

During Fiscal Year 1975, Alaskan correctional institutions had a used adult capacity of 519, an increase of approximately 8% over 483 in Fiscal Year 1974, indicating that in-state correctional populations have already exceeded levels of maximum institutional efficiency, at least on an annual basis.[112]

The remainder of this chapter will attempt to assess projected admissions to state correctional institutions and to probation/parole programs in Alaska and will address the rated capacity of each institution by region. Statewide institutional assessments will take into account transfers among institutions as well as to other detention facilities.

STATE CORRECTIONAL INSTITUTIONS

The Division of Corrections operates four principal booking institutions, located in Juneau, Ketchikan, Anchorage and Fairbanks. Combined these institutions accommodate a total of 316 persons. All four institutions provide for minimum, medium

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109/ Ibid.

110/ Ibid.

111/ Alaska Criminal Code Revision Commission, supra at 137.

112/ Ibid; Also see Caseload Turnover, infra at 97-98 of this chapter for discussions regarding seasonal admission variations.

and maximum security detention. The state also maintains a minimum security center at Palmer with a rated capacity of 66 persons.

As of 1974, the division employed 59 probation/parole officers and aides, 250 correctional officers and counselors and approximately 100 support staff.

Table 7-2 consists of a state institution admission comparison for the years 1972 through a portion of 1974, including juvenile admissions to regional institutions.

TABLE 7-2

INSTITUTIONAL ADMISSIONS: 1972-1974
(Regional Correctional Institution)

	1972	% of Total	1973	% of Total	1974	% of Total
Anchorage	7,594	57%	7,832	61%	4,042	58%
Fairbanks	3,390	26	3,120	25	1,857	27
Juneau	876	7	810	6	527	8
Ketchikan	1,372	10	1,042	8	490	7
Total Admissions	13,212	100%	12,804	100%	6,916	100%

Total Projected Admissions for 1974: 13,800

Correctional admissions generally tract the overall trend in total arrests. Each time a booking is made into a state institution or into a local jail facility on a state offense, it is counted as an admission to the state correctional system. In cases of driving offenses and other relatively minor misdemeanors, however, corrections frequently does not become involved at the arrest stage. The same holds true with respect to the ultimate outcome of a large number of adjudicated cases. There is a larger

percentage of cases dismissed and cases that result in non-institutional dispositions than cases that result in offenders being institutionalized. For example, in the vast majority of fish and game violations and traffic offenses penalties almost always are in the form of a monetary fine. Thus, although statewide trends for adjudication and arrests apply essentially equally to corrections, it cannot be assumed that a commensurate increase or decrease in either will affect division caseloads to the same degree in terms of absolute numbers.

In comparing total admissions, there was a decrease of 3% in 1973 from 1972, with a substantial rise on a monthly percentage basis in 1974. In total Part I arrests for the same years, there was appoximately a 2% decrease in 1973 from 1972 and a 13% increase from 1973 to 1974. For these years the correction system followed the statewide trend in Part I arrests fairly closely.[113]

Actual and projected admissions to state institutions are depicted in Figure 7-1, which appears at the end of this chapter, supra at p. 123. It is estimated that total admissions to institutions will increase between 76% and 89% from 1972 to 1980. This will mean between 23,000 and 25,000 admissions to state correctional institutions in 1980. In 1973, there was an actual total of 12,804 admissions to state institutions.[114]

113/ Alaska Division of Corrections Statistics, 1972-1974; Also see Appendix C, Section 3(a) Forecast Data Series - Medium or Baseline Statewide Historical and Projected Criminal Activity, TABLE C-11, Baseline Historical & Projected: Total Part I Index Crimes - Statewide, supra at 226 of this report.

114/ ALaska Division of Corrections Statistics, 1972-1974.

Projections indicate that total correctional admissions would have been between 15% and 23% lower in 1980 if the pipeline had not been constructed. The trend established by the without pipeline construction projections also indicates that an increase in admissions of 35% from 1972 to 1980 would have occurred.

Figure 7-1 and most of the other graphs accompanying this chapter depict a high and low projected rate of growth and a trend "without pipeline construction." The high and low trends set out in these graphs do not follow the high and low trends depicted for total arrests. Rather, each trend follows the arrest baseline figure correlated to high and low years within the three year institutional admission history. Although the admission history/arrest ratio did not fluctuate to any significant degree, in order to insure an accurate range of projections a low and high trend was included.

It has been assumed in the development of projected institutional and probation/parole admissions that admissions correlate directly with arrest history. A comparison between the three year correctional admissions history examined and law enforcement arrest history statistics for the same years tends to support this assumption, as fluctuations in arrests were apparent in admissions.

The present demographic breakdown of persons in correctional institutions by age and sex group indicates, according to the three year admission history examined that approximately 6% of inmates at any one time are women and that approximately 14% of total institutional admissions are juveniles.

The following geographic breakdown by regional responsibility of the Division of Corrections does not correspond to the areas previously defined for purposes of the criminal activity projections of this study.

Southcentral Region

Anchorage is the largest metropolitan center in the state and provides correctional services for most of the Southcentral Region. Institutions serving the area are the Southcentral Corrections Center and Anchorage Annex, the State Correctional Center at Eagle River and the Palmer Adult Camp. Optimum housing at the Southcentral Corrections Center at Anchorage is 72 with a rated capacity of 65 inmates per day. The Anchorage Annex has an optimum capacity of 106 inmates and a rated capacity of 95 and the Eagle River Correctional Center has an optimum capacity of 90 with a rated capacity of 85. The minimum security camp at Palmer has an optimum capacity of 70 and a rated capacity of 66.

An influx of population during the summer months apparently generates fluctuations in crimes rates on a seasonal basis, as a result of both employment opportunities and tourism. An explanation of total admissions to Anchorage correctional facilities tends to reinforce this observation. In 1972, admissions increased by 58% from January to July and decreased 99% by December. Admissions increased by 50% in July from January in 1973 with a subsequent decrease of 5% in December. From 1972 through 1974, admissions to Anchorage institutions constituted approximately 56% of state institutional admissions.[115]

115/ Ibid.

Figure 7-2, which can be found at the end of this chapter, supra at p. 124, depicts actual and projected admissions to correctional institutions from 1972 through 1980 and indicates that caseloads will almost double over that period. The projections indicate that total admissions will increase as much as 61% with pipeline related growth included. Institutional admissions for 1980 are projected at a range 24% higher than the "without pipeline construction" projections.

Admissions to Anchorage institutions showed a steady percentage increase from 1972 through 1974, and from 1974 through 1975 an increase of 22% is anticipated with a gradual leveling trend through 1980. In terms of actual numbers, the difference between the projected low and high in institutional admissions ranges from 600 to 1,000 admissions, which will mean that in 1980 an average of 109 units will be required above the present Anchorage area rated capacity of 311.

Southcentral institutions will not be able to meet future demands even under emergency circumstances if the present rate of growth continues. Maximum institutional efficiency, differential programs of treatment and general education and rehabilitative programs will all be severely taxed.

Figure 7-3, which is located at the end of this chapter, supra at p. 125, compares the percentage of unsentenced offenders in Anchorage institutions from Janaury, 1973 to July, 1974, with total institutional populations.[116] Of 260 total inmates in May, 1974, 125 were unsentenced. This means that nearly

116/ Ibid.

one-half of all persons detained were awaiting the final disposition of a criminal case and is indicative of the general trend in the relative number of pre-trial and pre-sentence detainees in Anchorage institutions.

Northern Region

Correctional services to the Northern and Interior Regions of Alaska are provided by the State Corrections Center at Fairbanks and the Nome State Jail with ancillary units in adjacent communities. The Nome Jail is operated on a contract basis with the City of Nome. The Nome facility has an optimum capacity of 32 inmates with a rated capacity of 28. The institution is designed to house short-term offenders in medium security surroundings and has a staff of 10. Admissions in 1972-1974 are set out in Table 7-3 along with projected admissions through 1980. The table includes juvenile admissions.

TABLE 7-3
ACTUAL AND PROJECTED ADMISSIONS TO THE NOME STATE JAIL
1972-1980

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Projected High	700	400	600	700	800	900	900	1,000	1,000
Projected Low	700	400	500	700	800	800	900	900	900
Without Pipeline	700	400	500	500	600	600	700	800	800

Projections indicate that the Nome Jail will experience a high of 22 admissions per day. With a rated capacity of 28, the Nome State Jail should be able to accommodate the projected increase in admissions.

The Northern Corrections Center at Fairbanks serves as both an intake booking facility and an institution for sentenced offenders. Both minimum and medium security facilities are provided, with a rated capacity of 103 inmates. Post-conviction facilities accommodate men only. At present, Fairbanks has no half-way house program or other semi-parole facility for offender reintegration.

Figure 7-4, which can be found at the end of this chapter, supra at p.126, depicts projected Fairbanks admissions through 1980 and indicates a pipeline impact of as much as 29% above admissions projected "without pipeline construction" for that year. Admissions are expected to increase from 3,400 in 1972 to a high of 6,700 in 1980. By 1980, the Fairbanks facility will require an additional minimum of 98 units above the present rated capacity of 103 in order to accommodate this projected increase.

Southeast Region

Correction services to the Southeast Region are provided primarily by the State Corrections Center at Juneau and the Ketchikan State Jail with local facilities located in Sitka, Wrangell, Petersburg and other small communities. The Juneau facility has an optimum capacity of 105 inmates with a rated capacity of 94. The Ketchikan State Jail has an optimum capacity of 26 and a rated capacity of 23.

Figures 7-5 and 7-6, which are located at the end of this chapter, supra at p. 127 and p. 128, depict actual and projected admissions (including juvenile detention admissions) for the period 1972 through 1980 for the Southeast Corrections

Center and the Ketchikan State Jail respectively.

At the Southeast Corrections Center at Juneau total admissions are projected to more than double from 1972 to 1980. However, the institution should be able to accommodate this projected increase in admissions given its present rated capacity, unless it becomes necessary to substantially increase the number of inmates from other institutions housed at the Juneau facility.

The picture in Ketchikan, however, is somewhat different. In 1972, admissions averaged 4 per day. In 1973 and 1974, this figure decreased to an average of 3 per day, generally following statewide trends.[117] Average daily admissions in 1980 are projected at a high of 5 per day. A total of 57 units will be required in order to accommodate this increase, which is 34 units in excess of the present rated capacity of 23. Construction of a community based correction center at Ketchikan should serve to both alleviate severe existing deficiencies and accommodate projected admissions through 1980.

JUVENILE DETENTION CAPABILITIES

Specifically designed juvenile detention facilities in Alaska are located in Anchorage at the McLaughlin Youth Center and in Ketchikan at the Ketchikan Detention Home. McLaughlin has an optimum housing capacity of 114 with a rated capacity of 91, while the Ketchikan facility has an optimum capacity of 16 with a rated capacity of 8. Together, the two juvenile facilities employ a total of 120 personnel in counseling and institution related services. Juveniles usually remain less

117/ Ibid.

than sixty days and have access to area schools and community services.

Juvenile offenders are also detained in both local facilities and state regional institutions in separate wards from adult offenders. Detention in these facilities is for a short period, usually under thirty days or until transfer to other locations, primarily the McLaughlin Youth Center.

Juvenile Part I criminal activity in Alaska generally parallels that of the nation as a whole. In 1971, Part I offenses committed by juveniles comprised 45% of total Part I offenses statewide. In 1972 this percentage was 44%. According to the Detailed Characteristics of the 1970 Census, juvenile offenses accounted for 43% of Part I offenses in the nation.

In all of the five historical years of offense history examined, there was a consistent percentage per crime category of juvenile participation. For example, in 1971 juvenile auto theft arrests were 51% of the total. In 1972, in the same category, it was 47%. A consistent percentage was also discernible in the aggravated assault category. In 1971, juvenile aggravated assault arrests were 11% of total arrests. In 1972, juvenile arrests were 12% of the total.[118]

Tables 7-4 and 7-5 compare total Part I juvenile arrests with total statewide Part I offenses closed by arrest for 1971 and 1972, respectively.

118/ Ibid.

TABLE 7-4

1971 JUVENILE - TOTAL ARREST COMPARISON
PART I OFFENSES

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	WESTERN NORTHERN	TOTAL STATE
Criminal Homicide	1/15	1/12	0/14	0/5	2/13	4/59
Rape	0/12	1/11	0/8	0/3	2/8	3/42
Robbery	4/60	1/10	2/3	0/2	3/2	10/77
Aggravated Assault	17/129	9/79	15/122	0/34	2/43	43/407
Burglary	81/140	33/94	62/119	20/38	24/40	220/431
Larceny-Theft	586/959	174/334	174/331	19/68	12/38	965/1730
Auto Theft	60/87	20/53	15/34	4/15	2/7	101/196
REGIONAL TOTALS	749/1402	293/593	268/631	43/165	47/151	1329/2942

119/ Alaska Division of Corrections Statistics, 1971; Also see Appendix C, Section 2, Uniform Crime Reports By Region: 1969-1973, TABLE C-3, Part I Index Crimes - Statewide: 1971, supra at 216 of this report.

TABLE 7-5

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1972 JUVENILE - TOTAL ARREST COMPARISON
PART I OFFENSES

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	WESTERN NORTHERN	TOTAL STATE
Criminal Homicide	2/22	0/10	1/3	0/6	1/11	4/52
Rape	1/8	0/15	1/7	0/6	1/8	3/44
Robbery	9/36	1/7	0/1	0/7	0/1	10/52
Aggravated Assault	31/129	3/96	12/145	3/64	12/90	61/524
Burglary	82/193	69/108	83/270	66/101	12/60	323/732
Larceny-Theft	550/1001	190/362	126/357	58/126	126/67	1050/1913
Auto Theft	35/54	11/27	14/64	16/37	14/8	90/190
REGIONAL TOTALS	710/1443	274/625	237/847	143/347	177/245	1541/3507

120/ Alaska Division of Corrections Statistics, 1972; Also See Appendix C, Section 2, Uniform Crime Reports By Region: 1969-1973, TABLE C-4, Part I Index Crimes - Statewide: 1972, supra at 217 of this report.

Part I offenses against property (burglary, larceny-theft, and auto theft) are crimes that involve an extremely high incidence of juvenile offenders. For example, in 1971, 51% of total statewide Part I burglaries that were closed by arrest involved juvenile offenders. In 1972, this figure decreased to 44%. It should be noted, however, that since the Part I larceny-theft category now includes all larcenies, regardless of dollar amount, Part I juvenile participation percentages will generally be higher than the juvenile participation percentage for overall criminal activity (i.e., Part I and Part II offenses combined.).

Table 7-6 indicates the number of juvenile admissions to state correctional institutions by year from 1972 through the first six months of 1974. The data presented indicates that very little increase in total admissions occurred between 1972 and 1973. Total admissions for 1974, however, projected from the first six months of actual experience, indicate a 26.5% increase over 1973.

TABLE 7-6

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JUVENILE ADMISSIONS: 1972-1974

	1972	1973	1974
Anchorage	743	803	502
Fairbanks	417	422	259
Juneau	197	162	82
Ketchikan	280	287	161
Nome	145	113	76
TOTAL	1,781	1,787	1,080

Total Projected Admissions for 1974: 2,160

121/ Alaska Division of Corrections Statistics, 1972-1974; Data set out for 1974 represents the first six months of the year only.

Figure 7-7, which is located at the end of this chapter, supra at p. 129, depicts actual and projected total juvenile admissions to state correctional institutions for the period 1972 through 1980, distinguishing between projections with pipeline related growth accounted for and those "without pipeline construction." The "without pipeline construction" projections indicate a 57% increase in total juvenile admissions in 1980, which is significantly lower than the 96% increase projected as the high estimate. In 1980, juvenile admissions are projected at a range of 23% to 34.6% higher than the "without pipeline construction" projections.

The increased number of juveniles arrested and admitted to state correctional institutions will represent a major challenge to the Division of Corrections. The two juvenile detention centers previously examined will experience substantial impact as a result of these increases unless additional detention facilities are made available. At present, institutionalization of juvenile offenders is the exception rather than the rule, with the majority of offenders placed on probation. This practice will undoubtedly be increased unless alternatives are made available.

PROBATION AND PAROLE SERVICES

Services provided by the probation and parole unit of the Alaska Division of Corrections include the supervision of adult and juvenile offenders, the development of non-institutional rehabilitative and re-integrative programs for offenders on probation or parole, the preparation of pre-sentence investigations and reports, the preparation of background histories and evaluations for the Alaska Parole Board and the Interstate Compact

Administrator and the initiation in certain locations of the state of juvenile petitions seeking an adjudication of delinquency or child in need of supervision.

Probation and parole services are in general designed to provide an alternative either to institutionalization or further institutionalization in the form of community-based counseling, treatment, education and re-integration programs.

Alaska has adopted the minimum standards of the President's Commission on Law Enforcement and Administration of Justice (1967) which call for maintaining a ratio of 65 workload units per probation/parole officer per month. Workload units are divided as follows:

1 court report	5 units
1 other report	3 units
1 active supervisory case	1 unit
1 preliminary intake	1 unit

Thus, if a probation officer completes four court reports, five other investigations, supervises 25 probationers and investigates 5 preliminary intake referrals in a month, a caseload of 65 units would result. In order to insure proper distribution of caseload, at least one-third of each officer's caseload is audited each month for man hours of services delivered, supervision effort, and currency of files.

Most of the probation/parole workload is referred to the division by the Alaska Court System. In the sentencing of all felons, for example, the probation unit is required to prepare and submit presentence reports. Other specifically court related functions include preliminary intake in juvenile cases

by a probation officer under Children's Rule 4.

Probation and parole units are divided among three regions in Alaska. These are the Northern Region, Southcentral Region, and Southeast Region. Pipeline impact projections along "without pipeline construction" projections developed on a statewide basis are graphically depicted in Figures 7-8 and 7-9, which can be found at the end of this chapter, supra at p. 130 and p. 131, respectively.

From 1972 to 1973 there was a 3% increase in average monthly probation caseloads. From 1973 to 1974, however, there was a 39% increase in total statewide admissions to probation. Figures 7-8 and 7-9 indicate that statewide admissions to probation and parole supervision could increase as much as 158% and 85%, respectively, between 1972 and 1980.

While the Northern and Southeastern offices will experience significant additional caseload increases, it is primarily the Southcentral Region that will be hit with the large majority of these additional cases. Presently, the Southcentral Region's average monthly caseload comprises 50% of total statewide probationary cases and 55% of the parole caseload. Even assuming that this same percentage distribution remains constant throughout the forecast period, the Southcentral office will average between 1,300 and 1,500 probationary cases per month in 1980 and a parole caseload of 160. In 1973, there were only a total of 1,202 average probationary cases per month statewide and 146 projected average monthly parole cases statewide.

122/ Rules of Children's Procedure of the State of Alaska.

CONCLUSIONS

Along with the other components of the Alaska criminal justice system, the Alaska Division of Corrections would have experienced a sharply increased workload even if the Trans Alaska Pipeline had not been constructed. However, projected increases in population and the Alaska work force along with general economic and criminal activity growth directly associated with pipeline construction will accelerate and significantly contribute to the overall increase through 1980 in total admissions to correctional programs discussed in this chapter.

In conjunction with legislative changes and the practices, policies and resources of law enforcement and prosecutorial agencies and the courts, pipeline related growth will directly affect both institutional and probation/parole programs and effectiveness.

In-state correctional populations have already reached levels of maximum institutional efficiency, at least on an annual basis. Projections indicate that total admissions to state correctional institutions will increase between 75% and 89% from 1972 to 1980, and that in 1980, for example, total admissions could be expected to be between 15% and 23% less if the pipeline had not been constructed.

Approximately 14% of all institutional admissions in Alaska involve juvenile offenders. Between 1972 and 1980 juvenile admissions to state correctional institutions would have increased 51% if the pipeline had not been constructed. This increase will be as much as 96% under high impact projections.

The impact of pipeline related growth on the probation/parole unit of the division will, if anything, exceed that on institutional capabilities. The projections indicate that total statewide admissions to probation and parole programs could increase as much as 158% and 85%, respectively, between 1972 and 1980. In 1980, between 24% and 43% of these additional probationary cases will be related to growth associated with pipeline construction.

In light of the fact that correctional admissions will increase at approximately the same rate as arrests, planning for additional impact must be initiated with a careful comparison of present institutional and probation/parole capabilities with projected future requirements. Along with an analysis of institutional and probation/parole capacities, present and future, the Alaska Division of Corrections has an extreme need for the development, in conjunction with the rest of the criminal justice system, of an adequate informational and statistical base both with respect to offenders and in terms of an assessment of program efficiency, caseload distributions and personnel effectiveness.

TABLE 7-7

TOTAL ACTUAL AND PROJECTED ADMISSIONS
TO STATE CORRECTIONAL INSTITUTIONS

ACTUAL ADMISSIONS AND LOW & HIGH PIPELINE IMPACTED PROJECTIONS*

	SOUTHCENTRAL		NORTHERN		SOUTHEAST		KETCHIKAN		TOTAL STATEWIDE ADMISSIONS**	
	Low	High	Low	High	Low	High	Low	High	Low	High
1972	7,594	7,594	3,390	3,390	876	876	1,372	1,372	13,232	13,232
1973	7,832	7,832	3,120	3,120	810	810	1,042	1,042	12,804	12,804
1974	7,400	8,000	3,500	3,700	900	1,000	1,200	1,200	13,400	14,400
1975	9,200	9,800	4,300	4,500	1,100	1,200	1,200	1,300	16,400	17,500
1976	10,600	11,400	4,900	5,300	1,300	1,400	1,400	1,400	18,900	20,300
1977	11,400	12,200	5,300	5,700	1,400	1,500	1,500	1,600	20,300	21,800
1978	11,900	12,800	5,500	6,200	1,500	1,600	1,600	1,700	21,300	22,800
1979	12,500	13,400	5,800	6,500	1,600	1,700	1,700	1,800	22,300	24,000
1980	13,000	14,000	6,000	6,700	1,600	1,800	1,800	1,900	23,300	25,000

ALTERNATIVE PROJECTIONS WITHOUT PIPELINE CONSTRUCTION

	SOUTHCENTRAL	NORTHERN	SOUTHEAST	KETCHIKAN	TOTAL STATEWIDE ADMISSIONS**
1973	6,300	2,900	800	900	11,400
1974	6,400	3,000	800	900	11,600
1975	7,000	3,200	900	1,000	12,600
1976	7,800	3,600	1,000	1,100	13,900
1977	8,600	4,000	1,100	1,200	15,500
1978	9,500	4,400	1,200	1,300	17,000
1979	10,400	4,800	1,300	1,400	18,600
1980	11,300	5,200	1,400	1,500	20,300

* Actual Admissions = 1972, 1973 and first six months of 1974.

** Includes Admissions to non-booking facilities not reflected in Regional Correctional Center Totals.

TABLE 7-8

TOTAL STATEWIDE ACTUAL AND PROJECTED JUVENILE ADMISSIONS
TO STATE CORRECTIONAL INSTITUTIONS

	ACTUAL ADMISSIONS AND LOW & HIGH PIPELINE IMPACTED PROJECTIONS		ALTERNATE PROJECTIONS WITHOUT PIPELINE CONSTRUCTION
	LOW	HIGH	
1972	1,636	1,636	-
1973	1,674	1,674	-
1974	2,000	2,000	1,600
1975	2,200	2,400	1,800
1976	2,600	2,800	2,000
1977	2,900	3,000	2,200
1978	2,900	3,200	2,400
1979	3,100	3,400	2,600
1980	3,200	3,500	2,600

TABLE 7-9

AVERAGE ACTUAL AND PROJECTED MONTHLY PROBATION CASELOADS

AVERAGE ACTUAL MONTHLY PROBATION CASELOADS
AND LOW & HIGH PIPELINE IMPACTED PROJECTIONS

	SOUTHCENTRAL		NORTHERN		SOUTHEAST		TOTAL MONTHLY STATEWIDE CASELOADS	
	Low	High	Low	High	Low	High	Low	High
1972	583	582	352	352	230	230	1,165	1,165
1973	655	655	352	352	195	195	1,202	1,202
1974	848	900	500	600	350	350	1,648	1,870
1975	900	1,000	550	700	350	400	1,800	2,100
1976	1,100	1,200	600	700	400	400	2,100	2,400
1977	1,200	1,300	600	800	400	500	2,200	2,600
1978	1,200	1,300	700	800	500	600	2,400	2,700
1979	1,200	1,400	800	800	500	600	2,500	2,800
1980	1,300	1,500	800	900	500	600	2,600	3,000

ALTERNATIVE PROJECTIONS
AVERAGE MONTHLY PROBATION CASELOADS
WITHOUT PIPELINE CONSTRUCTION

	SOUTHCENTRAL	NORTHERN	SOUTHEAST	TOTAL MONTHLY STATEWIDE CASELOADS
1974	600	350	250	1,200
1975	700	350	250	1,300
1976	700	450	350	1,500
1977	800	500	350	1,6500
1978	900	500	400	1,800
1979	1,000	600	400	2,000
1980	1,000	650	450	2,100

TABLE 7-10

AVERAGE ACTUAL AND PROJECTED MONTHLY PAROLE CASELOADS

AVERAGE ACTUAL MONTHLY PAROLE CASELOADS
AND PIPELINE IMPACTED PROJECTIONS

	SOUTHCENTRAL	NORTHERN	SOUTHEAST	TOTAL MONTHLY STATEWIDE CASELOADS
1972	83	34	29	146
1973	92	27	25	144
1974	81	30	28	138
1975	110	40	40	190
1976	120	50	40	210
1977	140	50	45	235
1978	140	55	50	245
1979	150	60	50	260
1980	160	60	50	270

ALTERNATIVE PROJECTIONS

AVERAGE MONTHLY PAROLE CASELOADS
WITHOUT PIPELINE CONSTRUCTION

	SOUTHCENTRAL	NORTHERN	SOUTHEAST	TOTAL MONTHLY STATEWIDE CASELOADS
1974	75	28	26	129
1975	81	30	30	141
1976	90	35	30	155
1977	90	35	30	155
1978	110	40	40	190
1979	120	45	40	205
1980	130	50	45	225

