SUSITNA HYDROELECTRIC PROJECT

FEDERAL ENERGY REGULATORY COMMISSION PROJECT No. 7114

DOCUMENTATION REPORT SOCIOECONOMIC IMPACT MODEL

VOLUME I

FINAL REPORT

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_ Alaska Power Authority _

SUSITNA HYDROELECTRIC PROJECT

DOCUMENTATION REPORT SOCIOECONOMIC IMPACT MODEL

Volume 1

Report by Frank Orth & Associates, Inc.

Under Contract to Harza-Ebasco Susitna Joint Venture

> Prepared for Alaska Power Authority

> > Final Report June 1985

NOTICE

ANY QUESTIONS OR COMMENTS CONCERNING THIS REPORT SHOULD BE DIRECTED TO THE ALASKA POWER AUTHORITY SUSITNA PROJECT OFFICE

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1.0 INTRODUCTION

1.1 PURPOSE AND BACKGROUND OI THE REPORT

The socioeconomic impact model for the Susitna Hydroelectric Project was originally developed in 1982 to assist in preparing the license application to the Federal Energy Regulatory Commission (FERC). The model and forecasts used in the license application incorporated the assumption that construction workers would be permitted and required to provide their own transportation to and from the Project construction site, and that workers would work one week on and one week off. This private vehicle scenario is referred to as the base case, since variations in worker transportation policy and mitigation measures have been evaluated with respect to this scenario.

The socioeconomic impact model has four principal parts or modules: economic-demographic, traffic, public facilities and services, and fis-The economic-demographic module dissaggregates forecasts for the cal. Fairbanks and Anchorage portions of the Railbelt to individual communities likely to be affected by construction of the Susitna Project, and estimates potential socioeconomic effects on the basis of a number of historical economic-demographic relationships and hypotheses concerning the tendency of workers to establish residence close to their place of work. The Railbelt forecasts disaggregated by the socioeconomic impact model are provided by the Man-In-The-Arctic Program (MAP) Economic Model, developed and operated by the Institute of Social and Economic Research of the University of Alaska. The MAP Model forecasts are also used in electric power load forecasting for the Susitna Project. The traffic produces forecasts of average annual traffic volumes from historical data on traffic trips, population, and employment. After the trips are determined, an allocation procedure is used to distribute trips from their place of origin to one of several destinations. The public facilities and services and fiscal modules apply historical rates of facility requirements and fiscal conditions to forecasted population to estimate potential project effects on these factors.

Since the license application was filed, base year data used in the model have been updated and a number of refinements have been made to improve the model's forecasting capability. Altlernative construction worker transportation and hiring plans have also been formulated. The alternative plans include use of air and bus transportation systems instead of permitting private vehicles into the construction village. The alternative hiring scenarios assume different hiring ratios between the Fairbanks and Anchorage areas. The socioeconomic impact model used to prepare the base case forecasts was modified to simulate the socioeconomic effects of these alternative transportation and hiring scenarios.

This report describes the recent updates and refinements that have been made in the socioeconomic impact model, the modifications made in the model to examine alternative worker transportation and hiring scenarios, and the resulting forecasts of potential Project impacts under both the base case and a set of three air and bus transportation scenarios. These forecasts will be used in project planning, especially planning relating to construction work force management and hiring, mitigation planning, and the settlement process.

1.2 IMPLICATIONS OF TRANSPORTATION AND HIRING SCENARIOS TO SOCIOECONOMIC IMPACT ASSESSMENT

Under the air transportation scenario, construction workers would be flown to the construction site from airports in either Anchorage, Fairbanks, or both locations. Work shifts would probably be a minimum of about 17 days under this scenario. Under the bus scenario, workers would be bussed from Anchorage, Fairbanks, or both municipalities, as well as certain intermediate locations such as Cantwell. Some bus transportation would probably also supplement the air scenario.

Socioeconomic effects on Parks Highway communities such as Cantwell, Trapper Creek, Talkeetna, and Healy would be of lesser magnitude under either the air or bus transportation plan than in the base case, since workers would have much less incentive to establish residence close to the construction site at Watana. In fact, under the air transportation plan workers would have very little, if any incentive, to locate outside

the greater Anchorage or Fairbanks areas. A similar condition would exist under the bus transportation plan, provided bus service along the Parks was quite limited. However, the feasibility of imposing such a limitation is probably not great, since provision must be made for accommodating residents of the Parks Highway communities seeking work on the Project.

While there would be some difference in socioeconomic effects between the air and bus transportation plans, both of these cases would have significantly less effects on communicies along the Parks Highway than the base case in which construction workers would drive private vehicles to the construction site. The air and bus plans were therefore treated as one transportation scenario for purposes of comparing their socioeconomic effects with those that would result under the base case. The comparisons shown in this report demonstrate that the air and bus scenario produces significantly less socioeconomic effect on the Parks Highway communities than does the base case.

In formulating any air or bus transportation scenario where workers originate in either Anchorage or Fairbanks, it is necessary to develop assumptions concerning the number of workers that will be employed from each metropolitan area. To examine a broad range of assumptions, three hiring ratios were used:

- o 77 percent of construction workers hired from Anchorage and 23 percent of construction workers hired from Fairbanks; this ratio is based on the ratio of their respective populations at the present time; this scenario is referred to as the reference case in this report.
- l00 percent of construction workers hired from Anchorage; this ratio is based on the use of only one point of departure, such as one airport.
- o 50 percent of construction workers hired from Anchorage and 50 percent of construction workers hired from Fairbanks; this ratio reflects the relative proximity of the Watana site to Fairbanks.

Effects of each of these hiring scenarios on Parks Highway communities would be similar, with the principal effects occurring, as would be expected, in the metropolitan areas of Anchorage and Fairbanks. These effects are estimated in this report.

1.3 CONTENTS AND ORGANIZATION OF REPORT

Chapter 2 of this report lists the revisions that have been made in base year and other basic data used as input to the socioeconomic model since the last documentation report was published in March 1984. Chapter 3 describes a number of enhancements that have been made in the model's methodology that are intended to permit the model to more closely simulate present and future socioeconomic conditions in the Railbelt. The detailed assumptions applied in developing the air and bus transportation scenarios are described in chapter 4. This chapter also descubes the assumptions relating to the hiring of workers in the Anchorage and Fairbanks areas. Chapter 5 presents revised base case socioeconomic forecasts as well as forecasts developed under each of the three air and bus transportation scenarios. The socioeconomic forecasts include projectinduced effects on economic and demographic conditions, traffic, public facilities and services, and local fiscal conditions.

Two separately bound appendices have been prepared to provide additional community specific information and documentation of the socioeconomic model. Appendix A gives a summary and comparison of Susitna projectinduced socioeconomic effects under the base case and the three air and bus scenarios for each of several Railbelt cities and communities. Appendix B provides a complete listing of the socioeconomic model's variable and parameter values and definitions.

2.0 DATA REVISIONS AND UPDATES

2.1 UPDATES OF SECONDARY DATA AND PRIMARY DATA

This section contains a discussion of data collected for the Susitna Hydroelectric Project studies during FY85. The topic areas that are discussed include: 1) project construction employment; 2) construction worker characteristics; 3) employment; 4) population; 5) housing characteristics; 6) public facilities and services; and 7) fiscal resources.

2.1.1 Construction Work Force Requirements.

An important indicator of the magnitude of Project effects on specific communities that would be affected by the construction of the Susitna Hydroelectric Project is the size of the construction work force. During FY85, new construction work force estimates were generated. The new estimates are shown in Table 2.1.

These estimates represent a substantial (60 percent) reduction in work force size as compared to the estimates used in the License Application to the Federal Energy Regulatory Commission (FERC). In 1990, average annual construction employment is estimated to be 1,417 jobs versus the 3,498 workers used in the License Application. Another reason for the reduction in the newer work force estimates is related to the fact that peak monthly work force estimates were used in the FERC License Application and average annual numbers are now used in all FY85 forecasts. The major reason for this change was that the use of the former work force estimates represented a worst case scenario (in terms of in-migration) with a low probability of occurrence. The use of average annual work force estimates represents a more likely occurrence.

2.1.2 Construction Work Force Socioeconomic Characteristics.

Additional data on construction worker characteristics was gathered during FY85. Because of the lack of data on Alaskan construction workers, a continuing data gathering effort spanning FY83 to FY85 was undertaken to improve the reasonableness of the assumptions made regarding construction worker characteristics. Three surveys of two projects were conducted and used in conjunction with the results from larger, more extensive, efforts conducted in the Lower 48 states. The assumptions that were made in the Susitna socioeconomic impact wodel are shown in Table 2.2. Data collected from the Alaska project surveys are also shown for comparison.

The major differences between the assumptions used in the Susitna socioeconomic impact model and the survey results also shown are the percent of workers who would be Alaska residents, work force origin assumptions, the percent of movers that would be accompanied by dependents, and the percent of movers that plan to remain in local communities. Movers are defined as individuals who reside outside the local area prior to obtaining jobs on a construction project and who move their permanent residence into an area after obtaining employment on a project.

The percent of local residents (those living in the Mat-Su Borough) that would obtain Project construction jobs was assumed to be smaller than the results found in the surveys. The rationale for this difference is related to the larger size of the Susitna construction work force and the longer time period over which Project construction would be performed. For projects in rural areas, local residents with requisite skills for construction can fill a specified number of jobs on any construction project. However, as the size of the construction work force increases, the percentage of workers that are local residents will decline. Longer construction periods are also expected to increase the percentage of uonlocal residents in the construction work force as people outside the immediate project vicinity have more time to become aware of construction employment opportunities and to act on this information.

It was assumed that the Railbelt economy has matured to the point where construction employment opportunities generated by the Susitna Project can be adequately filled by existing residents. However, support employment opportunities induced by the Project would be filled by a mixture of Railbelt residents and other people from outside the Railbelt.

The percent of movers that would be accompanied by dependents would be higher than that found in the other surveys of other projects because the construction periods for the other projects extended for only several years whereas the Susitna Project construction period is expected to last for a period of 17 years. The longer time frame should provide fairly stable employment opportunities for many people and increase the likelihood that permanent residences may be changed.

It was assumed that out-migration by construction workers after project construction is completed would be close to 100 percent. This assumption is based on the MAP model determination of net population migration which seeks to balance labor demand with labor supply. Since no large project similar to the Susitna project is expected to occur after 2002, it is likely that most of the construction workers would leave to seek other areas offering greater opportunities for employment.

2.1.3 Base Year Employment and Unemployment Rates.

During FY85, data on employment and unemployment rates for the years 1983 and 1984 became available. This information was gathered from the Statistical Quarterly series, Alaska Economic Trends publications, and from estimates by Frank Orth & Associates, Inc. using partial data available for 1984. The data collected are shown in Table 2.3.

2.1.4 Base Year Population.

Population data for 1983 and limited information for 1984 became available during FY85. Data for 1983 came from the Alaska Department of Labor's publication, <u>the 1983 Population Overview</u>, and from the Mat-Su Borough Planning Department's <u>Annual Survey of Population and Housing</u>. Data for 1984 were derived from population estimates from the Anchorage and Kenai Planning Departments, the <u>Annual Survey of Population and Housing</u>, 1984, by the Mat-Su Planning Department, and socioeconomic surveys conducted by Harza-Ebasco for the communities of Trapper Creek, Cantwell, Healy, and Talkeetna. Data for other communities are based on population fore: dsts from the Susitna socioeconomic impact model. Data for all communities are shown in Table 2.4.

2.1.5 Base Year Housing.

Table 2.5 contains information that was collected on housing characteristics during FY85. Household numbers were generated from population estimates and household size estimates. The latter were obtained from census data and ISER model forecasts of population and households. State household size projections were then used to determine growth trends in household size for community and census division areas. After household size estimates were generated for 1983 and 1984, the number of households were obtained by dividing population by household size. Vacancy rates were determined from census data, from survey data collected on individual communities, and from estimates obtained from borough planning departments.

2.1.6 Base Year Public Facilities and Services Characteristics.

Since FY81, data on public facilities and services have been gathered each fiscal year for the Mat-Su Borough communities and Cantwell. During FY85, however, additional communities had data collected on their public facilities and services. These included: Healy, Nenana, the Nenana City Public School, the Railbelt School District, Anchorage, and Fairbanks. Data were obtained primarily through key informant interviews conducted either through meetings or over the phone. The results of the data collection effort are presented in Table 2.6 for major facilities and services.

Demand for each facility and service was determined from historical information that was gathered on average daily and peak use. This information was then combined with historical population estimates to determine per capita (or per household) standards that could be applied to the economic-demographic forecasts of population (or households). The specific values used for each facility and service by community are shown in Appendix B, part 4.

2.1.7 Base Year Fiscal Conditions.

Per capita revenue and expenditure multipliers have been used to project the effects of the Project on local fiscal conditions. These multipliers have been constantly revised and updated since FY81. Revision is a necessary element in reporting per capita multipliers as the actual monies spent on specific expenditure categories and revenue estimates are not determined until after each fiscal year is over. Thus, in any budget document, there will be several budgets shown for any particular year. For example, the FY85 Mat-Su Borough budget contains and actual FY83 budget, and estimated FY84 budget, and an approved FY85 budget. Both the FY84 and FY85 budgets will be revised in future budget publications. However, at the present time, the budgets for FY81, FY82, and FY83 have been finalized. Given adjustments for calendar year, both the 1983 and 1984 calendar year fiscal conditions will be revised in future fiscal years. Per capita multipliers for total revenues and expenditures in 1983 and 1984 are shown in Table 2.7. Values for specific per capita multipliers are shown in Appendix B, part 5.

2.2 ASSUMPTIONS

A major change in model assumptions includes an effort to adopt consistent definitions of the Railbelt region as they exist in the ISER MAP model and in the Susitna socioeconomic impact model. The MAP model's definition of the Railbelt region includes the Anchorage area and the Fairbanks area. The Anchorage area includes the Municipality of Anchorage, the Kenai Peninsula Borough, and the Mat-Su Borough. The Fairbanks area was defined as the Fairbanks-North Star Borough and the SE Fairbanks Census Division.

Previous socioeconomic modeling efforts defined the Railbelt region to include the Valdez-Chitina-Whittier census division and the Railbelt portion of the Yukon-Koyukuk census area as shown in Map 1 in order to capture all significant effects of the Project. However, in subsequent modeling efforts, the effects on the Valdez-Chitina-Whittier census division were determined to be negligible with the possible exception of the community of Paxson. Significant effects were likely to occur in the Railbelt portion of the Yukon-Koyukuk census area because of certain off-site Project facilities (i.e., the Cantwell railhead and transmission line construction) and the proximity of communities in this area to the



NOTE

SOURCE: ALASKA DEPARTMENT OF LABOR, RESEARCH AND ANALYSIS SECTION, U.S. CENSUS MAPS PROVIDED IN 1983 POPULATION OVERVIEW, JANUARY 1985 Project site. Therefore, for purposes of the Susitna socioeconomic impact model, it was decided to include the community of Paxson and the Railbelt portion of the Yukon-Koyukuk census area in the definition of the Fairbanks area. To maintain consistency between baseline forecasts, projections of baseline population, employment, and housing for these two areas were added to the respective ISER forecasts for the Fairbanks area and the Railbelt.

Several sets of assumptions were changed in FY85 to correspond with new data that were obtained. These include: 1) MAP model forecasts of employment, population, net migration, and households; 2) the construction work force origin assumptions by census divisions; 3) the construction work force origin assumptions for the communities in the Mat-Su Borough and the Railbelt portion of the Yukon-Koyukuk census area; and 4) forecasts of unemployment rates for census divisions in the Railbelt.

The MAP model forecasts of employment, population, and housing were adjusted upward to reflect more recent data available on these characteris-The MAP model forecasts were prepared in December 1984 and thus, tics. do not incorporate more recent data on population and employment that became available in January 1985. Because the differences between the more recent data and the ISER forecasts were sizeable (for example, the ISER forecast of population in 1983 was about 20,000 people lower in the Anchorage Area than more recent estimates from state sources), adjustments were made to the 1983 and 1984 ISER forecasts and then carried through each year of the projection period. The rationale for making this type of adjustment was: 1) the large differences are a unique phenomenon related to significant population in-migration in the years 1983 and 1984; and 2) that certain socio-demographic characteristics of the population have undergone substantial change (i.e., labor force participation rates have fallen).

Three other assumptions were changed to reflect consistency with the ISER MAP model forecasts, the likely distribution of support employment benefits from the family village at the Project site, and the percent of in-migrants that would be needed to fill support jobs and jobs vacated by residents taking construction jobs on the Project.

First, the out-migration rates applied to the in-migrants filling support jobs or jobs vacated by construction workers were adjusted to 100 percent from 30 percent. This adjustment reflects the fact that MAP model forecasts project migration by balancing labor supply with labor demand and that no major project is expected to employ Susitna contruction workers after project construction is completed.

Second, it was assumed that the support employment generated by construction workers residing at the village would be dispersed to Mat-Su Borough communities, Cantwell, Fairbanks, and Anchorage. Under the FY84 forecasts, Anchorage did not receive any of the support employment generated by village construction workers. The FY85 forecasts have been adjusted to reflect the fact that most of the support employment would be generated in Anchorage because of the longer shift and rotation schedule of approximately 17 days. In addition, support employment multipliers for the rural/remote areas of the Mat-Su Borough were revised downward to reflect the difficulty of retaining employment benefits in areas with small, undiversified, and largely non-cash economies.

Third, the percent of workers that would in-migrate to communities in response to employment created in local support sectors and jobs vacated by local residents taking Project construction jobs was adjusted. Rural areas were expected to have larger percentages of workers in-migrating for any support or other jobs related to the Project as compared to urban areas.

One other assumption that was changed in order to conform with the most recent data available had to do with the percentage of the construction work force that would be laborers, semi-skilled/skilled workers, and administrative or engineering professionals. In the prior versions of the model, these percentages were assumed to be 68 percent for laborers, 18 percent for semi-skilled/skilled workers, and 14 percent for administrative or engineering professionals. These percentages were modified to 20 percent, 55 percent, and 25 percent, respectively.

3.0 ENHANCEMENTS IN METHODOLOGY

3.1 SUSITNA SOCIOECONOMIC IMPACT MODEL

This section summarizes the approach used in the Susitna socioeconomic impact model before describing the geographical coverage of the model's procedures.

3.1.1 Approach.

Three alternative theoretical concepts were examined as a possible foundation for the Susitna socioeconomic impact model. These alternatives include location, central place, and economic base theories. Economic base theory was relied upon heavily as a modeling approach because its strength lay in estimating how secondary industry sectors will change in response to a change in direct industry sectors like energy generation. This is relevant for the Susitna Project because one of the most significant sources of impacts will be employment and population growth that is stimulated by the Project's direct employment.

In economic base theory, there are two key concepts. First, it assumes that the economy may be split into two sectors: direct and secondary. Businesses and other economic entities that sell goods and services to places, or people who live, outside of the local economy comprise the direct sector. Those that sell goods and services within the local economy comprise the secondary sector.

Second, it assumes that the amount of secondary activity is determined by the amount of direct activity. The method used to project impacts of the Project follows economic base theory in that secondary (support sector) impacts of the Project are estimated using employment multipliers. It is assumed that the level of secondary activity is uniquely determined by the level of direct (basic sector) activity and that a given change in the level of direct activity will bring about a predictable change in secondary activity (Leistritz and Murdock, 1981). Thus, the creation of a given number of construction jobs will create a predictable number of secondary jobs in related industries and the service sector. Several techniques were used in conjunction with the aggregate employment multiplier method to project impacts. Some of the more important techniques are:

- linear regression trend analysis to allocate ISER's MAP model baseline employment and population projections to smaller geographic areas;
- o gravity allocation models to allocate inmigrating workers to communities;
- o person per household multiplier trends to project numbers of households;
- per capita planning standards to project demands for public facilities and services; and
- per capita fiscal multipliers to project revenues and expenditures for local jurisdictions with and without the project.