FIGURE 7-1

ACTUAL AND PROJECTED ADMISSIONS TO INSTITUTIONS, 1972-1980

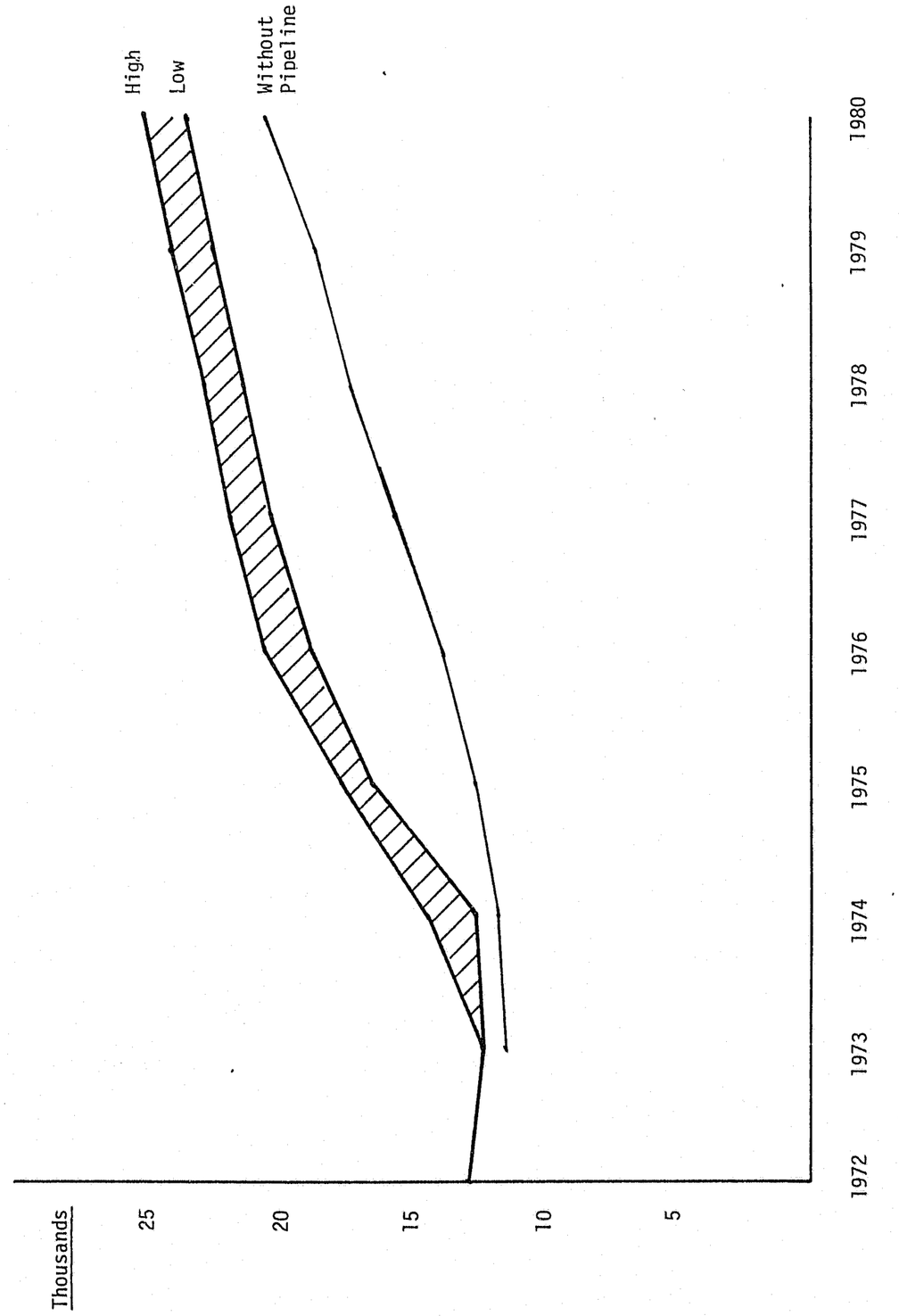


FIGURE 7-2

ACTUAL AND PROJECTED ADMISSIONS TO ANCHORAGE INSTITUTIONS, 1972-1980

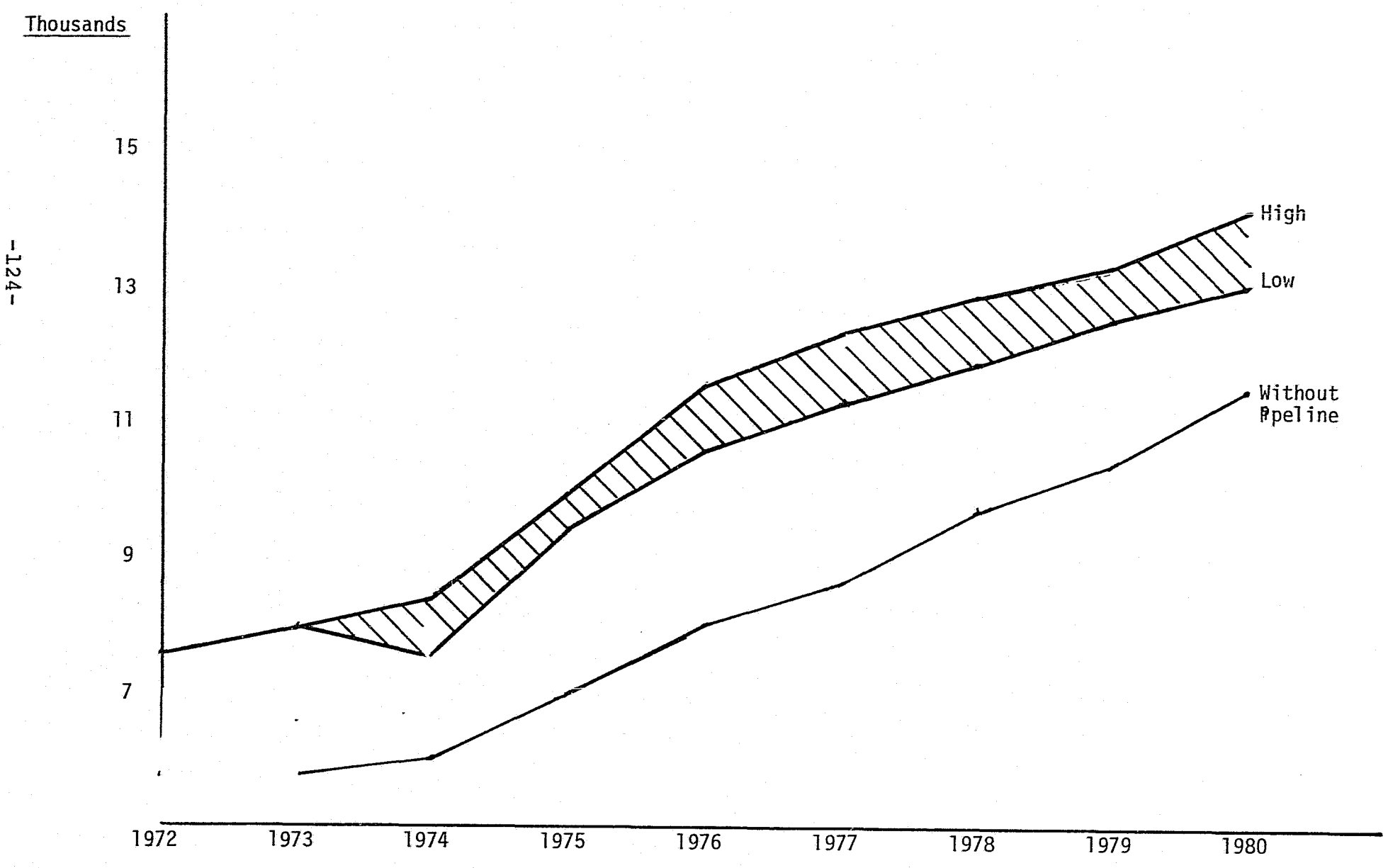


FIGURE 7-3

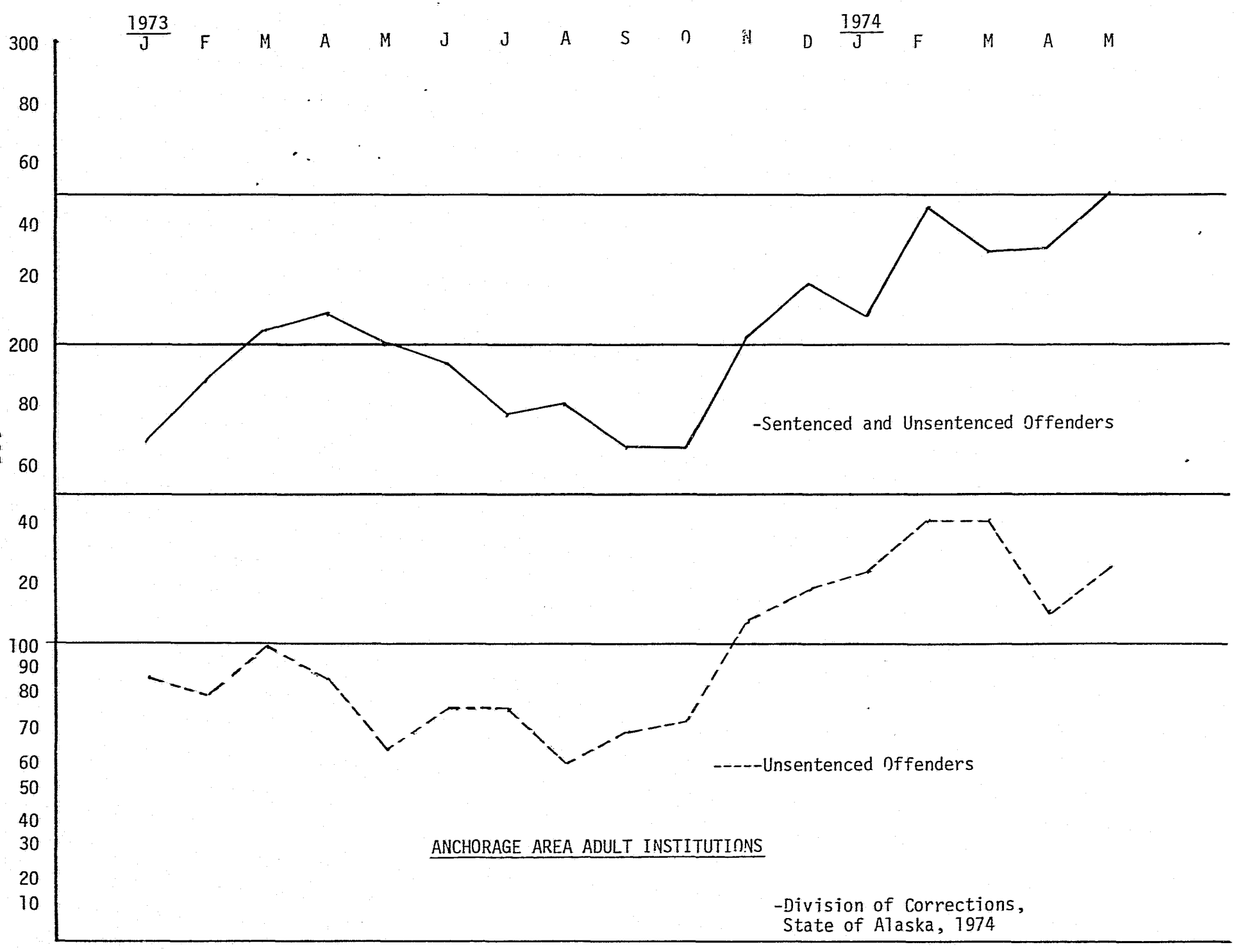


FIGURE 7-4

ACTUAL AND PROJECTED ADMISSIONS TO THE FAIRBANKS STATE CORRECTIONAL CENTER, 1972-1980

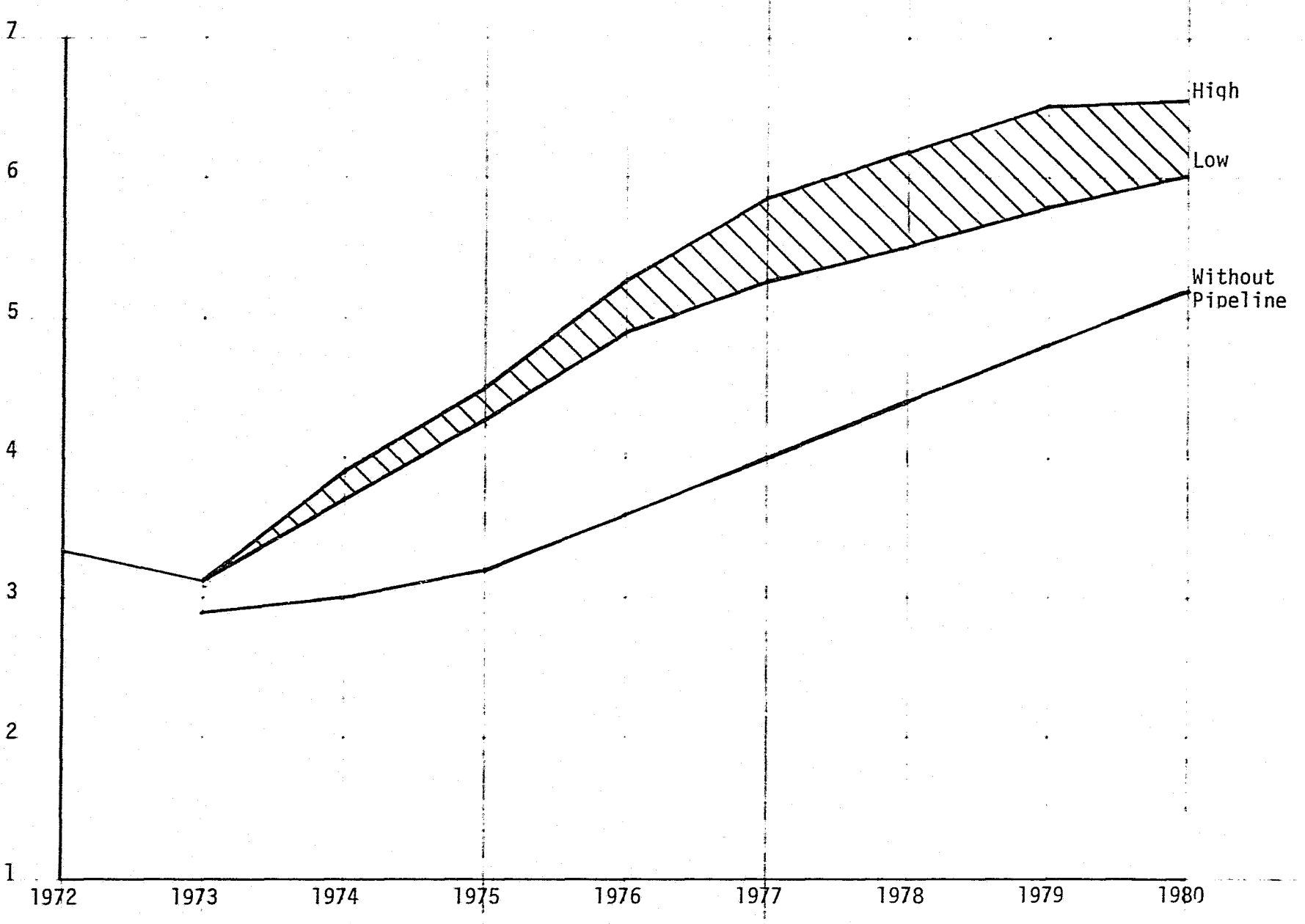


FIGURE 7-5

ACTUAL AND PROJECTED ADMISSIONS TO THE SOUTHEAST REGIONAL CORRECTION INSTITUTION, 1972-1980

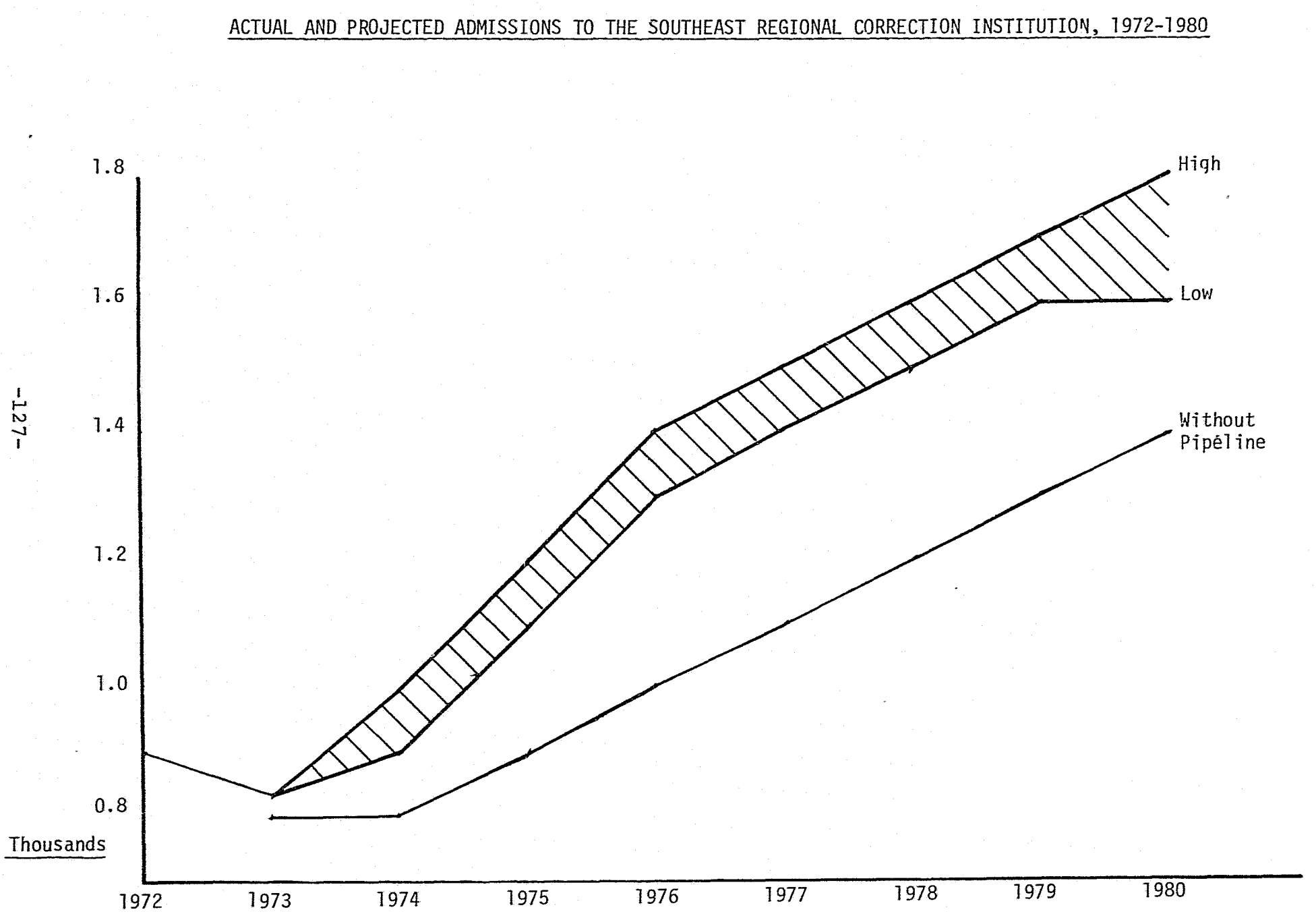


FIGURE 7-6

ACTUAL AND PROJECTED ADMISSIONS TO KETCHIKAN STATE JAIL, 1972-1980

FIGURE 7-7

ACTUAL AND PROJECTED JUVENILE ADMISSIONS TO STATE INSTITUTIONS, 1972-1980

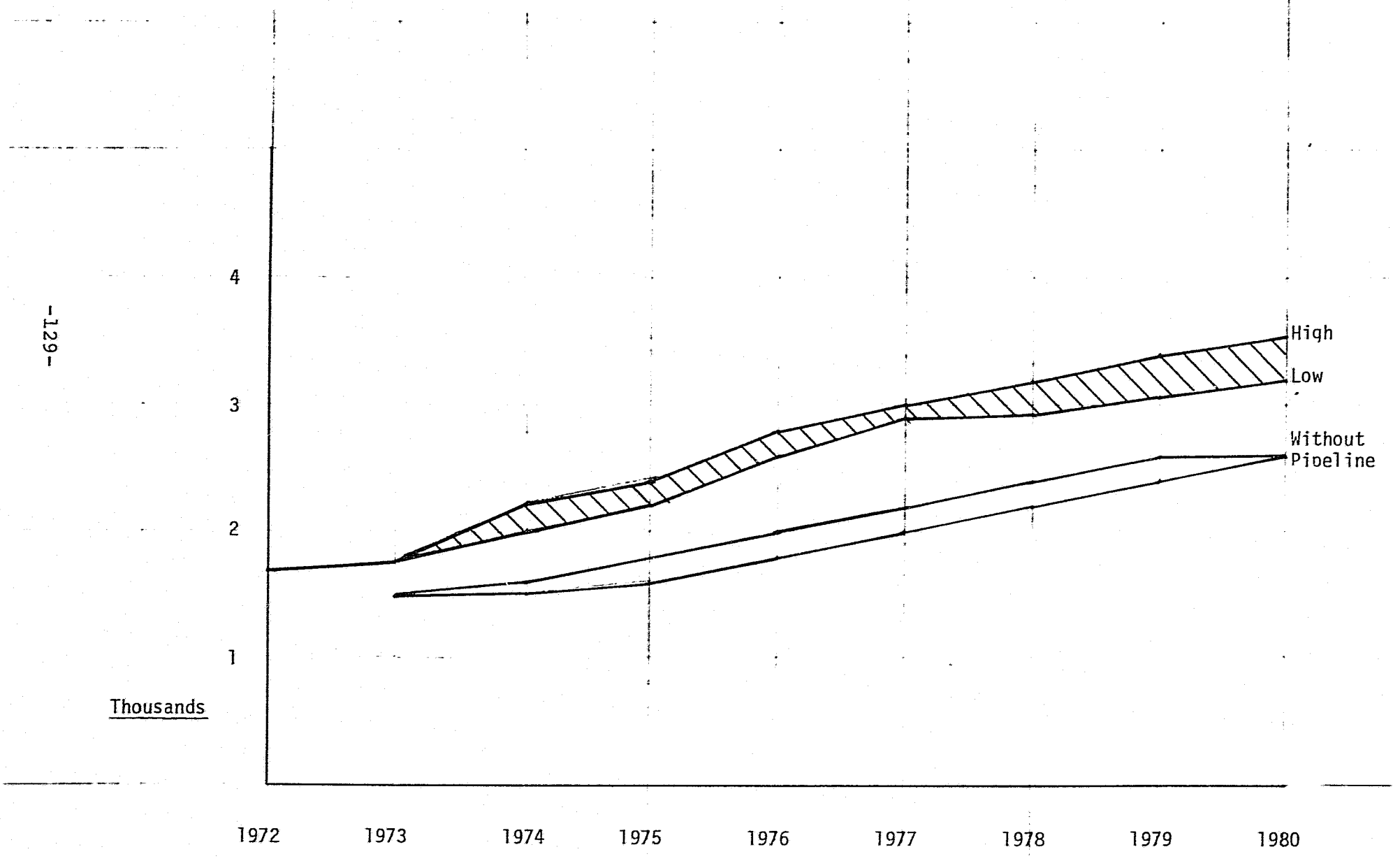


FIGURE 7-8

ACTUAL AND PROJECTED ADMISSIONS TO PROBATION, 1972-1980

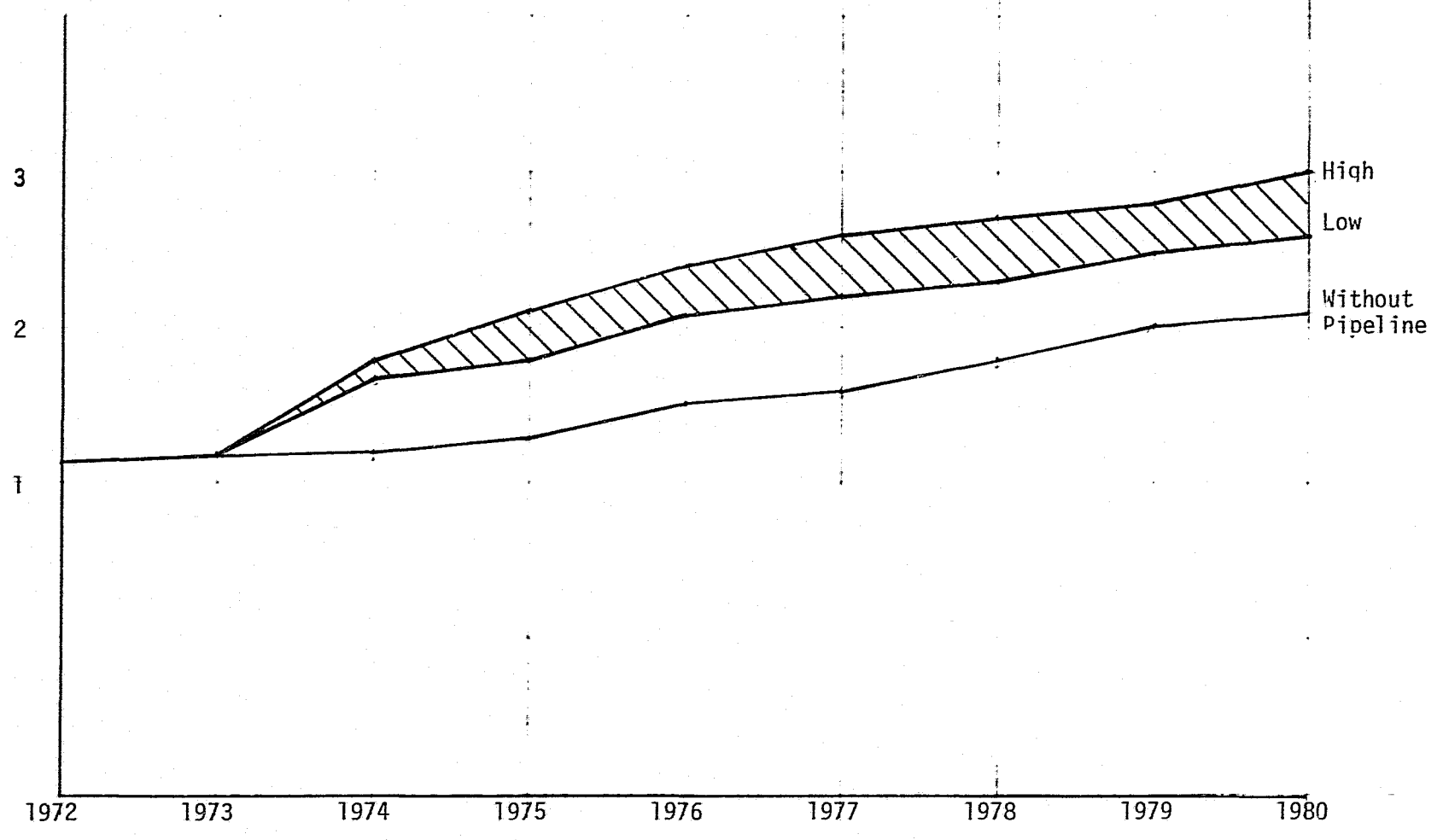
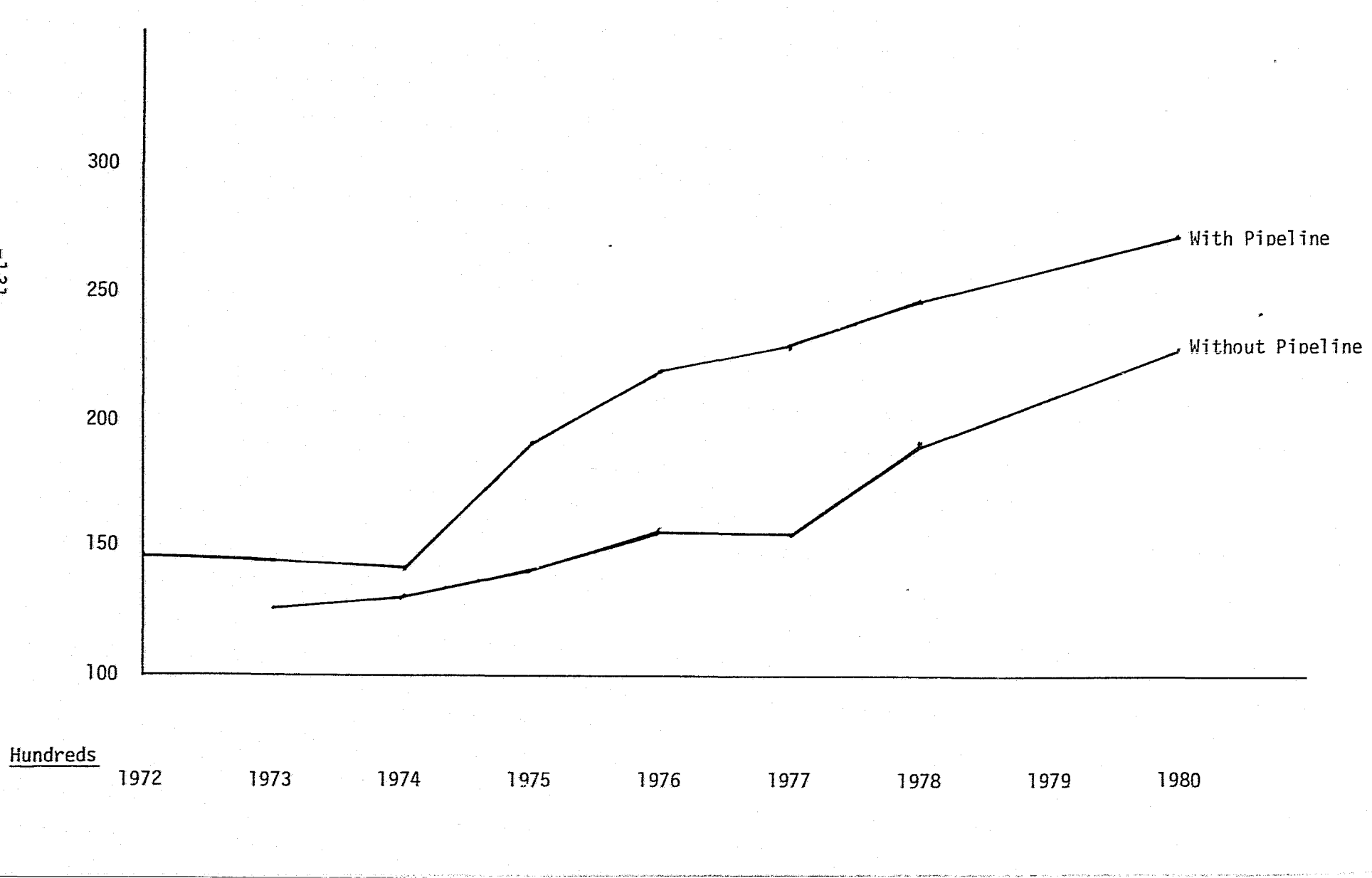


FIGURE 7-9

ACTUAL AND PROJECTED TOTAL PAROLE AVERAGE MONTHLY CASELOAD, 1972-1980



CHAPTER VIII

DATA COLLECTION

INTRODUCTION

Historical criminal activity data relied on for this study was assembled from data collected from the Alaska Department of Public Safety, Division of Alaska State Troopers, and from twelve municipal police departments. Supplemental caseload activity data was also collected from the Criminal Division of the Alaska Department of Law, the Alaska Court System and the Alaska Division of Corrections. The data collected does not provide a universe of criminal activity for the historical period examined, but it does provide a statistical base for the most heavily populated areas of the state and is estimated to represent in excess of 95 percent of total criminal activity processed in Alaska.[123]

Statistics were obtained, to a large extent, from Uniform Crime Reports, submitted by municipal police departments to the Federal Bureau of Investigation. Additions were made from Alaska State Trooper detachment data in order to develop criminal activity trends during the historical period examined. Primary emphasis in data assimilations was placed on the development of a

123/ Also see Appendix A, TABLE A-1, Sources of Crime Data by Region, supra at 143 ; and Appendix B, Section IV-D, Dependent Variables of the ACJ Model, supra at 190 , and Section V, Historical Data Collection, supra at 203 of this report.

consistent statistical base for the state as a whole. Consistency was difficult to obtain since many police departments had incomplete records for portions of the historical period. Furthermore, a number of smaller police departments which did not submit Uniform Crime Reports maintain records only on total arrests. Thus, it was at times necessary to estimate criminal activity trends in a few communities of the state based on successive yearly percentages of existing departmental statistics. Due to legislative revisions during the historical period, such as repeal of Alaska's "drunk-in-public" statute, total arrest statistics for misdemeanors decreased substantially between 1969 and 1974.[124] Adjustments, therefore, had to be made in criminal activity categories so that the development of a trend analysis would remain possible.