The Susitna socioeconomic impact model structure is detailed in Appendices B-2, B-3, B-4, and B-5. However, for a more thorough description of the model approach, the techniques used to project impacts, and narrative on the structure of the model, see the <u>Working Paper on Regional</u> <u>Disaggregation Procedures, Working Paper Number 2: Technical Description</u> of the Socioeconomic Model, and <u>Projection Assumptions, Methodology and</u> <u>Output Formats</u> prepared by Frank Orth & Associates, Inc. for the Alaska Power Authority.

3.1.2 Geographical Coverage of Model Procedures.

The Susitna socioeconomic impact model was designed to include all areas that may reasonably be affected by construction and operation of the Project. Given the location of the Project, the existing transportation network, and the location of existing communities, Project effects are expected to be concentrated in the Railbelt region as defined in section 2.2. However, Project effects will be significant in some, but not all,

communities located in the defined Railbelt region. In order to determine the likely distribution of effects, three characteristics for every major geographic jurisdiction and community are examined. Employment, population, and housing effects from the Project will provide three good indicators of the size and significance of Project effects in the Railbelt region and its geographical components. The areas that will be reported on for these characteristics are shown in Table B.1-1 and B.1-2 in Appendix B.

Based on preliminary distributions of effects, it was determined that the communities of Kenai, Soldotna, Homer, Seward, Delta Junction, and North Pole were not likely to be significantly affected (i.e., population effects would not exceed 5 percent of the baseline population in any one year). Therefore, these communities were excluded from further analysis in the Susitna socioeconomic impact model. Traffic, facilities and services, and fiscal effects were not examined.

Several communities that had been included in the analysis during FY84 were excluded from consideration in FY85. The communities of Valdez, Glennallen, Copper Center, and Gulkana were excluded because significant Project effects were not found in model runs. Employment effects on the entire census division did not exceed 2 percent in the FY84 forecasts and the number of workers that would in-migrate in any one community did not exceed four in any year. These effects would be even smaller under the current operating assumptions in which the size of the work force was reduced by 40 percent and all workers originate in the Railbelt.

The community of McKinley Park was excluded for a different reason. According to FY84 forecasts, significant effects were shown to occur in this community. However, due to land availability, it was determined that significant population in-migration is precluded in this area. Thus, it made sense to exclude this community from the analysis conducted in FY85 and redistribute the population in-migration that had occurred under previous forecasts to other communities that could accommodate this influx.

3.2 ECONOMIC-DEMOGRAPHIC MODULE

3.2.1 Approach.

The basic approach to determining project effects on employment, population, and housing conditions was to start with estimates of the total construction and operations work force. Then, the labor categories of these workers were determined. After these classifications were made, workers were further disaggregated into those workers that would work at the dam site, the railhead, and the transmission 1. . The place of origin for each type of worker was also determined. The latter two groups were subtracted from the labor category totals and separately distributed to railhead sites and transmission line staging sites.

Workers who would work at the Project sites were then assigned to specific places of residence. The choices for these workers included retaining their permanent residence at the place of origin and living at the work camp, moving their permanent place of residence to the family village, or moving their permanent place of residence to communities near the Project site but different from their place of origin. First, workers who would be assigned housing at the family village were determined. Then, the number of workers who would relocate their permanent residence to other communities was determined. The nonrelocaters who would live at the work camp were determined by subtracting the village workers and relocaters from the total number of workers who would construct the dams. The settlement patterns of the relocaters were determined through gravity allocation procedures.

Project effects on employment were then determined for each community or area by aggregating over the number of project workers who would be nonrelocaters, relocaters, railhead workers, or transmission line workers. Baseline employment that would be used to construct energy facilities if the Susitna Project is not built were then subtracted from each community total as appropriate before secondary employment effects were determined.

After project effects on employment have been determined, project-related population in each community or area was forecast. First, the number of

in-migrants necessary to fill project-related jobs and jobs vacated by local residents taking project-related jobs were determined. Person per household multipliers were then applied to the expected in-migration (or out-migration) of workers to obtain forecasts of project effects on population.

After population effects were determined, project effects on housing were derived. Housing effects were derived from the number of in-migrating (or out-migrating) workers in each community. These forecasts were compared with forecasts of the number of housing units to complete the analysis of housing conditions.

3.2.2 Enhancements In Existing Procedures

Twelve enhancements were made in the existing procedures described above during FY85. These included:

- the methods used to aggregate effects up to the Anchorage area, the Fairbanks area, and the Railbelt region;
- the methods used to disaggregate baseline employment and population effects from the Project;
- 3. the methods used to account for employment related to building the without-project energy facilities;
- 4. the methods used to account for hiring assumptions;
- 5. the methods used to account for employment by place of work;
- 6. the methods used to determine out-migration of workers from places receiving relocaters so that they can be tracked back to their place of origin;
- the methods used to determine secondary employment by place of residence from secondary employment by place of work;
- the methods used to determine Railbelt School District population;
- 9. the methods used to avoid negative number in village and gravity allocation procedures;
- 10. adjustments in the direct in-migrating married worker variables (DIMM) to account for railhead and transmission line workers; and
- 11. the methods used to determine gravity model attraction factors.

The first enhancement was made in order to take into account a more complete definition of the geographic area that would experience projectrelated effects. The definition of the Fairbanks area was modified for two reasons. First, project effects would occur in the Railbelt portion of the Yukon-Koyukuk census division because the railhead used during Watana construction would be in Cantwell. Second, the use of Fairbanks as a hiring center and debarkation point under the Air and Bus transportation scenarios required that communities surrounding Fairbanks in every direction be considered as places for secondary in-migrants to relocate. Thus, the community of Paxson was added to the Fairbanks area definition. No changes were made in the Anchorage area; it still included the Municipality of Anchorage, the Mat-Su Borough, and the Kenai Peninsula Borough. The Railbelt region was then defined as the sum of the Anchorage and Fairbanks areas.

The second enhancement was made in order to take into account the work that was carried out in the report on Working Paper on the Regional Disaggregation Procedures and the new definition used for the Fairbanks area. More recent and current data were available on the employment and population percent shares of the census divisions that comprise each of these areas. This information was incorporated into the percent share trend variables (BSPP and BSEM). Second, the recommendations regarding the which disaggregation procedure to use for each area and characteristic were incorporated. For example, in the case of employment in the Fairbanks area, it was recommended that the TAPS years be excluded from the linear regression analysis used to determine the percent share growth trends. Third, the percent share trends in the Fairbanks area for employment and population were modified to take into account the Railbelt portion of the Yukon-Koyukuk census division and the community of Paxson.

The third enhancement was not possible to undertake in previous forecasts because estimates of the number of workers required to build baseline energy facilities were not available. However, during FY85, these estimates were prepared and distributed to the project team. The estimates are identified in the model as "BEMP." They were used in the calculation of direct employment effects by community or area, in the determination of the number of vacated local jobs, in the determination of

direct population effects, and in the forecast procedures for direct household effects. In each instance, the proportion of baseline energy employment, population, and households that would reside in each community or area was subtracted from the respective direct project effects which did not take into account baseline energy employment.

The fourth enhancement was made so that different hiring ratios used under the different Air and Bus scenarios could be easily incorporated into the Susitna socioeconomic impact model. First, the assumptions were added at the top of the model. Second, the assumption values were applied to the determination of the origin of the railhead, transmission line, and dam construction workers and the baseline employment associated with energy generating facilities required under the without-project alternative.

The fifth enhancement was made in order to more systematically cover employment effects by place of work. During FY84, place of work estimates were shown for the Mat-Su Borough but for no other areas. As a consequence, it was not clear when employment was in terms of place of work or when employment was in terms of place of residence. This distinction was sharpened during FY85. Because transmission line workers, railhead workers, and dam site workers are all explicitly accounted for in the Susitna socioeconomic impact model, it was very easy to develop procedures to show employment by place of work. All direct construction and operations jobs occur in the Mat-Su Borough with the exception of jobs at the Cantwell railhead and jobs associated with transmission line staging sites in Anchorage and Fairbanks. Secondary employment effects by place of work were assumed to reflect the settlement patterns of the direct construction and operations workers on the Project.

The sixth enhancement was one of the more complex of the enhancements to implement. In FY84, communities that received in-migration would automatically experience out-migration when construction employment began to decline. However, communities that provided the in-migrants did not necessarily receive back those in-migrants in the same proportion that they were sent.

The ability to track out-migration from communities receiving relocaters from Ancharage and Fairbanks has been greatly improved. More elaborate indicators of the origin of relocaters have been added so that the difference between the total married and single workers originating from a community and the married and single workers that would not relocate can be monitored for every year. This difference then represents the number of married and single dam construction workers from a community that have relocated to the viilage or other communities. When adjusted by person per household multipliers and the origin of married and single railhead workers and transmission line workers, the difference serves as an indicator of out-migration. The variables labeled "DOMP" and "DOSP" in the module represent the amount of out-migration in a community unadjusted for retention of relocaters.

The out-migration and return of relocaters has also been adjusted for the amount of retention of relocaters by local study area communities. For example, if 50 percent of relocaters still reside in communities to which they have relocated, then the number of returning relocaters to Anchorage and Fairbanks would be reduced by 50 percent. The procedures that adjust for retention rates are described by the variables labeled "DAOM" and "DAOS" in the module. As stated in section 2.2, out-migration rates were assumed to be 100 percent.

The seventh enhancement changed the methods to determine secondary employment by place of residence from secondary employment by place of work. In prior versions of the Susitna socioeconomic impact model, it had been assumed that employment by place of residence would be the same as employment by place of work. This assumption was modified so that the consistent forecasts between the base case and complementary models would be obtained. The base case model was modified so that workers inmigrating to take secondary employment opportunities and vacated local jobs in Anchorage and Fairbanks had the option to relocate to communities in the Mat-Su Borough and the Railbelt portion of the Yukon-Koyukuk census division. The number of secondary in-migrants that would work in the municipalities and live elsewhere were determined from initial allocations of secondary relocaters in the complementary model. The percentage of this total that would relcoate to recipient communities was determined

by the population shares that each recipient community represented of the total recipient communities that could receive im-migrants excluding the municipalities.

The eighth enhancement was the determination of the Railbelt School District population from existing information on population for the Railbelt Portion of the Yukon-Koyukuk census division and the communities therein. The Railbelt School District serves the entire population of the Railbelt Portion of the Yukon-Koyukuk census division with the exception of the City of Nenana which has its own school district. Therefore, population for the Railbelt School District was determined by subtracting the population of Nenana from the Railbelt Portion of the Yukon-Koyukuk census division for each year.

The ninth enhancement was the development of ways to avoid negative numbers in the village and gravity allocation procedures. During initial runs of the economic-demographic module, negative numbers in the village assignment procedures and gravity allocation distributions occurred because net construction employment was being distributed. These numbers did not make intuitive sense since Susitna Project construction manpower requirements were positive in every year between 1985 and 2002. This problem was corrected by subtracting baseline employment associated with energy generating facilities that would be constructed if the Susitna Project was not built after the village assignment procedures and gravity allocation procedures were completed in the base case model. Such a change allowed the village housing units to be filled and eliminated negative numbers from the gravity model allocations.

The tenth enhancement was simply undertaken by adding married railhead and transmission line workers to the calculation for determining the direct in-migrating Susitna dam construction workers (DIMM). This addition was necessary as these variables are used to determine the number of school children that would be associated with the construction worker population influx.

The final enhancement was to more objectively quantify the attraction factors used in the gravity allocation procedures. These factors consisted of the availability of housing, school quality, the availability

of commercial services, the availability of public facilities and services, the availability of land, and the availability of recreation opportunities.

In each case, objective measures of these attraction factors were determined. The number of vacant housing units were used for housing availability. A scale of 0 to 5 was developed where 5 was assigned if a community had sufficient vacant housing units to house the entire number of construction workers that would relocate in the peak year of construction. Zero was assigned if a community had not vacant housing units at all. A linear function was used between these two values to determine the relationship of each community in the Anchorage and Fairbanks areas to other respective communities in those areas.

Pupil-teacher ratios were used to indicate school quality. Again, a scale of 0 to 5 was used. Assignments of values were based on the scale shown below:

- 5 pupil-teacher ratio of 13 or lower
- 4 pupil-teacher ratio of 13 to 18
- 3 pupil-teacher ratio of 18 to 21
- 2 pupil-teacher ratio of 21 to 24
- 1 pupil-teacher ratio of 24 to 27
- 0 pupil-teacher ratio of 27 or more

The types of public facilities and services available in a community determined whether a value of from 1 to 5 was assigned as the attraction value for this factor. Assignments of values were based on the scale shown below:

- 5 water, sewer, hospital services available, and paid fire and police services
- 4 same as five except that fire services provided by volunteers and police services are provided only by state troopers
- 3 same as four except no hospital services available

2 same as three except that now water and sewer systems available 1 no services

The availability of commercial services in a community was determined by the size of the community (population). A value of from 1 to 5 was assigned as the attraction values that were allowed for this factor. Assignments of values were based on the scale shown below:

- 5 25,000 or more
- 4 10,000 to 25,000 if defined economic activity exists, otherwise reduce by one
- 3 2,500 to 10,000 if defined economic activity exists, otherwise reduce by one
- 2 100 to 2,500 if defined economic activity exists, otherwise reduce by one
- 1 less than 100 people

The availability of land in a community was determined by the number of acres of residentail land available. A value of from 1 to 5 was assigned as the attraction values that were allowed for this factor. Assignments of values were based on the scale shown below:

For the Anchorage area,

4,500 acres or more, low price, no land-use restrictions;
2,000 to 4,500 acres, low price, no land-use restrictions;
600 to 2,000 acres, low price, no land use restrictions;
200 to 600, low price, no land use restrictions;
less than 200 acres, low price, no land use restrictions

For the Fairbanks area,

5 1,500 acres or more, low price, no land-use restrictions; 4 1,000 to 1,500 acres, low price, no land-use restrictions; 500 to 1,000 acres, low price, no land use restrictions; 100 to 500, low price, no land use restrictions; 1 less than 100 acres, low price, no land use restrictions

Failure to meet the price or land use restrictions criteria would lower the value for the community in question.

The availability of recreation opportunities were defined differently for each communities in the Anchorage area and the Fairbanks area. Values or from 1 to 5 were used in each area. For the Fairbanks area, values of five were assigned to those communities that were closest to Denali Park. Values of 1 were assigned to those communities that were furthest from this site.

For the Anchorage area, values of five were assigned to all Kenai Peninsula communities because of the diversity of outdoor recreation opportunities available. Fewer outdoor recreation opportunities resulted in lower values for communities in the Mat-Su Borough. The urban environment of Anchorage gave this municipality a value of three.

Associated with these enhancements were assmptions about the weights that married and single relocaters would assign to each of these factors in their determinations to relocate their permanent place of residence. The following weights by worker category and attraction factor were applied:

	Housing	School	Public Facilities	Commercial	Land	Recreation
		Quality	and Services	Services		and a stand of the stand of t
Married	3	3	3	3	1	1
Single	2	1	2	2	1	2

It was assumed that married workers would place more importance on housing, schools, public facilities and services and commercial services and less on outdoor recreation opportunities in deciding where to relocate than would single workers who would have more opportunity to take advantage of outdoor recreation opportunities and generally not as concerned about schools at this point in their life.

3.2.3 Incorporation of New Procedures.

Four new procedures were incorporated into the economic-demographic module during FY85. These include: 1) the incorporation of control totals for employment, population, housing, and population migration; 2) the development of housing capacity constraints in the gravity model for the communities of Cantwell and Trapper Creek; 3) the incorporation of railhead worker procedures to explicitly take into account the effects of these workers on Cantwell; and 4) the incorporation of transmission line worker procedures to explicitly take into account the effects of these workers on Anchorage, Fairbanks, Talkeetna, and Cantwell which would operate as off-site staging centers.

3.2.3.1 Consistency Checks for Employment, Population, Net Migration, and Housing. In FY85, baseline and project effect forecasts of employment, population, population migration, and housing were made for the Anchorage and Fairbanks areas via the MAP model. Because these forecasts represent the aggregated effect of the Project, it became necessary to ensure that the Susitna socioeconomic impact model forecasts were consistent with the MAP model forecasts. Baseline employment and population numbers between ISER and the MAP model were already consistent due to the regional disaggregation procedures used in prior model runs. For more detail on these procedures, see the Working Paper on Regional Disaggregation Procedures prepared by Frank Orth & Associates in 1985. However, there were no constraints in the model that ensured that the baseline household and project effect forecasts would be consistent. The following explanation discusses the procedures that were developed to ensure consistency.

The MAP model forecasts for each worker hiring and transportation scenario were entered into the Susitna socioeconomic impact model. Consistency for the direct project construction employment effects were easy to obtain as the percentage of workers that are hired in the Anchorage and Fairbanks area were explicitly entered into the model. Operations and secondary employment estimates were assumed to be equal to the total employment effect in each area minus the direct project construction employment. Then, initial forecasts of secondary and operations employment were made. Adjustment factors (ADJE8AN and ADJE8FN) were then derived by subtracting direct construction employment effects, operations employment effects in the Mat-Su Borough and Kenai Peninsula Borough from the forecasts of total employment effects of the MAP

model and dividing the diffence by the initial secondary construction employment effects found in the Anchorage Borough. The adjustment factor was then applied to the initial forecasts of secondary employment effects in Anchorage. Adjustment factors for population and housing were defined by the variables "ADJP8AN, ADJP8FN, ADJH8AN, ADJH8FN, ADJB8AN, and ADJB8FN." Later, Susitna model forecasts of employment effects for the Anchorage and Fairbanks area were compared with the MAP forecasts to ensure that there were no major differences in the forecasts. Similar procedures were used for forecasts of population and housing effects. These comparisons take place at the end of the economic-demographic module and were calculated using variables defined as "BDIF" and "PDIF."

<u>3.2.3.2</u> Capacity Constraints in Gravity Model. A separate evaluation of land and housing availability was undertaken as part of the Social Sciences program for the Susitna Project during FY85. The results of that analysis revealed that potential housing constraints existed in the communities of Cantwell and Trapper Creek that might preclude these communities from absorbing the projected amount of population in-migration (Frank Orth & Associates, Inc., 1985). In order to take these possibilities into account, capacity constraints were built into the Susitna socioeconomic impact model. These variables are defined by "QCON."

The constraints become operative only when population in-migration would exceed a certain level (including an allowable margin for error) in these communities. The percent of overflow (QOFP) that can be accommodated by nearby communities was also determined from the analysis of land use and housing referenced above. These percentages were based on the available housing in nearby communities after they have satisfied all projectrelated demand plus an additional share to allow for the downward revisions in the work force estimates. After this information was built into the model, the initial gravity model allocations of workers to communities were evaluated against the capacity constraints. If the constraints became operative, the expected overflow (QOVF) was subtracted from the initial gravity model allocations of workers to Cantwell and Trapper Creek. The derived percentage of the overflow that would be accommodated in the nearby communities of Healy, Nenana, Fairbanks, and the suburban Mat-Su Borough was then added to the initial gravity model allocations for these communities and the model continues as before.

3.2.3.3 Transmission Line Worker Procedures. In the past, the transmission line workers were not treated explicitly in the Susitna socioeconomic impact model. They were considered to be included in that part of the work force that did not relocate. However, in FY85, new information about the where these workers would be housed became available. Because many of these workers would operate out of Talkeetna, Cantwell, Fairbanks, and Anchorage, they had to be dealt with explicitly in the FY85 forecasts.

First, assumptions regarding the number of transmission line (T-line) workers, the percentage in each labor category, the percent to be located at each staging site, and the marital status of each worker was entered into the model. Second, the numbers of T-line workers by labor category, by staging site, and by staging site by marital status were then calculated.