In general, the collection of historical criminal activity and processing data necessary for the preparation of this report was made difficult by the lack of an overall comprehensive and systematic process for collecting, maintaining, retrieving and analyzing statistics generated by criminal justice agencies in Alaska. The data collection and assimilation phase of the project was originally expected to require approximately three months, but instead continued over almost six because of these difficulties.

With the exception of the Alaska State Troopers and the Anchorage and Fairbanks Police Departments, most police agencies

124/ See, ch 207 SLA 1972, repealing AS 11.45.032 (sec. 2 ch 207 SLA 1972) and enacting AS 47.37, Uniform Alcoholism and Intoxication Treatment Act (sec.1 ch 207 SLA 1972).

in the state almost totally lack comprehensive criminal activity statistics. Some local police departments maintain incomplete records, with data that is available for one year, often missing the next. In addition, much of the data that was available was in a form that made it difficult to work with due to a lack of consistency in its collection and categorization. Examples include the reporting of larcenies as burglaries, the inclusion of disorderly conduct offenses within assault and sometimes, even aggravated assault and the inclusion or exclusion of joyriding within auto theft.

Although police departments are required to maintain records of criminal activity, such paperwork often assumes a low priority which makes the data collected from local police departments somewhat less reliable. Data collected from the Alaska State Troopers was the most apparently reliable and generally uniform in quality. In order to obtain better projections of criminal activity in the future, an improved data base is essential. The data format employed by the Alaska State Troopers would provide a good basis for a uniform system to be employed by all municipal departments, with the Alaska Department of Public Safety serving as the data collection and maintenance agency. It would clearly be beneficial to the criminal justice system as a whole for the Commissioner of Public Safety to fully implement his statutory authority to require all police agencies in the state to submit complete, accurate, and uniform crime reports to the department.[125]

125/ See, AS 18.65.060 and regulations promulgated thereunder in Title 13 of the Alaska Administrative Code.

Beyond the data collection and assimilation problems encountered with law enforcement agencies, it is equally clear that the other components of the criminal justice system in Alaska severely lack an adequate statistical base from which to analyze current problems and develop future programs. For example, the statistical collection and analysis capability of the Criminal Division of the Alaska Department of Law is limited to summary offense forms prepared manually for each case in which prosecution is initiated. Since the preparation of these forms is unstructured and uncontrolled, there is considerable question as to their accuracy and completeness. The Alaska Division of Corrections, on the other hand, records considerable data, but lacks complete and necessary offender information from other components of the criminal justice system. Assessment of institutional, probation/parole and rehabilitative requirements is consequently limited by the absence of coordinated information gathering efforts and the availability of comprehensive records.

It would be beneficial to research projects such as this study, as well as to agency management itself, to have a central repository for the storage and analysis of statistical criminal justice material. The establishment of such a repository could be accomplished by combining the existing capabilities of the Alaska Justice Information System (AJIS) computerized data base and the research and statistical capabilities of the Comprehensive Data System (CDS). Both of these are discussed briefly below.

ALASKA JUSTICE INFORMATION SYSTEM

The Alaska Justice Information System is a computerized criminal justice information system which was initiated in the summer of 1971 with the development of a five-year plan for implementation. The plan documented the need for a justice information system in Alaska and identified the following objectives:

1. Provide state and local criminal justice agencies with the capability of utilizing modern computer technology to resolve record-keeping problems at a reasonable cost;
2. Provide state and local criminal justice agencies with a modern communications network for administrative messages, computer inquiries and a potential electronic interface with the National Crime Information Center in Washington, D.C.;
3. Allow the interchange of criminal justice information between agencies;
4. Provide a central repository for recording information regarding such things as: wanted persons, stolen property and criminal histories for access by authorized state and local government agencies; and
5. Provide a central data base for compiling state and local government uniform crime reports and producing management reports for all criminal justice agencies.

Although AJIS has provided many advantages and has met some of these objectives, systems planning at either the strategic or operational level cannot exist without accurate, complete and current statistical summary data and the proper analysis of that data.

At present, each component in AJIS provides some statistical summary information. A program must be designed, however, to compile selected elements of all file summaries into a usable, interrelated statistical summary that will demonstrate, through analysis, program and component inter-relationships and become a cost-effective tool contributing to crime reduction.

Standardized reporting systems at all levels and within all components of the justice process are necessary to provide uniform statistics and develop the correlation between crime data and other social indicators.

Data elements must be uniformally defined and retrievable before a proper historical data bank can be developed for planning and research use.

COMPREHENSIVE DATA SYSTEM

The Comprehensive Data System (CDS) is a voluntary program for states, funded on a grant basis by the Law Enforcement Assistance Administration. The purpose of the program is to permit involved states to:

1. Establish a statistical analysis center;
2. Assume responsibility for uniform crime reporting at the state level;
3. Develop a management and administrative statistics program;
4. Agree to implement an offender-based transaction statistics program; and
5. Agree to develop the capability of providing statistics and technical assistance to state and local agencies.

Such a program, in conjunction with AJIS, could potentially provide Alaska with the information necessary to make sound management decisions. The statistical analysis center should be independent from the control and influence of any one operational agency. In this way, the center could objectively analyze data and provide services to all criminal justice agencies.

The CDS program could serve as the collection center and repository for Uniform Crime reports from law enforcement agencies. Combined with AJIS, the tracking of an offender from the point of arrest through case disposition could then be accomplished. Proper adoption and use of a simulation decision model of the criminal justice system should be useful in determining how decisions of one agency will affect another. Simulation programming could also serve as a strategic and operational planning device.

CONCLUSION

The lack of adequate, timely and complete information prevents complete identification of many of the problems facing the criminal justice system in Alaska. Current information needs include: information on the extent and nature of crimes; more complete information on individual offenders; and management information such as judicial and prosecutor caseloads, time studies, etc. Specific information should be gathered, analyzed, and made available for managerial-level decisions. Data collected could then be used to define problems, develop alternative strategies for coping with those problems, and record the effectiveness of attempted, corrective policies.

An improved data source and collection, maintenance and retrieval system is desperately needed for future planning by all components of the Alaska criminal justice system. As the quality of the data base improves, so should estimates of future occurrences. While the art of forecasting is not an exact science, improvements can be made with more accurate input.

Should anticipated additions to AJIS occur and the decision made to participate in the CDS program, Alaska should have the information necessary, and the resources required, to implement an effective research and analysis tool.

APPENDIX A

SUPPORTING TABLES AND FIGURES

FOR

CHAPTER II

ALASKA'S CRIMINAL GROWTH PATTERNS

TABLE OF CONTENTS

TABLE A-1

SOURCES OF CRIMINAL ACTIVITY DATA

BY REGION

REGION	SOURCE
1 (Anchorage)	AST* "C" Detachment Anchorage Police Department
2 (Fairbanks)	AST "I" Detachment Fairbanks Police Department
3 (Southeast)	AST "A" and "B" Detachments Police Departments of the Cities of Juneau, Ketchikan, Sitka, Petersburg, and Wrangell
4 (Southcentral)	AST "D", "G", and "H" Detachments Police Departments of the Cities of Kenai, Kodiak, Seward and Valdez
5 (Western & Northern)	AST "E", "F", "J" and "I" Detachments Bethel Police Department

*Alaska State Troopers

TABLE A-2

YEARLY PEAKS

ALYESKA MANPOWER ESTIMATES *

YEAR	LOW ESTIMATE	BASELINE OR MEDIUM ESTIMATE	HIGH ESTIMATE
1974	10,150	10,150	10,150
1975	15,800	15,800	15,800
1976	12,200	12,200	12,200
1977	450	450	3,000
1978	450	450	450
1979	450	450	450
1980	450	450	450

* Human Resources Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions at p. 46, November, 1974.

TABLE A-3

GAS PIPELINE

PEAK MANPOWER ESTIMATES *

YEAR	LOW ESTIMATE	BASELINE OR MEDIUM ESTIMATE	HIGH ESTIMATE
1976	100	100	100
1977	500	500	1,700
1978	2,400	2,400	10,100
1979	2,300	2,300	8,000
1980	100	100	600

*Human Resources Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions at p. 50, November, 1974.

TABLE A-4

ALASKA DEPARTMENT OF REVENUE FORECASTS

STATE EXPENDITURE PROJECTIONS *

FY	RT	STEX	IR	SLPD	STEX(70$)	RN
72	-	453.4	-	1.150	394.3	-
73	1.190	539.5	1.08	1.242	434.4	1.102
74	1.120	604.3	1.10	1.366	442.4	1.018
75	1.205	727.1	1.09	1.489	489.0	1.105
76	1.240	902.8	1.08	1.608	561.4	1.148
77	1.150	1083.4	1.08	1.737	612.7	1.111
78	1.150	1245.9	1.07	1.859	670.2	1.075
79	1.150	1432.8	1.07	1.989	720.4	1.075
80	1.150	1647.7	1.07	2.128	774.3	1.075

KEY:
FY - Fiscal year
RT- Total rate of growth; Financial Positions and Options, Department of Administration, Department of Revenue, August 19, 1974; RT (t2)=STEX(t2/STEX(t1)
STEX - State expenditures (unrestricted + restricted - debt service) (Mil. $)
IR - Inflation rate
SLPD - State and Local price deflator, 1970 base; extrapolated by inflation rate from 1972 value, ISeGR
STEX(70$) - State Expenditure (Constant 1970$) (Mil. $) STEX (70$) = STEX/SLPD
RN - Natural increase rate RN=RT/RI

*Human Resources Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions at p. 53, November, 1974.

TABLE A-5

PROJECTED STATE EXPENDITURES 1974-1980*

YEAR	LOW ESTIMATE	BASELINE OR MEDIUM ESTIMATE	HIGH ESTIMATE
1974	398.2	442.4	486.6
1975	440.1	489.0	546.9
1976	505.3	561.4	617.5
1977	561.3	623.7	686.1
1978	603.2	670.2	737.2
1979	648.4	720.4	792.4
1980	696.9	774.3	851.7

*Human Resources Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions at p. 54, November, 1974. (Projections are set out in millions of 1970 dollars).

TABLE A-6

OIL AND GAS MINING EMPLOYMENT

YEAR	LOW ESTIMATE*	BASELINE OR MEDIUM ESTIMATE*	HIGH ESTIMATE*	W/O PIPELINE**
1977	2550	2550	2550	2100
1978	2350	2350	2350	2100
1979	2400	2400	2400	2100
1980	2400	2400	2400	2100

*Human Resources Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions, November, 1974.

** Mathematical Sciences Northwest Incorporated, A Study of the Economic and Sociological Impact of Construction and Initial Operation of the Trans-Alaska Pipeline, Volume II, prepared for Alyeska Pipeline Company, 1971.

TABLE A-7

HARD ROCK MINING EMPLOYMENT

YEAR	LOW ESTIMATE*	BASELINE OR MEDIUM ESTIMATE*	HIGH ESTIMATE*	W/O PIPELINE**
1977	450	450	450	2,800
1978	450	450	450	3,300
1979	450	500	500	3,800
1980	450	550	600	4,300

*Human Resources Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions, November, 1974.

** Mathematical Sciences Northwest Incorporated, A Study of the Economic and Sociological Impact of Construction and Initial Operation of the Trans-Alaska Pipeline, Volume II, prepared for Alyeska Pipeline Company, 1971.

TABLE A-8

BOOMERS *

YEAR	LOW ESTIMATE	BASELINE OR MEDIUM ESTIMATE	HIGH ESTIMATE
1977	4,000	4,000	2,000
1978	2,000	2,000	2,000
1979	1,000	1,000	2,000
1980	500	500	2,000

*Human Resources Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions, November, 1974.

TABLE A-9

BASELINE POPULATION PROJECTIONS*

YEAR	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	WESTERN & NORTHERN	TOTAL
1974	166,400	60,600	54,500	40,000	33,400	354,900
1975	188,400	69,000	60,900	51,000	37,000	406,100
1976	205,800	73,300	66,700	55,400	38,600	439,800
1977	217,200	74,900	70,500	50,800	38,200	451,600
1978	223,500	76,400	73,100	50,700	39,100	462,700
1979	227,700	77,200	75,500	51,300	40,200	472,000
1980	232,700	78,100	78,100	52,500	40,300	481,600

*Human Resources Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions, November, 1974.

TABLE A-10

BASELINE CIVILIAN WORK FORCE PROJECTIONS*

YEAR	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	WESTERN & NORTHERN	TOTAL
1974	66,400	21,500	26,200	197,700	14,700	148,400
1975	78,100	26,500	29,500	26,200	16,100	176,400
1976	87,100	28,700	32,600	28,500	16,700	193,600
1977	93,400	30,100	34,400	25,200	15,600	198,700
1978	96,200	30,500	35,800	24,900	16,200	203,700
1979	98,200	30,900	37,100	25,300	16,900	208,300
1980	100,700	31,500	38,400	25,900	16,700	213,100

*Human Resources Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions, November, 1974.

TABLE A-11

POPULATION PROJECTIONS WITHOUT CONSTRUCTION OF THE TRANS-ALASKA PIPELINE

YEAR	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	WESTERN & NORTHERN	TOTAL
1973	144,476	55,450	50,370	38,412	28,978	317,686
1974	147,639	55,934	50,471	39,506	29,803	323,353
1975	154,663	57,541	52,433	41,100	31,006	336,743
1976	162,943	59,941	55,283	43,297	32,662	354,126
1977	171,937	62,724	58,490	45,385	34,238	372,774
1978	179,856	65,564	61,764	47,770	36,037	390,991
1979	190,433	68,475	65,222	49,510	37,349	410,989
1980	201,370	70,901	68,731	51,662	38,973	431,637

*Mathematical Sciences Northwest Incorporated, A Study of the Economic and Sociological Impact of Construction and Initial Operation of the Trans-Alaska Pipeline, Volume II, prepared for Alyeska Pipeline Company, 1971.

TABLE A-12

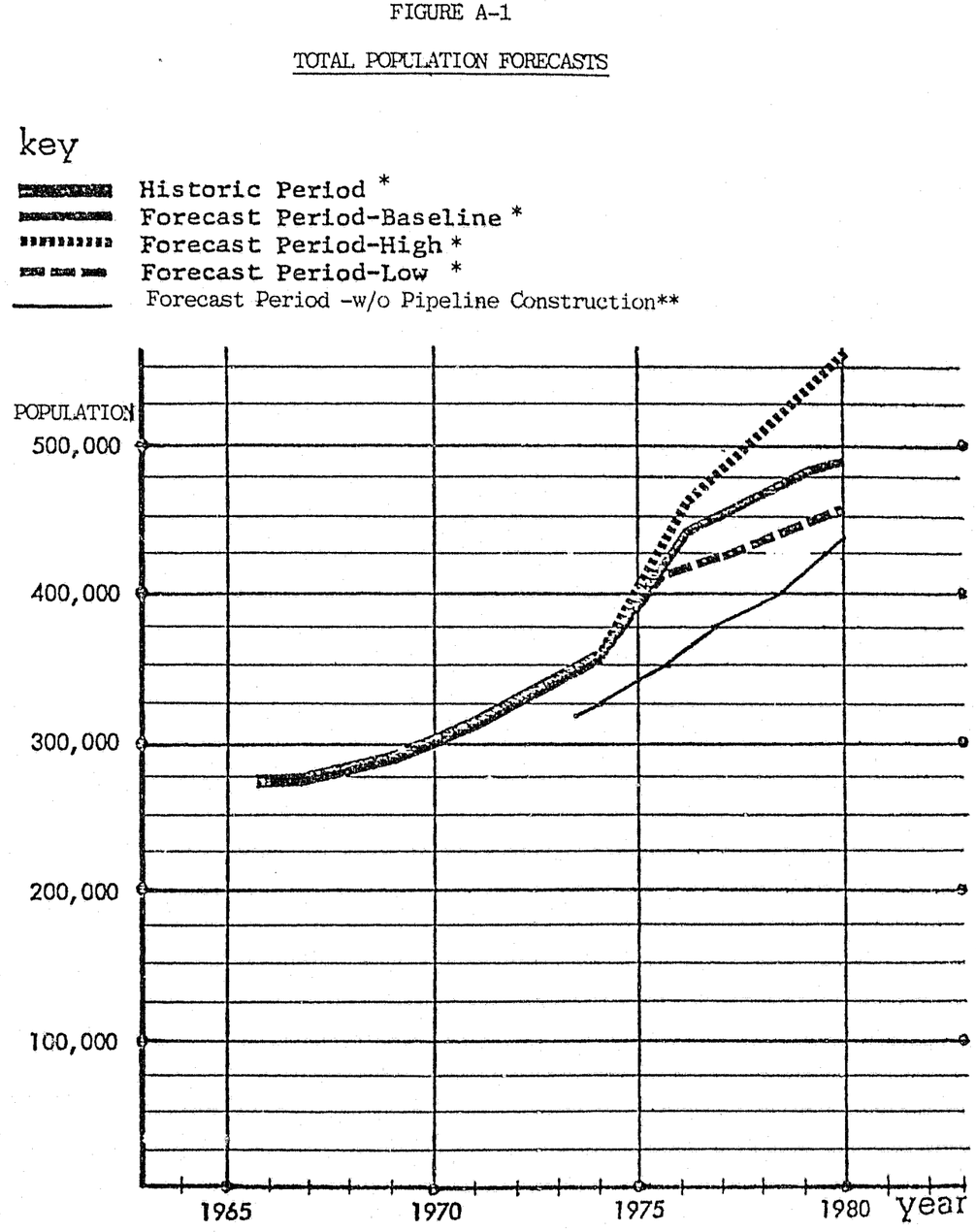
WORK FORCE PROJECTIONS WITHOUT CONSTRUCTION OF THE TRANS-ALASKA PIPELINE*

YEAR	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	WESTERN & NORTHERN	TOTAL
1973	55,896	18,194	23,108	15,102	9,655	121,955
1974	57,402	18,425	23,154	15,661	10,012	124,654
1975	60,747	19,190	24,089	16,473	10,532	131,031
1976	64,689	20,333	25,446	17,592	11,248	139,308
1977	68,972	21,658	26,973	18,657	11,928	148,188
1978	73,043	23,010	28,532	19,690	12,588	156,863
1979	77,780	24,397	30,179	20,758	13,272	166,386
1980	82,992	25,552	31,850	21,853	13,971	176,218

*Mathematical Sciences Northwest Incorporated, A Study of the Economic and Sociological Impact of CVnstruction and Initial Operation of the Trans-Alaska Pipeline, Volume II, prepared for Alyeska Pipeline Company, 1971.

FIGURE A-1

TOTAL POPULATION FORECASTS

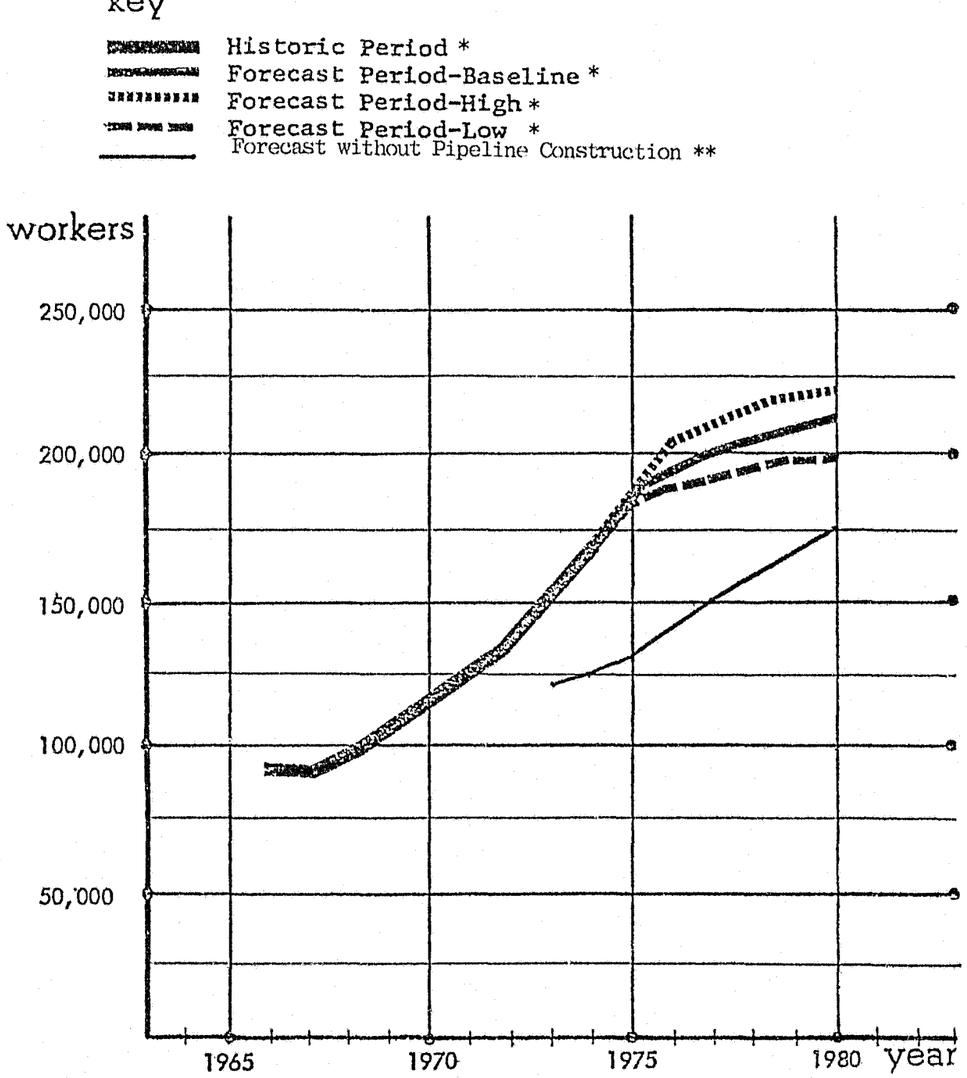


*Human Resources Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions at p. 116, November, 1974.

**Mathematical Sciences Northwest Incorporated, A Study of the Economic and Sociological Impact of Construction and Initial Operation of the Trans-Alaska Pipeline, Volume II, prepared for Alyeska Pipeline Company, 1971.

FIGURE A-2

CIVILIAN WORK FORCE FORECASTS



*Human Resources Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions at p. 117, November, 1974.

*Mathematical Sciences Northwest Incorporated, A Study of the Economic and Sociological Impact of Construction and Initial Operation of the Trans-Alaska Pipeline, Volume II, prepared for Alyeska Pipeline Company, 1971.