Because T-line workers were assigned to communities outside of the gravity model, they could not be entered into the pool considered for relocation. Therefore, the T-line workers by labor category were subtracted from the respective labor category pools of relocaters. After the gravity model assignments were conducted, the married and single T-line workers by staging site were entered into the formulas that determine the direct project employment effects by community on a place of work and place of residence basis.

The origin of T-line workers by marital status was then built into the model based on the hiring assumptions used for the particular model run. T-line workers were assumed to originate from the municipalities of Anchorage and Fairbanks only. The origin information was then used to compute out-migration from Anchorage and Fairbanks and the number of jobs vacated by Anchorage and Fairbanks residents taking construction jobs. Population related to T-line construction and in-migrants filling secondary and vacated jobs were then determined by applying the appropriate person per household multipliers. T-line household effects were computed on the basis of one T-line worker per household.

<u>3.2.3.4</u> Railhead Worker Procedures. Railhead workers would be located at Cantwell and the Devil Canyon work camp during Project construction. The Cantwell railhead workers were treated implicitly during FY84 by adjustments to the attracticr factors used in gravity procedures. However, this method led to unsatisfactory results in attempting to guage the effect of railhead workers on Cantwell. In FY85, Railhead workers were treated explicitly in the model. The procedures were similar in most respects to the T-line procedures outlined above. The major difference was that the residence of Railhead workers would be limited to one community or work camp during Project construction. Therefore, the number of assumptions that had to be entered into the model were fewer for the Railhead procedures as compared to the T-line procedures.

3.3 TRAFFIC MODULE

3.3.1 Approach.

The basic premise of the traffic model is that traffic volumes in the study area were related to the characteristics of the study area communities. In turn, forecasts of other traffic conditions like accidents were based on the forecasts of traffic volumes. A detailed description of the model is provided in an Appendix to the Traffic Analysis Report (Frank Orth & Associates, Inc., 1985).

To explain the reasons for travel, aggregate historical traffic volumes were split into two parts--trip origins and destinations. Traffic volume consisted of people either traveling from their place of residence (origin) to some specified destination (e.g., work or shopping center) or returning to their place of residence. Therefore, traffic volume over a selected roadway or road segment was composed of people leaving for a destination or returning to their origin. As described above, trip generation modules were used to project the volume of trips generated by a place, usually based on characteristics of the place's population, emrloyment, and land use. Trip distribution modules were used to project trip destinations. Based on the attraction factors of a destination and their distance from point of trip origin, an allocation of trips from each origin was made among the possible destinations.
3.3.1.1 Traffic Module Components. The traffic model for the Susitna Project is composed of four related components: 1) a trip generation module; 2) a trip distribution module; 3) procedures to specify and project vehicle types; and 4) procedures to project traffic accident numbers and characteristics. The first component (the trip generation module) determined the number of trips originating from each of the 10 major communities along the Parks Highway between Anchorage and Fairbanks and Paxson and Talkeetna. They are called origin-destination zones. Ratios between population/employment and interzonal trips were used to calibrate the trip generation module (Alaska Department of Transportation and Public Facilities, Transportation Planning Division, 1982 and 1983; Frank Orth & Associates, Inc., March 1984c). In addition, other data sources providing information about trip origins and destinations were used (EMPS-Sverdrup, December 1983; Datum Engineering and Dames & Moore, December 1983; DOWL Engineers, May 1982; and Frank Orth & Associates, February 1984). This information provided ratios between traffic trips and population and employment which were then used to project traffic vclumes by applying them to population and employment projections by origin-destination zones. The population and employment projections were available as model outputs from the economic-demographic module of the Susitna socioeconomic impact model.

Because there were insufficient data about trip origin and destination, a number of simplifying assumptions were made to specify the origin of interzonal trips. Since Average Annual Daily Traffic volume (AADT) as shown in Annual Traffic Volume Reports of 1982 and 1983, prepared by the Alaska Department of Transportation and Public Facilities (ADOTPF), represented two-way traffic, it was assumed that dividing AADT by two would yield one-way interzonal trips. The property of symmetry was also assumed, meaning travel was round-trip. For example, a person driving from Wasilla to Anchorage was assumed to return to Wasilla via the same route (multiple destination trips were ruled out). A third assumption was that because each one-way flow would be composed of trip-makers who would be returning to their place of origin and trip-makers who would be arriving from other zones, exact estimates of trip origin could not be made. However, data on commuting patterns from survey reports (Frank

Orth & Associates, Inc., February 1984) and residence adjustments in Bureau of Economic data (U.S. Department of Commerce, Bureau of Economic Analysis, 1984) were used to narrow the range of interzonal trips from each origin.

The second component (trip distribution module) determined how the trips from each specific community (origin zone) were distributed to other zones included in the traffic model. In order to make the trip distribution assignments compatible with allocation of workers to communities in the economic-demographic module, a gravity procedure was used in the trip distribution module. The weights and attraction variables used in this procedure were designed to be as similar as possible to those used in the gravity procedures that determined the likely settlement patterns for project-related workers. Therefore, an attraction-constrained gravity procedure was employed in the traffic model.

A traffic attraction index was created and used to rank destinations according to employment, number of households, commercial services, public facilities and services, and recreation. Data for these destination characteristics were gathered from secondary sources. Travel distance was specified in minutes of travel time between places and an exponent of 2 was used to determine the travel time factor in the gravity procedures. The latter value is related to how often all types of trips are made by people and is somewhat higher than the exponent used to determine work trips in the economic-demographic module.

The trip distribution module determined the number of interzonal trips from each origin that are allocated to each of the specified destinations or community traffic areas. Based on the comparison of each destination's attraction and distance from origin relative to all other destinations' attractions and distance from origin, the percentage of trips from each origin attracted to a specific destination was determined. Once interzonal trip destinations were determined, the appropriate oneway interzonal trips that would occur over each road segment were added and multiplied by two to obtain average annual traffic volumes.

The third component of the traffic model determined vehicle types for each road seguent. Historical percentages for the number of cars, trucks, and campers in AADT were available from the <u>Annual Traffic Volume</u> <u>Reports</u> and the <u>Environmental Evaluation of the New Parks Highway</u> (ADOTPF, Transportation Planning Division, 1982 and 1983; Datum Engineering and Dames & Moore, December 1983). These relationships between vehicle types were assumed to continue in the future.

The fourth component of the traffic model projected numbers of accidents. Data on accident statistics by road segment for 1981 to 1983 were acquired from the Traffic Safety Division of the ADOTPF. In this component of the traffic model, the number of total accidents, human injury accidents, human fatality accidents, and animal road kills $\frac{1}{}$ were projected for each road segment of interest for selected years between 1985 and 2005. Total accidents included human injury accidents, property damage only accidents, and accidents involving animal road kills. Human fatality accidents were a subset of all human injury accidents. The number of human injuries and fatalities per year per road segment were not projected. $\frac{2}{}$

Projections were made by determining historical ratios between: 1) total accident numbers to AADT volumes; 2) human injury accidents to total accidents; 3) human fatality accidents to total accidents; and 4) animal road kills to total accidents. Animal road kills by species were not projected as the vast majority (95+ percent) of animal road kills in-volved moose. Accident and fatality ratios were assumed to continue in

^{1/} Each human injury accident, property damage only accident, and animal road kill accident was considered to be a discrete event. Accidents were not double counted in the total using these classifications.

^{2/} Ron Martindale, Traffic Safety Planner, personal communication, 1984. This information was not readily available from the Traffic Safety Division of ADOTPF. While the information is contained in their data base, it is not easily reported without significant investments of time from state agency personnel. Furthermore, the number of these accidents per road segment was so small that detailed projections would be misleading.

the future. Forecasts for total accidents were determined by applying the appropriate ratio to the forecasts of AADT volumes. After forecasts of total accidents were made, the other accident characteristics were projected.

3.3.2 Enhancements in Existing Procedures.

There were only two major changes to existing procedures in the traffic module so that consistency between the MAP model forecasts and the economic-demographic forecasts from the Susitna socioeconomic impact model with the traffic forecasts would occur. These were: 1) elimination of the Knik Arm Crossing as an operating roadway in the Traffic Module; and 2) changes in the weights, attraction factors, and exponent values used in the trip distribution procedures.

The first change was implemented by removing all variables related to the Knik Arm crossing and then extending the time periods for travel times developed prior to the operation of the Knik Arm Crossing. The result of the changes was to assume that the existing roadway network connecting the Project Site to the communities of Paxson, Cantwell, Anchorage, and Fairbanks prior to construction would remain unchanged during the projection period.

The second change was implemented by adjusting the values for the weights, attraction factors and the travel time exponent variables in the trip distribution procedures that were used and adjusted in the economicdemographic module.

3.3.3 Incorporation of New Procedures.

No new procedures were incorporated into the traffic module. The traffic module operates in the same way described in the Traffic Analysis Report.

3.4.1 Approach.

The general approach to forecasting public facility and service requirements during 1985 to 2005 was:

- to develop appropriate standards, for each service or facility category and for each relevant community, that relate service and facility requirements to the size of population;
- to assess the adequacy of existing facilities and services and to quantify any over- or under-capacity using these standards;
- 3. to estimate future needs based on the application of these standards to the population growth forecasts with and without the Susitna project;
- 4. to indicate the significance of the effect on local jurisdictions; and
- to provide indicators of need for potential impact mitigation measures.

The public facilities and services module uses three types of data input. First, the module reads in the economic-demographic forecasts of the number of in-migrating workers, population, and households. Second, the assumptions on service standards are entered. Third, information on present and planned capacity is entered.

Following these statements, per capita (per household) standards are multiplied by projected baseline and with-project population forecasts and the results are stored as service requirements for each community. The effects of direct population in-migration (or out-migration) and the total project-related population effects are calculated independently so that direct and total effects can be separated for mitigation planning purposes.

Effects of the Project are displayed quantitatively in various ways. Project-related requirements are compared to the requirements without the project as a percent increase, and to 1985 capacity in both absolute and percent capacity utilization terms. For more detailed information about the assumptions and the methods used to produce public facility and services effects, see <u>Projection Assumptions</u>, Methodology and Output Formats and <u>Working Paper Number Two: Technical Description of the Socioeconomic</u> <u>Model</u> prepared by Frank Orth & Associates, Inc.

3.4.2 Enhancements to Existing Procedures.

Two enhancements were made to the public facilities and services module in FY85 to improve its accuracy. These enhancements include: 1) taking into account the unique characteristics of construction workers in terms of the number of schoolchildren accompanying in-migrating married construction workers; and 2) debugging the capacity procedures for the solid waste variables.

The first enhancement was implemented by altering the way project-related schoolchildren were calculated in the model. In FY84, schoolchildren were calculated by applying a per capita standard to the construction, operation, and secondary population influx in each community. This approach failed to account for differences in the number of schoolchildren accompanying each type of project-related worker. The new procedure takes explicit account of these differences by separating out the construction workers and their dependents from the other project-related populations. Assumptions about the number of schoolchildren accompanying the former group were derived from survey information gathered during FY84 and FY85 on the Anchorago-Fairbanks Intertie Tranmission Line project and the Terror Lake Hydroelectric Project (see Table 2.2). The per capita standards used for the baseline population were still applied to the operations and secondary populations.

The solid waste capacity procedures were changed so that the actual capacity for all Mat-Su Borough communities would be reported. The enhancement was made by replacing the variable "ACSW5MS" with "ASWS5MS" so

that the actual capacity of the communities would be reported instead of the cumulative use of those communities.

3.4.3 Incorporation of New Procedures.

No new procedures were incorporated into the public facilities and services module. The public facilities and services module operates in the same way described in Working Paper Number Two: Technical Description of the Socioeconomic Model.

3.5 FISCAL MODULE

3.5.1 Approach.

The purpose of fiscal effects analysis is to identify the types and magnitude of project-incuded changes in the expenditures and revenues of local governments, to identify or estimate the timing of project-related expenditures and revenues, and to use this information in the mitigation planning process.

The general approach taken to analyze fiscal effects is very similar to the approach used to analyze public facilities and services effects.

- to develop appropriate standards, for each revenue and expenditure category and for each relevant community, that relate revenue and expenditure requirements to the size of population or the size of the tax base;
- to estimate future needs based on the application of these standards to the population growth forecasts with and without the Susitna project;
- 3. to indicate the significance of the effect on local jurisdictions; and
- to provide indicators of need for potential impact mitigation measures.

The fiscal module uses three types of data input. First, the module reads in the economic-demographic forecasts of population and households. Second, the assumptions on per capita revenue and expenditure multipliers are entered into the model. Third, information on the size and growth of the tax base (assessed valuation) is entered.

Following these statements, per capita standards are multiplied by projected baseline and with-project population forecasts and the results are stored as fiscal requirements for each community. The effects of direct population in-migration (or out-migration) and the total project-related population effects are calculated independently so that direct and total effects can be separated for mitigation planning purposes.

Effects of the Project are displayed quantitatively in various ways. Project-related requirements are compared to the requirements without the project as a percent increase, and to projected baseline net fiscal balances. For more detailed information about the assumptions and the methods used to produce fiscal effects, see <u>Projection Assumptions</u>, <u>Methodology and Output Formats</u> and <u>Working Paper Number Two: Technical Description of the Socioeconomic Model</u> prepared by Frank Orth & Associates, Inc.

3.5.2 Enhancements in Existing Procedures.

Aside from extensions in geographic coverage of the procedures, there was one major enhancement adopted for all communities analyzed in this module. This enhancement added additional variables to each borough or community's revenues and expenditures so that the total revenues and expenditures for each area would conform more closely with the constant value of the number presented in each jurisdiction's budget documents. In the case of the Mat-Su Borough, seven variables were added. These included: 1) state-shared service area revenues; 2) animal control revenues; 3) animal control expenditures; 4) miscellaneous expenditures; and 5) other local education revenues (besides property tax); 6) education grant revenues; and 7) service area transfer revenue. For all other communities, a miscellaneous revenue and a miscellaneous expenditure variable were added.

Two minor enhancements were made to the fiscal module in FY85. Revised consumer price deflaters were used to adjust the current dollar values of all per capita multipliers to conform with most recent revisions in the Anchorage consumer price index. Deflaters for the years 1981, 1982, and 1984 were adjusted. The other minor enhancement was implemented when the gross sales multiplier used in calculating sales tax revenues for the City of Palmer was adjusted upward to conform with data in the 1982 Palmer budget.

3.5.3 Incorporation of New Procedures.

No new procedures were incorporated into the fiscal module. The fiscal module operates in the same way described in Working Paper Number Two: Technical Description of the Socioeconomic Model.

4.0 AIR AND BUS SCENARIO METHODOLOGIES

4.1 DESCRIPTION OF AIR AND BUS SCENARIOS

The Air and Bus scenarios that are used in this report are based on four assumptions that differ from those used in the Car Transportation Scenario. First, the mode of transportation used by construction workers to get to the Project site will differ. Second, the proportion of workers hired out of either Anchorage or Fairbanks may differ. Third, the settlement patterns of workers will be more clustered around the municipalities of Anchorage and Fairbanks than the communities nearest the Project site under the Air and Bus Scenarios. Fourth, secondary workers are assumed to relocate their residences under the Air and Bus scenarios as compared to construction workers under the Car Transportation Scenario.

The major difference among the three air and bus scenarios used in FY85 were the hiring ratio assumptions. The first air and bus scenario (AB1) assumes that 77 percent of the Susitna construction workers would be hired out of the Anchorage area and 23 percent would be hired out of the Fairbanks area. The second air and bus scenario (AB2) assumes that 50 percent of the Susitna construction workers would be hired out of the Anchorage area and the same percentage would come from the Fairbanks area. The third air and bus scenario (AB3) assumed that 100 percent of the construction workers would come from the fairbanks area.

The difference in socioeconomic effects that these scenarios would create are shown in Table 4.1. The proportion of employment, population, household demand, and net population migration effects that would be experienced in each area are directly related to the hiring ratio assumption. In 1990, the Fairbanks area would receive between 21 and 22 percent of the employment and population effects under the AB1 scenario. The percentages are somewhat lower than the hiring ratio assumption of 23 percent. The difference would be related to the fact that some Fairbanks area workers would live at the on-site family village and work camp and thus be counted as residents of the Anchorage area. For the AB2 scenario, the proportion of employment and population effects that would

occur in the Fairbanks area would be between 41 and 45 percent in 1990. These percentages are lower than the hiring ratio because of the way the village and work camp workers are allocated. An offsetting effect for the distribution of village and work camp workers is the fact that growth in either the Anchorage or Fairbanks area will generate secondary employment effects in the other area. However, for AB1 and AB2 scenarios this effect is substantially smaller than the worker allocation effect. Under the AB3 scenario, the Fairbanks area would receive between 0.6 and 4.6 percent of the employment and population effects. These percentages are slightly higher than the hiring ratio assumption of zero because it was assumed that some of the secondary employment generated by the Project would occur in the Fairbanks area even though the Project would have almost no direct effects on this area. In this case the directional effect of the economic interdependence assumption is not offset by the village and work camp worker allocations.

4.2 ECONOMIC-DEMOGRAPHIC MODULE

4.2.1 Differences in Conceptual Approach

The conceptual approach used for the air and bus scenarios differed in several important ways as compared to the car transportation scenario. Railhead, transmission line, and dam site workers were separated as before. Construction workers who would work on the dams themselves were then assigned to specific places of residence. The choices for these workers included retaining their permanent residence at the place of origin and living at the work camp or moving their permanent place of residence to the family village. These workers were not allowed to move their permanent place of residence from their place of origin as outmigration from smaller communities to the municipalities of Anchorage and Fairbanks was strictly prohibited. First, workers who would be assigned housing at the work camp were determined. The nonrelocaters who would live at the work camp were determined by subtracting the village workers from the total number of workers who would construct the dams.

Direct project effects on employment were then determined for each community or area by aggregating over the number of project workers who would be nonrelocaters, railhead workers, or transmission line workers. Baseline employment that would be used to construct energy facilities if the Susitna Project is not built was then subtracted from each community total as appropriate before secondary employment effects were determined.

Secondary employment effects were determined by multiplying the number of direct workers by place of residence by the values for secondary employment multipliers. Adding direct and secondary employment would yield project-related effects on employment. After project effects on employment have been determined, project-related population in each community or area was forecast.

As before, after the residence of direct Project workers was established, direct population effects were determined by applying person per household multipliers to the in-migrating construction workers. However, secondary population effects were forecast in a different way than that used in the Car Transportation Scenario. The number of in-migrants necessary to fill secondary jobs and jobs vacated by local residents taking project-related jobs were determined similarly to the Car Transportation Scenario. For all communities except Anchorage and Fairbanks, it was assumed that workers in-migrating to take secondary jobs and vacated local jobs would live in the same community as their place of work. For Anchorage and Fairbanks, it was assumed that workers in-migrating to take secondary and vacated local jobs would either reside in Anchorage or Fairbanks or move to outlying communities. Such a choice corresponds to the observed historical and current trend toward suburbanization of Anchorage and Fairbanks where people work in Anchorage or Fairbanks but live in places outside of these areas.

The difference occurred in the methods used to distribute these inmigrants. The method used to determine the settlement patterns of workers in-migrating to take secondary and vacated local jobs was the attraction-constrained gravity allocation procedures. The same procedures used in the base case model (which were applied to direct Project workers) were used in the air and bus scenarios except that the focus of

distribution has changed from the Project site to the municipalities of Anchorage and Fairbanks, the communities considered for relocation were expanded to include the communities of Kenai, Soldotna, Seward, Homer, Delta Junction, and North Pole, and some of the in-migrants were assumed to remain in Anchorage and Fairbanks. Person per household multipliers were then applied to the expected in-migration (or out-migration) of workers to obtain forecasts of project effects on population in each community. Housing effects under the Car Transportation and Air and Bus Transportation Scenarios were forecast using the same basic approach.