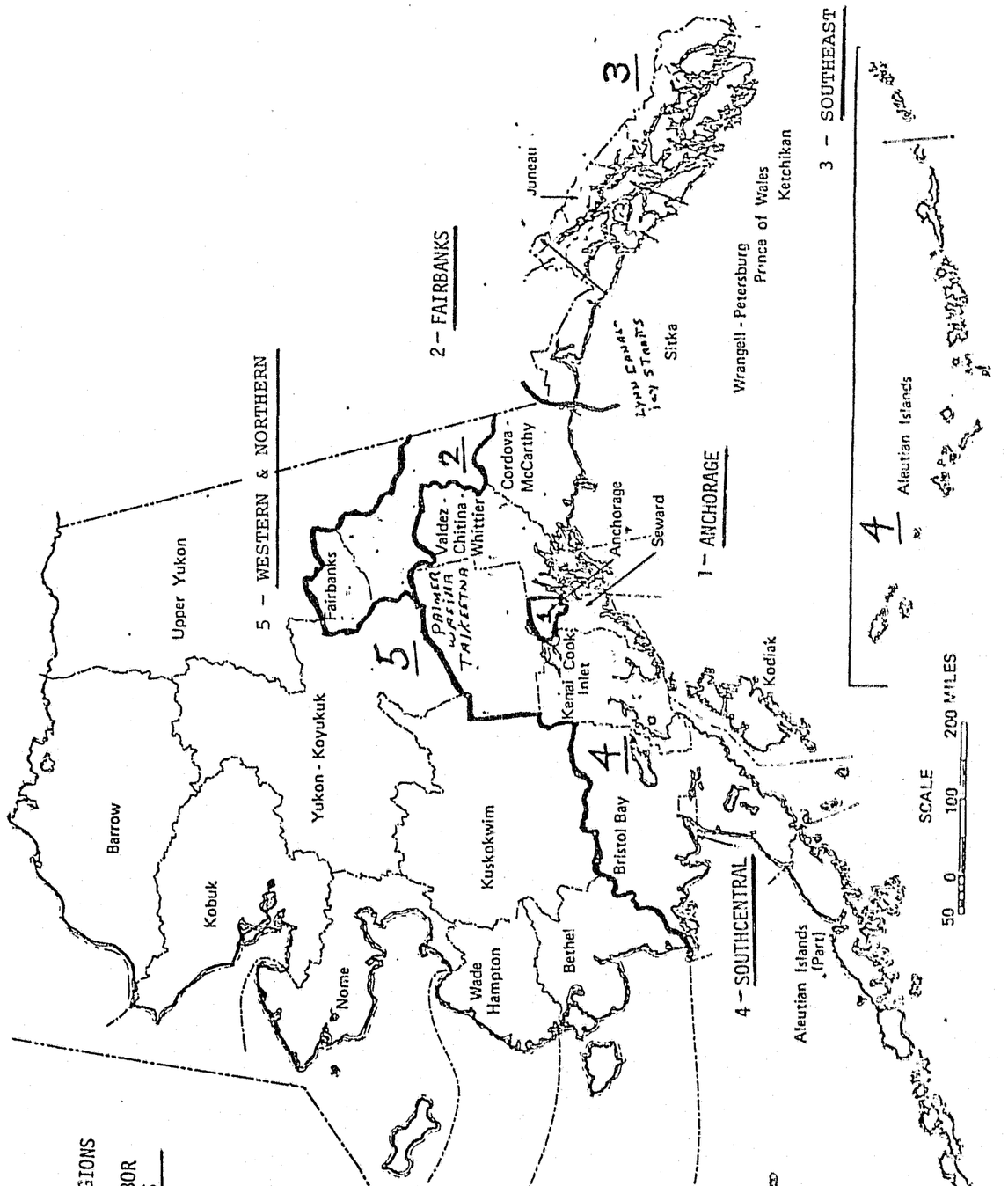
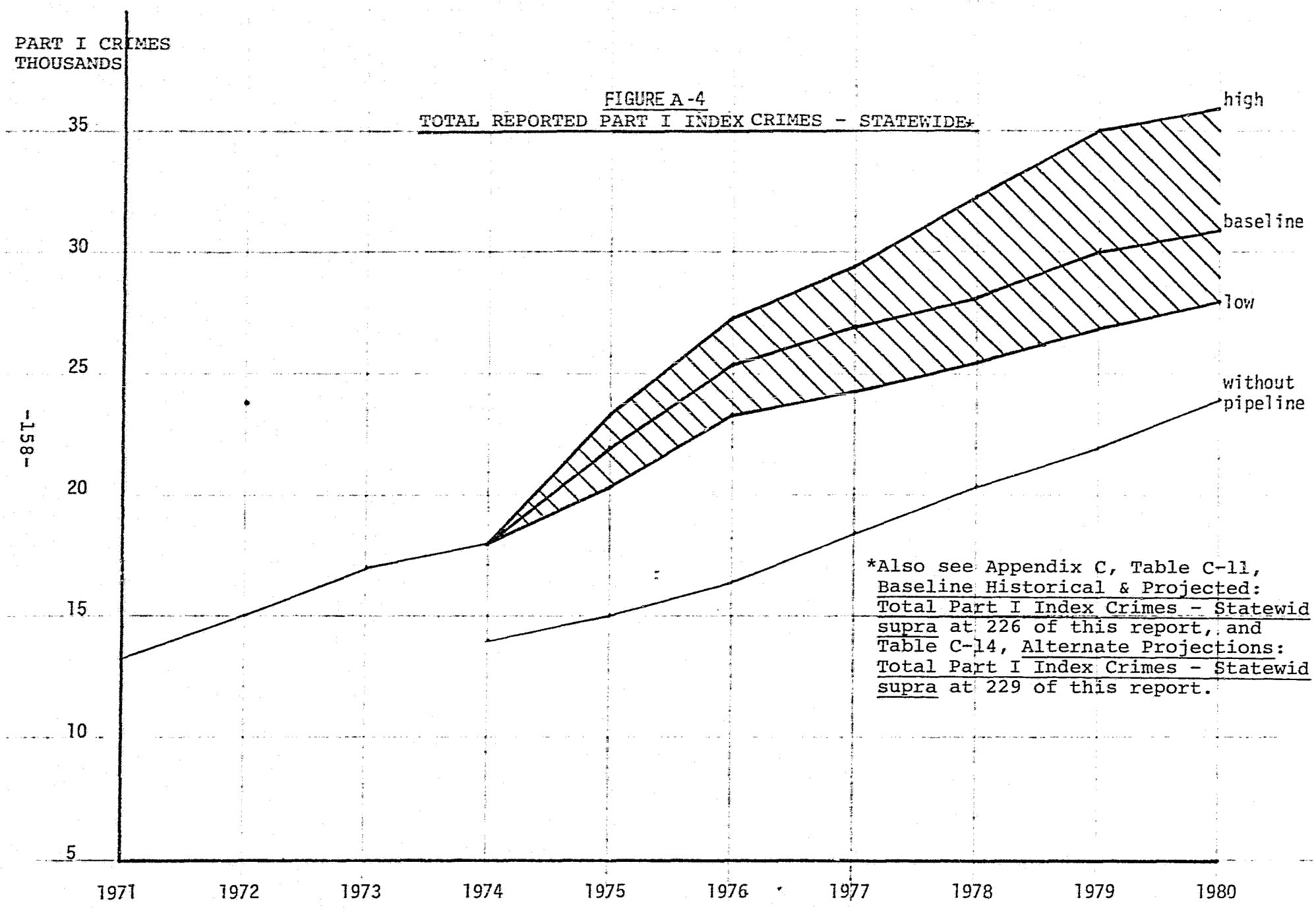


FIGURE A-3

FIVE STUDY REGIONS AND THEIR LABOR MARKET AREAS

FIGURE A-4

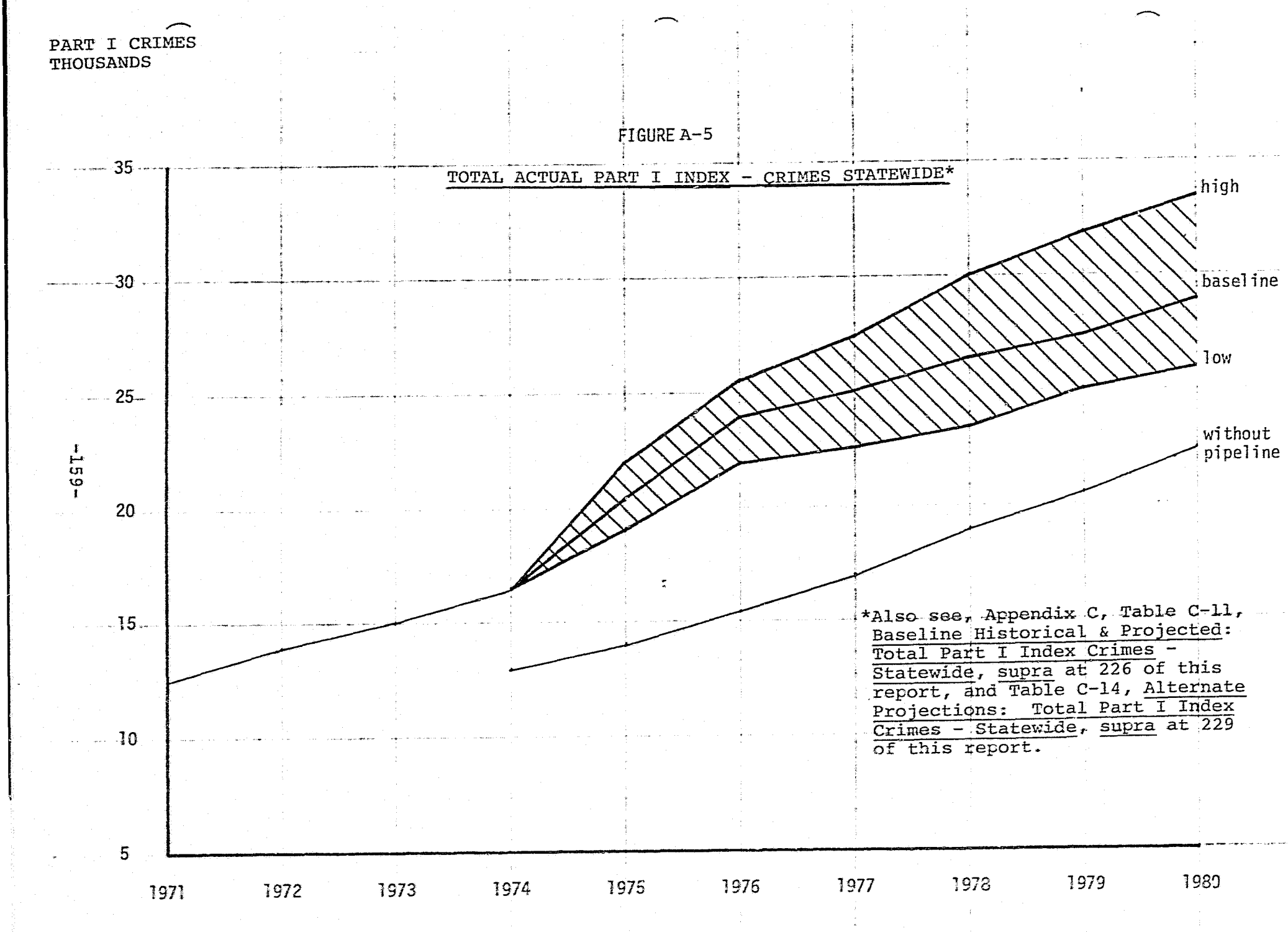
TOTAL REPORTED PART I INDEX CRIMES - STATEWIDE*



*Also see Appendix C, Table C-11, Baseline Historical & Projected: Total Part I Index Crimes - Statewid supra at 226 of this report, and Table C-14, Alternate Projections: Total Part I Index Crimes - Statewid supra at 229 of this report.

FIGURE A-5

TOTAL ACTUAL PART I INDEX - CRIMES STATEWIDE*



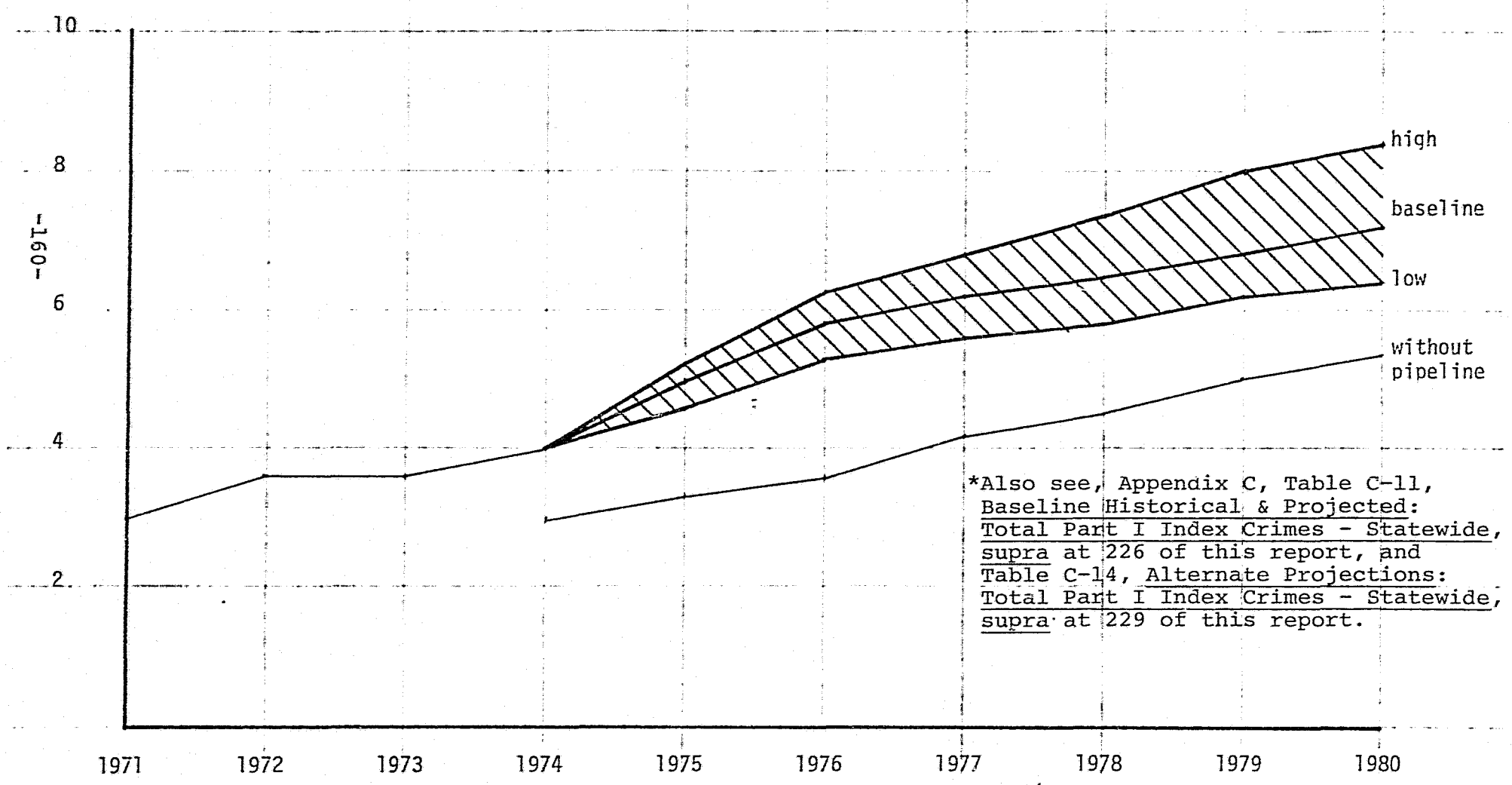
*Also see, Appendix C, Table C-11, Baseline Historical & Projected: Total Part I Index Crimes - Statewide, supra at 226 of this report, and Table C-14, Alternate Projections: Total Part I Index Crimes - Statewide, supra at 229 of this report.

PART I CRIMES

THOUSANDS

FIGURE A-6

TOTAL ARRESTS PART I INDEX CRIMES - STATEWIDE*



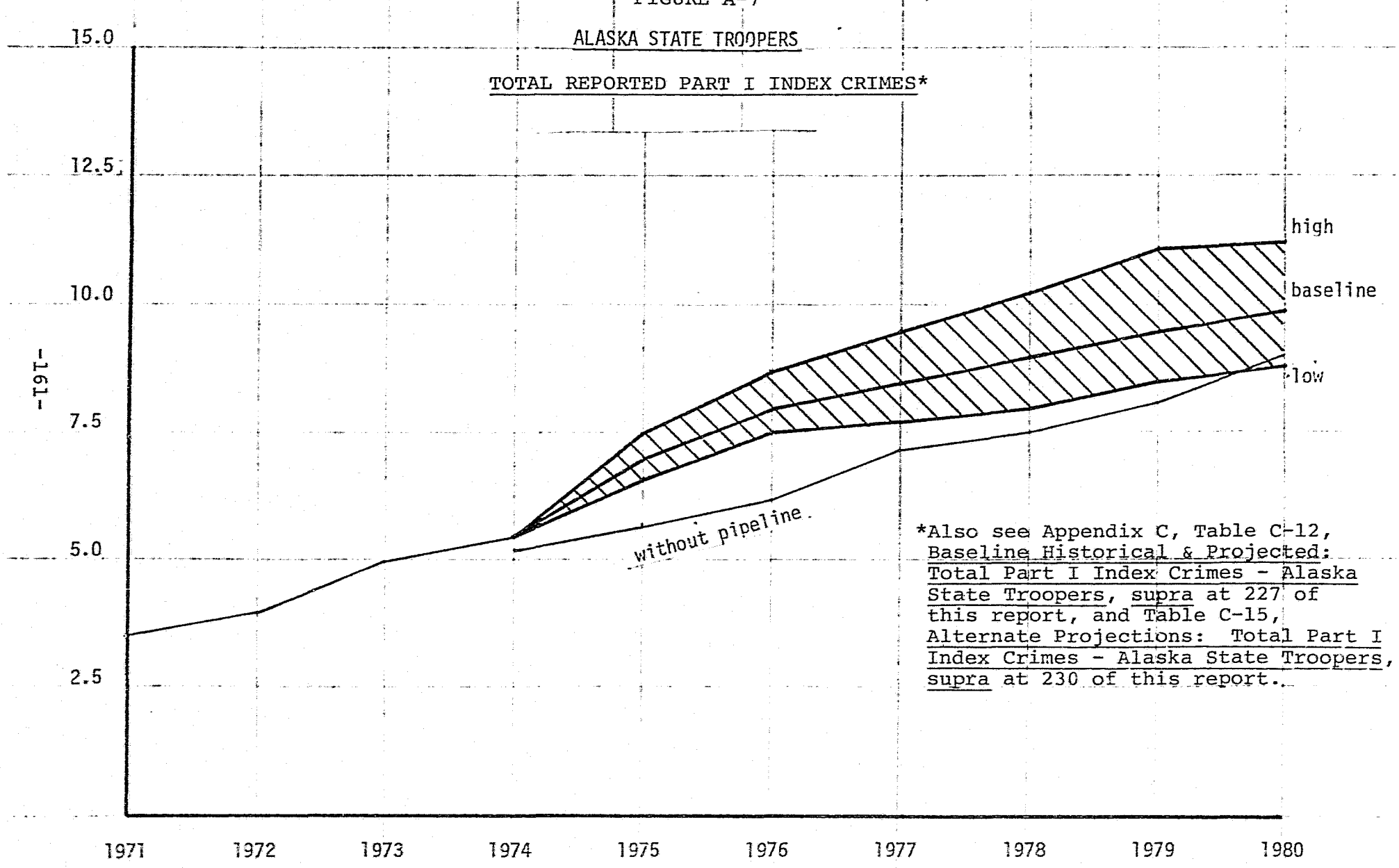
*Also see, Appendix C, Table C-11, Baseline Historical & Projected: Total Part I Index Crimes - Statewide, supra at 226 of this report, and Table C-14, Alternate Projections: Total Part I Index Crimes - Statewide, supra at 229 of this report.

PART I CRIMES
Thousands

FIGURE A-7

ALASKA STATE TROOPERS

TOTAL REPORTED PART I INDEX CRIMES*

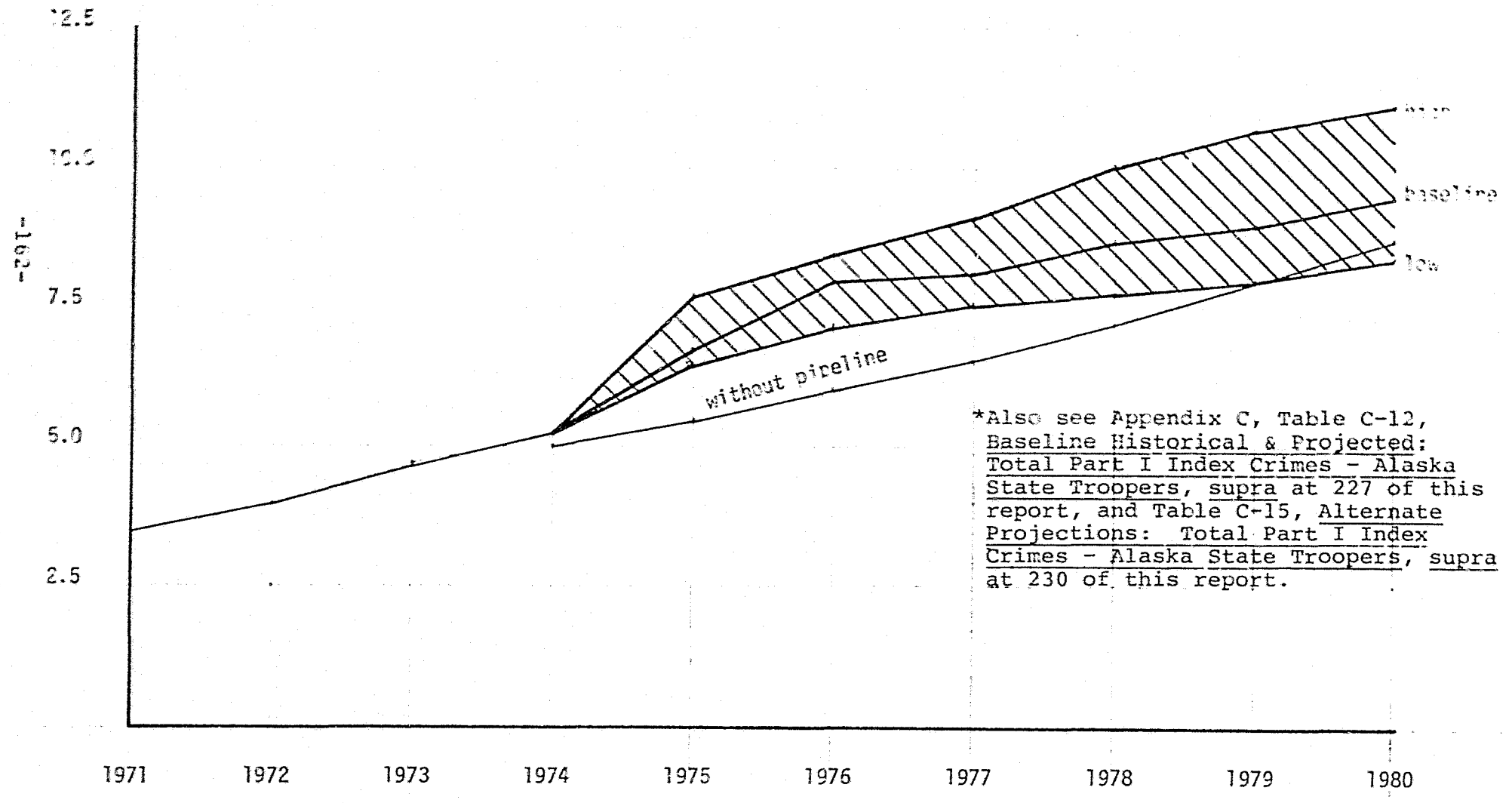


*Also see Appendix C, Table C-12, Baseline Historical & Projected: Total Part I Index Crimes - Alaska State Troopers, supra at 227 of this report, and Table C-15, Alternate Projections: Total Part I Index Crimes - Alaska State Troopers, supra at 230 of this report.

FIGURE A-8

ALASKA STATE TROOPERS

TOTAL ARREST PART I INDEX CRIMES*

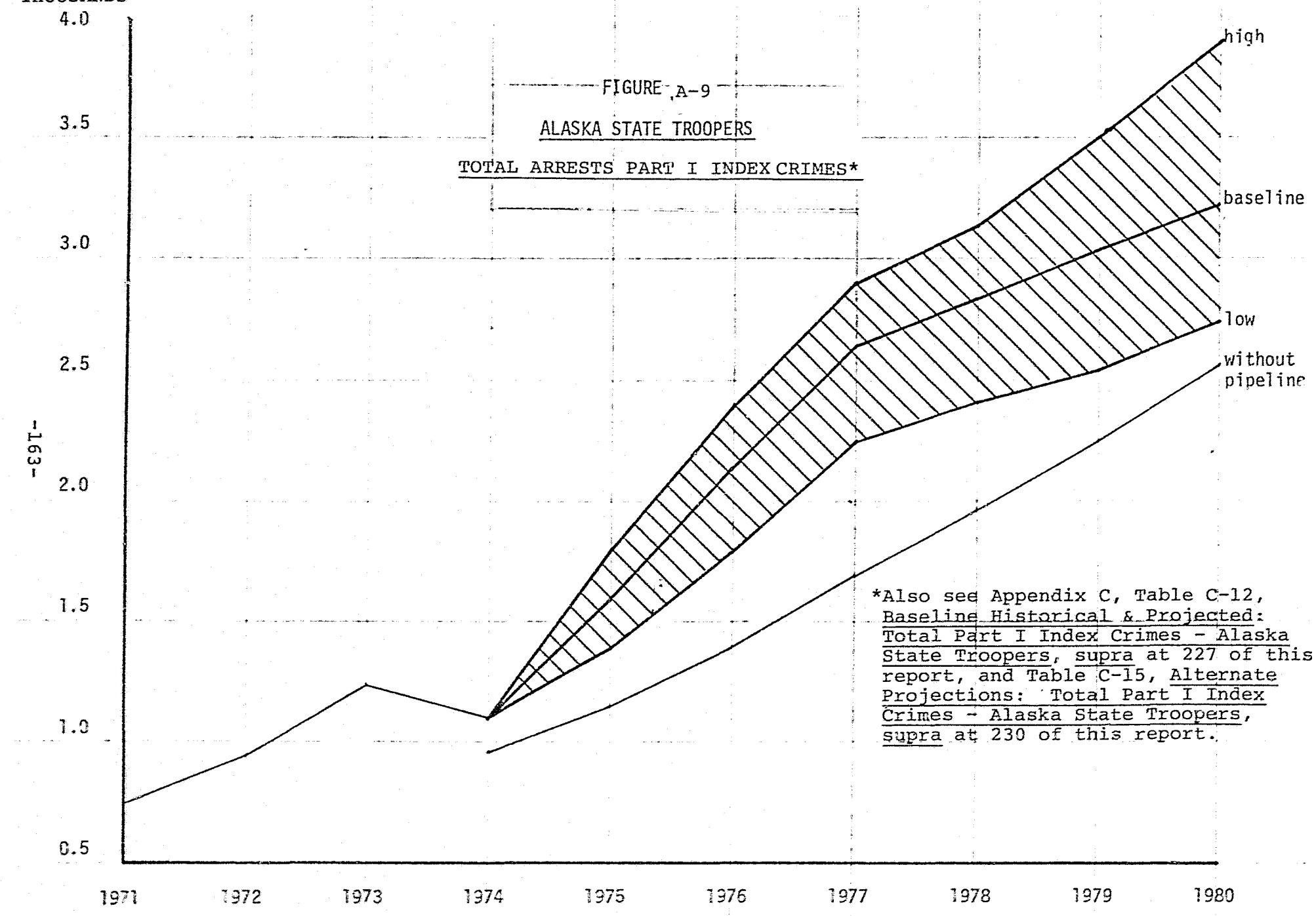


*Also see Appendix C, Table C-12, Baseline Historical & Projected: Total Part I Index Crimes - Alaska State Troopers, supra at 227 of this report, and Table C-15, Alternate Projections: Total Part I Index Crimes - Alaska State Troopers, supra at 230 of this report.