4.2.2 Differences in Geographical Coverage.

There are no major differences in geographical coverage between the Car Transportation Scenario and the Air and Bus Scenarios. The communities of Kenai, Soldotna, Homer, Seward, Delta Junction, and North Pole appear in both the base case model and the complementary model. It is only when certain procedures are employed that differences in geographic coverage occurs. The most significant example of a difference is the geographic coverage of the gravity allocation procedures used in the two models. In the base case model, only the communities in the Matanuska-Susitna Borough, the Railbelt portion of the Yukon-Koyukuk census division, and the community of Paxson are considered for relocation. The choice of these areas relates to the fact that workers would be commuting to and from the Project site by car. Thus, workers originating from Anchorage or Fairbanks would not be inclined to move to communities in the Kenai Peninsula Borough or to places like Delta Junction or North Pole as these places would increase the amount of travel time that these workers would need to commute to the site.

In the complementary model, the six communities listed above plus Anchorage and Fairbanks are included as candidates to receive workers inmigrating to take secondary jobs or vacated jobs by local residents in Anchorage or Fairbanks. The rationale behind these choices is related to the facts that the location of jobs (the reason for in-migration) would be in Anchorage or Fairbanks and that historically, people with jobs in Anchorage and Fairbanks are likely to live in either of these two places

or in communities that are not too distant from Anchorage or Fairbanks. As travel times are similar in most directions when traveling from Anchorage or Fairbanks, it made intuitive sense to include communities like Kenai, Seward, North Pole, and Delta Junction as candidates to receive in-migrating people taking secondary jobs or vacated local jobs in Anchorage or Fairbanks.

4.2.3 Differences in Enhancements to Existing Procedures

There are some differences in model procedures used for the Air and Bus transportation scenarios and the Car transportation scenario. The following differences in enhancements to existing procedures were identified:

- Ways To Avoid Negative Numbers in Gravity Model Distributions and Village Assignment Procedures
- 2. Ways To Avoid Infinite Numbers in Control Totals
- 3. Gravity Model Procedures

4.2.3.1 Ways To Avoid Negative Numbers in Gravity Model Distributions and Village Assignment Procedures. During initial runs of the economicdemographic module, negative numbers in the village assignment procedures and gravity model distributions occurred because net construction employment was being distributed. These numbers did not make intuitive sense since Susitna Project construction manpower requirements were positive in every year between 1985 and 2002. This problem was corrected by subtracting baseline employment associated with energy generating facilities that would be constructed if the Susitna Project was not built after the village assignment procedures and gravity model procedures were completed in the base case model. Such a change allowed full use of the village housing units to occur and eliminated negative numbers from the gravity model allocations. Baseline employment was subtracted from calculation of direct employment effects in the base case model. The same procedure was used to eliminate negative numbers in the village worker assignment procedures in the complementary model. However, an additional adjustment was necessary to eliminate negative numbers from the gravity model allocations in this model. The additional adjustment was required because the gravity models in the base case model and the complementary models distributed different worker groups. After the direct employment effects (including baseline employment) were accounted for in the complementary model, some years showed negative net construction employment. In these years, secondary employment effects would also be negative.

In the base case model, this caused no problems as negative number were simply a reflection of out-migration. In the complementary model, this caused a problem because these secondary jobs were used to determine the amount of net migration that would be expected to occur in each communi-However, some of the workers were allowed to settle in places that ty. were different than their employment by place of work. A gravity model was used to determine these worker's settlement patterns. In those years, where negative numbers appear, negative numbers would also appear in the gravity model allocations. Such numbers present a problem as the purpose of a gravity model is to distribute in-migrants not determine where out-migration would occur. An adjustment was made so that when jobs were being lost in Anchorage and Fairbanks, the gravity model would, in fact, distribute no workers through the gravity model. The lost workers would appear after gravity model allocations were made and they would be reflected as losses in Anchorage and Fairbanks. Thus, all effects of the Project are captured and the gravity model operates consistently.

4.2.3.2 Way To Avoid Infinite Mumbers in Household Control Totals.

Employment, population, and housing effects occur from the Project after the year 2002 because of operations and the lagged effect the Project has on secondary employment. In order to capture these effects, a value of 1 was added to the expected zero values for the municipalities of Anchorage and Fairbanks so that when the adjustment factors (described in section 3.2.3.1) were applied, the secondary effects in employment, population, and households would be captured. This procedure worked for every

adjustment factor in the base case model and the complementary model except for household effects in Anchorage in the complementary model. In this case, the unadjusted value of the household effects was -1. Adding a value of 1 to this number, created a zero value in the denominator of the adjustment factor. Thus, the household control totals did not match the values shown in the ISER MAP model. The procedure was corrected by adding a value of 2 to the unadjusted value, thereby creating conditions that were exactly the same as those for the other adjustment factors in each model.

<u>4.2.3.3 Gravity Model Procedures</u>. As stated in section 4.2.1, the gravity allocation procedures operated differently in the complementary model as compared to the base case model. The difference shows up in the . calculation of two variables in each model. Under the base case assumptions, direct employment (DENR) in communities located in the local impact area (Mat-Su Borough and the Railbelt Portion of Yukon-Koyukuk Census Division) call them y would be equal to the number of original residents from community y that do not relocate, plus the number of workers that relocate from other communities to community y, minus any workers that would out-migrate from community y, and plus any transmission line and railhead workers that would be staged out of community y.

Under the complementary model, direct employment (DENR) in community y would be equal to the number of original residents from community y that do not relocate plus any transmission line and railhead workers that would be staged out of community y. This change implies that outmigration of original residents from these communties would not occur and that the direct workers do not relocate except for those who would live at the village, who work on the railhead, or who work on the transmission line.

The second variable that is calculated differently is the number of inmigrating secondary worker households (EINW). Under the base case model, the EINW values for the local impact area communities are calculated as a certain percentage of the in-migrating workers who would work in Anchorage or Fairbanks (the percentage is based on population share) plus the number of secondary in-migrating workers that would work and live in

these communities divided by the average number of jobs per household for the U.S. Under the complementary model, the number of secondary inmigrating households is determined by the number of workers required to fill secondary and vacated local jobs in each community plus the number of in-migrants (determined through the gravity model) that would work in Anchorage and Fairbanks but live in communities outside of these two places divided by the jobs per household variable. The calculation of EINW under the latter model requires the use of one new variable labeled EIJI and defines the total number of in-migrants before adjustment for retention (assumed to be zero) and before adjustment for jobs per household.

4.2.4 Differences in Incorporation of New Procedures

No new procedures were incorporated in the Air and Bus Scenarios that were not already incorporated into the Car Transportation Scenario.

4.3 TRAFFIC MODULE

4.3.1 Differences in Conceptual Approach

There were no differences in the conceptual approach between the FY85 Air And Bus Transportation Scenarios and the FY85 Car Transportation Scenario.

4.3.2 Differences in Enhancements to Existing Procedures

There were two changes to existing procedures in the Car Transportation Scenario required to run the Air and Bus transportation scenarios. First, the percentage of project-related workers in Cantwell that would construct the railhead and the transmission lines and who would travel between Cantwell and Anchorage and Fairbanks was changed for each Air and Bus scenario to reflect worker hiring assumptions. For example, under AB1 forecasts, about 77 percent of the railhead and transmission line workers were assumed to travel back to Anchorage (their assumed place of residence) when their rotations at work were over. Cne hundred percent of these workers were assumed to travel back to Anchorage under the AB3 scenario.

Second, the method used to determine the direct project-related average annual traffic volumes over road segments is different between the car transportation scenario and the air and bus scenarios. Under the base case model, project construction workers travel from their place of residence to the Project site. Therefore, a construction worker with a residence in Houston would add to the average annual traffic volumes between and in the communities of Trapper Creek and Cantwell. Under the Air and Bus Scenarios, these workers would tend to increase traffic volumes between Houston and Anchorage as the latter community would function as the debarkation point with the lowest overall travel time to the Project site associated with it. The percentage of workers traveling in a specific direction would be expected to change as the elements of the air and bus transportation program become better defined. Some workers would travel from Houston to the Project Site depending on the placement of park and ride lots and how travel costs are allocated between employers and employees.

4.3.3 Differences in Incorporation of New Procedures.

There were no differences in incorporation of new procedures between the Car Transportation Scenario and the Air and Bus transportation scenarios.

4.4 PUBLIC FACILITIES AND SERVICES MODULE

4.3.1 Differences in Conceptual Approach.

There were no differences in conceptual approach for projecting public facilities and services effects between the Car Transportation scenario and the Air and Bus scenarios. For each facility and service, per capita (or per household) standards applied to population forecasts (or household forecasts) were used to determine the effects on public facilities and services in each community.

4.3.2 Differences in Enhancements to Existing Procedures

There were no differences in enhancements to existing procedures in the public facilities and services module between the base case model and the complementary model.

4.3.3 Differences in Incorporation of New Procedures

There were no differences in the incorporation of new procedures in the public facilities and services module between the base case model and the complementary model.

4.4 FISCAL MODULE

4.4.1 Differences in Conceptual Approach

There were no differences in conceptual approach for projecting fiscal effects between the Car Transportation scenario and the Air and Bus scenarios. For each revenue and expenditure item, per capita (or per household) standards applied to population forecasts (or household forecasts) were used to determine the effects on fiscal conditions in each community.

4.4.2 Differences in Enhancements to Existing Procedures

There were no differences in enhancements to existing procedures in the fiscal module between the base case model and the complementary model.

4.4.3 Differences in Incorporation of New Procedures

There were no differences in the incorporation of new procedures in the fiscal module between the base case model and the complementary model.

5.0 SUMMARY AND COMPARISON OF CAR TRANSPORTATION & AIR AND BUS SCENARIOS

5.1 PROJECTED ECONOMIC-DEMOGRAPHIC EFFECTS

This section describes and analyzes the economic-demographic effects of the six scenarios that have been used to forecast the effects of the Susitna Project. The effecas that are covered include employment by place of residence, population, housing demand, housing units, vacant housing units, worker migration, and net population change. Information for each effect is shown in a summary table at the end of this chapter.

5.1.1 Summary of Project Effects on Employment by Census Division

Baseline and project effects on employment are shown in Table 5.1. For 1985, baseline employment is higher in the FY85 forecasts as compared to the FY84 forecasts. These revisions are related to more recent historical information that shows lower growth rates for employment. Employment forecasts for the Railbelt have generally fallen since the FERC forecasts were made. The lower employment forecasts are related to the continual and persistent downward revisions in growth rates for the Alaskan economy that have been embodied in the ISER MAP model forecasts. As shown in Table 5.1, employment growth in the Railbelt has fallen from a projected increase of 49 percent between 1985 to 2005 under the FERC forecasts to an estimated 26 percent increase in the latest forecasts.

In 1985, the effect from the Susitna Project on employment by place of residence has fallen in each census division when comparing the FERC, FY84, and FY85 Car forecasts with the exception of the Railbelt Portion of the Yukon-Koyukuk Census Division and the Mat-Su Borough. The lower employment effects under the FY85 forecasts are due mostly to the downward revisions in the construction manpower requirements. The forecast of the Project's effect in the Yukon-Koyukuk during 1985 has increased since the FERC forecasts were conducted. This change is due to the increasing sophistication with which the railhead workers have been treated within the Susitna socioeconomic effects model and in the upward revisions

in the number of workers required to construct the railhead. Since the FERC forecasts, they have been treated more explicitly. Thus, the effect of the railhead on employment in the Railbelt Portion of the Yukon-Koyukuk cersus division would represent an increase in baseline employment of 32 percent for 1985.

The implementation of an air and bus transportation program versus a car transportation program (as shown in the FY85 Car forecasts and the AB1 forecasts in Table 5.1) has the generally desired effect of concentrating employment effects in the municipalities of Anchorage and Fairbanks and away from communities in the Mat-Su Borough and the Railbelt portion of the Yukon-Koyukuk census division. The increased employment in the municipalities of Anchorage and Fairbanks under the Air and Bus Scenarios is related to the use of these places as debarkation points and the fact that direct construction workers are not relocating from Anchorage and Fairbanks to communities in the Mat-Su Borough and the Railbelt portion of the Yukon-Koyukuk census division. Therefore, secondary employment effects reinforce the greater concentrations within the municipalities of Anchorage and Fairbanks.

Changes in the worker hiring assumptions (as shown in the AB1, AB2, and AB3 forecasts) would have little overall effect on employment in the Mat-Su Borough and in the Railbelt portion of the Yukon-Koyukuk census division. Employment in the Mat-Su Borough is largely related to employment occurring at the village which remains fairly consistent across Air and Bus scenarios. Employment in the Railbelt portion of the Yukon-Koyukuk census division is almost totally related to railhead and transmission line employment which does not change under any of the Air and Bus scenarios.

5.1.2 Summary of Project Effects on Population by Selected Communities and Census Divisions

Baseline and project effects on population are shown in Table 5.2. In 1985, baseline population projections are higher for every census division and borough under the FY85 forecasts than for the population projections developed under the FERC forecasts or the FY84 forecasts. For

example, total Railbelt population under the FY84 forecasts would be 343,929 under the FY84 forecasts and 400,049 under the FY85 forecasts. The major reason for the increase in population projections relates to revisions in the ISER MAP model forecasts and more recent data on population that capture the significant population in-migration that occurred in the Municipality of Anchorage during 1983 and 1984.

Easeline population growth rates have been revised downward since the FERC forecasts were prepared. In the Fairbanks area, baseline population was expected to grow by 17 percent between 1990 and 1999 under the FERC forecasts. The most recent forecast suggests that an 11 percent growth rate is more likely. For the Anchorage area, baseline population was expected to reach 382,256 under the FERC forecast for an increase of about 20 percent between 1990 and 1999. Under the FY85 forecasts, the growth in population was adjusted down to about 12 percent for the same period.

As shown in Table 5.2, project-related effects on population in the Anchorage and Fairbanks area under the AB1, AB2, and AB3 forecasts vary in accordance with the hiring assumptions used. The FY85 Car forecast and the AB1 forecasts were expected to be similar as the worker hiring assumptions were identical and transportation program effects at the census division level offset each other at the area level.

At the borough and census division level, population effects from the Project were generally similar for the Mat-Su Borough under the FERC forecasts, FY84 forecasts, and the FY85 Car forecasts at 2,500 people in 1990. Thereafter, the population effects under the FY85 Car forecasts are less than the other two forecasts as work force requirements were about 50 percent higher for the latter forecasts and they assume that between 50 and 70 percent of all construction workers would not outmigrate after construction is completed. The assumption used in the FY85 forecasts was that 100 percent of all construction workers would outmigrate after Susitna construction is completed.

The effect of instituting an air and bus transportation program versus a car transportation program shows that population effects tend to be more

concentrated around the municipalities of Anchorage and Fairbanks under the former program as compared to the latter. The magnitude of the Project effect would be 1,346 people in Anchorage in 1990 under FY85 ABL forecasts as compared to 846 people under the FY85 Car forecasts. In Fairbanks, the effect of the Project would be a gain of 153 people under ABL forecasts versus a loss of 83 people under the FY85 Car forecasts.

There would be slightly more population in the Kenai Peninsula Borough and the Southeast Fairbanks census division under the Air and Bus scenario as compared to the Car transportation scenario because secondary relocaters were allowed to live in communities in these areas under the FY85 AB forecasts but not under the FY85 Car forecasts. The options for relocaters were based on whether the travel time is measured from the Project site to the place of residence or from the muncipalities of Anchorage and Fairbanks to the place of residence.

For the small Parks highway communities that were expected to be significantly affected by the Project under the FERC and FY84 forecasts, the population effects were significantly reduced under the FY85 forecasts. This reduction occurred because of the downward revisions in construction work force requirements. The magnitude of the Project effect on population in 1990 was reduced by 84 percent in Trapper Creek, 50 percent in Talkeetna, 84 percent in Cantwell, and 92 percent in Healy.

Further reductions in the size of the Project effect on population would occur if an Air and Bus transportation program were instituted. Comparing Project effects under the FY85 Car forecasts with those for the FY85 ABI forecasts shows that project-induced population would decline from 47 people to 24 people in Trapper Creek in 1990, from 99 people to 81 people in Talkeetna in 1990, from 124 people to 115 people in Cantwell in 1990, and from 23 people to 3 people in Healy in 1990. The percentage decline in the number of people in Talkeetna and Cantwell would not be as great as that for Healy and Trapper Creek because the railhead and tranmission line workers in these communities are unaffected by the type of transportation program that would be implemented for the dam cconstruction.

Depending on the worker hiring scenario that is chosen, the Project effect on population in 1990 would represent an increase over baseline population of between 6 and 10 percent for Trapper Creek, 21 and 25 percent in Talkeetna, 53 percent in Cantwell, and 0 and 1 percent in Healy.

A final point to note is the effect on population that occurs for the communities of Kenai, Homer, Soldotna, Seward, Delta Junction, and North Pole. The Project effect would not exceed 1 percent in any of these communities between 1985 and 2005 except for North Pole. North Pole would experience a project-induced increase in population of between 3 and 5 percent under the AB2 forecasts when Project construction would reach its peaks in 1990 and 1999.

5.1.3 Summary of Project Effects on Households by Selected Communities and Census Divisions

Baseline and project effects on households are shown in Table 5.3. In 1985, baseline household projections are higher for every census division and borough under the FY85 forecasts than for the household projections developed under the FERC forecasts or the FY84 forecasts with the exception of the Southeast Fairbanks census division. For example, total Railbelt households under the FY84 forecasts would be 120,466 under the FY84 forecasts and 135,208 under the FY85 forecasts. The major reason for the increase in household projections relates to revisions in the ISER MAP model forecasts and more recent data on households that capture the significant population in-migration that occurred in the Municipality of Anchorage during 1983 and 1984.

Baseline household growth rates have been revised downward since the FERC forecasts were prepared. In the Fairbanks area, baseline households were expected to grow by 20 percent between 1990 and 1999 under the FERC forecasts. The most recent forecast suggests that a 12 percent growth rate is more likely. For the Anchorage area, baseline households were expected to reach 134,071 by 1999 under the FERC forecast for an increase of about 25 percent between 1990 and 1999. Under the FY85 forecasts, the growth rate in households was adjusted down to slightly more than 15 percent.

As shown in Table 5.3, project-related effects on households in the Anchorage and Fairbanks area under the AB1, AB2, and AB3 forecasts vary in accordance with the hiring assumptions used. In the Anchorage area during 1990, project-related effects would range from 799 households under the AB2 forecasts to 1,497 under the AB3 forecasts or a 0.7 percent increase over baseline households to a 1.3 percent increase over baseline households, respectively. The comparable percentages for the Fairbanks area would be 0 percent and 2.4 percent. The FY85 Car forecast and the AB1 forecasts for these areas were expected to be similar as the worker hiring assumptions were identical and transportation program effects net out at this level.

Similar to the Project effects on population, the introduction of an air and bus transportation program would tend to concentrate the household effects in the muncipalities of Anchorage and Fairbanks and away from the communities in the Mat-Su Borough and the Railbelt portion of the Yukon-Koyukuk census division as compared to the Car transportation program. The Air and Bus transportation program would place slightly more projectrelated households in the Kenai Peninsula Borough and in the Southeast Fairbanks census division in 1990. However, the increase in households is very small in each case at 8 households for the Kenai Peninsula Borough and 4 households for the Southeast Fairbanks census division.

For the small Parks highway communities that were expected to be significantly affected by the Project under the FERC and FY84 forecasts, the household effects were significantly reduced under the FY85 forecasts. This reduction occurred because of the downward revisions in construction work force requirements. The magnitude of the Project effect on households in 1990 was reduced by 83 percent in Trapper Creek, 17 percent in Talkeetna, 88 percent in Cantwell, and 92 percent in Healy.

Further reductions in the size of the Project effect on households would occur if an Air and Bus transportation program were instituted. Comparing Project effects under the FY85 Car forecasts with those for the FY85 ABL forecasts shows that project-induced households would decline from 15 to 9 households in Trapper Creek in 1990, from 59 to 49 households in

Talkeetna in 1990, from 54 to 52 households in Cantwell in 1990, and from 7 to 1 households in Healy in 1990. The percentage decline in the number of households in Talkeetna and Cantwell would not be as great as that for Healy and Trapper Creek because the choice of place of residence for the railhead and transision line workers in these communities is unaffected by the type of transportation program that would be implemented for construction workers at the Project site.

Depending on the worker hiring scenario that would be chosen under an air and bus transportation program, the Project effect on households in 1990 would represent an increase over baseline households of between 6 and 12 percent for Trapper Creek, 30 and 35 percent in Talkeetna, 67 percent in Cantwell, and 0 and 1 percent in Healy. By 1999, the percentage increase in households over baseline numbers would be reduced close to zero in Cantwell and Healy, 1 to 5 percent in Trapper Creek, and 16 to 19 percent in Talkestna.

A final point to note is the effect on households that occurs for the communities of Kenai, Homer, Soldotna, Seward, Delta Junction, and North Pole. The Project effect would not exceed 1 percent in any of these communities between 1985 and 2005 except for North Pole. North Pole would experience a project-induced increase in households of between 3 and 5 percent under the AB2 forecasts when Project construction would reach its peaks in 1990 and 1999.

5.1.4 Summary of Project Effects on Housing Units by Selected Communities and Census Divisions

Baseline and project effects on housing units are shown in Table 5.4. In 1985, baseline household projections are higher for every census division and borough under the FY85 forecasts than for the household projections developed under the FERC forecasts or the FY84 forecasts. The upward revision in housing units in the Southeast Fairbanks census division and the downward revision in baseline forecasts of households is explained by the fact that vacancy rates were adjusted from 5 percent under the FY84 forecasts to about 31 percent under the FY85 forecasts (see Table 2.5).

In 1985, total Railbelt housing units under the FY84 forecasts would be 132,342 under the FY84 forecasts and 162,108 under the FY85 forecasts. The major reason for the increase in housing unit projections relates to revisions in the ISER MAP model forecasts and more recent data on housing units that capture the significant population in-migration that occurred in the Municipality of Anchorage during 1983 and 1984.

Baseline housing unit growth rates have been revised downward since the FERC forecasts were prepared. In the Fairbanks area, baseline housing units were expected to grow by 20 percent between 1990 and 1999 under the FERC forecasts. The most recent forecast suggests that a 10 percent growth rate is more likely. For the Anchorage area, baseline housing units were expected to reach 142,543 by 1999 under the FERC forecast for an increase of about 24 percent between 1990 and 1999. Under the FY85 forecasts, the growth rate in housing units was adjusted down to about 14 percent.

As shown in Table 5.4, project-related effects on housing units in the Anchorage and Fairbanks area under the AB1, AB2, and AB3 forecasts vary in accordance with the hiring assumptions used. The project effects are equal in magnitude to those shown for households as project-related households are compared to baseline housing stock to determine whether short-term housing demand during construction can be met by baseline In the Anchorage area during 1990, project-related housing supply. effects would range from 799 housing units under the AB2 forecasts to 1,497 under the AB3 forecasts or a 0.6 percent increase over baseline housing units to a 1.1 percent increase over baseline housing units, respectively. The comparable percentages for the Fairbanks area would be O percent and 1.9 percent. The FY85 Car forecast and the AB1 forecasts for these areas were expected to be similar as the worker hiring assumptions were identical and transportation program effects net out at this level.

Similar to the Project effects on households, the introduction of an air and bus transportation program would tend to concentrate the housing unit effects in the muncipalities of Anchorage and Fairbanks and away from the communities in the Mat-Su Borough and the Railbelt portion of the Yukon-Koyukuk census division as compared to the Car transportation program.

The Air and Bus transportation program would place slightly more projectrelated housing units in the Kenai Peninsula Borough and in the Southeast Fairbanks census division in 1990. However, the increase in units is very small in each case at 8 units for the Kenai Peninsula Borough and 4 units for the Southeast Fairbanks census division.

For the small Parks highway communities that were expected to be significanchy affected by the Project under the FERC and FY84 forecasts, the housing unit effects were significantly reduced under the FY85 forecasts. This reduction occurred because of the downward revisions in construction work force requirements. The magnitude of the Project effect on howing units in 1990 was reduced by 83 percent in Trapper Creek, 17 percent in Talkeetna, 88 percent in Cantwell, and 92 percent in Healy.

Further reductions in the size of the Project effect on housing units would occur if an Air and Bus transportation program were instituted. Comparing Project effects under the FY85 Car forecasts with those for the FY85 ABl forecasts shows that project-induced housing units would decline from 15 to 9 housing units Trapper Creek in 1990, from 59 to 49 housing units in Talkeetna in 1990, from 54 to 52 housing units in Cantwell in 1990, and from 7 to 1 housing units in Healy in 1990. The percentage decline in the number of units in Talkeetna and Cantwell would not be as great as that for Healy and Trapper Creek because the choice of place of residence for the railhead and transision line workers in these communities is unaffected by the type of transportation program that would be implemented for construction workers at the Project site.

Depending on the worker hiring scenario that would be chosen under an air and bus transportation program, the Project effect on housing units in 1990 would represent an increase over baseline housing units of between 5 and 9 percent for Trapper Creek, 22 and 24 percent in Talkeetna, 47 percent in Cantwell, and 0 and 1 percent in Healy. By 1999, the percentage increase in housing units over baseline numbers would be reduced close to zero in Cantwell and Healy, 1 to 3 percent in Trapper Creek, and 13 to 15 percent in Talkeetna.

A final point to note is the effect on housing units that would occur for the communities of Kenai, Homer, Soldotna, Seward, Delta Junction, and North Pole. The Project effect would not exceed 1 percent in any of these communities between 1985 and 2005 except for North Pole. North Pole would experience a project-induced increase in housing units of between 2 and 4 percent under the AB2 forecasts when Project construction would reach its peaks in 1990 and 1999. However, the project-related number of howing units is small at 22 housing units in 1990.

5.1.5 Summary of Project Effects on Vacant Housing Units by Selected Communities and Census Divisions.

Baseline and project effects on vacant housing units are shown in Table 5.5. In 1985, baseline vacant housing unit projections are higher for every census division and borough under the FY85 forecasts than for the household projections developed under the FERC forecasts or the FY84 forecasts with the exception of the Mat-Su Borough. The Mat-Su Borough experienced a slight drop in the number of vacant units in 1985, falling from 3,862 units under the FY84 forecasts to 3,846 units under the FY85 forecasts. The drop in vacant housing units is related to a downward revision in vacancy rates that occurred since the FY84 forecasts were conducted.

In 1985, total vacant housing units in the Railbelt under the FY84 forecasts would be 11,876 under the FY84 forecasts and 26,900 under the FY85 forecasts. The major reason for the increase in vacant housing unit projections relates to higher projected growth rates in housing units as compared to households and the availability of more current vacancy rate information at the borough and census division level.

Baseline vacant housing unit growth rates have been revised downward since the FERC forecasts were prepared. In the Fairbanks area, baseline vacant housing units were expected to grow by 20 percent between 1990 and 1999 under the FERC forecasts. The most recent forecast suggests that a vacant housing units will decline by 1 percent over this time period. For the Anchorage area, baseline vacant housing units were expected to reach 8,472 by 1999 under the FERC forecast for an increase of about 20 percent between 1990 and 1999. Under the FY85 forecasts, the growth rate

in vacant housing units was adjusted down to slightly more than 5 percent.

As shown in Table 5.5, project-related effects on vacant housing units in the Anchorage and Fairbanks area under the AB1, AB2, and AB3 forecasts vary in accordance with the hiring assumptions used. The project effects are equal in magnitude, but opposite in sign, to those shown for housing units as project-related housing units must be subtracted from the baseline housing stock to determine the effect on vacant housing units.

In the Anchorage area during 1990, project-related effects would range from -799 housing units under the AB2 forecasts to -1,497 under the AB3 forecasts or a -4 percent decrease under baseline vacant housing units to a -7 percent decrease under baseline vacant housing units, respectively. The comparable percentages for the Fairbanks area would be 0 percent and 1.9 percent. The FY85 Car forecast and the AB1 forecasts for these areas were expected to be similar as the worker hiring assumptions were identical and transportation program effects net out at this level.

Similar to the Project effects on households, the introduction of an air and bus transportation program would tend to concentrate the loss of vacant housing units in the muncipalities of Anchorage and Fairbanks and away from the communities in the Mat-Su Borough and the Railbelt portion of the Yukon-Koyukuk census division as compared to the Car transportation program. The Air and Bus transportation program would reduce project-related vacant housing units in the Kenai Peninsula Borough and in the Southeast Fairbanks census division in 1990 as compared to the Car Transportation scenario. However, the loss in vacant units is very small in each case at 8 units for the Kenai Peninsula Borough and 4 units for the Southeast Fairbanks census division.

For the small Parks Highway communities that were expected to be significantly affected by the Project under the FERC and FY84 forecasts, the vacant housing unit effects were significantly reduced under the FY85 forecasts. This reduction occurred because of the downward revisions in construction work force requirements. The magnitude of the Project effect on vacant housing units in 1990 under the FY85 Car forecasts was increased by 71 units in Trapper Creek, 10 units in Talkeetna, 187 units in Cantwell, and 79 units in Healy as compared to the FY84 forecasts.

Further increases in the size of the Project effect on vacant housing units would occur if an Air and Bus transportation program were instituted. Comparing Project effects under the FY85 Car forecasts with those for the FY85 AB1 forecasts shows that project-induced vacant housing units would increase from -15 to -9 housing units Trapper Creek in 1990, from -59 to -49 housing units in Talkeetna in 1990, from -54 to -52 housing units in Cantwell in 1990, and from -7 to -1 housing units in Healy in 1990. The percentage increase in the number of vacant units in Talkeetna and Cantwell would not be as great as that for Healy and Trapper Creek because the choice of place of residence for the railhead and transmission line workers in these communities is unaffected by the type of transportation program that would be implemented for construction workers at the Project site.

Depending on the worker hiring scenario that would be chosen under an Air and Bus transportation program, the Project effect on vacant housing units in 1990 would represent an decrease in baseline vacant housing units of between 20 and 37 percent for Trapper Creek, 80 and 88 percent in Talkeetna, 153 percent in Cantwell, and 4 and 8 percent in Healy. By 1999, the percentage decrease in vacant housing units as compared to baseline numbers would be reduced to zero in Cantwell and 3 percent in Healy, 6 to 16 percent in Trapper Creek, and 66 to 72 percent in Talkeetna.

A final point to note is the effect on vacant housing units that would occur for the communities of Kenai, Homer, Soldotna, Seward, Delta Junction, and North Pole. The Project effect would not exceed plus or minus 2 percent in any of these communities between 1985 and 2005 except for Seward and North Pole. North Pole would experience a project-induced decrease in vacant housing units of between 0 and 16 percent under the AB2 forecasts when Project construction would reach its peaks in 1990 and 1999. However, the project-related number of housing units is small at 22 housing units in 1990. In Seward, baseline vacant housing units (101) would decline by 8 percent under the AB3 forecasts in 1990.

5.1.6 Summary of Project Effects on Net Worker Migration by Census Division

Net worker migration is defined by net number of workers that migrate into a census division. Baseline information regarding net worker migration was not available for any geographic jurisdiction. Project-related effects on net worker migration are shown at the census division and borough level in Table 5.6. The table shows that project-related effects on net worker migration in the Anchorage and Fairbanks area under the AB1, AB2, and AB3 forecasts vary in accordance with the hiring assumptions used.

In the Anchorage area during 1990, project-related effects on net worker migration would range from 829 workers under the AB2 forecasts to 1,503 workers under the AB3 forecasts. The FY85 Car forecast and the AB1 forecasts for these areas were expected to be similar as the worker hiring assumptions were identical and transportation program effects at the census division level offset each other at the area level.

Similar to the Project effects on population, the introduction of an air and bus transportation program would tend to concentrate migrating workers in the muncipalities of Anchorage and Fairbanks and away from the communities in the Mat-Su Borough and the Railbelt portion of the Yukon-Koyukuk census division as compared to the Car transportation program. Net worker migration would increase by 62 percent in 1990 under the ABI forecast as compared to the FY85 Car forecast, or by 185 workers in the municipality of Anchorage. At the same time, net worker migration would decrease by 22 percent in the Mat-Su Borough or from 911 under the FY85 Car forecast to 712 under the ABI forecast.

In the Fairbanks-North Star Borough, net worker migration would increase by 14 percent in 1990 under the AB1 forecast as compared to the FY85 Car forecast while net migration in the Railbelt portion of the Yukon-Koyukuk census division would fall by 36 percent under the respective forecasts.

The Air and Bus transportation program under AB1 forecasts would increase project-related worker migration in the Kenai Peninsula Borough and in the Southeast Fairbanks census division in 1990 as compared to the Car

Transportation scenario. However, the increase in worker migration is very small in each case at 15 workers for the Kenai Peninsula Borough and 9 workers for the Southeast Fairbanks census division.

5.1.7 Summary of Project Effects on Net Population Change by Census Division

Baseline and project effects on net population change are shown in Table 5.7. In 1985, baseline net population change projections are lower for every census division and borough under the FY85 forecasts than for the net population change projections developed under the FERC forecasts or the FY84 forecasts with the exception of the Mat-Su Borough. In 1985, net population change in the Railbelt under the FY84 forecasts would be 11,442 under the FY84 forecasts and 6,961 under the FY85 forecasts. The major reason for the decrease in net population change over time relates to lower projected growth rates for population in the ISER MAP model forecasts.

As shown in Table 5.7, project-related effects on net population change in the Anchorage and Fairbanks area under the AB1, AB2, and AB3 forecasts vary in accordance with the hiring assumptions used. In the Anchorage area during 1990, project-related effects would range from 365 people under the AB2 forecasts to 576 under the AB3 forecasts or a 5.5 percent increase over baseline net population change to a 8.6 percent increase over baseline net population change, respectively. The comparable percentages for the Fairbanks area would be 25 percent and 5 percent. The FY85 Car forecast and the AB1 forecasts for these areas were expected to be similar as the worker hiring assumptions were identical and transportation program effects at the census division and borough level offset each other at this level.

Similar to the Project effects on population, the introduction of an Air and Bus transportation program would tend to concentrate ret population change in the muncipalities of Anchorage and Fairbanks and away from the communities in the Mat-Su Borough and the Railbelt portion of the Yukon-Koyukuk census division as compared to the Car transportation program. In the municipality of Anchorage, not population change would increase by 69 percent in 1990 under the AB1 forecast as compared to the FY85 Car

forecast, or by 160 workers. At the same time, net population change would decrease by 70 percent in the Mat-Su Borough or from 268 under the FY85 Car forecast to 81 under the AB1 forecast.

In the Fairbanks-North Star Borough, net population change would increase by 24 percent in 1990 under the ABI forecast as compared to the FY85 Car forecast while net population change in the Railbelt portion of the Yukon-Koyukuk census division would fall by 100 percent under the respective forecasts.

The Air and Bus transportation program would increase project-related net population change in the Kenai Peninsula Borough and in the Southeast Fairbanks census division in 1990 as compared to the Car Transportation scenario. However, the gain in population is very small in each case at 27 people for the Kenai Peninsula Borough and 13 people for the Southeast Fairbanks census division.

5.2 PROJECTED TRAFFIC EFFECTS

This section describes and analyzes the economic-demographic effects of the six scenarios that have been used to forecast the effects of the Susitna Project. The effects that are covered include annual average traffic volumes, truck traffic, total accidents, human injury accidents, and animal road kill accidents. Information for each effect is shown in a summary table at the end of this chapter.

5.2.1 Summary of Project Effects on Average Annual Traffic Volumes by Selected Road Segment

Baseline and project-related effects on average annual traffic volumes are shown in Table 5.8 for road segments that connect the major communities in the Railbelt region. FERC forecasts are not shown on this table except for the Project Access Road because traffic projections were not conducted for any other road in this scenario.

In 1985, baseline traffic volumes are higher on every road segment shown in Table 5.8 under the FY85 forecasts as compared to the FY84 forecasts. The major reason for the increase in traffic volumes relates to revisions in the ISER MAP model forecasts and more recent data on population that capture the significant population in-migration that occurred in the municipality of Anchorage, the Matanuska-Susitna Borough, and the municipality of Fairbanks that occurred during 1983 and 1984.

Baseline traffic volume growth rates have been revised downward since the FY84 forecasts were prepared based on expected employment and population growth rates in the most recent ISER MAP model forecasts. In the vicinity of the municipality of Fairbanks, baseline traffic volumes were expected to grow by 96 percent between 1985 and 2002 under the FY84 forecasts. The most recent forecast suggests that an 89 percent increase is more likely. For the Anchorage area (Anchorage, Palmer, Wasilla, and Houston), baseline traffic volumes were expected to reach 103,476 (including volume on the Knik Arm Crossing) under the FY84 forecast for an increase of about 83 percent between 1985 and 2002. Under the FY85 forecasts, the growth in baseline traffic volumes was adjusted up to 90 percent.

As shown in Table 5.8, project-related effects on average annual traffic volume (AADT) in the vicinity of the municipalities of Anchorage and Fairbanks under the AB1, AB2, and AB3 forecasts vary in accordance with the hiring assumptions used. In the Anchorage area during 1990, project-related effects would range from 780 AADT under the AB2 forecasts to 1,422 AADT under the AB3 forecasts or a 1.4 percent increase over base-line AADT to a 2.5 percent increase over baseline AADT, respectively. The comparable percentages for the Fairbanks area would be 2 percent and 0.5 percent.

The FY85 Car forecast and the AB1 forecasts for the road segments shown in Table 5.8 were not expected to be the same even with identical worker hiring assumptions. The primary reason for lower AADT between all communities relates to the fact that fewer Susitna construction workers in the municipalities of Anchorage and Fairbanks would travel through other communities on their way to work under the Air and Bus transportation scenarios as compared to the FY85 Car transportation scenario. These

workers would leave Anchorage and Fairbanks by air. This effect is reinforced by the proportion of construction workers that would originate from the municipalities. Since about 87 percent of all Susitna construction workers would originate from these two places, the reduction in trips by these workers more than offsets the increased AADT resulting from the other 13 percent who would predominately travel over roads leading to these municipalities in order to fly to the Project site. For example, along the Project Access Road in 1990, project-related AADT would be 224 under the FY85 Car forecast and 168 AADT under the AB1 forecast. On the Cantwell to Project Access Road segment in 1990, projectrelated AADT would fall from 162 under the FY85 Car forecast to 102 AADT under the AB1 forecast.

The magnitude of the project-related effect on AADT was expected to decrease under the FY85 forecasts as compared to the FY84 forecasts for two reasons: 1) the size of the construction work force was substantially reduced in the latest round of data revisions; and 2) the worker shift and rotation schedule was lengthened which means fewer trips from the same number of worker on an average daily basis.

In 1990, on the road segment that connects Cantwell and Healy, the project-related increase over baseline AADT fell from 42 percent under the FY84 forecasts to 6 percent under the FY85 Car forecasts. Similarly on the segment connecting Cantwell to the junction of the Project Access Road with the Denali Highway, the project-related increase of 348 AADT which represented and increase of about 363 percent over baseline AADT fell to 162 AADT under the FY Car forecast or an increase of 188 percent over baseline AADT.

In 1990, the Project effect on AADT in terms of percent increase over baseline declines from 19 percent to 4 percent on the Healy to Nenana segment, from 29 percent to 6 percent on the Trapper Creek to Cantwell segment, and from 14 percent to 7 percent on the Talkeetna Road during 1990 when comparing the FY84 forecast to the FY85 Car forecast.
5.2.2 Summary of Project Effects on Truck Traffic by Selected Road Segment

Table 5.9 shows baseline truck traffic and project-related truck traffic for the 14 road segments connecting the major communities in the Railbelt Region. FERC forecasts are not shown on this table because truck traffic projections were not conducted for any roads in this scenario.