FIGURE A-9

ALASKA STATE TROOPERS

TOTAL ARRESTS PART I INDEX CRIMES*



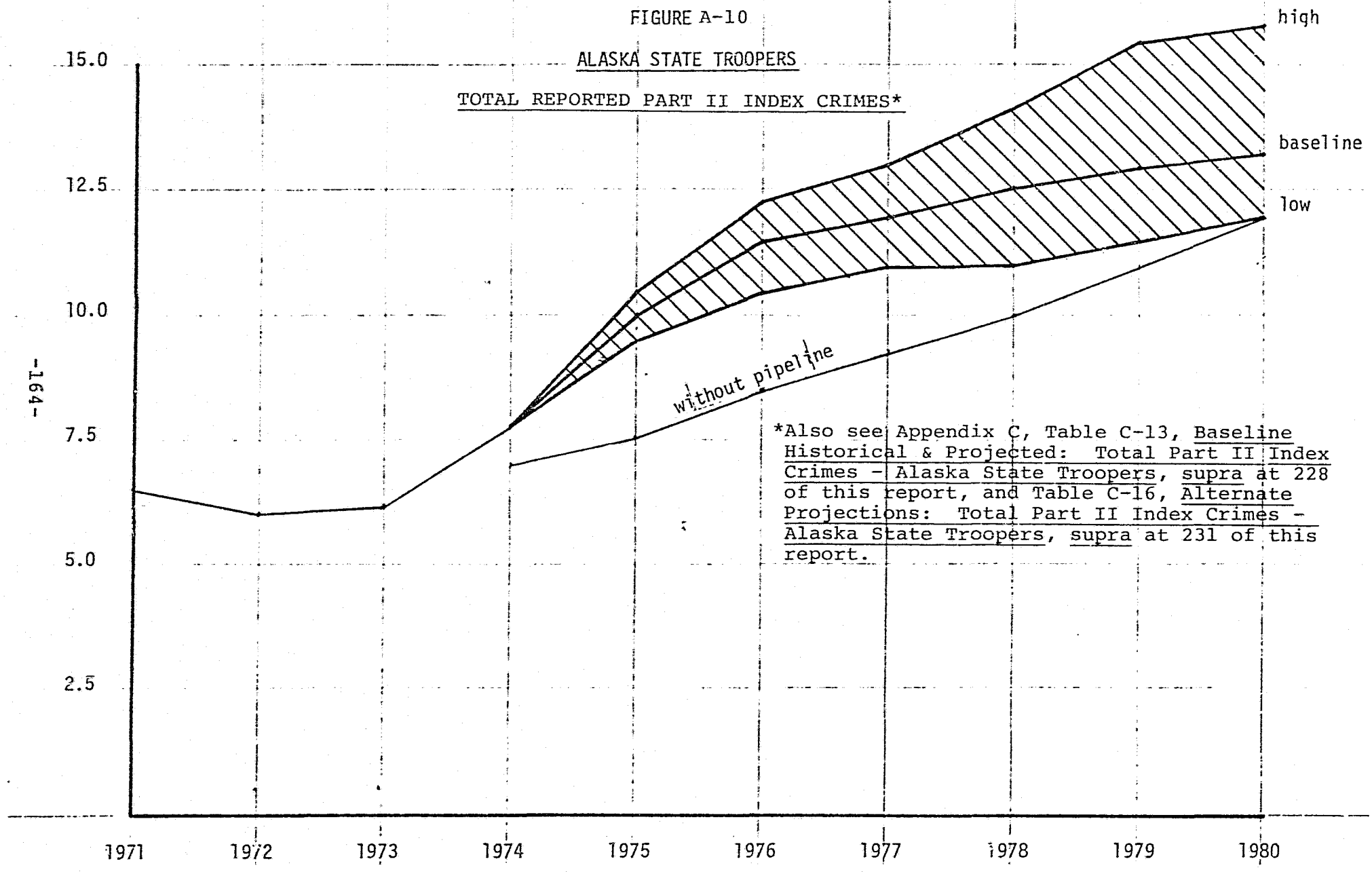
*Also see Appendix C, Table C-12, Baseline Historical & Projected: Total Part I Index Crimes - Alaska State Troopers, supra at 227 of this report, and Table C-15, Alternate Projections: Total Part I Index Crimes - Alaska State Troopers, supra at 230 of this report.

PART II CRIMES
THOUSANDS

FIGURE A-10

ALASKA STATE TROOPERS

TOTAL REPORTED PART II INDEX CRIMES*



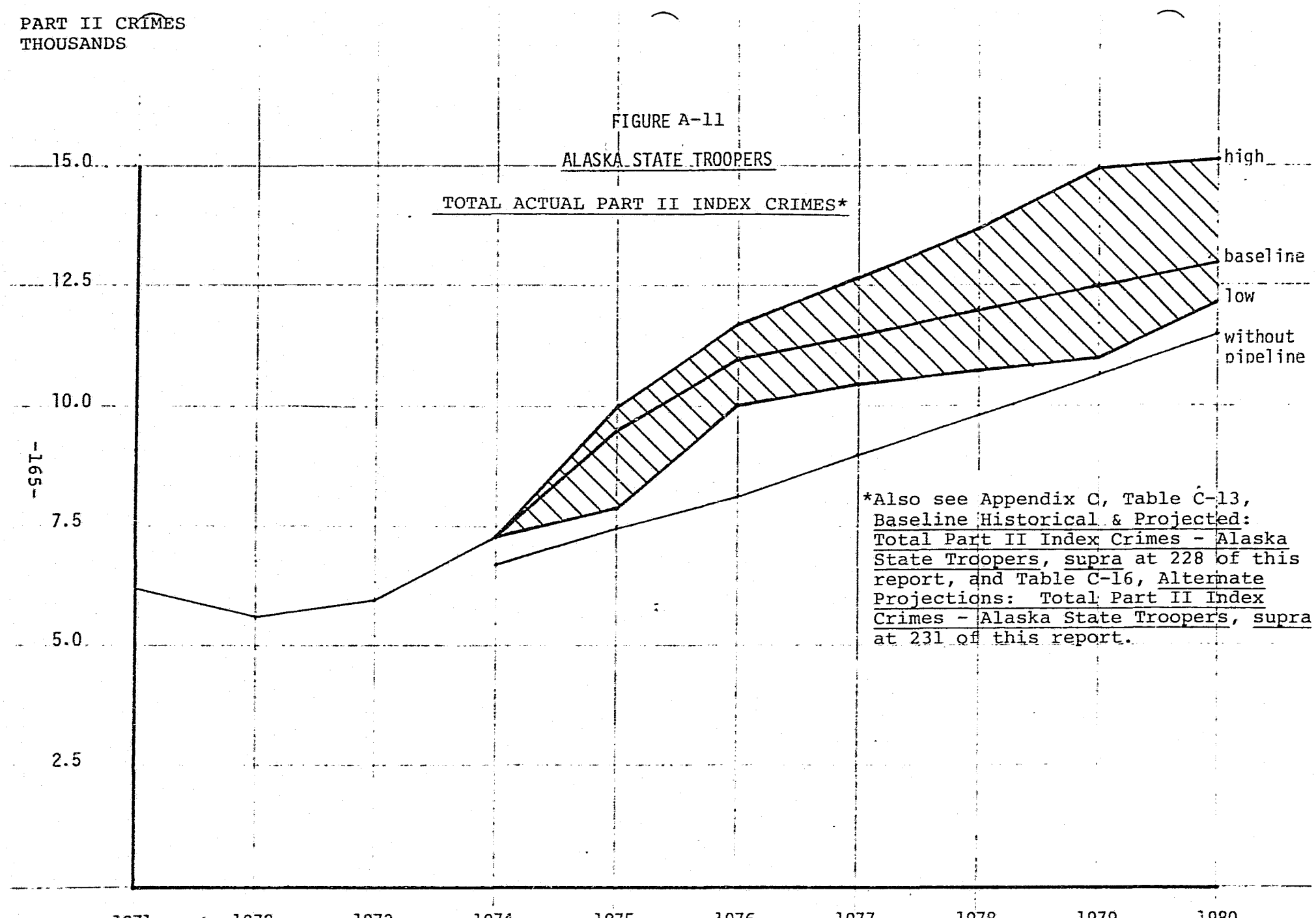
*Also see Appendix C, Table C-13, Baseline Historical & Projected: Total Part II Index Crimes - Alaska State Troopers, supra at 228 of this report, and Table C-16, Alternate Projections: Total Part II Index Crimes - Alaska State Troopers, supra at 231 of this report.

PART II CRIMES
THOUSANDS

FIGURE A-11

ALASKA STATE TROOPERS

TOTAL ACTUAL PART II INDEX CRIMES*

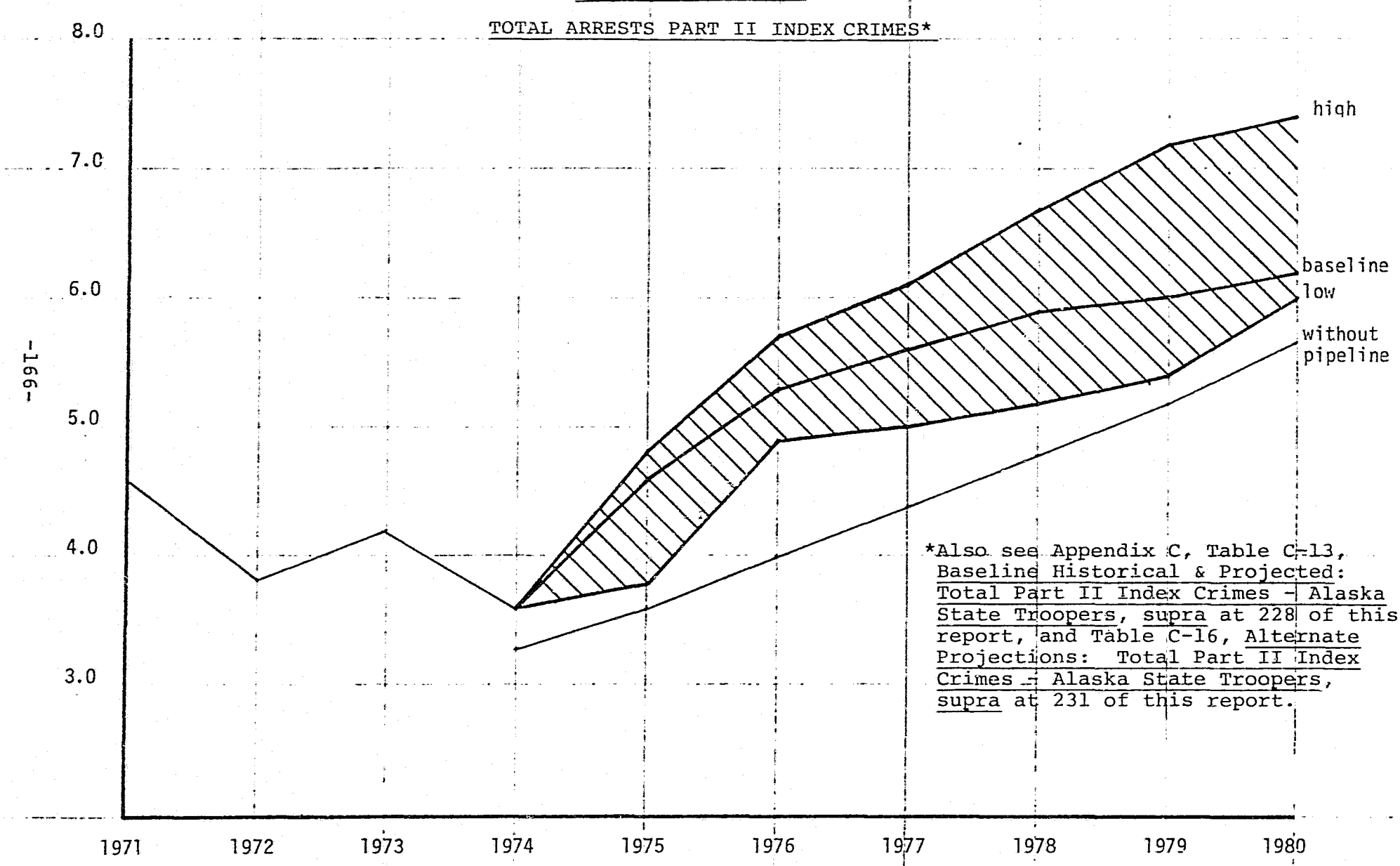


*Also see Appendix C, Table C-13, Baseline Historical & Projected: Total Part II Index Crimes - Alaska State Troopers, supra at 228 of this report, and Table C-16, Alternate Projections: Total Part II Index Crimes - Alaska State Troopers, supra at 231 of this report.

FIGURE A-12

ALASKA STATE TROOPERS

TOTAL ARRESTS PART II INDEX CRIMES*



*Also see Appendix C, Table C-13, Baseline Historical & Projected: Total Part II Index Crimes - Alaska State Troopers, supra at 228 of this report, and Table C-16, Alternate Projections: Total Part II Index Crimes - Alaska State Troopers, supra at 231 of this report.

APPENDIX B

CRIMINAL ACTIVITY PROJECTIONS

METHODOLOGY

TABLE OF CONTENTS

LIST OF TABLES

I. INTRODUCTION

This appendix contains a detailed description of the data and methodology utilized to project criminal activity referred to and analyzed in the narrative and conclusions of Chapter II, Alaska's Criminal Growth Patterns. Included here are explanations of the selection, categorization and collection of data employed in the mathematical model and the development and operation of the series of functional relationships composing this model. These forecasting equations, derived exclusively for purposes of this study, provide the basic mechanism for projecting relevant state-wide and regional crime trends.

The impact of pipeline construction on criminal activity in Alaska was determined in a 3-step process: first, utilization of an underlying economic base model to develop state-wide population and work force projections; second, integration and regression of historical population and work force data with historical criminal activity data to derive a mathematical and predictive relationship; and third, utilization of projections of population and work force variables to determine projected levels of criminal activity within the state during the period from 1974 to 1980. The mathematical relationship used to project criminal activity was uniquely developed to describe the situation in Alaska and has been entitled the Alaska Criminal Justice Model (hereinafter referred to as the ACJ Model).

II. THE ACJ MODEL

The ACJ Model is based on multiple regression analysis,

CONTINUED

2 OF 3

which provides a means for deriving a functional relationship between two sets of variables that minimizes the difference between predicted and actual values of relevant variables. Historical patterns set a trend in which the state has previously responded to changes in exogenous variables. This reaction to changes is further described and analyzed through resulting criminal activity projections. In this manner, historical tendencies and expected, quantifiable forces[1] can provide adequate information to forecast the impact of a major economic change such as construction of the trans-Alaska pipeline.

All regression models make several assumptions regarding the behavior of pertinent relationships. The twin assumptions crucially affecting the ACJ Model's development were: (1) an underlying premise which assumes a continued maintenance of crime prevention measures at levels set during the historical period; and (2) the assumption that relationships found to exist in the past will prevail in the future.

A regression model draws predominantly on past relationships and, therefore, may be properly described as an impact or short-run model. It assumes a constancy of the basic structure of its subject and does not account for new growth factors, e.g., the development of new forms of criminal activity or methods of detection, apprehension or prevention.

III. THE ECONOMIC BASE MODEL AND TYPES OF DATA EMPLOYED

Projections for Alaska's population, work force,

1/ See Section IV-B, Major Forces of Change, supra at 178 of this Appendix.

unemployment and employment levels were developed from an existing economic base model of Alaska which constitutes the foundation for the ACJ Model.[2] This underlying economic base model represents a projected future data base, but nothing more, and a different set of projected variables could equally have been employed. The fundamental connection between criminal activity and the character of population growth, economic dislocation and unemployment levels forms the basic, causal link which determines the extent and predictability of the parameters and variables used in the ACJ Model.

The economic base model divides the state's economy into basic and non-basic components represented by several

2/ Projections of Alaska's economy and demography with pipeline construction taken into consideration have been derived from the following study:

> Human Resources Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volumes I and II, November, 1974.

It should be emphasized that this study only provided future data points for the ACJ Model. As noted above in the text, it was not the "basis" for the ACJ Model and any other projections for the same variables employed would have worked equally as well. However, a detailed analysis of the economic base model is necessary to a proper understanding of the underlying assumptions of this study. A more detailed analysis of the economic base model may be found in Volume II, Technical Report, of the above-cited study.

Estimates of the state's economy without pipeline construction were derived in large part from:

> Mathematical Sciences Northwest, Inc., A Study of the Economic and Sociological Impacts of Construction and Initial Operation of the Trans-Alaska Pipeline, Volume II, 1971 (prepared for the Alyeska Pipeline Company).

industrial categories.[3] The relationship between the two sets of components presupposes that shifts in employment in basic industry employment will provoke secondary effects in non-basic employment sectors. A fairly detailed account of the variables comprising the economic base model and other assumptions used to develop these figures is included in this in order to provide a source of future comparison between actual and projected data.

The economic base model assigns the following industries basic, or explanatory status: the Federal Government, pipeline construction, manufacturing, mining, oil and gas exploration and extraction, communications and utilities, and pipeline transportation. Non-basic industries were determined to be construction and transportation other than directly related to the trans-Alaska pipeline, wholesale and retail trade, finance, insurance and real estate, and state and local government.[4]

Major forces of change are expected to alter the Alaskan economy within the next five years. These forces are

3/ Regarding the basic and non-basic classification: the economic demand for an industry's product or service was assumed to determine the source of employment and the character of the inter-relationships between industries. Basic industries alter in response to externally generated demand and were, therefore, established as the independent, or exogenous, variables of the economic model. Non-basic industries are primarily responsive to internal demand, which alters with changes in basic industry employment. Consequently, the characteristics of non-basic industry employment were developed within the economic model as dependent, or endogenous, variables.

4/ See Section IV-C, Independent Variables of the ACJ Model, supra at 183 of this Appendix.

oil pipeline construction, gas pipeline construction, state government expenditures, the Native Land Claims Settlement Act, manufacturing, oil and gas exploration and extraction, hardrock mining, capital relocation and boomers.[5]

Each of these forces will independently affect estimates of pipeline impact on Alaska's population and work force. Three estimates of pipeline construction impact representing probable levels of economic activity associated with each major force have been utilized to adjust the projections of the regression analysis for the independent effects of these forces.

IV. THE DEVELOPMENT OF AN ALASKA CRIMINAL JUSTICE (ACJ) MODEL

A. Introduction

Crime projections for the state were generated by developing relationships or equations between a history of criminal activity and an assumed set of economic variables. Care was taken to insure that the independent variables matched those developed by the economic base model so that both past and future data would be readily available. The ACJ Model is a unique model developed for Alaska and has no direct relationship to any other model developed for the state. If the underlying set of variables shift because of an unaccounted for force in the economy, the ACJ Model will remain useable for an analysis of new estimates of criminal activity. More importantly, however, an

5/ See Section IV-B, Major Forces of Change, supra at 178 of this Appendix.

unaccounted for change will be clearly recognizable because the assumptions of the economic base model have been clearly stated.

The set of variables employed in the ACJ Model are: (1) independent variables which consist of the economic data used in each equation to describe levels of criminal activity;[6] and (2) dependent variables which consist of actual and projected levels of criminal activity.[7]

The various types of criminal activity composing the dependent variables include aspects of criminal activity reflecting FBI classifications of Part I and Part II crimes as they are allocated regionally, according to the extent which reported crime is processed and the number of persons arrested.

The independent and dependent variables of the ACJ Model are discussed in more detail in the next three sections of this appendix. These variables are summarized in Table B-1, following. The Standard and Industrial Classification Code (SIC) is indicated to the right of the applicable variables in the table. Projections of independent variables taken from the economic model include an indication as to their status in the economic base model (i.e., a basic industry or a non-basic industry).

6/ Independent variables refer to those forces quantitatively captured outside the system under study. The values these components take on determine the behavior of those elements whose values are generated within the system, i.e., the dependent variables.

7/ Dependent variables refer to those forces operating and quantitatively captured within the system under study. They are dependent on both the character of the system, as well as the independent elements of the system.

TABLE B-1

VARIABLES OF THE ACJ MODEL

INDEPENDENT VARIABLES

VARIABLE	STATUS IN ECONOMIC MODEL	SIC CODE
1. Total Population		
2. Total Civilian Workforce		
3. Unemployment		
4. Total Workers		
5. Federal Government	Basic Industry	91
6. Pipeline Construction	"	15-17
7. Manufacturing	"	19-39
8. Mining	"	10-14
9. Communications, Utilities	"	48-49
10. Pipeline Transportation	"	40-47
11. Other Construction	Non-basic Industry	15-17
12. Transportation	"	40-47
13. Wholesale Trade	"	50
14. Retail Trade	"	52-59
15. Finance, Insurance & Real Estate	"	60-69
16. State & Local Government	"	92-93
17. Services	"	70-89
18. Non-categorized	"	01-09 & Other

DEPENDENT VARIABLES

1. Part I - Reported
2. Part I - Actual
3. Part I - Arrests
4. Part I - Reported AST[8]
5. Part I - Actual AST
6. Part I - Arrests AST
7. Part I - Number of Persons Arrested AST
8. Part II - Reported AST
9. Part II - Actual AST
10. Part II - Arrests AST
11. Part II - Number of Persons Arrested AST

8/ Alaska State Troopers

B. Major Forces of Change

To assist in an understanding of criminal activity projections obtained from the ACJ Model, this section attempts to delineate those major economic changes expected to occur in Alaska through 1980. These changes are all reflected in the economic base model which provides the future data series of independent variables. In addition, these major forces of change have been quantitatively captured in their expected effects on population and work force within the three pipeline impact estimates representing the different levels of anticipated economic activity (i.e., high, medium or baseline and low).

A description and explanation of the forces affecting the Alaska economy follows:

1. Oil Pipeline Construction.

The level of manpower needs for construction of the trans-Alaska pipeline will differ from projections provided by Alyeska only if external factors such as weather, the availability of supplies, labor problems, or environmental conditions affecting construction are significantly different than anticipated. Changes in technology are not expected to affect work schedules to any significant degree.

2. Gas Pipeline Construction.

Employment forecasts include the impact of construction and operation of a gas pipeline as well as the secondary impacts upon the Alaskan work force which will occur after that pipeline is completed.

A major consideration in evaluating manpower requirements to construct a gas pipeline is the route which the pipeline will take. Two gas pipeline routes from Prudhoe Bay have been proposed. One would proceed southward through Alaska, parallel with the present Alyeska route; the other, eastward and through Canada.

Estimates of peak manpower needs to construct a gas pipeline range from an initial low of 100 in 1976, to a high of 10,000 in 1978 under high pipeline impact projections. Manpower projections based on medium and low estimates of pipeline impact both decrease to 100 by 1980, while the high estimate levels off at 600.[9]

3. State Government Expenditures.

During the period through 1980, Alaska's rapidly expanding population is expected to generate significantly increased demands for government services, particularly in the areas of education, health, housing, social services and public safety.

Initial bonus-lease revenues obtained from leasing of state lands on the North Slope for oil and gas exploration will expire during FY (fiscal year) 1976. However, by FY '78, the state's financial picture is expected to change dramatically as a result of state royalty revenues.

9/ See TABLE A-3. Gas Pipeline Manpower Estimates, infra at 145 of Appendix A, of this report which indicates yearly projections for impact estimates. Note that both the low and medium or baseline estimates suggest projections which include construction of the trans-Canada gas pipeline, while the high impact projections presupposes construction of a trans-Alaska pipeline.

A forecast based on a study conducted by the Alaska Department of Revenue was used to generate a series of projected state expenditure figures.[10] Expenditures are expected to progressively increase through FY 1980.[11]

4. Alaska Native Land Claims Settlement Act.

Under the Act, 12 regional and 224 village corporations have been established. Little information was available that could be utilized in developing economic projections regarding the disposition of settlement monies. The extent of the employment demand generated by the corporations was derived as a difference between a potential high and a potential low value. This is expected to range from 550 jobs in 1979 to 575 by 1980, whereas the corresponding figures for the high impact estimate are 575 and 625, respectively. Low impact estimate figures indicate employment demand of 500 for both years.[12]

10/ See TABLE A-4. Department of Revenue Forecasts, infra at 146 of Appendix A, of this report which delineates the development of future levels of state expenditures.

11/ See TABLE A-5. Projected State Expenditures, infra at 147 of Appendix A, of this report which depicts a projected breakdown of state expenditures under the three estimates of pipeline impact. The high and low impact estimate projections were developed by assuming the projected values could vary by 10 percent due to the uncertainties surrounding use of oil and gas royalty and tax revenues.

12/ Human Resource Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions at p. 54, November, 1974.

5. Manufacturing Activity.

In the past, manufacturing in Alaska has been dominated by logging, pulp and food processing. With the completion of the trans-Alaska pipeline, it is conceivable that Alaska's potential as a site for petrochemical industrial development will increase. It is also possible that the area manufacturing complex on Cook Inlet will expand. Such an expansion could generate employment demands that would contribute to a slight increase in state-wide manufacturing employment in 1979 and 1980.

Estimates have been made of Alaska's manufacturing employment demand in light of pipeline construction. A low or baseline impact estimate would indicate projections of 10,300 in 1979, rising to 10,700 in 1980, whereas the figures for a high estimate would be 10,400 to 10,800, respectively.[13] The corresponding estimate, assuming the pipeline was not built, would be 9,600 to 10,100.[14]

6. Oil and Gas Exploration and Extraction Activity.

Employment demand in the field of oil and gas exploration and extraction is not expected to rise above levels reached in 1969 prior to the North Slope oil lease sale.

13/ Ibid. Appendix B at pp. 187-188; Also, see Section IV-C(6), supra at 186 of this Appendix.

14/ Mathematical Sciences Northwest Incorporated, A Study of the Economic and Sociological Impact of Construction and Initial Operation of the Trans-Alaska Pipeline, Volume II, 1971.

Projections for oil and gas related employment as under any of the three estimates of economic activity associated with pipeline construction is expected to range from a high in 1977 of 2,550 to 2,400 for 1979 and 1980.[15] Estimated oil and gas exploration and extraction employment demand, assuming that the pipeline was not built, would be about 2,100 from 1977 through 1980.[16]

7. Hardrock Mining.

Other mineral exploration in Alaska is expected to remain at very low levels of development due, not to the lack of mineral resources, but to the high cost of capital and labor associated with their extraction. Currently, the highest costs that are assumed in the state for available capital and labor investment are for oil and gas exploration, pipeline construction and pipeline related activities. Investors will be reluctant to invest large sums of money, machinery and time in hardrock mining until the prospective return on the investment is comparable to the return on investment in oil and gas activities.

Estimates of hardrock mining employment demand range from a low of 450 in 1977 to a high of 550 under the baseline assumption of pipeline impact. Corresponding figures under high pipeline impact estimates are 450 to 600. Low impact estimates result in a constant figure of 450 for the entire period. The control or "without pipeline" figures range from 2,800 in 1977 to 4,300 in 1980.[17]

8. Boomers.

A series of data was added to unemployment figures used in the projections to adjust for the larger than normal in-migration of job seekers attracted by construction of the trans-Alaska pipeline and the large lay-off of workers anticipated after pipeline construction is completed. This component, "boomers", is not expected to remain constant for all of the assumed pipeline construction alternatives.

Estimates of "boomers" range from 4,000 in 1977 to 500 in 1980 under low and baseline pipeline impact estimates, whereas the corresponding figures for a high estimate are constant at 2,000 for the full period.[18]

C. Independent Variables of the ACJ Model.

The following descriptions of independent variables relied on serve to explain the underlying assumptions and rationale which formed the projections used to estimate future crime levels in Alaska. As actual data becomes available, it may be substituted for projections of independent variables in the ACJ Model,

15/ Human Resource Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions, Appendix B at pp. 187-188, November, 1974.

16/ Mathematical Sciences Northwest Incorporated, A Study of the Economic and Sociological Impact of Construction and Initial Operation of the Trans-Alaska Pipeline, Volume II, 1971. See also, Table A-6, Oil and Gas Exploration and Extraction Employment, infra at 148 of Appendix A of this report.

17/ See TABLE A-7, Hardrock Mining Employment, infra at 149 of Appendix A of this report, and Section IV-C(7), supra at 187 of this Appendix.

18/ See TABLE A-8, Boomers, infra at 150 of Appendix A of this report.

which should provide more accurate estimates of projected criminal activity.

1. Total Population.

The population of the state and its regions was calculated through the use of dependency ratios.[19] In order to handle the different components of the work force, four ratios were used. The civilian work force dependency ratio varies from 2.04 in 1974 to 2.00 in 1980 with an increased participation of women in the work force. The military segment was assumed to have a dependency ratio of 1.055 times the civilian equivalent throughout the period. The ratio used for the expansion of native services was 1.0, assuming they and their families are already residents. Boomers are estimated to have a dependency ratio of 1.5, with an underlying assumption that many would come to Alaska and leave their families outside the state.

As a result of these computations, estimates of population growth range from an increase of 27 percent to 58 percent, depending on other projection assumptions made.[20]

2. Unemployment.

The unemployment component of the projections required a dual level of calculation as a function of both population and industry demand. An additional portion due to boomers was

19/ An indication of how many dependents a member of the work force has relying on him (e.g., a dependency ratio of 2, shows the worker has himself and another person depending on his job).