Baseline truck traffic numbers were revised upward in FY85 forecasts for every road segment except the Nenana to Fairbanks segment as compared to the FY84 forecasts. The major reason for the increase in traffic volumes relates to revisions in the ISER MAP model forecasts and more recent data on population that capture the significant population in-migration that occurred in the municipality of Anchorage, the Matanuska-Susitna Borough, and the municipality of Fairbanks that occurred during 1983 and 1984.

Baseline traffic volume growth rates have been revised downward since the FY84 forecasts were prepared based on expected employment and population growth rates in the most recent ISER MAP model forecasts. In the vicinity of the municipality of Fairbanks, baseline traffic volumes were expected to grow by 96 percent between 1985 and 2002 under the FY84 forecasts. The most recent forecast suggests that an 89 percent increase is more likely. For the Anchorage area (Anchorage, Palmer, Wasilla, and Houston), baseline traffic volumes were expected to reach 103,476 (including volume on the Knik Arm Crossing) by 2002 under the FY84 forecast for an increase of about 83 percent between 1985 and 2002. Under the FY85 forecasts, the growth in baseline traffic volumes was adjusted up to 90 percent.

The project effect on truck traffic would range from a 0 percent increase over baseline on the Nenana to Fairbanks road segment to a 466.7 percent increase on the Cantwell to Project Access Road segment of the Denali Highway under the FY85 forecasts. The project effect of 70 trucks on the latter segment would be related to the movement of Project materials from the railhead to the Project site.

The Air and Bus Transportation program (as shown in the AB1 forecasts)

would reduce the volume of truck traffic on every road segment as compared to the FY85 Car forecast except on the Denali Highway and on the Project Access Road. Project-related truck traffic does not exceed 30 trucks on any road segment except the Denali Highway and the Project Access Road under any of the FY85 forecasts.

5.2.3 Summary of Project Effects on Total Accidents by Selected Road Segment

Table 5.10 shows baseline total accidents and project-related effects on total accidents for the 14 road segments connecting the major communities in the Railbelt Region. FERC forecasts are not shown on this table because accident projections were not conducted for any roads in this scenario.

The baseline number of accidents were either revised upward or remained the same under the FY85 forecasts as compared to the FY84 forecasts. Upward revisions were related to upward revisions in population in the most current ISER MAP model forecasts. The revisions were small in size, numbering 1 or 2 more accidents on each road segment except Near Anchorage where the accidents in 1985 under the FY84 forecasts were raised from 90 to 102 under the FY85 forecasts.

Discounting the effects of the Knik Arm Crossing on FY84 forecasts for road segments connecting Anchorage, Wasilla, and Houston, baseline trends in accidents were similar under the FY84 and FY85 forecasts except for slightly slower growth rates on the Nenana to Fairbanks road segment which reflect slower population growth rates in these two communities which in turn were based on more recent historical data on population growth and downward revisions in the population growth rate for the Fairbanks area in the most recent ISER MAP model forecasts.

In all, the magnitude of the Project effect on total accidents would be quite small. In 1990, twelve accidents over the 14 road segments shown in Table 5.10 would be project-related under the FY85 Car forecasts, down from the 27 that were projected under the FY84 forecasts for that year. Under Air and Bus scenarios, the number of project-related accidents would fall even further in 1990 to 5 accidents under the AB1 forecasts, 3

accidents under the AB2 forecasts, and 7 accidents under the AB3 forecasts. By 2002, the number of project-related accidents on road segments that connect communities in the Railbelt region would fall to 2 accidents under all of the FY85 forecasts.

5.2.4 Summary of Project Effects on Human Injury Accidents by Selected Road Segment

Table 5.11 shows beseline human injury accidents and project-related effects on human injury accidents for the 14 road segments connecting the major communities in the Railbelt Region. FERC forecasts are not shown on this table because accident projections were not conducted for any roads in this scenario.

The same patterns discussed in relation to total accidents apply to human injury accidents except that there were fewer upward revisions in baseline accident numbers in 1985, fewer road segments would experience project-related effects, and the percent increase over baseline accidents on those segments that would experience such effects would generally be smaller.

Ten human injury accidents would be expected to occur during 1990 as a result of Project construction on the 14 road segments shown in Table 5.11 under the FY84 forecasts. Under the FY85 Car forecast, this number is reduced to 3 human injury accidents on the Anchorage to Palmer and Wasilla road segment, the Wasilla to Houston road segment, and the Cantwell to Healy road segment. Under the Air and Bus scenarios, this number would be reduced to either 0 or 1 human injury accidents.

5.2.5 Summary of Project Effects on Animal Road Kill Accidents by Selected Road Segment

Table 5.12 shows baseline animal road kill accidents and project-related effects on animal road kill accidents for the 14 road segments connecting the major communities in the Railbelt Region. FERC forecasts are not shown on this table because accident projections were not conducted for any roads in this scenario. The same patterns discussed in relation to total accidents apply to animal road kill accidents except that there were fewer upward revisions in baseline accident numbers in 1985 and fewer road segments would experience project-related effects.

Four animal road kill accidents would be expected to occur during 1990 as a result of Project construction on the 14 road segments shown in Table 5.12 under the FY84 forecasts. Under the FY85 Car forecast, this number is reduced to 1 animal road kill accident on the Wasilla to Houston road segment. Under the Air and Bus scenarios, this number would be reduced to 0 animal road kill accidents.

5.3 PROJECTED PUBLIC FACILITIES AND SERVICES EFFECTS

This section discusses the public facilities and services effects for communities in the Railbelt Region. A summary table showing the relevant communities and scenarios is provided for each facility or service so that comparisons across places and scenarios can take place.

5.3.1 Summary of Project Effects on Water Systems by Selected Community

Five communities that are likely to be affected by Susitna construction have currently operating or planned water systems. They include Anchorage, Palmer, Wasilla, Fairbanks, and Nenana. Baseline conditions for these water systems and project effects on capacity utilization are shown in Table 5.13.

Revisions in water system capacity occurred for Palmer and Wasilla in the FY85 forecasts. In Palmer, capacity was adjusted from 1,368,000 gallons per day to 1,030,000 gallons per day. In Wasilla, capacity of the system was expanded from 864,000 gallons per day to 900,000 gallons per day.

Baseline revisions in water demand also occurred for Palmer and Wasilla. For Palmer, the percent of current and planned capacity used under baseline condition in 1985 declined from 42.9 percent to 39.7 percent. In Wasilla, baseline capacity utilization rose from 53.7 percent under the FY84 forecasts to 87.4 percent under the FY85 forecasts. These changes in baseline demand are related to revisions in population estimates for

these two communities. Under baseline projections, the demand placed on water systems in Wasilla and Palmer are expected to exceed 100 percent of capacity by 1995 and 2005, respectively. Baseline revisions in capacity and use for the other communities did not occur since FY85 was the first time that facilities and services in Anchorage, Fairbanks, and Nenana were projected.

As shown in Table 5.13, project-related effects on water systems in the Anchorage and Fairbanks area under the AB1, AB2, and AB3 forecasts vary in accordance with the hiring assumptions used. In the municipality of Anchorage during 1990, project-related effects on capacity utilization would range from 0.3 percent under the AB2 forecasts to 0.9 percent under the AB3 forecasts of the design capacity of 36 million gallons per day. The comparable percentages for the municipality of Fairbanks would be 0.7 percent and -0.2 percent of the design capacity of 4 million gallons per day.

The introduction of an air and bus transportation program would tend to concentrate project-related effects on capacity utilization in the municipalities of Anchorage and Fairbanks and away from the communities in the Mat-Su Borough and the Railbelt portion of the Yukon-Koyukuk census division as compared to the Car transportation program. For example, project-related effects on capacity utilization in Anchorage would be 0.4 percent in 1990 under the FY85 Car forecast as compared to 0.6 percent under the AB1 forecast. The comparable percentages for Palmer would be 2.8 percent under the FY85 Car forecast and 1.5 percent under the AB1 forecast. In Wasilla, project-related effects on capacity utilization would fall from 3.4 percent in 1990 under the FY85 Car forecast to 1.9 percent under the AB1 forecast.

The project would not increase capacity utilization of the currently operating water systems by more than 3.4 percent under any of the FY85 forecasts. The Air and Bus scenarios would have the beneficial effect of shifting project-related demands on water service away from the smaller communities toward the municipalities of Anchorage and Fairbanks which have greater capacities to absorb the project-related population.

5.3.2 Summary of Project Effects on Sewer Systems by Selected Community

Five communities that are likely to be affected by Susitna construction have currently operating or planned sewer systems. They include Anchorage, Palmer, Wasilla, Fairbanks, and Nenana. Baseline conditions for these sewer systems and project effects on capacity utilization are shown in Table 5.14.

Revisions in sewer system capacity occurred for Palmer in the FY85 forecasts. In Palmer, capacity was adjusted from 500,000 gallons per day to 300,000 gallons per day.

Baseline revisions in water demand also occurred for Palmer. In Palmer, the percent of current and planned capacity used under baseline condition in 1985 declined from 107.9 percent under the FY84 forecasts to 99.9 percent under the FY85 forecasts. This change in baseline demand is related to the downward revision in population estimates for this community. Baseline revisions in capacity and use for the other communities did not occur since FY85 was the first cime that facilities and services in Anchorage, Fairbanks, Wasilla, and Nenana were projected.

Under baseline projections, the demand placed on sewer systems in Wasilla and Nenana are expected to exceed 100 percent of capacity by 1990. Demand currently exceeds the design capacity of the sewer system in Palmer.

As shown in Table 5.14, project-related effects on sewer systems in the Anchorage and Fairbanks area under the AB1, AB2, and AB3 forecasts vary in accordance with the hiring assumptions used. In the municipality of Anchorage during 1990, project-related effects on capacity utilization would range from 0.3 percent under the AB2 forecasts to 0.9 percent under the AB3 forecasts of the design capacity of 34 million gallons per day. The comparable percentages for the municipality of Fairbanks would be 0.8 percent and -0.1 percent of the design capacity of 6.5 million gallons per day.

The introduction of an air and bus transportation program would tend to concentrate project-related effects on capacity utilization in the municipalities of Anchorage and Fairbanks and away from the communities in

the Mat-Su Borough and the Railbelt portion of the Yukon-Koyukuk census division as compared to the Car transportation program. For example, project-related effects on capacity utilization in Anchorage would be 0.4 percent in 1990 under the FY85 Car forecast as compared to 0.6 percent under the AB1 forecast. The comparable percentages for Palmer would be 7.3 percent under the FY85 Car forecast and 4.0 percent under the AB1 forecast. In Wasilla, project-related effects on capacity utilization would fall from 5.3 percent in 1990 under the FY85 Car forecast to 3.0 percent under the AB1 forecast.

In the Fairbanks area, an air and bus transportation program would increase the project-related effect on sewer capacity utilization in the municipality of Fairbanks from 0.7 percent under the FY85 Car forecast to 0.8 percent under the AB1 forecast in 1990. In Nenana, project-related effect on capacity utilization would fall from 12.2 percent under the FY85 Car forecast to 1.3 under the AB1 forecast.

The project would not increase capacity utilization of the currently operating sewer systems by more than 12.2 percent under any of the FY85 forecasts. The Air and Bus scenarios would have the beneficial effect of shifting project-related demands on sewer service away from the smaller communities toward the municipalities of Anchorage and Fairbanks which have greater capacities to absorb the project-related population.

5.3.3 Summary of Project Effects on Police Services by Selected Community

Seven communities that are likely to be affected by Susitna construction have police officers or state troopers stationed in their locales. They include Anchorage, Palmer, Trapper Creek, Fairbanks, Cantwell, Healy, and Nenana. Baseline conditions for these services and project effects on capacity utilization are shown in Table 5.15.

Changes in the number of staff occurred for Palmer and the Mat-Su Borough in the FY85 forecasts. In Palmer, staff was adjusted from 14 officers under the FY84 forecasts to 9 officers under the FY85 forecasts. Radio dispatchers which had been included in the former set of forecasts were excluded in FY85. While Mat-Su Borough has no responsibility for police service, the total number of state troopers and police officers stationed

in the Borough give an idea of the quantity of the service. The number of officers was adjusted up from 29 in FY84 to 30 in FY85.

Baseline revisions in demand for police service also occurred for Palmar and the Mat-Su Borough, reflecting changes in population forecasts. In Palmer, the baseline demand for police protection (at a standard of 1.5 officers per thousand population) was estimated to decrease from 4.7 officers (or 33.3 percent of capacity) under the FY84 forecasts to 4.3 officers under the FY85 forecasts in 1985. This change in baseline demand is related to the downward revision in population estimates for this community. As shown in Table 5.15, the baseline demand for police protection in the Mat-Su Borough has decreased in 1985 as a percent of capacity from 134 percent under FY84 forecasts to 131.6 percent under FY85 Car forecasts. No revisions occurred for Anchorage, Fairbanks, Nenana, or Healy as this was the first time that facilities and services in these communities were projected.

Under baseline projections, the demand placed on police protection in Anchorage and the Mat-Su Borough currently exceed the capacity of staff. The municipality of Fairbanks and Nenana are expected to exceed 100 percent of capacity by 1995 and 1990, respectively.

As shown in Table 5.15, project-related effects on police protection in the Anchorage and Fairbanks area under the AB1, AB2, and AB3 forecasts vary in accordance with the hiring assumptions used. In the municipality of Anchorage during 1990, project-related demands for police protection would require an additional 0.4 officers under the AB2 forecasts to 2.0 officers under the AB3 forecasts. The comparable projct-related demands for police protection in the municipality of Fairbanks would be 0.2 officers and -0.8 officers.

The introduction of an air and bus transportation program would tend to concentrate project-related effects on demand for police protection in the municipalities of Anchorage and Fairbanks and away from the communities in the Mat-Su Borough and the Railbelt portion of the Yukon-Koyukuk census division as compared to the Car transportation program. For example, project-related demand on police protection in Anchorage would be 0.8 officers in 1990 under the FY85 Car forecast as compared to 1.2

officers under the ABL forecast. The comparable demands for Palmer would be 0.3 officers under the FY85 Car forecast and 0.2 officers under the ABL forecast. In Trapper Creek, project-related effects on demand for police protection would fall from 0.1 officers in 1990 under the FY85 Car forecast to about 0 officers under the ABL forecast.

 $\langle q \rangle_{p}$

In the Fairbanks area, an air and bus transportation program would increase the project-related effect on demand for police protection in the municipality of Fairbanks from -0.1 officers under the FY85 Car forecast to 0.1 officers under the AB1 forecast in 1990. In Cantwell, projectrelated effect on demand for police protection would remain constant as the railhead and transmission line workers are unaffected by the implementation of a transportation program for construction workers at the Project site. In Nenana, project-related effect on demand for police protection would fall from 0.1 officers under the FY85 Car forecast to about 0 officers under the AB1 forecast.

The project would not increase demands for police protection in the served communities by more than 34 percent under any of the FY85 forecasts. The 34 percent increase in Cantwell in 1985 is associated with railhead construction and would not last more than two years. The Air and Bus scenarios would have the beneficial effect of shifting project-related demands on police protection away from the smaller communities toward the municipalities of Anchorage and Fairbanks which have greater capacities to absorb the project-related population.

5.3.4 Summary of Project Effects on Solid Waste Facilities by Selected Community

Four communities or boroughs that are likely to be affected by Susitna construction have currently operating solid waste facilities. They include the Municipality of Anchorage, the Mat-Su Borough, the Fairbanks-North Star Borough, and Cantwell. Baseline conditions for these facilities and project effects on capacity utilization are shown in Table 5.16.

Provisions in solid waste facility capacity occurred for the Mat-Su Borsh a FY85 forecasts. In this Borough, capacity was adjusted from 212 acres to reflect the fact that several landfills were

Baseline revisions in solid waste facility demand also occurred for the Mat-Su Borough. In the Borough, the percent of current and planned capacity used under baseline conditions in 1985 increased from 8.5 percent under the FY84 forecasts to 8.6 percent under the FY85 forecasts. This change in baseline demand is related to the upward revisions in population estimates for this area. Baseline revisions in capacity and use for the other boroughs did not occur since FY85 was the first time that facilities and services in the Municipality of Anchorage, and the Fairbanks-North Star Borough were projected. Under baseline projections, the demand placed on solid waste facilities in each area is not expected to exceed 100 percent of capacity during 1985 to 2005.

As shown in Table 5.16, project-related effects on solid waste facilities in the Anchorage and Fairbanks area under the AB1, AB2, and AB3 forecasts vary in accordance with the hiring assumptions used. In the municipality of Anchorage during 1990, cumulative project-related effects on capacity utilization would range from 0.0 percent under the AB2 forecasts to 0.1 percent under the AB3 forecasts of the design capacity of 535 acres. The comparable percentages for the municipality of Fairbanks would be 0.3 percent and 0.0 percent of the design capacity of 75 acres.

The introduction of an air and bus transportation program would slightly concentrate project-related effects on capacity utilization in the municipalities of Anchorage and Fairbanks and away from the communities in the Mat-Su Borough and the Railbelt portion of the Yukon-Koyukuk census division as compared to the Car transportation program. For example, project-related effects on capacity utilization in Anchorage would be 0.0 percent in 1990 under the FY85 Car forecast as compared to 0.1 percent under the AB1 forecast. The comparable percentages for the Mat-Su Borough would be 1.0 percent under the FY85 Car forecast and 0.9 percent under the AB1 forecast.

In the Fairbanks area, an air and bus transportation program would show no change in the project-related effect on solid waste facility utilization in the municipality of Fairbanks in 1990. In Cantwell, projectrelated effect on capacity utilization would also remain constant at 7.5 percent across FY85 forecasts.

The project would not increase capacity utilization of the currently operating solid waste facilities by more than 7.5 percent under any of the FY85 forecasts. The Air and Bus scenarios would have slight beneficial effects of shifting project-related demands on solid waste facilities away from the smaller communities toward the municipalities of Anchorage and Fairbanks which have greater capacities to absorb the project-related population.

5.3.5 Summary of Project Effects on Recreation Facilities by Selected Community

Three boroughs that are likely to be affected by Susitna construction have currently operating recreation facilities in the form of community parks. They include the Municipality of Anchorage, the Mat-Su Borough, and the Fairbanks-North Star Borough. Baseline conditions for these facilities and project effects on capacity utilization are shown in Table 5.17.

Revisions in recreation facility capacity occurred for the Mat-Su Borough in the FY85 forecasts. In this Borough, capacity was adjusted from 96.5 acres to 236.5 acres to reflect the fact that several areas were purchased for parks.

Baseline revisions in recreation facility demand also occurred for the Mat-Su Borough. In the Borough, the percent of current and planned capacity used under baseline conditions in 1985 decreased from 55.5 percent under the FY84 forecasts to 23.7 percent under the FY85 forecasts. This change in baseline demand is related to the expansion of park acreage for this area. Baseline revisions in capacity and use for the other boroughs did not occur since FY85 was the first time that recreation facilities and services in the hunicipality of Anchorage and the Fairbanks-North

Star Borough were projected. Under baseline projections, the demand placed on recreation facilities in each area is not expected to exceed 100 percent of capacity during 1985 to 2005.

As shown in Table 5.17, project-related effects on recreation facilities in the Anchorage and Fairbanks area under the AB1, AB2, and AB3 forecasts vary in accordance with the hiring assumptions used. In the municipality of Anchorage during 1990, project-related effects on capacity utilization would range from 0.2 percent under the AB2 forecasts to 0.6 percent under the AB3 forecasts of the design capacity of 910.2 acres. The comparable percentages for the municipality of Fairbanks would be 0.1 percent and 0.0 percent of the design capacity of 6,000 acres.

The introduction of an air and bus transportation program would concentrate project-related effects on capacity utilization in the municipalities of Anchorage and Fairbanks and away from the Mat-Su Borough as compared to the Car transportation program. For example, project-related effects on capacity utilization in Anchorage would be 0.2 percent in 1990 under the FY85 Car forecast as compared to 0.4 percent under the AB1 forecast. The comparable percentages for the Mat-Su Borough would be 1.0 percent under the FY85 Car forecast and 0.7 percent under the AB1 forecast.

In the Fairbanks area, an air and bus transportation program would show no change in the project-related effect on recreation facility capacity utilization in the municipality of Fairbanks in 1990.

The project would not increase capacity utilization of the currently operating recreation facilities by more than 1.0 percent under any of the FY85 forecasts. The Air and Bus scenarios would have beneficial effects of shifting project-related demands on recreation facilities away from the smaller communities toward the municipalities of Anchorage and Fairbanks which have greater capacities to absorb the project-related population.

5.3.6 Summary of Project Effects on School Facilities by Selected Community

Five school districts in the Railbelt region that are likely to be affected by Susitna construction are discussed in this section. They include the Municipality of Anchorage School District, the Mat-Su Borough School District, the Fairbanks-North Star Borough School District, the Railbelt School District, and the Nenana City Public School. Baseline conditions for these facilities and project effects on capacity utilization are shown in Table 5.18.

Capacity estimates are defined in terms of the number of students that the existing and planned school facilities can accommodate. Revisions in school facility capacity occurred for the Mat-Su Borough in the FY85 forecasts. In this Borough, capacity was adjusted from 6,516 students to 8,915 students to reflect the fact that several school buildings under the school construction program were completed between the development of the FERC forecasts and the FY84 forecasts.

Baseline revisions in school facility use also occurred for the Mat-Su Borough. In the Borough, the percent of current and planned capacity used under baseline conditions in 1985 increased from 90.0 percent under the FY84 forecasts to 97.4 percent under the FY85 forecasts. This change in baseline demand is related to the upward revisions in population estimates for this area. Baseline revisions in capacity and use for the other boroughs did not occur since FY85 was the first time that facilities and services in the Municipality of Anchorage School District, the Fairbanks-North Star Borough School District, the Railbelt School District, and the City of Nenana were projected.

Under baseline projections, the demand placed on school facilities in the Mat-Su Borough and Nenana would exceed 100 percent of capacity by 1990 and 1999, respectively. Demand currently exceeds capacity in the Municipality of Anchorage and the Fairbanks-North Star Borough.

As shown in Table 5.18, project-related effects on school facilities in the Anchorage and Fairbanks area under the AB1, AB2, and AB3 forecasts vary in accordance with the hiring assumptions used. In the Municipality

of Anchorage during 1990, project-related effects on capacity utilization would range from 0.1 percent under the AB2 forecasts to 0.8 percent under the AB3 forecasts of the design capacity of 37,440 students. The comparable percentages for the Fairbanks-North Star Borough would be 2.6 percent and -0.1 percent of the design capacity of 10,267 students.

The introduction of an air and bus transportation program would concentrate project-related effects on capacity utilization in the Municipality of Anchorage and the Fairbanks-North Star Borough and away from the Mat-Su Borough and school districts in the Railbelt portion of the Yukon-Koyukuk census division as compared to the Car transportation program. For example, project-related effects on capacity utilization in Anchorage would be 0.1 percent in 1990 under the FY85 Car forecast as compared to 0.5 percent under the ABI forecast. The comparable percentages for the Mat-Su Borough would be 9.1 percent under the FY85 Car forecast and 6.9 percent under the ABI forecast.

In the Fairbanks area, an air and bus transportation program would increase the project-related effect on school facility utilization in the Fairbanks-North Star Borough in 1990 from 0.8 percent under the FY85 Car forecast to 1.1 percent under the AB1 forecast. In the City of Nenana, the project-related effect on capacity utilization would change from 2.3 percent under the FY85 Car forecast in 1990 to 0.5 percent in the AB1 forecast. No change in project-related effects would occur in the Railbelt School District as most of the effect is related to railhead and transmission line workers who would remain unaffected by the implementation of an air and bus transportation program for construction workers at the Project site.

The project would not increase capacity utilization of the currently operating school districts by more than 11.5 percent under any of the FY85 forecasts. This relatively large effect is due to railhead construction and operation in Cantwell which is not expected to last more than nine years. The Air and Bus scenarios would have beneficial effects of shifting project-related demands on school facilities away from the smaller communities toward the municipalities of Anchorage and Fairbanks which have greater capacities to absorb the project-related population.

5.4 PROJECTED FISCAL EFFECTS

This section discusses the fsical effects for communities and boroughs in the Railbelt Region. A summary table showing the relevant communities, boroughs, and scenarios is provided for revenues and expenditures so that comparisons across places and scenarios can take place.

Eight communities and boroughs that are likely to be affected by Susitna construction have fiscal responsibilities. They include the Municipality of Anchorage, the Mat-Su Borough, Palmer, Wasilla, Houston, the Municipality of Fairbanks, Cantwell, and Nenana. Baseline expenditures and net fiscal balances and project effects on fiscal balances are shown in Table 5.19. All dollar figures in Table 5.19 are in thousands of constant 1983 dollars.

Revisions in baseline expenditures occurred in all eight areas with the exception of Cantwell and Nenana as the fiscal conditions in these communities were not projected prior to FY85. In the remaining areas, upward revisions were made in FY85 as compared to the values used for baseline expenditures in the FERC forecasts. In 1985, baseline expenditures were increased by 49 percent in Anchorage, 37 percent in the Mat-Su Borough, 34 percent in Palmer, 7 percent in Wasilla, 159 percent in Houston, and 35 percent in the Municipality of Fairbanks.

Baseline revisions in fiscal balances also occurred for some of the above communities and boroughs, including the Mat-Su Borough, Palmer, Wasilla, and Houston. In the Mat-Su Borough, the size of the baseline fiscal balance in 1985 increased from -\$2.7 million in FY84 forecasts to -\$0.6 million under FY85 forecasts, reflecting upward revisions in base year revenues and faster rates of increase in per capita revenue multipliers as compared to per capita expenditure multipliers. In Palmer, the net positive fiscal balance of \$178,000 in 1985 under the FY84 forecast increased to \$496,000 under the FY85 forecasts for similar reasons.

In Wasilla, the baseline net fiscal balance rose from \$134,000 dollars under the FY84 forecasts to \$618,000 under the FY85 forecasts. This

change in baseline balances is related to upward revisions in base year revenue estimates and faster rates of increase in per capita revenue multipliers as compared to per capita expenditure multipliers. The baseline net fiscal balance in Houston was revised downward in the FY85 forecast as compared to the FY84 forecasts in 1985 from \$44,000 to -\$7,000. The reason for the decrease in fiscal balance relates to the loss of several special grant revenue funds that were received from the state. No revisions occurred for Anchorage, Fairbanks, Cantwell, and Nenana as FY85 was the first time that fiscal effects were projected.

As shown in Table 5.19, project-related effects on fiscal balances in the Anchorage and Fairbanks area under the AB1, AB2, and AB3 forecasts vary in accordance with the hiring assumptions used. In the municipality of Anchorage during 1990, project-related effects on fiscal balances would range from \$60,000 under the AB2 forecasts to \$217,000 under the AB3 forecasts compared to the baseline net fiscal balance \$26.5 million. The comparable figures for the municipality of Fairbanks would be -\$52,000 and \$14,000 as compared to the baseline net fiscal balance of -\$4.6 million.

The introduction of an air and bus transportation program would tend to concentrate project-related effects on fiscal balances in the municipalities of Anchorage and Fairbanks and away from the communities in the Mat-Su Borough and the Railbelt portion of the Yukon-Koyukuk census division as compared to the Car transportation program. For example, project-related effects on fiscal balances in Anchorage would be \$89,000 in 1990 under the FY85 Car forecast as compared to \$145,000 under the AB1 The comparable figures for the Mat-Su Borough would be forecast. \$137,000 under the FY85 Car forecast and \$121,000 under the AB1 fore-In Palmer, Wasilla, and Houston, the project effect on fiscal cast. balances would fall by \$36,000 under the AB1 forecasts as compared to the FY85 Car forecast. Thus, an air and bus transportation program would increase the project effect from 0,3 percent of the baseline net fiscal balance to 0.5 percent in Anchorage during 1990 while reducing the project effect from 8 percent to 7 percent of the baseline net fiscal balance in the Mat-Su Borough for the same year.

In the Fairbanks area, project-related effects on fiscal balances in Fairbanks would be \$11,000 in 1990 under the FY85 Car forecast as compared to -\$24,000 under the AB1 forecast. The comparable figures for the City of Nenana would be -\$5,000 under the FY85 Car forecast and -\$2,000 under the AB1 forecast. The introduction of an air and bus transportation program would have very little effect in Cantwell as the railhead and transmission line workers are not affected by such a program. Thus, the change from a car transportation program to an air and bus transportation program would decrease the baseline net fiscal balance by 0.7 percent in Fairbanks during 1990 while increasing the baseline net fiscal balance of Nenana by 17 percent for the same year.

The project would have the greatest absolute effect on the Mat-Su Borough under the FY85 Car forecast in 1999 and the greatest negative absolute effect on the municipality of Fairbanks in 1990 under the AB2 forecast. The Air and Bus scenarios would have the beneficial effect of shifting project-related demands on fiscal balances away from the smaller communities toward the municipalities of Anchorage and Fairbanks which have greater fiscal capacities to absorb the project-related population.

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TABLES

Table 2.1

Construction Work Force Requirements Baseline and Susitna Project Forecasts Car Transportation and Air and Bus Scenarios 1985-2002

Area	1985	1986	1987	1988	1989	1990	1991	Yea 1992	r 1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Ralibeit Susitna	701	1228	867	849	1159	1417	1752	1370	722	301	343	356	747	885	795	932	493	90
Baseline	0	0	0	0	0	132	528	1230	386	663	336	107	0	0	107	0	214	0
Net Empl.	701	1228	867	849	1159	1285	1224	140	336	-362	7	249	747	885	688	932	279	90

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Baseline refers to baseline energy employment that would occur if the Susitna Hydroelectric Project is not built. The without-Susitna plan includes construction of two coal plants, six simple cycle combustion turbines, and one combined cycle combustion turbine.

Net employment refers to the difference between those employed in the with-Susitna development scenario less those who would have been employed building coal and other thermal power plants if Susitna were not built.

Source: Harza-Ebasco Susitna Joint Venture, Revised Work Force Estimates, correspondence dated February 21, 1985.

Characteristic	Susitna Model Assump- tions <u>1</u> /	1983 Intertie Survey Data	1984 Intertie Survey Data	Terror Lake Survey Data
Percent Local Residents (%) Percent Alaska Residents (%)	7 100	20 77	40 83	10 70
Origin of Work Force (%) Railbelt Other Alaska Out-of-State	100 0 0	68 9 23	77 6 17	58 12 30
Percent of Non-Local Workers that are Movers (%)	33	53	30	10
Percent of Movers that are Accompanied by Dependents (%)	73	27	27	56
Number of Dependents per Accompanied Worker	2.30	2.25	2.44	2.21
Number of School Children per Accompanied Worker	1.15	1.30	1.08	1.16
Percent of Movers that Plan to Remain in the Local Community (%)	0	20 <u>2</u> /	16 <u>3</u> /	20

Comparison of Construction Worker Survey Results with the Susitna Socioeconomic Impact Model

Note: Local workers are defined as individuals who live in or near respective project sites prior to gaining employment on the projects shown in the table. These workers do not change their place of residence because of employment on a project. Non-local residents are defined as individuals who reside outside the local area prior to obtaining a job on a construction project. Movers are defined as individuals who reside outside the local area prior to obtaining o job on a construction project and who move their permanent residence into the local area after obtaining employment on a project.

- 1/ From the Susitna Hydroelectric Project Socioeconomic Impact Model (April 1985 Update, Car Transportation Scenario).
- 2/ In the 1983 Intertie Survey, respondents answered that they were planning to stay, not planning to stay, or uncertain. For purposes of this table, it was assumed that approximately 50 percent of those answering "uncertain" would remain.
- <u>3</u>/ In the 1984 Intertie Survey, respondents were asked where they planned to live after the project was completed. For purposes of this table, it was assumed that anyone responding "Talkeetna," "Cantwell," or nearby areas within daily commuting distance (Healy or Willow) plan to remain in the community.

Source: Frank Orth & Associates, Inc., 1985. Harza-Ebasco Susitna Joint Venture, 1985.

Table 2.3

Geographic	Employ	nent	Unemployment Rate					
Jurisdiction	1983	1984	1983	1984				
Anchorage Area $\frac{1}{}$								
Anchorage Borougn Mat-Su Borough Kenai-Cook Inlet C.D. Seward Census Division	116,852 6,094 10,405 1,415	120,702 6,377 10,707 1,462	.076 .151 .152 .152	.079 .148 .149 .149				
Total	134,766	139234	。086	。088				
Fairbanks Area 2/ Fairbanks-North Star Yukon-Koyukuk SE Fairbanks Paxson	33,781 836 1,853 11	34,587 859 1,890 11	.153 .152 .120 .117	.152 .146 .131 .116				
Total	36,481	37,347	.151	.151				
<u>Communities</u> <u>3</u> / Municipality of Anchorage Municipality of Fairbanks	116,852 13,880	120,702 14,206	.076 .153	.079 .152				

Base Year Employment and Unemployment Rates Areas, Census Divisions, and Study Area Communities 1983-1984

- 1/ The Anchorage area consists of the Anchorage Borough, the Kenai Peninsula Borough (Kenai-Cook Inlet Census Division and Seward Census Division), and the Matanuska-Susitna Borough.
- 2/ For purposes of this report, the Fairbanks area is defined as the Fairbanks-North Star Borough, the Southeast Fairbanks Census Division, the Railbelt portion of the Yukon-Koyukuk census area, and the community of Paxson.
- 3/ Employment by small communities is not given as data are unavailable at this level for most communities with the exception of Anchorage and Fairbanks.

Sources: Alaska Department of Labor, Research and Analysis Section, <u>Alaska Statistical Quarterly 1983</u>, Juneau, AK: 1984; Frank Orth & Associates, Inc., 1985.

Table 2.4

		Base Y	lear	Pop	ulatio	n		
Areas,	Census	Divisio	ns,	and	Study	Area	Communitie	38
			1983	3-198	34			

Geographic	Population							
Jurisdiction	1983	1984						
Anchorage Area 1/								
Municipality of Anchorage	230,852	244,026						
Mat-Su Borough	30,580	34,118						
Palmer	2,738	2,792						
Wasilla	2,944	3,548						
Houston	606	739						
Talkeetna	325	277						
Trapper Creek	227	236						
Kenai Peninsula Borough	35,751	38,938						
Kenai	5,774	6,176						
Soldotna	3,252	3,597						
Seward	1,883	2,072						
Homer	3,237	3,432						
Total	297,183	317,082						
Fairbanks Area 2/								
Fairbanks-North Star	64,810	66,733						
Fairbanks	26,629	27,413						
North Pole	957	1,068						
Railbelt Portion of Yukon-Koyukuk	2,517	2,554						
Cantwell	193	193						
Healy	506	581						
Nenana	586	549						
SE Fairbanks	6,516	6,681						
Delta Junction	1,141	1,183						
Paxson	35	37						

1/ The Anchorage area consists of the Anchorage Borough, the Kenai Peninsula Borough (Kenai-Cook Inlet Census Division and Seward Census Division), and the Matanuska-Susitna Borough.

- 2/ For purposes of this report, the Fairbanks area is defined as the Fairbanks-North Star Borough, the Southeast Fairbanks Census Division, the Railbelt portion of the Yukon-Koyukuk census area, and Paxson.
- Sources: Alaska Department of Labor, Research and Analysis Section, <u>Alaska Population Overview</u> for 1981, 1982, and 1983. Juneau, <u>AK:</u> 1982, 1983, and 1984. <u>Municipality</u> of Anchorage Planning Department, <u>Population</u> <u>Estimates</u> for 1984, Anchorage, AK: 1984. <u>Kenai</u> Peninsula Borough Planning Department, <u>Population</u> <u>Estimates</u> for 1984, Kenai, AK: 1984. <u>Matanuska-Susitna</u> Borough Planning Department. <u>Matanuska-Susitna</u> Borough Planning Department. <u>Matanuska-Susitna</u> Borough Planning Department. <u>Matanuska-Susitna</u> Borough Annual Survey of Population and Housing for <u>1981, 1982, 1983, and 1984</u>. Palmer, AK: 1981, 1982, 1983, and <u>1984</u>.

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Base Year Housing Areas, Census Divisions, and Study Area Communities 1983-1984

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Geographic	House	holds	Siz	28	Rat	6S		
Jurisdiction	1983	1984	1983	1984	1983	.1984		
Anchorage Area 1/								
Municipality of Anchorage Mat-Su Borough Palmer Wasilla Houston Talkeetna Trapper Creek Kenai Peninsula Borough Kenai Seward Soldotna Homer	88,396 9,611 944 947 210 103 71 13,633 2,300 775 1,286 1,354	91,703 11,565 922 1,183 249 114 77 14,575 2,368 773 1,371 1,369	2.844 3.180 2.900 3.110 2.890 3.160 3.200 2.856 2.802 2.727 2.819 2.680	2.842 2.950 3.028 3.000 2.970 2.440 3.065 2.853 2.801 2.730 2.818 2.685	.128 .234 .027 .188 .302 .146 .111 .257 .196 .134 .155 .185	.127 .206 .078 .090 .310 .321 .274 .254 .192 .132 .153 .181		
Total	111,640	117,843	N/A	N/A	N/A	N/A		
Fairbanks Area 2/	-	Ē						
Fairbanks-North Star Fairbanks North Pole Yukon-Koyukuk (Railbelt) Cantwell Healy Nenana SE Fairbanks Cen. Div. Delta Junction Community of Paxson	23,044 10,537 335 822 81 151 205 2,098 442 12	23,077 10,476 358 814 68 178 197 2,100 444 12	2.891 2.598 2.983 3.148 2.380 3.351 2.859 3.193 2.653 3.078	2.886 2.606 2.974 3.131 2.837 3.256 2.787 3.175 2.659 3.065	.188 .074 .275 .247 .357 .152 .072 .314 .259 .050	.186 .074 .272 .247 .327 .096 .092 .312 .256 .050		
Total	25,976	26,003	N/A	N/A	N/A	N/A		

1/ The Anchorage area consists of the Anchorage Borough, the Kenai Peninsula Borough (Kenai-Cook Inlet Census Division and Seward Census Division), and the Matanuska-Susitna Borough.

2/ For purposes of this report, the Fairbanks area is defined as the Fairbanks-North Star Borough, the Southeast Fairbanks Census Division, the Railbelt portion of the Yukon-Koyukuk census area, and Paxson.

Sources: Alaska Department of Labor, Research and Analysis Section, <u>Alaska Population Overview</u> for 1981, 1982, and 1983. Juneau, <u>AK: 1982, 1983, and 1984.</u> <u>Matanuska-Susitna Borough Planning Department. Mat-Su Borough</u> <u>Annual Survey of Population and Housing for 1981, 1982, 1983, and 1984. Palmer, AK: 1981, 1982, 1983, and 1984.</u> <u>U.S. Department of Commerce, Bureau of the Census, Census of</u> <u>Population and Housing, 1980.</u> Washington D.C.: 1982.