20/ See FIGURE A-1, Total Population Forecasts, infra at 155 of Appendix A of this report.

determined exogenously and added to the total. The boomer component was used to anticipate in-migration due to pipeline construction publicity and the size of lay-offs after completion of the project.

Unemployment is expected to peak in 1977 when the rate is projected to reach 14.9 percent. By 1980, it is expected to be 11.8 percent of the work force.[21]

3. Federal Government.

Federal government employment has been assigned basic industry status within the economic base model. The size of the industry is responsive to national policy and requires a positive flow of funds into the state, i.e., amounts through employment in excess of taxes collected from residents.

The involvement of the Federal government in Alaska has decreased during the past few years and this trend is expected to continue. Between 1974 and 1980, Federal government employment in Alaska is expected to increase only a small percentage, from 17,200 to 17,700.[22]

4. State and Local Government.

State and local government is one of the fastest growing industries in Alaska. It was a non-basic component of the economic model, which responds primarily to changes in demand for services in response to increased population and purchasing

21/ Human Resource Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions at p.2, November, 1974.

22/ Ibid. at p. 68; Appendix B at pp. 181-188.

power. State and local government is projected to grow 83 percent between 1974 and 1980.[23]

5. Construction.

With construction of the trans-Alaska oil pipeline and the potential construction of a gas pipeline, contract construction has become the most volatile sector of the state's economy. Pipeline construction was assumed to be an independent variable (basic component) in the economic model; however, other construction activity was assumed to be a dependent variable (non-basic component) in that model. This approach reflects the fact that stimulated growth in this latter component of the industry is associated with the population growth in general.[24]

6. Manufacturing.

Manufacturing was assigned basic industry status within the economic base model and is expected to show only slight increases in activity. Some expansion may occur in wood and food processing, particularly after 1980. Technological changes are expected to account for the bulk of any increase. The petrochemical complex on the Kenai Peninsula will probably increase

23/ Human Resource Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions at pp. 16 and 90, November, 1974; Also see TABLE A-5, Projected State Expenditures, infra at 147 of Appendix A, and Section IV-B(3), State Government Expenditures, infra at 179 of this Appendix.

24/ Human Resource Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions at pp. 13 and 92-95, November, 1974.

in size, but this capital intensive industry is expecting only small changes in employment patterns. Between 1974 and 1980, an overall increase in manufacturing related employment is expected to be about 23 percent.[25]

7. Mining.

This component is defined to include both hardrock and oil and gas exploration and extraction. Both categories, collectively, form one of the basic industries within the economic base model. Greatest activity is expected in oil and gas operations and most of the growth there is expected in production well development. By the end of the decade, employment should approach levels reached in 1970. Hardrock mining, on the other hand, is expected to alter at a much slower rate. Opportunity costs for labor and financing will clearly favor oil and gas operations rather than hardrock mining for the remainder of the decade..[26] Between 1974 and 1980, mining employment is expected to increase by 12 percent.[27]

25/ Ibid. at pp. 13 and 92-95.

26/ "Opportunity Costs" are described as follows in H.S. Sloan, Dictionary of Economics, 1970:

> "The most favorable price that can be commanded by a factor of production which thus tends to become the minimum cost at which that factor can be had by any entrepreneur. Tool makers, for example, may be able to sell their labor to automobile manufacturers as well as to many other manufacturers. The automobile manufacturers may be willing and able to pay more than the other manufacturers and the latter, in that case, will have to pay the opportunity costs thus set by the automobile manufacturers."

27/ Human Resource Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions at p. 95, November, 1974; See also TABLE A-7, Hardrock Mining Employment, infra at 149 of Appendix A of this report and the discussion in Section IV-B(7), Hardrock Mining, infra at 182 of this Appendix.

8. Communications and Utilities.

These variables were assigned basic industry status within the economic base model. Most of the current growth is technological in nature and is essentially committed to a coordination of systems being installed with the goal of developing a basic compatibility with previously situated components. It is hypothesized that growth would occur regardless of attendent population expansion. The increase between 1974 and 1980 is expected to be approximately 5 percent.[28]

9. Retail Trade.

Retail trade is expected to increase as a direct function of an increase in the population and the work force. Improving economies of scale will undoubtedly stimulate retail markets in the state.[29] This is especially true in the Anchorage region. A more heavily populated region can take advantage of quantity buying, local warehousing, etc. Retail trade is expected to increase 64 percent between 1974 and 1980.[30]

28/ Human Resource Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions, at p. 96, November, 1974.

29/ Economies of scale are those savings in manpower, time and other expenditures which result from greater activity. The ability to spread basic operating costs, necessary on any scale of operation, over a larger output, thereby allowing cost per unit of output to be reduced may make investment potentially profitable when a larger scale of industry is evaluated.

30/ Human Resource Planning Institute and Urban and Rural Systems Associates, Manpower and Employment Impact of the Trans-Alaska Pipeline, Volume I. Summary of Findings and Conclusions, at pp. 96-97, November, 1974.

10. Wholesale Trade.

As retail trade increases, wholesale trade is also expected to increase. These changes are expected to generate a 63 percent employment increase between 1974 and 1980.

11. Finance, Insurance and Real Estate.

This component is expected to grow 61 percent between 1974 and 1980. This growth, as a function of both population and industrial activity increases, reflects a continued stability which this industry has and should continue to demonstrate.[31]

12. Transportation.

Transportation is expected to show a more rapid rate of growth during the first part of the forecast period than the last due to pipeline construction. To allow for this later period decline, a portion of the transportation component has been treated as an independent variable in the economic base model and added on in later years. It should be noted, however, that the component affected is only a small part of the total industry. Between 1974 and 1980, transportation is expected to grow approximately 52 percent.[32]

13. Services.

Service industries are expected to grow 76 percent between 1974 and 1980. This growth is a function of population and the associated economies of scale. Service agencies formally located outside the state will find it feasible to develop in-state

31/ Ibid. at p. 97.

32/ Ibid. at pp. 97-98.

offices, allowing both a breadth and type of agency development to increase.[33]

14. Non-Categorized.

Non-categorized workers include domestics, those who are self-employed, farmers, fishermen, etc. It is representative of a large and diversified group, which is not easily quantified. The method used to develop projections was a time trend forecasting over its own history.[34]

D. Dependent Variables of the ACJ Model.

Historical criminal activity data was collected from the Alaska Department of Public Safety, Division of Alaska State Troopers, and from twelve municipal police departments. The data collected does not provide a universe of criminal activity, but it does provide a data base for the most heavily populated areas in the state and is estimated to represent in excess of 95 percent of total criminal activity processed in Alaska.

It should be noted that data collection and uniform reporting from the different sources proved a problem in data assembly. Some local police departments maintain incomplete crime records. Data available for one year was often missing the next and had to be estimated. An additional problem which was not as obviously apparent, but which may have affected data quality, was the reporting of criminal data consistently. Examples include

33/ Ibid. at p. 98.

34/ Ibid.

the reporting of a larceny as a burglary and the inclusion of joyriding within auto theft. Although police departments are required to maintain records of criminal activity, such paperwork often assumes a low priority which makes the data collected from local police departments somewhat less reliable. Data collected from the Alaska State Troopers was the most apparently reliable and generally uniform in quality. In order to obtain better projections of criminal activity in the future, an improved data base is essential. The data format employed by the Alaska State Troopers would provide a good basis for a uniform system to be employed by all municipal departments, with the Department of Public Safety serving as the data collection and maintenance agency.

The data collected for the development of the criminal activity projections of this study can generally be divided into nine different categories, which, in turn, fall into the following three general groups.[35]

1. Reported Activity.

There are three categories of reported criminal activity addressed in this report. The first includes the total Part I criminal activity which was reported to the Alaska State Troopers (hereinafter AST) and to the twelve city police departments

35/ See TABLE A-1, infra at 143 of Appendix A of this report for a listing of the sources of the criminal data for each of the five regions of the study. The regions and sources of data are discussed more fully in Section V, Historical Data Collection, of this Appendix. Data collection problems have been more thoroughly analyzed in Chapter VIII, Data Collection, infra.

surveyed. The second category contains only the subset of reported activity handled by AST. The final category quantifies reported Part II criminal activity handled by AST detachments.

2. Actual Activity.

This group refers to that reported activity which actually involved some sort of confirmed criminal conduct. The first level of definition refers to the actual Part I criminal activity handled by both AST and the twelve city police departments. The second refers to the Part I criminal activity handled only by AST and the last includes only actual Part II criminal activity handled by AST.

3. Arrests.

The "actual activity" closed through arrest by municipal police departments and AST surveyed detachments were also divided into three categories. The first includes total Part I arrests, the second contains AST detachment Part I arrests, and the third AST detachment Part II arrests.

E. Crime Type Allocation.

Criminal activity data has been divided into two major groups by general type of crime utilizing the Federal Bureau of Investigation Part I and Part II reporting categories.

Part I Crimes. During the period 1969 through 1973, these crimes in Alaska displayed an overall general increase. Data collected from AST detachments and select local police departments showed an increase from 11,712 actual Part I criminal offenses to 15,027 in 1973. This change represents an overall

increase of 28 percent during this five-year period, which may be compared to a 73 percent increase nationally. However, violent crimes in Alaska have increased 51 percent in the areas sampled while property crimes increased 26 percent compared to 33 percent and 79 percent increases, respectively, on the national level.[36]

Part I offenses have been sub-categorized and defined as follows:[37]

1. Criminal Homicide:

   (a) Murder and non-negligent manslaughter: all wilful felonious homicides as distinguished from deaths caused by negligence. Excludes attempts to kill, assaults to kill, suicides, accidental deaths, or justifiable homicides. Justifiable homicides are limited to:
      (1) the killing of a person by a peace officer in the line of duty;
      (2) the killing of a person in the act of committing a felony by a private citizen.
   (b) Manslaughter by negligence: any death which the police investigation established was primarily attributable to the gross negligence of some individual other than the victim.

2. Forcible rape:

   Rape by force, assault with intent to rape and attempted rape. Excludes statutory offenses (no force used--victim under age of consent).

36/ Alaska data collected from AST detachments and city police agencies is set out in TABLE A-1, infra at 143 of Appendix A of this report. Statistics for the United States, in general, have been obtained from the Federal Bureau of Investigation, Uniform Crime Reports for the United States, 1969-1973.

37/ Categories and definitions are directly quoted from the Federal Bureau of Investigation, Uniform Crime Reports for the United States, U.S. Government Printing Office, Washington, D.C., 1973, pp. 57-58; with the exception noted in footnote 38, supra.

3. Robbery:

Stealing or taking anything of value from the care, custody, or control of a person by force or violence or by putting in fear, such as strong-arm robbery, stick-ups, armed robbery, assaults to rob, and attempts to rob.

4. Aggravated assault:

Assault with intent to kill or for the purpose of inflicting severe bodily injury by shooting, cutting, stabbing, maiming, poisoning, scalding, or by the use of acids, explosives, or other means. Excludes simple assaults.[38]

5. Burglary:

Breaking or entering: burglary, house-breaking, safecracking, or any breaking or unlawful entry of a structure with the intent to commit a felony or a theft. Includes attempted forcible entry.

6. Larceny:

Theft (except auto theft) - The unlawful taking, carrying, leading, or riding away of property from the possession or the constructive possession of another:
(a) Fifty dollars and over in value;
(b) Under fifty dollars in value.
Thefts of bicycles, automobile accessories, shoplifting, pocket-picking, or any stealing of property or article which is not taken by force and violence or by fraud. Excludes embezzlement "con" games, forgery, worthless checks, etc.[39]

7. Auto theft:

The unlawful taking or stealing of a motor vehicle.

Part II Crimes. Part II offenses have been sub-categorized and defined as follows:

8. Other assaults:

Assaults which are not of an aggravated nature.

9. Arson:

Wilful or malicious burning with or without intent to defraud. Includes attempts.

10. Forgery and counterfeiting:

Making, altering, uttering or possessing, with intent to defraud, anything false which is made to appear true. Includes attempts.

11. Fraud:

Fraudulent conversion and obtaining money or property by false pretenses. Includes bad checks except forgeries and counterfeiting. Also includes larceny by bailee.

12. Embezzlement:

Misappropriation or misapplication of money or property entrusted to one's care, custody, or control.

38/ Assault statutes in Alaska do not specifically refer to "aggravated" assaults but, rather divide the felonious, Part I, version into several sub-categories, i.e., assault with intent to kill, assault with a dangerous weapon, etc., which can easily be referred to under this FBI general classification. The lesser offense is referred to as a Part II category, assault and battery, but for the purposes of this report can be submerged in the FBI classification, simple assault or other assaults. See also footnote 39, supra.

39/ The category Larceny has been compressed from its previous two-section definition, dichotomized by the value of the object stolen, to a unified category, Larceny-theft, in 1973. The "Larceny-theft" paragraph is quoted from Uniform Crime Reports for the United States, 1973, U.S. Government Printing Office, Washington, D.C., 1974, p. 55. For purposes of this report, the compilation of data was unaffected as the relevant crimes were still included under the same Part I category.

13. Stolen property; buying, receiving, possessing:

    Buying, receiving, and possessing stolen property and attempts.

14. Vandalism:

    Wilful or malicious destruction, injury, disfigurement, or defacement of property without consent of the owner or person having custody or control.

15. Weapons; carrying, possessing, etc:

    All violations of regulations or statutes controlling the carrying, using, possessing, furnishing, and manufacturing of deadly weapons or silencers. Includes attempts.

16. Prostitution and commercialized vice:

    Sex offenses of a commercialized nature and attempts, such as prostitution, keeping a bawdy house, procuring or transporting women for immoral purposes.

17. Sex offenses (except forcible rape, prostitution, and commercialized vice):

    Statutory rape, offenses against chastity, common decency, morals, and the like. Includes attempts.

18. Narcotic drug laws:

    Offenses relating to narcotic drugs, such as unlawful possession, sale, use, growing, manufacturing, and making of narcotic drugs.

19. Gambling:

    Promoting, permitting, or engaging in gambling.

20. Offenses against the family and children:

    Nonsupport, neglect, desertion, or abuse of family and children.

21. Driving under the influence:

    Driving or operating any motor vehicle or common carrier while drunk or under the influence of liquor or narcotics.

22. Liquor laws:

    State or local liquor law violations, except "drunkenness" (class 23) and driving "under the influence" (class 21). Excludes Federal violations.

23. Drunkenness:

    Drunkenness or intoxication.

24. Disorderly conduct:

    Breach of the peace.

25. Vagrancy:

    Vagabondage, begging, loitering, etc.

26. All other offenses:

    All violations of state or local laws, except classes 1-25 and traffic.

27. Suspicion:

    Arrests for no specific offense and released without formal charges being placed.

28. Curfew and loitering laws (juveniles):

    Offenses relating to violation of local curfew or loitering ordinances where such laws exist.

29. Runaway (juveniles):

    Limited to juveniles taken into protective custody under provisions of local statutes as runaways.

F. Regional Allocation.

The Regions. Forecasts within the ACJ Model have been made for five specified regions of the state, as well as a forecast predicated upon a state-wide basis. The regional breakdowns are as follows: (1) Anchorage; (2) Fairbanks; (3) Southeast; (4) Southcentral; and (5) Western-Northern.[40] The regions are based on aggregations of Labor Market Areas defined by the Alaska Department of Labor. Those areas are listed under each regional name, except for regions (1) and (2) whose names correspond to the area names. This definition of the regions for purposes of developing projections allows for convenient use of the labor market data integral to the economic base model and provides for an easier update of the model.

Method of Allocation. The mechanism for allocating total criminal activity among the five regions consisted of (1) extrapolating from the regional shares during the historical period 1969-1973; and (2) tempering that extrapolation by integrating previously forecasted population figures. This mechanism was incorporated as a subsystem of the main model. In cases where personal knowledge of a given region was thought to be superior to the extrapolations, the allocation coefficients were adjusted to reflect that understanding.

For each crime type, there are five different sets of regional allocation coefficients. For example, in 1973, under

40/ See FIGURE A-3, infra at 157 of Appendix A of this report for a map of this regional division.

the category of actual Part I offenses, the number of assaults was allocated by region as follows: 34 percent to Anchorage, 23 percent to Fairbanks, 10 percent to Southeast; 14 percent to Southcentral, and 19 percent to Western-Northern. Historical patterns indicate that the regional shares shift with time. Consequently, an effort was made to extrapolate the historical patterns into the future, or to find average levels of activity for that crime type and region.

Regional allocations were made by crime type levels and the total for a region was found by totaling the various crime type projections.

G. Alaska Crime Forecasting Equations for the ACJ Model.

The set of criminal forecasting equations forming the ACJ Model were formulated utilizing twenty observations of economic and criminal activity during a five-year historical period. Table B-2, following, presents the final set of equations selected to forecast crime in Alaska. Table B-3 lists the definitions of the dependent (y) and independent (x) variables of those equations. Each variable is accompanied by a coefficient which relates the degree to which a particular criminal activity responds to a change in the variable. Also shown for each equation are the square of the coefficient of determination (R^2),[41] the standard

41/ The square of the coefficient of determination (R^2) is an indication of what percentage of a dependent variable can be attributed to the independent variable(s).

deviation from the mean[42] and the number of degrees of freedom (D.F.).[43] The equations are designed to best fit historically observed data for a given category of crime.

Two dependent variables could not be adequately defined using a multi-regression analysis, "Arrests-Part II" and "Number Of Persons Arrested-Part II". Instead, these were estimated as a percentage of "Actual-Part II" crimes.

42/ The standard deviation from the mean indicates the spread of values taken on by a dependent variable. This dispersion about the central value shows how closely clustered the studied observations or projections are and can be used as an indication of how certain the central value is.

43/ Degrees of Freedom (D.F.) indicates how many of the variables were constrained by having a value assigned to them in order to project other variables (i.e., given three variables x, y, z, and fixing the value of one (z) the number of degrees of freedom is two (D.F. = 2).

TABLE B-2

ALASKA CRIME FORECASTING EQUATIONS
FOR ACJ MODEL

$Y_1 = 1.017X_1 \; .036X_{14} + .078X_3 + .411X_2 + .045X_{16} + 8730$
$R^2 = .99$ Standard Deviation = .771 D.F. = 15

$Y_2 = 1.100X_1 \; .016X_{14} + .035X_3 + .265X_2 + .058X_{16} + 8136$
$R^2 = .99$ Standard Deviation = .521 D.F. = 15

$Y_3 = .036X_1 + .018X_{14} + .033X_3 + .129X_2 + .003X_{16} \; 382$
$R^2 = .99$ Standard Deviation = .147 D.F. = 15

$Y_4 = .057X_2 \; .337X_{12} \; .064X_3 \; .076X_{14} + .052X_{16} \; 4821$
$R^2 = .96$ Standard Deviation = .440 D.F. = 15

$Y_5 = .062X_2 \; .350X_{12} - .063X_3 - .080X_{14} + .052X_{16} - 4679$
$R^2 = .95$ Standard Deviation = .443 D.F. = 15

$Y_6 = -.035X_2 - .071X_{12} - .038X_3 - .010X_{14} + .012X_{16} - 2322$
$R^2 = .99$ Standard Deviation = .095 D.F. = 15

$Y_7 = -.047X_2 - .135X_{12} - .089X_3 - .005X_{14} + .032X_{16} - 5161$
$R^2 = .91$ Standard Deviation = .415 D.F. = 15

$Y_8 = -.060X_2 - .392X_{12} - .054X_3 - .049X_{14} + .062X_{16} \; 5934$
$R^2 = .97$ Standard Deviation = .52 D.F. = 15

$Y_9 = -.080X_2 - .406X_{12} - .065X_3 - .052X_{14} + .064X_{16} - 6083$
$R^2 = .97$ Standard Deviation = .509 D.F. = 15

Y_{10}= Estimated: $F(Y_q)$

Y_{11}= Estimated: $F(Y_q)$

TABLE B-3

VARIABLE ABBREVIATION DEFINITIONS

Y_1 = Reported-Part I

Y_2 = Actual-Part I

Y_3 = Arrests-Part I

Y_4 = Reported-Part I (Alaska State Troopers)

Y_5 = Actual-Part I (Alaska State Troopers)

Y_6 = Arrests-Part I (Alaska State Troopers)

Y_7 = No. Persons Arrested-Part I (Alaska State Troopers)

Y_8 = Reported-Part II (Alaska State Troopers)

Y_9 = Actual-Part II (Alaska State Troopers)

Y_{10} = Arrests-Part II (Alaska State Troopers)

Y_{11} = No. Persons Arrested-Part II (Alaska State Troopers)

X_{12} = Federal Government Employment

X_{13} = State and Local Government Employment

X_{14} = Construction Employment

X_{15} = Non-Categorized Employment

X_{16} = Unemployment

X_{17} = Alaska Population

V. HISTORICAL DATA COLLECTION

It is important to re-emphasize that data collected was found to be of varying quality. An improved data source and collection, maintenance and retrieval system is desperately needed for future planning by all components of the Alaska criminal justice system. As the quality of the data base improves, so should estimates of future occurrences. While the art of forecasting is precisely that and not an exact science, improvements can be made with more accurate inputs to the ACJ Model. The point cannot be made too strongly, however, that these comments should not be construed as being overly critical of the data utilized in this study. It was the best available at the time of its collection, and these prefatory observations are designed to identify an existing problem which, unless corrected, will continue to affect all components of the criminal justice system in Alaska in their efforts to plan for future activity and the development of capital investment programs.

In the text that follows, a brief description by region of the methodology employed in collecting data for the study is provided.[44]

A. Anchorage Region.

Because of its large population concentration relative to the state as a whole and accompanying problems as a metropolitan

44/ See also TABLE A-1, Sources of Crime Data by Region, infra at 143 of Appendix A of this report and Chapter VIII, Data Collection, infra.

center, Anchorage was treated as a separate entity for the purpose of providing a scope of crime impact due to pipeline construction on Southcentral Alaska. The Anchorage City Police Department in addition to the "C" Detachment of the Alaska State Troopers, provided the data base for statistical analysis of this area. Both of these agencies have approximately commensurate responsibility for law enforcement in the Anchorage area. The AST detachment, however, confines itself mainly to activity outside of the City of Anchorage, itself, and to the region extending eastward to Cordova.

The data base derived from both AST and the Anchorage City Police Department was taken from the annual reports of each agency filed with the Federal Bureau of Investigation. With the addition of these statistics, a general trend in crime impact due to the pipeline was determined.

Data collected from January, 1969, through August, 1974, provides a relevant comparison with which to project future crime impact in the Anchorage area.

1969 - Part I crime data is derived from the Anchorage City Police Department and AST Detachment "C".

1970 - Part I crimes were totalled and include Spenard, Anchorage proper and the area serviced by AST "C" Detachment. In October, 1970, the Anchorage Borough contracted with the Anchorage City Police Department to provide law enforcement service to the Spenard area. Consequently, Part I crime data includes Spenard for only the three remaining months of the year. Part II offense

data for "reported" offenses came from AST "C" Detachment only.

1971 - Part I offense data is derived from Spenard, AST and the Anchorage City Police Department.

1972 - Same as 1971.

1973 - Same as 1972, however, only data for the "reported" and "actual" categories for the Anchorage City Police Department were not available and were projected from 1972 data.

B. Fairbanks Region.

This region was treated separately in order to establish a framework upon which to base pipeline impact projections. The Fairbanks City Police Department and "I" Detachment of the Alaska State Troopers provided the source of data for this region. Both of these agencies filed annual reports of criminal activity with the Federal Bureau of Investigation. The breakdown that follows explains the source of data included in each category of Part I and Part II crimes.

1969 - Part I offense data was derived from both the Fairbanks City Police Department and AST "I" Detachment. Part II offense data came from "I" Detachment data only.

1970 - Part I offense data was derived from both the Fairbanks City Police Department and AST "I" Detachment. Part II offense data came from AST only.

1971 - Part I offense data came from the Fairbanks City Police Department and AST. Part II offense data was provided solely by AST.

1972 - Same as 1971.

1973 - Same as 1972.

C. Southeastern Region.

Data from this region was obtained primarily from reports submitted by each police department to the Federal Bureau of Investigation annually, as well as from AST data. The police departments from which crime data were available included Juneau, Sitka, Ketchikan, Wrangell, Petersburg and Detachments "A" and "B" of the Alaska State Troopers. Requests were made to all city and borough police departments in the region. Haines provided only activity report statistics which were difficult to adapt to the FBI statistical format. Requests for records of communities with town constables were not made as these communities also receive law enforcement assistance from AST detachments, thereby resulting in a duplication of records. Furthermore, since every police department did not provide information for each calendar year covered, qualifications of exact data included in each category for each year is necessary.

1969 - Part I offense data represents the sum of data collected from the Ketchikan Police Department and AST. Information was not available from Juneau and Sitka and so no estimates were made based on 1969 data. Part II offenses included only AST data. Wrangell and Petersburg data were only available for total arrests. Estimates of "reported" and "actual" activity were made using the relationship of total "arrests" to "reported" activity and "actual" activity to "reported" activity in the region.

1970 - Part I offense data are based upon the sum of AST data and that provided by the police departments of Juneau (for the first 8 months only), Ketchikan, and Sitka. To account for the four missing months of Juneau data, all of the components were projected times a 1.33 adjustment factor. Data for Wrangell and Petersburg were estimated as in 1969. Part II offense data was derived solely from AST.

1971 - Part I offense data are based upon the sum of AST data plus that provided by Juneau, Ketchikan, and Sitka. Wrangell and Petersburg data were handled as in 1969. Part II offense data was derived solely from AST.

1972 - Part I offense data came from Ketchikan, Juneau, Sitka, Wrangell, and AST. Part II offense data came only from AST. Petersburg data were handled as in 1969.

1973 - Part I offense data are the sum of AST data plus that obtained from Juneau and Sitka. Crime data from Ketchikan were estimated by adjusting the 1972 figures. Wrangell and Petersburg data were handled as in 1969. Part II offense data came from AST only.

D. Southcentral Region.

This region comprises roughly one-fifth of the total area of the state and is situated in a strategic location in relation to direct pipeline impact. The Alaska State Troopers are the principal agency responsible for law enforcement throughout the region. AST detachments in the Southcentral region include "D", "G" and "H" with headquarters and posts located in the following communities:

Detachment	Region Served	Headquarters	Posts
D	Kenai Peninsula	Soldotna	Moose Pass, Homer, Seward, Cooper Landing, and Ninilchik
G	Matanuska-Susitna	Palmer	Big Lake, Nancy Lake, Talkeetna, and Wasilla
H	Glennallen	Glennallen	Paxson, Tok, Valdez, Northway, Ernestine, Copper Center, Cordova, Nilchina, Eagle and Kenny Lake

Statistics were utilized from AST reports filed with the Federal Bureau of Investigation for the years 1969 through 1973. Also included in the estimates of criminal activity are data for Valdez, Seward, Kodiak, and Kenai. Data obtained from these police departments were sketchy and estimates were made to complement those figures obtained from AST. The process involved adding actual statistics in where they were available. For years where data was not available, activity was projected through increasing the data by the same relative amount observed the previous year for each individual police department.

E. Western-Northern Region.

Law enforcement within the vast majority of this area is the responsibility of the Alaska State Troopers. Detachments "E", "F", "I" and "J" are located within the Western-Northern region of Alaska as follows:

Detachment	Region Served	Headquarters	Posts
E	Kodiak - Alaska Peninsula - Aleutians	Kodiak	Dillingham, Naknek, and Sand Point
F	Bethel - Kuskokwim	Bethel	St. Marys
I	Fairbanks - Upper Yukon - Barrow - Yukon - Koyukuk	Fairbanks	Nenana, Anderson, Barrow, Ft. Yukon, Tanana, Galena, Cantwell, Delta, Harding Lake, Livengood, and Deadhorse
J	Seward Peninsula - Kobuk	Nome	Kotzebue, Savoonga, and Unalakleet

Statistics were generated from reports filed annually by AST with the Federal Bureau of Investigation. None of the communities with town constables were consulted, since the majority of their law enforcement efforts are coordinated through AST detachments. The Bethel Police Department responded for each category with data that is reflected in each year's tabulations, 1969-1973.

APPENDIX C

DATA SUPPLEMENT TO

CHAPTER II

ALASKA'S CRIMINAL GROWTH PATTERNS

TABLE OF CONTENTS

1. INTRODUCTION

This appendix contains tabulated summaries and results of the work of this study in an effort to assess and predict the impact of pipeline construction on the administration of criminal justice in Alaska during the period 1974 through 1980.

The tables presented represent the original work of the study. Historical data was collected from the Alaska Department of Public Safety, Division of Alaska State Troopers, and from select municipal law enforcement agencies. Projected estimates of criminal activity set forth in this appendix are the product of the Alaska Criminal Justice Model. A comprehensive explanation of the methodology employed in developing these criminal activity projections is set forth in Appendix B.

2. UNIFORM CRIME REPORTS BY REGION; 1969-1973

The tables that follow (C-1 through C-10) contain the Part I historical criminal activity data collected by region for this study for the period 1969 through 1973, and are organized as follows:

TABLES

TABLE C-1

PART I INDEX CRIMES - STATEWIDE
1969

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
			REPORTED			
Criminal Homicide	21	8	4	5	14	52
Rape	69	17	28	5	18	137
Robbery	128	52	3	6	4	193
Assault	148	146	240	37	48	619
Burglary	1286	557	456	311	105	2715
Larceny	3290	1502	1116	651	89	6648
Auto Theft	1094	543	169	194	26	2026
REGIONAL TOTALS	6036	2825	2016	1209	304	12390
			ACTUAL			
Criminal Homicide	15	7	3	3	14	42
Rape	53	8	22	5	14	102
Robbery	119	50	3	6	4	182
Assault	143	139	214	33	44	573
Burglary	1262	543	406	301	95	2607
Larceny	3224	1458	1027	614	79	6402
Auto Theft	1021	479	120	163	21	1804
REGIONAL TOTALS	5837	2684	1795	1125	271	11712
			ARRESTS			
Criminal Homicide	12	5	1	3	13	34
Rape	16	3	15	4	13	51
Robbery	34	46	1	5	0	86
Assault	68	107	103	26	36	340
Burglary	167	63	95	50	40	415
Larceny	652	191	218	58	34	1153
Auto Theft	124	55	31	46	6	262
REGIONAL TOTALS	1073	470	464	192	142	2341

TABLE C-2

PART I INDEX CRIMES - STATEWIDE

1970

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
			REPORTED			
Criminal Homicide	20	18	9	11	10	68
Rape	48	23	29	5	15	120
Robbery	176	34	6	2	4	222
Assault	217	92	269	30	39	647
Burglary	1289	498	461	324	96	2668
Larceny	3791	1465	1180	354	94	6884
Auto Theft	1059	515	159	89	28	1850
REGIONAL TOTALS	6600	2645	2113	815	286	12459
			ACTUAL			
Criminal Homicide	16	17	9	7	10	59
Rape	38	16	26	2	10	92
Robbery	174	33	6	2	4	219
Assault	207	92	239	26	36	600
Burglary	1253	491	415	312	86	2557
Larceny	3728	1432	1086	340	87	6673
Auto Theft	1001	475	119	73	23	1691
REGIONAL TOTALS	6417	2556	1900	762	256	11891
			ARRESTS			
Criminal Homicide	14	16	7	7	10	54
Rape	6	10	15	2	9	42
Robbery	29	14	3	0	1	47
Assault	80	66	153	20	28	347
Burglary	138	95	122	33	40	428
Larceny	783	239	248	55	41	196
Auto Theft	89	51	36	15	5	196
REGIONAL TOTALS	1139	491	584	132	134	2480

TABLE C-3

PART I INDEX CRIMES - STATEWIDE

1971

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
			REPORTED			
Criminal Homicide	29	19	16	8	15	87
Rape	94	29	27	3	13	166
Robbery	173	29	13	3	5	223
Assault	288	127	194	49	58	716
Burglary	1418	463	493	246	101	2721
Larceny	4317	1532	1341	456	88	7734
Auto Theft	1129	401	128	74	28	1760
REGIONAL TOTALS	7448	2600	2212	839	308	13407
			ACTUAL			
Criminal Homicide	21	14	14	5	13	67
Rape	78	20	17	3	9	127
Robbery	160	28	11	3	5	207
Assault	285	118	173	43	55	674
Burglary	1353	449	458	238	90	2588
Larceny	4212	1501	1247	421	80	1461
Auto Theft	1040	333	106	62	23	1564
REGIONAL TOTALS	7149	2463	2026	775	275	12688
			ARRESTS			
Criminal Homicide	15	12	14	5	13	59
Rape	12	11	8	3	8	42
Robbery	60	10	3	2	2	77
Assault	129	79	122	34	43	407
Burglary	140	94	119	38	40	431
Larceny	959	334	331	68	38	1730
Auto Theft	87	53	34	15	7	196
REGIONAL TOTALS	1402	593	631	165	151	2942

TABLE C-4

PART I INDEX CRIMES - STATEWIDE

1972

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
		REPORTED				
Criminal Homicide	31	17	7	12	14	81
Rape	85	29	26	10	25	175
Robbery	172	31	1	11	9	224
Assault	308	133	381	98	112	1032
Burglary	1681	507	508	445	150	3291
Larceny	4860	1652	960	678	234	8384
Auto Theft	1139	391	189	151	29	1899
REGIONAL TOTALS	8276	2760	2072	1405	573	15086
		ACTUAL				
Criminal Homicide	27	12	4	6	13	62
Rape	68	20	11	10	13	122
Robbery	160	28	1	9	6	204
Assault	292	125	343	89	101	950
Burglary	1570	493	467	410	113	3053
Larceny	4673	1589	730	610	153	7755
Auto Theft	977	318	144	125	23	1587
REGIONAL TOTALS	7767	2585	1700	1259	422	13733
		ARRESTS				
Criminal Homicide	22	10	3	6	11	52
Rape	8	15	7	6	8	44
Robbery	36	7	1	7	8	52
Assault	129	96	145	64	90	524
Burglary	193	108	270	101	60	732
Larceny	1001	362	357	126	67	1913
Auto Theft	54	27	64	37	8	190
REGIONAL TOTALS	1443	625	847	347	245	3507

TABLE C-5

PART I INDEX CRIMES - STATEWIDE

1973

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
		REPORTED				
Criminal Homicide	35	20	14	22	18	109
Rape	111	26	14	5	15	171
Robbery	183	22	27	6	2	240
Assault	693	163	204	123	180	1363
Burglary	2396	510	650	364	194	4114
Larceny	5239	1526	1430	824	168	9187
Auto Theft	1168	345	268	143	28	1952
REGIONAL TOTALS	9825	2612	2607	1487	605	17136
		ACTUAL				
Criminal Homicide	29	13	8	14	14	78
Rape	72	23	13	5	15	128
Robbery	170	22	23	6	2	223
Assault	310	161	173	106	177	927
Burglary	1664	496	624	348	185	3317
Larceny	4953	1478	1287	767	145	8630
Auto Theft	1036	301	241	121	25	1724
REGIONAL TOTALS	8234	2494	2369	1367	563	15027
		ARRESTS				
Criminal Homicide	23	12	8	13	14	70
Rape	8	11	1	5	14	39
Robbery	38	3	2	6	1	50
Assault	137	117	94	84	161	593
Burglary	205	81	183	44	102	615
Larceny	1061	264	303	174	52	1854
Auto Theft	57	44	81	37	13	232
REGIONAL TOTALS	1529	532	672	363	357	3453

TABLE C-6

PART I INDEX CRIMES - ALASKA STATE TROOPERS

1969

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
			REPORTED			
Criminal Homicide	7	4	1	5	9	26
Rape	23	12	7	3	6	51
Robbery	20	12	1	4	1	38
Assault	30	55	11	16	15	127
Burglary	563	336	159	206	28	1292
Larceny	903	557	162	230	12	1864
Auto Theft	538	244	37	50	3	872
REGIONAL TOTALS	2084	1220	378	514	74	4270
			ACTUAL			
Criminal Homicide	5	3	0	3	9	20
Rape	18	3	4	3	6	34
Robbery	19	10	1	4	1	35
Assault	27	50	10	15	14	116
Burglary	555	323	153	205	28	1264
Larceny	887	531	152	220	9	1799
Auto Theft	510	205	24	47	3	789
REGIONAL TOTALS	2021	1125	344	497	70	4057
			ARRESTS			
Criminal Homicide	5	3	0	3	8	19
Rape	8	2	4	3	6	23
Robbery	4	2	1	2	0	9
Assault	16	35	9	13	14	87
Burglary	59	57	27	33	15	191
Larceny	109	37	22	18	3	190
Auto Theft	52	29	10	15	3	109
REGIONAL TOTALS	253	165	73	87	50	628

TABLE C-7

PART I INDEX CRIMES - ALASKA STATE TROOPERS

1970

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
			REPORTED			
Criminal Homicide	18	15	2	10	5	50
Rape	19	15	4	3	3	44
Robbery	25	7	3	1	1	37
Assault	70	60	34	13	6	183
Burglary	575	314	165	215	19	1288
Larceny	1093	618	247	125	17	2100
Auto Theft	507	197	36	23	5	768
REGIONAL TOTALS	2307	1226	491	390	56	4470
			ACTUAL			
Criminal Homicide	15	14	2	7	5	43
Rape	12	9	4	1	2	28
Robbery	24	61	3	1	1	36
Assault	61	56	28	12	6	163
Burglary	565	312	160	212	19	1268
Larceny	1080	602	230	122	17	2051
Auto Theft	488	185	28	21	5	727
REGIONAL TOTALS	2245	1185	455	376	55	4316
			ARRESTS			
Criminal Homicide	15	13	2	7	5	42
Rape	2	8	4	1	2	17
Robbery	3	6	2	0	1	12
Assault	36	41	23	10	6	116
Burglary	58	66	44	22	15	205
Larceny	148	48	56	17	11	280
Auto Theft	39	23	13	5	2	82
REGIONAL TOTALS	301	205	144	62	42	754

TABLE C-8

PART I INDEX CRIMES - ALASKA STATE TROOPERS

1971

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
		REPORTED				
Criminal Homicide	23	10	8	7	10	58
Rape	17	18	8	2	1	46
Robbery	26	8	4	2	2	42
Assault	57	76	27	21	25	206
Burglary	457	283	170	163	24	1097
Larceny	685	541	247	161	11	1645
Auto Theft	287	122	60	19	5	493
REGIONAL TOTALS	1552	1058	524	375	78	3587
		ACTUAL				
Criminal Homicide	15	6	6	5	8	40
Rape	13	11	6	2	1	33
Robbery	25	7	4	2	2	40
Assault	55	69	26	20	25	195
Burglary	447	273	160	162	23	1065
Larceny	658	524	223	151	10	1566
Auto Theft	261	106	51	18	5	441
REGIONAL TOTALS	1474	996	476	360	74	3380
		ARRESTS				
Criminal Homicide	14	6	6	5	8	39
Rape	4	8	4	2	1	19
Robbery	13	3	3	1	2	22
Assault	42	51	23	17	21	154
Burglary	69	68	55	25	15	232
Larceny	67	84	25	21	8	205
Auto Theft	36	24	10	5	4	79
REGIONAL TOTALS	245	244	126	76	59	750

TABLE C-9

PART I INDEX CRIMES - ALASKA STATE TROOPERS

1972

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
		REPORTED				
Criminal Homicide	15	15	7	11	13	61
Rape	27	21	7	6	4	65
Robbery	24	7	0	7	1	39
Assault	84	67	38	42	71	302
Burglary	554	287	154	295	67	1357
Larceny	916	432	297	240	60	1945
Auto Theft	268	90	47	39	9	453
REGIONAL TOTALS	1888	919	550	640	225	4222
		ACTUAL				
Criminal Homicide	11	10	3	6	12	42
Rape	22	15	4	6	3	50
Robbery	24	6	0	5	1	36
Assault	75	62	30	41	70	278
Burglary	533	277	142	278	63	1293
Larceny	885	402	280	219	53	1839
Auto Theft	245	75	41	36	9	406
REGIONAL TOTALS	1795	847	500	591	211	3944
		ARRESTS				
Criminal Homicide	11	9	3	6	11	40
Rape	7	12	3	3	3	28
Robbery	9	2	0	3	1	15
Assault	50	50	21	32	64	217
Burglary	73	85	29	67	35	289
Larceny	102	51	69	39	18	279
Auto Theft	21	12	14	12	5	64
REGIONAL TOTALS	273	221	139	162	137	932

TABLE C-10

PART I INDEX CRIMES - ALASKA STATE TROOPERS

1973

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
			REPORTED			
Criminal Homicide	24	18	11	20	17	90
Rape	23	16	7	3	13	62
Robbery	28	1	2	4	2	37
Assault	124	77	39	53	66	359
Burglary	707	250	227	241	107	1532
Larceny	1200	470	390	291	125	2476
Auto Theft	280	107	82	37	19	525
REGIONAL TOTALS	2386	939	758	649	349	5081
			ACTUAL			
Criminal Homicide	15	11	6	14	13	59
Rape	20	14	6	3	12	55
Robbery	27	1	1	4	2	35
Assault	115	77	33	49	65	339
Burglary	697	245	219	237	102	1500
Larceny	1164	450	369	275	108	2366
Auto Theft	254	95	77	35	17	478
REGIONAL TOTALS	2292	893	711	617	319	4832
			ARRESTS			
Criminal Homicide	14	10	6	13	13	56
Rape	4	8	3	3	11	29
Robbery	7	0	1	3	1	12
Assault	91	71	29	42	59	292
Burglary	141	58	66	29	56	350
Larceny	170	72	69	54	39	404
Auto Theft	40	18	19	12	9	98
REGIONAL TOTALS	467	237	193	156	188	1242

3. FORECAST DATA SERIES

The tables found in the following four subsections (TABLES C-11 through C-29) set forth a tabular summation of the findings of this report. These tables represent the original work of the study. They contain projected estimates of criminal activity for the forecast period 1974 through 1980, which are the product of the Alaska Criminal Justice Model.

TABLES

TABLES

TABLE C-11

BASELINE HISTORICAL & PROJECTED

TOTAL PART I INDEX CRIMES - STATEWIDE

YEAR	REPORTED	ACTUAL	ARRESTS
1969	12390	11712	2341
1970	12459	11891	2480
1971	13407	12688	2942
1972	15086	13733	3507
1973	17136	15027	3453
1974	18000	16600	4000
1975	22000	20600	5000
1976	25400	23800	5800
1977	26900	25200	6200
1978	28300	26400	6600
1979	29800	27600	6900
1980	31200	28700	7200

TABLE C-12

BASELINE HISTORICAL & PROJECTED

TOTAL PART I INDEX CRIMES - ALASKA STATE TROOPERS

YEAR	REPORTED	ACTUAL	ARRESTS
1969	4270	4057	628
1970	4470	4316	754
1971	3587	3380	750
1972	4222	3944	932
1973	5081	4832	1241
1974	5500	5300	1100
1975	7100	6800	1600
1976	8200	7900	2100
1977	8600	8300	2600
1978	9100	8700	2800
1979	9400	9100	3000
1980	9800	9400	3200

TABLE C-13

BASELINE HISTORICAL & PROJECTED

TOTAL PART II INDEX CRIMES - ALASKA STATE TROOPERS

YEAR	REPORTED	ACTUAL	ARRESTS
1969	4263	5155	2912
1970	6492	6353	4490
1971	6452	6284	4605
1972	5886	4663	3809
1973	6214	6064	4243
1974	7700	7400	3600
1975	10000	9600	4600
1976	11500	11000	5400
1977	12000	11600	4600
1978	12600	12100	5900
1979	13000	12500	6100
1980	13400	12800	6200

TABLE C-14

ALTERNATE PROJECTIONS

TOTAL PART I INDEX CRIMES - STATEWIDE

YEAR	REPORTED	ACTUAL	ARRESTS
		LOW	
1974	18000	16600	4000
1975	20700	19300	4700
1976	23400	21800	5300
1977	24300	22800	5600
1978	25400	23600	5900
1979	26800	24800	6200
1980	28100	25800	6500
		HIGH	
1974	18000	16600	4000
1975	23400	21700	5300
1976	27500	25500	6300
1977	29700	27600	6800
1978	32300	30000	7400
1979	34900	32400	8000
1980	36200	33500	8300
		WITHOUT PIPELINE CONSTRUCTION	
1974	13900	12900	3100
1975	14900	13900	3400
1976	16600	15400	3700
1977	18500	17200	4100
1978	20200	18800	4600
1979	22300	20700	5000
1980	24200	22500	5400

TABLE C-15

ALTERNATE PROJECTIONS

TOTAL PART I INDEX CRIMES - ALASKA STATE TROOPERS

YEAR	REPORTED	ACTUAL	ARRESTS
		LOW	
1974	5500	5300	1100
1975	6700	6500	1400
1976	7500	7300	1800
1977	7700	7400	2300
1978	8100	7800	2400
1979	8400	8100	2600
1980	8700	8400	2800
		HIGH	
1974	5500	5300	1100
1975	7400	7800	1800
1976	8800	8500	2400
1977	9500	9200	2900
1978	10400	10000	3200
1979	11200	10800	3500
1980	11600	11200	3900
		WITHOUT PIPELINE CONSTRUCTION	
1974	5300	5100	1000
1975	5700	5500	1200
1976	6300	6100	1400
1977	7000	6800	1700
1978	7600	7400	2000
1979	8300	8000	2300
1980	9000	8800	2600

TABLE C-16

ALTERNATE PROJECTIONS

TOTAL PART II INDEX CRIMES - ALASKA STATE TROOPERS

YEAR	REPORTED	ACTUAL	ARRESTS
		LOW	
1974	7700	7300	3600
1975	9500	7800	3800
1976	10500	10100	4900
1977	10800	10400	5100
1978	11200	10800	5200
1979	11600	11100	5400
1980	11900	12300	6000
		HIGH	
1974	7700	7400	3600
1975	10400	10000	4800
1976	12300	11800	5700
1977	13200	12700	6100
1978	14300	13800	6700
1979	15400	14900	7200
1980	15900	15300	7400
		WITHOUT PIPELINE CONSTRUCTION	
1974	7100	6800	3300
1975	7700	7400	3600
1976	8500	8200	4000
1977	9300	9000	4400
1978	10100	9800	4800
1979	11100	10700	5200
1980	12000	11700	5700

TABLE C-17

BASELINE REGIONAL PROJECTIONS

TOTAL PART I INDEX CRIMES - STATEWIDE *

YEAR	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	WESTERN & NORTHERN
			REPORTED		
1974	9900	3100**	2600	1700	700
1975	12100	3700	3200	2100	900
1976	14000	4300	3700	2400	1000
1977	14800	4500	3900	2600	1100
1978	15600	4800	4200	2700	1100
1979	16400	5000	4400	2800	1200
1980	17200	5300	4600	3000	1200
			ACTUAL		
1974	9200	2800	2400	1600	700
1975	11300	3500	3000	1900	800
1976	13100	4000	3500	2300	900
1977	13900	4300	3700	2400	1000
1978	14500	4500	3900	2500	1000
1979	15200	4700	4100	2600	1100
1980	15800	4800	4200	2700	1100
			ARRESTS		
1974	1800	700	700	500	300
1975	2200	900	900	600	400
1976	2600	1000	1000	700	500
1977	2800	1100	1100	800	500
1978	2900	1100	1200	800	500
1979	3100	1200	1200	800	600
1980	3200	1300	1300	900	600

* Regional breakdowns will not necessarily sum to the totals for each category listed on other Tables in this Section due to multiple rounding at lower breakdowns of crime type on the regional level as indicated in the projections found within Section 4 of this appendix.

** Figure has been adjusted from the raw projection to conform with relationships external to the particular forecast equation in order to establish internal consistency between the series of projections.

TABLE C- 18

BASELINE REGIONAL PROJECTIONS

TOTAL PART I INDEX CRIMES - ALASKA STATE TROOPERS *

YEAR	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	WESTERN & NORTHERN
			REPORTED		
1974	2600	1000	800	700	400
1975	3400	1300	1100	900	500
1976	3900	1500	1200	1000	500
1977	4100	1600	1300	1100	600
1978	4300	1700	1400	1200	600
1979	4500	1700	1400	1200	600
1980	4600	1800	1500	1200	600
			ACTUAL		
1974	2500	1000	800	700	300
1975	3200	1200	1000	900	400
1976	3700	1400	1200	1000	500
1977	3900	1500	1200	1000	500
1978	4100	1600	1300	1100	600
1979	4300	1700	1400	1200	600
1980	4500	1700	1400	1200	600
			ARRESTS		
1974	500	200	200	100	100
1975	700	300	300	200	100
1976	1000	400	400	300	200
1977	1200	500	500	300	200
1978	1300	500	500	300	200
1979	1300	500	500	400	200
1980	1400	600	600	400	300

* Regional breakdowns will not necessarily sum to the totals for each category listed on other Tables in this Section due to multiple rounding at lower breakdowns of crime type on the regional level as indicated in the projections found within Section 4 of this appendix.

TABLE C-19

BASELINE REGIONAL PROJECTIONS

TOTAL PART II INDEX CRIMES - ALASKA STATE TROOPERS *

YEAR	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	WESTERN & NORTHERN
			REPORTED		
1974	2900	1900	1400	1000	500
1975	3800	2300	1900	1300	700
1976	4300	2800	2100	1500	700
1977	4500	2900	2200	1600	700
1978	4700	3100	2300	1700	800
1979	4900	3200	2400	1700	800
1980	5000	3300	2500	1900	800
			ACTUAL		
1974	2800	1800	1300**	1000	500
1975	3600	2300	1800	1300	600
1976	4200	2700	2000	1500	700
1977	4400	2800	2100	1500	700
1978	4600	2900	2200	1600	700
1979	4700	3000	2300	1600	800
1980	4800	3100	2400	1700	800
			ARRESTS		
1974	1400	900	600**	500	200
1975	1800	1100	900	600	300
1976	2000	1300	1000	700	300
1977	2100	1400	1000	700	300
1978	2200	1400	1100	800	400
1979	2300	1500	1100	800	400
1980	2300	1500	1200	800	400

* Regional breakdowns will not necessarily sum to the totals for each category listed on other Tables in this Section due to multiple rounding at lower breakdowns of crime type on the regional level as indicated in the projections found within Section 4 of this appendix.

** Figure has been adjusted from the raw projection to conform with relationships external to the particular forecast equation in order to establish internal consistency between the series of projections.

TABLE C-20

ALTERNATE REGIONAL PROJECTIONS

TOTAL REPORTED PART I INDEX CRIMES - STATEWIDE

YEAR	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	WESTERN & NORTHERN
			LOW		
1974	9900	3100	2600**	1700**	700
1975	11400	3500	3100	2100	800
1976	12800	4000	3500	2300	900
1977	13400	4100	3600	2400	1000
1978	14000	4300	3800	2500	1000
1979	14700	4600	4000	2700	1100
1980	15400	4800	4200	2800	1100
			HIGH		
1974	9900	3100	2600*	2000	700
1975	12900	4000	3500	2300	1000
1976	15100	4700	4100	2700	1100
1977	16300	5000	4500	3000	1200
1978	17800	5500	4900	3200	1300
1979	19200	5900	5200	3500	1400
1980	19900	6100	5400	3600	1400
			W/O PIPELINE		
1974	7600	2400	2100	1400	600
1975	8200	2500	2200	1500	600
1976	9100	2800	2500	1700	700
1977	10100	3100	2800	1800	700
1978	11100	3400	3000	2000	800
1979	12200	3800	3300	2200	900
1980	13300	4100	3600	2400	1000

* Regional breakdowns will not necessarily sum to the totals for each category listed on other Tables in this Section due to multiple rounding at lower breakdowns of crime type on the regional level as indicated in the projections found within Section 4 of this appendix.

** Figure has been adjusted from the raw projection to conform with relationships external to the particular forecast equation in order to establish internal consistency between the series of projections.

TABLE C-21

ALTERNATE REGIONAL PROJECTIONS

TOTAL ACTUAL PART I INDEX - CRIMES - STATEWIDE *

YEAR	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	WESTERN & NORTHERN
			LOW		
1974	9200**	2800	2400**	1600**	700
1975	10600	3300	2900	1900	800
1976	12000	3700	3300	2200	900
1977	12500	3900	3400	2300	900
1978	13000	4000	3500	2400	1000
1979	13600	4200	3700	2500	1000
1980	14200	4400	4900	2600	1000
			HIGH		
1974	9200	2800	2400**	600**	700
1975	11900**	3700**	2300	2200	900
1976	14100	4400	3900	2600	1000
1977	15200	4700	4100	2800	1100
1978	16500	5100	4500	3000	1200
1979	17800	5500	4900	3200	1300
1980	18400	5700	5000	3300	1300
			W/O PIPELINE		
1974	7100	2200	1900	1300	500
1975	7700	2400	2100	1400	600
1976	8500	2600	2300	1500	600
1977	9500	2900	2600	1700	700
1978	10300	3200	2800	1900	800
1979	11400	3500	3100	2100	900
1980	12400	3800	3400	2300	900

* Regional breakdowns will not necessarily sum to the totals for each category listed on other Tables in this Section due to multiple rounding at lower breakdowns of crime type on the regional level as indicated in the projections found within Section 4 of this appendix.

** Figure has been adjusted from the raw projection to conform with relationships external to the particular forecast equation in order to establish internal consistency between the series of projections.

TABLE C-22

ALTERNATE REGIONAL PROJECTIONS

TOTAL ARRESTS PART I INDEX CRIMES - STATEWIDE *

YEAR	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	WESTERN & NORTHERN
			LOW		
1974	1800**	700	700	500	300
1975	2100	800	800	600	400
1976	2300	900	1000	600	400
1977	2500	1000	1000	700	400
1978	2500	1000	1100	700	500
1979	2700	1000	1100	700	500
1980	2800	1100	1200	800	500
			HIGH		
1974	1800	700	700	500	300
1975	2300	900	1000	600	400
1976	2800	1100	1100	800	500
1977	3000	1200	1200	800	500
1978	3300	1300	1300	900	600
1979	3500	1400	1400	1000	600
1980	3700	1400	1500	1000	700
			W/O PIPELINE		
1974	1400	500	600	400	200
1975	1500	600	600	400	300
1976	1600	600	700	400	300
1977	1800	700	700	500	300
1978	2000	800	800	500	400
1979	2200	900	900	600	400
1980	2400	1000	1000	700	400

* Regional breakdowns will not necessarily sum to the totals for each category listed on other Tables in this Section due to multiple rounding at lower breakdowns of crime type on the regional level as indicated in the projections found within Section 4 of this appendix.

** Figure has been adjusted from the raw projection to conform with relationships external to the particular forecast equation in order to establish internal consistency between the series of projections.

TABLE C-23

ALTFRNATE REGIONAL PROJECTIONS

TOTAL REPORTED PART I INDEX CRIMES - ALASKA STATE TROOPERS

YEAR	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	WESTERN & NORTHERN
			LOW		
1974	2600	1000	800	700	400
1975	3200	1200	1000	900	500
1976	3500	1300	1100	1000	500
1977	3600	1400	1200	1000	500
1978	3800	1500	1200	1000	600
1979	4000	1500	1300	1100	600
1980	4100	1600	1300	1100	600
			HIGH		
1974	2600	1000	800	700	400
1975	3500	1400	1100	1000	500
1976	4100	1600	1300	1100	600
1977	4500	1700	1400	1200	700
1978	4900	1900	1600	1400	700
1979	5300	2000	1700	1500	800
1980	5400	2100	1700	1500	800
			W/O PIPELINE		
1974	2500	900	900	700	400
1975	2700	1000	900	700	400
1976	3000	1100	900	800	400
1977	3300	1200	1000	900	500
1978	3600	1400	1100	1000	500
1979	3900	1500	1200	1100	500
1980	4200	1600	1400	1200	600

* Regional breakdowns will not necessarily sum to the totals for each category listed on other Tables in this Section due to multiple rounding at lower breakdowns of crime type on the regional level as indicated in the projections found within Section 4 of this appendix.

TABLE C-24

ALTERNATE REGIONAL PROJECTIONS

TOTAL ACTUAL PART I INDEX CRIMES - ALASKA STATE TROOPERS*

YEAR	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	WESTERN & NORTHERN
			LOW		
1974	2500	1000	800	700	300**
1975	3100	1000	1000	900	500
1976	3400	1300	1100	1000	500
1977	3500	1300	1100	1000	500
1978	3600	1400	1200	1000	500
1979	3800	1500	1200	1000	600
			HIGH		
1974	2500	1000	800	700	300**
1975	3700	1400	1200	1000	500
1976	4000	1500	1300	1100	600
1977	4300	1700	1400	1200	600
1978	5000	1800	1500	1300	700
1979	5100	1900	1600	1400	800
1980	5300	2000	1700	1500	800
			W/O PIPELINE		
1974	2400	900	800	700	400
1975	2600	1000	800	700	400
1976	2900	1100	900	800	400
1977	3200	1200	1000	900	500
1978	3500	1300	1100	1000	500
1979	3800	1400	1200	1000	600
1980	4100	1600	1300	1100	600

* Regional breakdowns will not necessarily sum to the totals for each category listed on other Tables in this Section due to multiple rounding at lower breakdowns of crime type on the regional level as indicated in the projections found within Section 4 of this appendix.

** Figure has been adjusted from the raw projection to conform with relationships external to the particular forecast equation in order to establish internal consistency between the series of projections.

TABLE C-25

ALTERNATE REGIONAL PROJECTIONS

TOTAL ARRESTS PART I INDEX CRIMES - ALASKA STATE TROOPERS *

YEAR	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	WESTERN & NORTHERN
			LOW		
1974	500	200	200	100	100
1975	600	200	300	200	100
1976	800	300	300	200	100
1977	1000	400	400	200	200
1978	1100	400	500	300	200
1979	1100	400	500	300	200
1980	1200	500	500	300	200
			HIGH		
1974	500	200	200	100	100
1975	800	300	300	200	100
1976	1100	400	500	300	200
1977	1300	500	600	300	200
1978	1400	500	600	300	300
1979	1600	700	700	400	300
1980	1700	700	700	400	300
			W/O PIPELINE		
1974	400	200	200	100	100
1975	500	200	200	100	100
1976	600	200	300	200	100
1977	700	300	300	200	100
1978	900	300	400	200	200
1979	1000	400	400	200	200
1980	1100	400	500	300	200

* Regional breakdowns will not necessarily sum to the totals for each category listed on other Tables in this Section due to multiple rounding at lower breakdowns of crime type on the regional level as indicated in the projections found within Section 4 of this appendix.

TABLE C-26

ALTERNATE REGIONAL PROJECTIONS

TOTAL REPORTED PART II INDEX CRIMES - ALASKA STATE TROOPERS *

YEAR	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	WESTERN & NORTHERN
		LOW			
1974	2900	1900**	1400	1000	500
1975	3600	2300	1700	1200	600
1976	4000	2500	1900	1400	600
1977	4100	2600	1900	1400	700
1978	4300	2700	2000	1500	700
1979	4400	2800	2100	1500	700
1980	4500	2900	2100	1600	700
		HIGH			
1974	2900	1900**	1400	1000	500
1975	4000	2500	1900	1400	600
1976	4700	2900	2200	1600	700
1977	5000	3200	2400	1700	800
1978	5400	3400	2600	1900	900
1979	6000	3700	2800	2000	1000
1980	6000	3800	2900	2100	1000
		W/O PIPELINE			
1974	2700	1700	1300	1000	400
1975	2900	1800	1400	1000	500
1976	3200	2000	1500	1100	500
1977	3500	2200	1700	1200	600
1978	3800	2400	1800	1300	600
1979	4200	2700	2000	1400	700
1980	4600	2900	2200	1600	700

* Regional breakdowns will not necessarily sum to the totals for each category listed on other Tables in this Section due to multiple rounding at lower breakdowns of crime type on the regional level as indicated in the projections found within Section 4 of this appendix.

** Figure has been adjusted from the raw projection to conform with relationships external to the particular forecast equation in order to establish internal consistency between the series of projections.

TABLE C-27

ALTERNATE REGIONAL PROJECTIONS

TOTAL ACTUAL PART II INDEX CRIMES - ALASKA STATE TROOPERS*

YEAR	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	WESTERN & NORTHERN
		LOW			
1974	2800	1800	1300	1000	500**
1975	3000	1900	1400	1000	500
1976	3800	2400	1800	1300	600
1977	4000	2500	1900	1400	600
1978	4100	2600	1900	1400	700
1979	4200	2700	1900	1400	700
1980	4700	2900	2200	1600	700
		HIGH			
1974	2800	1800	1300	1000	500**
1975	3800	2400	1800	1300	600
1976	4500	2800	2100	1500	700
1977	4800	3000	2200	1600	800
1978	5200	3300	2500	1800	800
1979	5600	3600	2700	1900	900
1980	5800	3700	2800	2000	900
		W/O PIPELINE			
1974	2600	1600	1200	900	400
1975	2800	1800	1300	1000	400
1976	3100	2000	1500	1100	500
1977	3400	2200	1600	1200	500
1978	3700	2400	1800	1300	600
1979	4100	2600	1900	1400	600
1980	4400	2800	2100	1500	700

* Regional breakdowns will not necessarily sum to the totals for each category listed on other Tables in this Section due to multiple rounding at lower breakdowns of crime type on the regional level as indicated in the projections found within Section 4 of this appendix.

** Figure has been adjusted from the raw projection to conform with relationships external to the particular forecast equation in order to establish internal consistency between the series of projections.

TABLE C-28

ALTERNATE REGIONAL PROJECTIONS

TOTAL ARRESTS PART II INDEX CRIMES - ALASKA STATE TROOPERS * WESTERN & NORTHERN

YEAR	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTHCENTRAL	NORTHERN
		LOW			
1974	1400	900	600	500	200
1975	1400	900	700	500	200
1976	1900	1200	900	600	300
1977	1900	1200	900	700	300
1978	2000	1300	900	700	300
1979	2100	1300	1000	700	300
1980	2300	1400	1100	800	400
		HIGH			
1974	1400	900	600	500	200
1975	1800	1200	900	600	300
1976	2200	1400	1000	700	300
1977	2300	1500	1100	800	400
1978	2500	1600	1200	900	400
1979	2700	1700	1300	1000	400
1980	2800	1800	1300	1000	400
		W/O PIPELINE			
1974	1300	800	600	400	200
1975	1400	900	700	500	200
1976	1500	1000	700	500	200
1977	1700	1100	800	600	300
1978	1800	1100	900	600	300
1979	2000	1300	900	700	300
1980	2220	1400	1000	700	300

* Regional breakdowns will not necessarily sum to the totals for each category listed on other Tables in this Section due to multiple rounding at lower breakdowns of crime type on the regional level as indicated in the projections found within Section 4 of this appendix.

TABLE C-29

PIPELINE IMPACT

YEAR	REPORTED	ACTUAL	ARRESTS
	BASELINE PART I - STATEWIDE		
	LESS W/O PIPELINE - STATEWIDE		
1974	4100	3800	900
1975	7100	6700	1600
1976	8800	8400	2100
1977	8400	8000	2100
1978	8100	7600	2000
1979	7500	6900	1900
1980	7000	6200	1800
	BASELINE PART I - AST		
	LESS w/O PIPELINE - AST		
1974	200	200	100
1975	1400	1300	400
1976	1900	1800	700
1977	1600	1500	900
1978	1500	1300	800
1979	1100	1100	700
1980	800	600	600
	BASELINE PART II - AST		
	LESS W/O PIPELINE - AST		
1974	600	600	300
1975	2300	2200	1000
1976	3000	2800	1400
1977	2700	2600	1200
1978	2500	2300	1100
1979	1900	1800	900
1980	1400	1100	500

4. REGIONAL PROJECTIONS BY CRIME TYPE ASSUMING BASELINE ESTIMATE

The following set of tables (C-30 through C-43) consists of regional projections by crime type and year from 1974 through 1980, assuming a baseline or medium degree of pipeline impact on criminal activity in Alaska. They are numbered and arranged as follows:

TABLES

TABLE C-30

REGIONAL BASELINE PROJECTIONS
PART I INDEX CRIMES - STATEWIDE
1974

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
			REPORTED			
Criminal Homicide	27	15	6	11	12	72
Rape	53	18	16	6	14	108
Robbery	135	18	11	9	7	180
Assault	415	252	302	138	151	1259
Burglary	2018	593	593	554	198	3956
Larceny	5840	1712	1410	805	302	10069
Auto Theft	1402	420	304	187	23	2337
REGIONAL TOTALS	9890	3028	2642	1710	707	17980
			ACTUAL			
Criminal Homicide	25	14	6	10	11	66
Rape	49	17	15	6	13	100
Robbery	125	17	10	8	7	167
Assault	385	233	280	128	140	1166
Burglary	1868	549	549	513	183	3663
Larceny	5408	1585	1305	746	280	9324
Auto Theft	1299	390	281	173	22	2165
REGIONAL TOTALS	9159	2805	2446	1584	656	16650
			ARRESTS			
Criminal Homicide	21	11	6	9	10	57
Rape	14	11	3	3	9	40
Robbery	49	4	3	8	1	65
Assault	158	137	110	130	151	686
Burglary	239	145	167	102	73	726
Larceny	1240	326	348	196	65	2175
Auto Theft	71	68	82	45	17	283
REGIONAL TOTALS	1792	702	719	493	324	4033

TABLE C-31

REGIONAL BASELINE PROJECTIONS

PART I INDEX CRIMES - STATEWIDE

1975

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
			REPORTED			
Criminal Homicide	33	18	8	13	15	87
Rape	65	22	20	8	17	132
Robbery	165	22	13	11	9	220
Assault	509	308	370	170	185	1541
Burglary	2469	726	726	678	242	4842
Larceny	7149	2095	1726	986	370	12326
Auto Theft	1717	515	372	229	29	2861
REGIONAL TOTALS	12107	3706	3235	2095	867	22009
			ACTUAL			
Criminal Homicide	31	17	7	12	14	81
Rape	61	21	19	7	16	124
Robbery	155	21	12	10	8	206
Assault	476	288	346	159	173	1441
Burglary	2310	679	679	634	226	4529
Larceny	6686	1960	1614	922	346	1152
Auto Theft	1606	482	348	214	27	2676
REGIONAL TOTALS	11325	3468	3025	1958	810	2057
			ARRESTS			
Criminal Homicide	26	13	7	11	13	70
Rape	18	14	4	4	11	51
Robbery	62	5	3	10	2	82
Assault	197	171	137	163	188	856
Burglary	299	181	209	127	91	907
Larceny	1551	408	435	245	82	2721
Auto Theft	88	85	102	56	21	353
REGIONAL TOTALS	2241	877	897	616	408	5039

TABLE C-32

REGIONAL BASELINE PROJECTIONS
PART I INDEX CRIMES - STATEWIDE

1976

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
			REPORTED			
Criminal Homicide	39	21	9	15	17	102
Rape	75	26	23	9	20	153
Robbery	191	25	15	13	10	254
Assault	587	356	427	196	214	1780
Burglary	2853	839	839	783	280	5595
Larceny	8260	2421	1994	1139	427	14241
Auto Theft	1984	595	430	264	33	3306
REGIONAL TOTALS	13989	4283	3737	2419	1001	25430
			ACTUAL			
Criminal Homicide	36	20	9	14	16	95
Rape	70	24	21	9	19	143
Robbery	179	24	14	12	10	238
Assault	550	333	400	183	200	1666
Burglary	2671	786	786	733	262	5237
Larceny	7732	2266	1866	1066	400	13331
Auto Theft	1857	557	402	248	31	3095
REGIONAL TOTALS	13095	4010	3498	2265	938	23806
			ARRESTS			
Criminal Homicide	30	16	8	13	15	82
Rape	20	16	5	4	13	58
Robbery	71	6	4	11	2	93
Assault	228	198	159	188	218	992
Burglary	347	210	242	147	105	1051
Larceny	1797	473	504	284	95	3153
Auto Theft	102	98	119	65	25	409
REGIONAL TOTALS	2595	1017	1041	712	473	5838

TABLE C-33

REGIONAL BASELINE PROJECTIONS
PART I - INDEX CRIMES - STATEWIDE
1977

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
			REPORTED			
Criminal Homicide	41	22	10	16	18	107
Rape	79	27	24	10	21	161
Robbery	202	27	16	13	11	269
Assault	620	376	451	207	226	1880
Burglary	3014	886	886	827	295	5909
Larceny	8724	2557	2106	1203	451	15042
Auto Theft	2095	629	454	279	35	3492
REGIONAL TOTALS	14775	4524	3947	2555	1057	26860
			ACTUAL			
Criminal Homicide	38	21	9	15	17	101
Rape	74	26	23	9	20	151
Robbery	189	25	15	13	10	252
Assault	583	353	424	194	212	1766
Burglary	2831	833	833	777	278	5550
Larceny	8194	2402	1978	1130	424	14127
Auto Theft	1967	590	426	262	33	3279
REGIONAL TOTALS	13876	4250	3708	2400	994	25226
			ARRESTS			
Criminal Homicide	32	17	9	14	16	87
Rape	22	17	5	4	14	62
Robbery	76	6	4	12	2	100
Assault	244	212	169	201	233	1059
Burglary	370	224	258	157	112	1121
Larceny	1917	504	538	303	101	3363
Auto Theft	109	105	126	70	26	436
REGIONAL TOTALS	2770	1085	1109	761	504	6228

TABLE C-34

REGIONAL BASELINE PROJECTIONS
PART I INDEX CRIMES - STATEWIDE
1978

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
			REPORTED			
Criminal Homicide	43	24	10	17	19	113
Rape	83	29	26	10	22	170
Robbery	212	28	17	14	11	283
Assault	654	397	476	218	238	1983
Burglary	3179	935	935	873	312	6233
Larceny	9202	2697	2221	1269	476	15865
Auto Theft	2210	663	479	295	37	3683
REGIONAL TOTALS	15583	4773	4164	2696	1115	28333
			ACTUAL			
Criminal Homicide	40	22	10	16	18	106
Rape	78	27	24	10	21	159
Robbery	198	26	16	13	11	264
Assault	611	370	444	204	222	1851
Burglary	2966	872	872	814	291	5816
Larceny	8586	2517	2073	1184	444	14804
Auto Theft	2062	619	447	275	34	3437
REGIONAL TOTALS	14541	4453	3886	2516	1041	26436
			ARRESTS			
Criminal Homicide	34	17	9	15	17	92
Rape	23	18	5	5	15	66
Robbery	80	6	4	13	2	105
Assault	257	223	179	212	246	1117
Burglary	390	236	272	165	118	1182
Larceny	2022	532	568	319	106	354
Auto Theft	115	110	133	74	28	460
REGIONAL TOTALS	2921	1142	1170	803	532	6568

TABLE C-35

REGIONAL BASELINE PROJECTIONS
PART I INDEX CRIMES - STATEWIDE
1979

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
			REPORTED			
Criminal Homicide	45	25	11	18	20	119
Rape	88	30	27	11	23	179
Robbery	224	30	18	15	12	298
Assault	689	418	501	230	251	2088
Burglary	3347	984	984	919	328	6563
Larceny	9689	2840	2339	1336	501	16705
Auto Theft	2327	698	564	310	39	3878
REGIONAL TOTALS	16409	5025	4384	2839	1174	29830
			ACTUAL			
Criminal Homicide	42	23	10	17	19	111
Rape	81	28	25	10	22	166
Robbery	207	28	17	14	11	276
Assault	639	387	464	213	232	1935
Burglary	3101	912	912	851	304	6080
Larceny	8976	2631	2167	1238	464	15476
Auto Theft	2156	647	467	287	36	3593
REGIONAL TOTALS	15202	4656	4062	2630	1088	27636
			ARRESTS			
Criminal Homicide	36	18	10	16	17	97
Rape	24	19	6	5	15	69
Robbery	84	7	4	13	2	110
Assault	270	235	188	223	258	1173
Burglary	410	248	286	174	124	1242
Larceny	2123	559	596	335	112	3725
Auto Theft	121	116	140	77	29	483
REGIONAL TOTALS	3068	1202	1230	843	557	6898

TABLE C-36

REGIONAL BASELINE PROJECTIONS
PART I INDEX CRIMES - STATEWIDE
1980

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
			REPORTED			
Criminal Homicide	48	26	11	19	21	125
Rape	92	32	28	11	24	187
Robbery	234	31	19	16	12	312
Assault	720	437	524	240	262	2183
Burglary	3500	1029	1029	961	343	6862
Larceny	10130	2969	2445	1397	524	17466
Auto Theft	2433	730	527	324	41	4055
REGIONAL TOTALS	17157	5254	4583	2968	1227	31190
			ACTUAL			
Criminal Homicide	44	24	10	17	20	115
Rape	84	29	26	10	22	172
Robbery	215	29	17	14	11	287
Assault	664	402	483	221	241	2012
Burglary	3225	949	949	885	316	6324
Larceny	9337	2737	2254	1288	483	16098
Auto Theft	2242	673	486	299	37	3737
REGIONAL TOTALS	15811	4843	4225	2734	1130	28746
			ARRESTS			
Criminal Homicide	37	19	10	16	18	100
Rape	25	20	6	5	16	72
Robbery	87	7	5	14	2	115
Assault	281	244	196	232	269	1222
Burglary	427	259	298	181	129	1294
Larceny	2213	582	621	349	116	3882
Auto Theft	126	121	146	80	30	503
REGIONAL TOTALS	3196	1252	1282	877	580	7187

TABLE C-37

REGIONAL BASELINE PROJECTIONS
PART I INDEX CRIMES - ALASKA STATE TROOPERS

1971

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
		REPORTED				
[illegible]	[illegible]	4	3	5	4	22
[illegible]	[illegible]	7	4	2	7	33
[illegible]	[illegible]	2	3	6	3	55
[illegible]	[illegible]	81	42	58	69	386
[illegible]	[illegible]	266	238	265	116	1656
[illegible]	[illegible]	500	424	318	132	2649
[illegible]	[illegible]	143	115	50	29	717
REGIONAL TOTALS	[illegible]	1007	839	704	360	5519
		ACTUAL				
[illegible]	[illegible]	4	3	5	4	21
[illegible]	[illegible]	8	4	2	7	32
[illegible]	[illegible]	2	3	6	3	53
[illegible]	[illegible]	78	41	56	67	371
[illegible]	[illegible]	254	239	254	111	1590
[illegible]	[illegible]	183	107	305	127	2544
[illegible]	[illegible]	138	110	48	28	689
REGIONAL TOTALS	[illegible]	867	807	676	347	5301
		ARRESTS				
[illegible]	[illegible]	4	2	3	3	17
[illegible]	[illegible]	3	1	1	2	11
[illegible]	[illegible]	1	1	2	0	18
[illegible]	[illegible]	38	41	27	42	192
[illegible]	[illegible]	41	47	28	20	203
[illegible]	[illegible]	91	97	55	18	609
[illegible]	[illegible]	19	23	13	5	79
REGIONAL TOTALS	[illegible]	193	215	129	90	1129

TABLE C-38

REGIONAL BASELINE PROJECTIONS
PART I INDEX CRIMES - ALASKA STATE TROOPERS

1975

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
		REPORTED				
Criminal Homicide	8	6	3	6	5	28
Rape	16	11	5	2	9	43
Robbery	54	2	4	8	4	71
Assault	174	104	55	75	89	497
Burglary	980	341	320	341	149	2130
Larceny	1636	648	545	409	170	3408
Auto Theft	489	185	148	65	37	923
REGIONAL TOTALS	3357	1297	1080	906	463	7100
		ACTUAL				
Criminal Homicide	7	5	3	6	5	27
Rape	15	11	5	2	9	11
Robbery	52	2	3	7	3	68
Assault	168	101	53	72	86	479
Burglary	944	328	308	328	144	2052
Larceny	1576	624	525	394	164	3284
Auto Theft	471	178	142	62	36	889
REGIONAL TOTALS	3233	1249	1039	871	447	6841
		ARRESTS				
Criminal Homicide	9	4	2	4	4	23
Rape	6	4	1	1	4	16
Robbery	20	2	1	3	1	26
Assault	63	55	44	52	60	273
Burglary	95	58	66	40	29	289
Larceny	495	130	139	78	26	868
Auto Theft	28	27	33	18	7	113
REGIONAL TOTALS	716	280	286	196	131	1608

TABLE C-39

REGIONAL BASELINE PROJECTIONS
PART I INDEX CRIMES - ALASKA STATE TROOPERS
1976

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
REPORTED						
Criminal Homicide	9	7	4	7	6	33
Rape	18	13	5	2	10	49
Robbery	68	2	4	9	4	82
Assault	301	120	63	86	103	573
Burglary	1130	393	369	393	172	2457
Larceny	1887	747	629	472	197	3931
Auto Theft	561	213	170	75	43	1065
REGIONAL TOTALS	3971	1496	1244	1044	535	8189
ACTUAL						
Criminal Homicide	9	6	4	7	6	32
Rape	17	12	5	2	10	47
Robbery	60	2	4	9	4	79
Assault	103	116	61	83	99	552
Burglary	1089	379	355	379	166	2367
Larceny	1818	720	606	455	189	3788
Auto Theft	541	205	164	72	41	1026
REGIONAL TOTALS	3730	1440	1199	1007	515	7891
ARRESTS						
Criminal Homicide	11	6	3	5	5	30
Rape	7	6	2	1	5	21
Robbery	26	2	1	4	1	34
Assault	84	73	58	69	80	365
Burglary	128	77	89	54	39	387
Larceny	661	174	186	104	35	1160
Auto Theft	38	36	44	24	9	150
REGIONAL TOTALS	955	374	383	261	174	2148

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REGIONAL BASELINE PROJECTIONS
PART I INDEX CRIMES - ALASKA STATE TROOPERS
1977

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
REPORTED						
Criminal Homicide	9	7	4	7	6	34
Rape	19	14	6	3	11	52
Robbery	65	3	4	9	4	86
Assault	211	127	66	90	109	603
Burglary	1188	413	387	413	181	2583
Larceny	1983	785	661	496	207	4132
Auto Theft	593	224	179	78	45	1119
REGIONAL TOTALS	4068	1573	1307	1096	563	8609
ACTUAL						
Criminal Homicide	9	7	4	7	6	33
Rape	19	13	6	3	11	50
Robbery	63	2	4	9	4	83
Assault	202	121	64	87	104	578
Burglary	1140	396	372	396	173	2478
Larceny	1855	734	618	464	193	3865
Auto Theft	569	215	172	75	43	1074
REGIONAL TOTALS	3857	1488	1240	1041	534	8261
ARRESTS						
Criminal Homicide	14	7	4	6	7	38
Rape	9	7	2	2	6	26
Robbery	32	3	2	5	1	43
Assault	103	90	72	85	99	448
Burglary	157	95	109	67	48	476
Larceny	812	214	228	128	43	1425
Auto Theft	46	44	54	30	11	185
REGIONAL TOTALS	1173	460	471	323	215	2640

TABLE C-41

REGIONAL BASELINE PROJECTIONS

PART I INDEX CRIMES - ALASKA STATE TROOPERS

1978

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
			REPORTED			
Criminal Homicide	10	7	4	8	7	36
Rape	20	14	6	3	11	54
Robbery	69	3	5	10	5	91
Assault	222	133	70	95	114	635
Burglary	1251	4355	408	435	190	2720
Larceny	2089	827	696	522	218	4352
Auto Theft	625	236	189	83	47	1179
REGIONAL TOTALS	4286	1655	1378	1156	592	9067
			ACTUAL			
Criminal Homicide	9	7	4	8	7	35
Rape	19	14	6	3	11	52
Robbery	66	3	4	10	4	87
Assault	214	128	67	92	110	610
Burglary	1203	419	392	419	183	2616
Larceny	2009	795	670	502	209	4186
Auto Theft	601	227	181	79	45	1134
REGIONAL TOTALS	4121	1593	1324	1113	569	8721
			ARRESTS			
Criminal Homicide	15	8	4	6	7	40
Rape	10	8	2	2	6	28
Robbery	34	3	2	5	1	45
Assault	111	96	77	91	106	481
Burglary	168	102	117	71	51	509
Larceny	870	229	244	137	46	1527
Auto Theft	50	48	57	32	12	198
REGIONAL TOTALS	1258	494	503	344	229	2828

TABLE C-42

REGIONAL BASELINE PROJECTIONS

PART I INDEX CRIMES - ALASKA STATE TROOPERS

1979

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
			REPORTED			
Criminal Homicide	10	8	5	8	7	38
Rape	21	15	6	3	12	57
Robbery	71	3	5	10	5	94
Assault	231	139	73	99	119	661
Burglary	1304	454	425	454	198	2835
Larceny	2177	862	726	544	227	4536
Auto Theft	651	246	196	86	49	1228
REGIONAL TOTALS	4465	1727	1436	1204	617	9449
			ACTUAL			
Criminal Homicide	10	7	4	8	7	36
Rape	20	14	6	3	11	54
Robbery	69	3	5	10	5	91
Assault	223	134	70	95	114	636
Burglary	1253	436	409	436	191	2724
Larceny	2092	828	697	523	218	4359
Auto Theft	626	236	189	83	47	1181
REGIONAL TOTALS	4293	1658	1380	1158	593	9081
			ARRESTS			
Criminal Homicide	16	8	4	7	8	43
Rape	11	8	2	2	7	30
Robbery	36	3	2	6	1	48
Assault	118	103	82	98	113	515
Burglary	180	109	125	76	55	545
Larceny	932	245	262	147	49	1635
Auto Theft	53	51	61	34	13	212
REGIONAL TOTALS	1346	527	538	370	246	3029

TABLE C-43

REGIONAL BASELINE PROJECTIONS

PART I INDEX CRIMES - ALASKA STATE TROOPERS

1980

	ANCHORAGE	FAIRBANKS	SOUTHEAST	SOUTH CENTRAL	WESTERN & NORTHERN	TOTAL FOR STATE
REPORTED						
Criminal Homicide	11	8	5	9	7	39
Rape	22	15	6	3	12	59
Robbery	74	3	5	11	5	98
Assault	240	144	75	103	123	685
Burglary	1350	469	440	469	205	2934
Larceny	2253	892	751	563	235	4694
Auto Theft	674	254	203	89	51	1271
REGIONAL TOTALS	4624	1785	1485	1247	638	9779
ACTUAL						
Criminal Homicide	10	8	5	8	7	38
Rape	21	15	6	3	12	57
Robbery	71	3	5	10	5	94
Assault	231	138	72	99	119	659
Burglary	1300	452	424	452	198	2826
Larceny	2171	859	724	543	226	4522
Auto Theft	649	245	196	86	49	1225
REGIONAL TOTALS	4453	1720	1432	1201	616	9421
ARRESTS						
Criminal Homicide	17	9	5	7	8	46
Rape	11	9	3	2	7	32
Robbery	40	3	2	6	1	52
Assault	126	110	88	104	121	549
Burglary	192	116	134	81	58	581
Larceny	994	261	279	157	52	1743
Auto Theft	57	54	66	36	14	226
REGIONAL TOTALS	1437	562	577	393	261	3229