Table 2.6

Base	Yeer	Public	Faciliti	as and	Servic	es Use	Rotos	and	Capacities	1/
		Stud	y Area Co	mnun I 1	tles and	Schoo	n Dist	rîct	S	

1984

Area/Community	So	lld	Po	11co	F I	rø	Hos	pltal	Recr	eation	We	ter	Se	Wer	Sch	ools
	Was	sto	Ser	vicos	Serv	lces	Ser	vices	Faci	lities	Ser	vice	Sør	vico		
	Usø	Cara-	Uso	Capa-	Use	Capa-	Uso	Capa~	Vso	Capa-	Use	Сара-	Uso	Capa~	Use	Copa-
ĸĸĸĸŧĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸ	Rete	city	Rate	<u>clty</u>	Rate	<u>clty</u>	Rato	<u>city</u>	Rate	city	Rate	city	Rate	city	Rote	city
Anchorage Area																
Anchoraga	17.0	100	366	393	N/A	211	310	449	610	910	29.3	22.0	28.4	34.0	41855	37440
Mat-Su Borough	6.8	212	34	30	N/A	N/A	20	30	56	237	N7A	N/A	N/A	N/A	7985	8915
Palmor	0.6	80	4	8	N/A	N/A	N/A	NA	4	7	0.4	1.0	0.3	0.3	653	2325
Wasilla	0.7	40	NA	N/A	N/A	N/A	N/A	N/A	б	5	0.5	0.9	N/A	N/A	830	2850
Houston	0.1	6	N/A	N/A	N/A	18	NA	N/A	4	200	N/A	N/A	N/A	N/A	0	0
Talkeotna	0.1	5	NA	N/A	NA	12	N/A	N/A	0	0	NA	N/A	N/A	NA	65	100
Trapper Creek	0.0	0	N/A	N/A	N/A	0	N/A	N/A	0	0	NA	N/A	N/A	N/A	55	50
Fairbanks Area			-													
Falrbanks	0.8	75	41	46	N/A	46	85	147	167	6000	2.4	4.0	3.5	6.5	10676	10267
Railbalt Sch. Dist.	NA	N/A	NA	N/A	N/A	NA	N/A	NA	NA	N/A	N/A	N/A	N/A	N/A	345	410
Cantue I I	0.0	2	0	8	N/A	7	N/A	N/A	0	0	N/A	N/A	N/A	N/A	40	60
Healy	0.1	0	0		NA	20	NA	N/A	1	0	N/A	N/A	N/A	N/A	173	200
Nonana	G. I	35	A	8	N/A	13	N/A	N/A	8	0	0.1	0.2	0.1	0.1	R/A	N/A
Nenana City Pub. Sch.	N/A	N/A	N/A	N/A	NA	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	218	400

N/A Not Applicable.

If The following units are used for use rates in Table 2.6: solid waste (acres illied per year); police services (number of officers needed based on per capita standard; fire service (not applicable); hospital services (average daily number of occupied beds); recreation facilities (acres of community park needed based on per capita or per household standards); water service (millions of gallons per day); sever service (millions of gallons per day); sever service (millions of gallons per day); fire service (number of paid or volunteer firefighters); hospital services (number of hospital beds); recreation facilities (number of paid or volunteer firefighters); hospital services (number of hospital beds); recreation facilities (number of acres in community parks); water service (millions of gallons per day); sever service (number of paid or volunteer firefighters); hospital services (number of hospital beds); recreation facilities (number of acres in community parks); water service (millions of gallons per day); sever service (number of students).

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Sources: Key Informant Interviews, 1984 and 1985.

Table 2.7

Base Year Fiscal Conditions Per Capita Revenues and Expenditures in 1983 Dollars Study Area Communities and Jurisdictions 1983-1984

Area/Community	198	33	1984
ANCHORAGE AREA			
Municipality of Anchorage			
Revenues	\$ 751	.72	\$ 769.56
Expenditures	823	.87	826.41
Mat-Su Borough (general and service area fun	lds)		
Revenues	1,143	.39	1,109.80
Expenditures	1,108	.31	994.75
Mat-Su Borough School District			
Revenues	5,559	. 52	5,648.17
Expenditures	5,579	.46	5,657.57
City of Palmer			
Revenues	1,204	.52	1,428.37
Expenditures	1,194	.67	1,306.95
City of Wasilla			
Revenues	487	.43	396.00
Exper litures	389	.61	330.05
City of Houston			
Revenues	423	.87	314.47
Expenditures	423	.87	314.47
FAIRBANKS AREA			
Municipality of Fairbanks			
Revenues	577	.00	649.01
Fynenditures	1.010	.33	1.054.22
Community of Cantwell	29020	6 w/ w/	ಹೊತ್ತಿ¥್.∉ ಅದುಂಯ
Revenues	108	.81	113.99
Expenditures	108	. 81	108.81
City of Nenana			
Revenues	2,055	.09	2,163.24
Expenditures	2,050	.82	2,154.79
Nenana City Public School	-		
Revenues	13,641	.48	10,500.00
Expenditures	12,227	.86	11,311.18
Railbelt School District	-		-
Revenues	10,464	.30	10,346.18
Expenditures	10,569	.13	9,887.87

Table 4,1

Projected Employment, Population, Households, and Net Population Migration Effects Car and Air And Bus Scenario Construction Worker Hiring Alternatives

1985-2002

Scenarlo/Geo-	nin a fan de ser en de ser en de ser de s	, 1997), 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997,	al an ganagi kata dan dan dan dan dan dan dan dan dan da	Andrean (married)	******	an a	Y	'ear		in an ann an a	and managements of the	alan kilonok in fala di kana di ki	n de Skourgen oaktydiersjoer				Section of the section of the	
graphic Jurisdiction	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Car Transportation															,			
Anchorage Area																		
Employment	986	1895	1554	1527	1968	2227	2228	990	1159	-24	135	446	1219	1582	1581	1852	972	557
Population	1054	2257	2183	2249	2845	3342	3576	2449	2503	1275	1103	1303	2082	2597	2726	3106	2326	1773
Households	362	781	763	789	999	1177	1264	882	902	482	420	490	761	945	996	1132	869	680
Net Pop. Migration	807	1090	101	61	499	474	271	-837	-103	-1003	-397	52	546	452	159	307	563	-547
Fairbanks Area																		
Employment	277	521	422	416	540	606	602	248	313	-29	30	121	336	424	414	485	226	122
Population	316	617	576	596	765	888	938	586	644	265	261	332	559	673	685	782	517	384
Households	112	218	205	213	274	318	338	214	236	102	101	127	208	250	255	290	196	150
Net Pop. Migration	235	318	29	18	146	138	79	-245	-30	-293	-116	15	160	132	47	90	-165	~160
ABI Characteristics 1	!																	
Anchorage Area																		
Employment	986	1895	1554	1527	1968	2227	2228	990	1159	-24	135	446	1219	1582	1581	1852	972	557
Population	1054	2257	2183	2249	2845	3342	3576	2449	2503	1275	1103	1303	2082	2597	2726	3106	2326	1773
Households	362	781	763	789	999	1177	1264	882	902	482	420	490	761	945	996	1132	869	680
Net Pop. Migration	807	1090	101	61	499	474	271	-837	-103	-1003	-397	52	546	452	159	307	-563	-547
Fairbanks Area																		
Employment	277	521	422	416	540	606	602	248	313	-29	30	121	336	424	414	485	226	122
Population	316	617	576	596	765	888	938	586	644	265	261	332	559	673	685	782	517	384
Households	112	218	205	213	274	318	338	214	236	102	101	127	208	250	255	290	196	150
Net Pop. Migration	235	318	29	18	146	138	79	-245	-30	-293	-116	15	160	132	47	90	-165	-160

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Projected Employment, Population, Households, and Net Population Migration Effects Car and Air And Bus Scenario Construction Worker Hiring Alternatives 1985-2002

Scenar lo/Geo-		ilmiştirmi inmitirmiştir. Baştı	nasati antor attakan ngana	an da managan tang tang tang tang tang tang tan	in chine and constant	tan and the opportunity of	1944-004-100 million 400-4000 }	lear	na nigespherenterant	**********************		وي بيوني ويوني ويونيونيونيونيونيون	12449774223315223					****
graphic Jurisdiction	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
AB2 Characteristics 2/																		
Anchorage Area																		
Employment	677	1358	1175	1155	1462	662	1684	845	908	90	132	334	883	1179	1215	1419	840	515
Population	481	1262	488	1564	1923	2321	2594	2193	2055	1487	1097	1100	1465	1867	2062	2322	2085	1694
Households	152	416	509	418	509	536	658	799	900	787	735	561	418	414	529	669	745	835
Net Pop. Migration	521	704	65	40	323	306	175	-541	~67	-648	257	34	353	292	103	199	-364	-354
Fairbanks Area																		
Employment	586	1060	791	779	1038	1161	1135	384	553	-148	33	233	675	829	779	918	357	66
Population	885	1605	1261	1272	1677	1897	1908	836	1083	51	266	533	1171	1 398	1345	1560	755	463
Households	321	581	456	462	611	693	698	308	400	22	103	202	439	525	505	586	287	180
Net Pop. Migration	521	704	65	39	322	306	175	-541	-66	-648	-256	33	353	292	103	198	-364	-353
AB3 Characteristics 3/																		
Anchorage Area																		
Employment	1241	2336	877	1843	2398	2702	2686	1119	376	-114	137	538	1503	1916	1884	2210	1079	593
Population	1525	3075	2784	2841	3633	4209	4415	2687	2901	1112	1106	1470	2596	3199	3281	3755	2523	1839
Households	534	1080	984	1007	1289	1497	1575	970	1050	421	422	553	954	1173	1205	1377	943	705
Net Pop. Migration	1042	1408	130	79	645	612	350	-1082	-133	-1296	-513	67	706	584	206	397	-728	~707
Fairbanks Area																		
Employment	23	78	99	99	112	131	143	119	95	60	29	29	56	90	110	127	118	87
Population	-152	-196	- 20	8	- 17	27	105	350	249	426	258	166	50	76	138	139	321	320
Households	- 61	- 81	- 15	- 4	- 16	-	28	126	88	163	100	64	16	23	47	46	122	126
Net Pop. Migration	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

 $\frac{1}{2/3}$ ABI--Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks AB2--Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks

AB3--Air and Bus Scenario/100% construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks

Source: Harza-Ebasco Susitna Joint Venture, Draft Report on Impacts on In-Migration, Unemployment, and Public Facilities and Services, December 1984.

Univeristy of Alaska correspondence entitled Susitna Hydroelectric Project Development: Scenarios with New Work Force

Summary of Project Effects on Employment 1/ FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 2/ 1985-2005

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	19	85	19	1990		95	1999		2002		2005	
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Basellne	Effect
Anchorage Area												
Mun. of Anchorage												
FERC Forecasts	116,356	991	131,705	3,010	138,434	123	150,643	1,353	160,611	154	171,173	N/A
FY84 Forecasts	115,249	781	129,493	2,502	137,316	444	141,337	1,431	146, 105	312	152,906	223
FY85 Car Forecasts	122,615	714	127,817	1,314	136,657	-294	142,530	885	146,745	295	151,257	-207
FY85 ABI Forecasts	122,615	853	127,817	1,526	136,657	-289	142,530	1,005	146,745	293	151,257	-207
FYP5 AB2 Forecasts	122,615	562	127,817	1,079	136,657	-289	142,530	689	146,745	250	151,257	-207
FY85 AB3 Forecasts	122,615	1,094	127,817	1,923	136,657	-293	142,530	1,263	146, 745	329	151,257	-207
Mat-Su Borough												
FERC Forecasts	5,442	136	6,914	1,293	8,076	423	9,505	747	10,733	266	12,116	N/A
FY84 Forecasts	6,322	275	7,857	1,349	9,147	482	10,098	836	10,976	284	12,056	179
FY85 Car Forecasts	6,590	234	7,351	846	8,379	418	9,178	656	9,790	260	10,444	179
FY85 ABI Forecasts	6,590	81	7,351	614	8,379	412	9,178	524	9,790	263	10,444	179
FY85 AB2 Forecasts	6,590	81	7,351	534	8,379	412	9,178	494	9,790	263	10,444	179
FY85 AB3 Forecasts	6,590	81	7,351	664	8,379	412	9,178	553	9,790	236	10,444	179
Kenal Penin. Borough												
FERC Forecasts	12,904	116	15,368	349	16,969	14	19,189	159	21,055	16	23,097	N/A
FY84 Forecasts	12,097	100	14,334	329	16,003	36	17,145	155	18,252	11	19,662	0
FY85 Car Forecasts	12,514	38	13,335	67	14,572	10	15,463	40	16,127	2	16,836	0
FY85 AB1 Forecasts	12,514	52	13,335	87	14,572	11	15,463	51	16,127	2	16,836	0
FY85 AB2 Forecasts	12,514	34	13,335	49	14,572	8	15,463	31	16,127	2	16,836	0
FY85 AB3 Forecasts	12,514	66	13,335	114	14,572	17	15,463	65	16,127	2	16,836	0

Summary of Project Effects on Employment $\underline{I'}$

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 2/

1985-2005

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	19	85	19	90	19	95	19	99	20	02	20	105
Area/Community	Baseline	Effect	Basellne	Effect	Baseline	Effect	Basellne	Effect	Baseline	Effect	Baseline	Effect
Anchorage Area Subtotal												
FERC Forecasts	134,702	1,243	153,987	4,652	163,479	522	179,337	2,258	192,399	437	206,386	N/A
FY84 Forecasts	133,668	1,156	151,685	4,180	162,466	962	168,580	2,422	175, 333	607	184,625	402
FY85 Car Furecasts	141,719	986	148,503	2,277	159,609	134	167,171	1,581	172,661	557	178,538	-28
FY85 ABI Forecasts	141,719	986	148,503	2,227	159,609	134	167,171	1,580	172,661	558	178,538	-28
FY85 AB2 Forecasts	141,719	677	148,503	1,662	159,609	132	167,171	1,179	172,661	515	178,538	~28
FY85 AB3 Forecasts	141,719	1,241	148,503	2,701	159,609	137	167,171	1,184	172,661	593	178,538	28
Fairbanks Area												
Fairbanks-N.S. Bor.												
FERC Forecasts	38,606	272	39,597	705	41,616	31	45,361	323	48,449	40	51,710	N/A
FY84 Forecasts	33, 915	231	37,418	800	40,286	80	41,473	362	42,919	27	44,827	N/A
FY85 Car Forecasts	34,746	3	38,374	499	40,935	24	42,590	385	43,737	121	44,904	-21
FY85 ABI Forecasts	34,746	15	38, 374	503	40,935	19	42,590	389	43,737	119	44,904	-21
FY85 AB2 Forecasts	34,746	318	38,374	1,058	40,935	22	42,590	749	43,737	163	44,904	-21
FY85 AB3 Forecusts	34,746	-239	38, 374	33	40,935	18	42,590	85	43,737	84	44,904	-21
Railbeit Portion of												
Yukon-Koyukuk												
FERC Forecasts	N/A	148	N/A	307	N/A	236	N/A	240	N/A	222	N/A	N/A
FY84 Forecasts	629	190	725	503	83 7	56	939	256	1,023	20	1,115	N/A
FY85 Car Forecasts	867	274	977	107	1,064	б	1,125	29	1,169)	1,214	0
FY85 AB1 Forecasts	867	262	977	98	1,054	11	1,125	25	1,169	3	1,214	0
FY85 AB2 Forecasts	867	262	977	98	1,064	1 1	1,125	25	1,169	3	1,214	0
FY85 AE3 Forecasts	867	262	977	98	1,064		1,125	25	1,169	3	1,214	0

Summary of Project Effects on Employment 1/

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios $\frac{27}{2}$

1985-2005

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	19	85	1990		19	95	1999		2002		2005	
Area/Community	Basellne	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Basaline	Effect
SE Fairbanks C.D.												
FERC Forecasts	1.836	2	1.883	5	1.979	0	2,157	2	2.304	0	2.459	N/A
FY84 Forecasts	1,613	ł	1,780	5	1,916	1	1,972	2	2,041	0	2,132	0
FY85 Car Forecasts	1,891	1 0	2,046	0	2,137	0	2,186	0	2,215	0	2,245	0
FY85 ABI Forecasts	1,891	0	2,046	5	2,137	0	2,186	0	2,215	0	2,245	0
FY85 AB2 Forecasts	1,891	б	2,046	5	2,137	0	2,186	5	2,215	0	2,245	0
FY85 AB3 Forecasts	1,891	0	2,046	0	2,137	0	2,186	0	2,215	0	2,245	0
Fairbanks Area												
FERC Forecasts	40,443	422	41,481	1,017	43,596	267	47,519	565	50,753	262	54,170	N/A
FY84 Forecasts	36,157	422	39,923	1,308	43,039	137	44, 384	620	45, 983	47	48,074	0
FY85 Car Forecasts	37,515	277	41,409	606	44,149	30	45,914	414	47,135	122	48,378	-21
FY85 AB1 Forecasts	37,515	277	41,409	606	44, 149	30	45,914	4 4	47,135	122	48, 378	-21
FY85 AB2 Forecasts	37,515	586	41,409	1,161	44,149	33	45,914	779	47,135	166	48,378	-21
FY85 AB3 Forecasts	37,515	23	41,409	131	44,149	29	45,914	110	47,135	87	48, 378	-21
Total Ralibeit												
FERC Forecasts	175,145	2,034	200,112	5,730	207,075	439	226,856	3,155	243, 152	460	260,556	N/A
FY84 Forecasts	169, 825	1,548	191,608	5,707	205,505	1,163	212,964	3,180	221,316	666	232,699	402
FY85 Car Forecasts	179,234	1,263	189,912	2,833	203, 758	164	213,085	1,995	219,796	679	226,916	-49
FY85 AB1 Forecasts	179,234	1,263	189,912	2,833	203, 758	164	213,085	1,994	219,796	680	226,916	-49
FY85 AB2 Forecasts	179,234	1,263	189,912	2,823	203,758	165	213,085	1,994	219,796	681	226,916	-49
FY85 AB3 Forecasts	179,234	1,264	189,912	2,832	203, 758	166	213,085	1,994	219,796	680	226,916	-49
F TOD ADD FOR OCASTS	119,234	1,204	103, 312	2,032	202,128	100	212,082	1, 994	219,190	000	220, 910	-47

N/A--Not Available or Not Applicable.

1/ Employment data at the community level are not available; however, the Fairbanks area includes estimated employment in Paxson.

 $\frac{2}{2}$ Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% to construction worker hiring in Anchorage - 0%

Summary of Project Effects on Population FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

				Nu	imber of Pe	ople	a an	ine toologick in the second				
	19	85	1990		19	95	1999		2002		2005	
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Anchorage Area												
Mun. of Anchorage												
FERC Forecasts	200,959	435	224,027	663	234,507	-523	247,759	-36	258,182	-532	269,178	-292
FY84 Forecasts	203,106	142	223,196	180	232,879	1,366	236,936	1,180	240, 532	1,673	245, 605	1,750
FY85 Car Forecasts	247,237	289	248,767	830	251,747	142	261,562	844	265,226	1,001	268,077	555
FY85 AB1 Forecasts	247,237	639	248,767	1,346	251,747	52	261,562	1,147	265,226	1,022	268,077	361
FY85 AB2 Forecasts	247,237	204	248,767	566	251,747	23	261,562	632	265,226	962	268,077	361
FY85 AB3 Forecasts	247,237	1,004	248, 767	2,028	251,747	68	261,562	1,577	265,226	1,083	268,077	361
Mat-Su Borough												
Palmer												
FERC Forecasts	3,302	5	4,525	49	5,374	35	6,167	39	6,838	33	7,581	27
FY84 Forecasts	3,106	31	4,255	110	5,054	92	5,799	103	6,430	90	7,129	90
FY85 Car Forecasts	2,876	111	3, 334	201	3,960	-5	4,544	110	5,038	14	5,586	-22
FY85 AB1 Forecasts	2,876	51	3, 334	110	3,960	6	4,544	61	5,038	8	5,586	~
FY85 AB2 Forecasts	2,876	35	3, 334	75	3,960	б	4,544	40	5,038	6	5,586	3
FY85 AB3 Forecasts	2,876	68	3, 334	139	3,960	6	4,544	80	5,038	6000 Calify	5,586	is,
Wasilla												
FERC Forecasts	2,895	5	4, 157	59	5,967	44	7,969	48	9,756	42	12,053	34
FY84 Forecasts	3,402	38	4,884	132	7,012	107	9,364	118	11.633	101	4,452	101
FY85 Car Forecasts	3,814	120	5, 476	214	7,861	-7	10,498	120	13,042	14	16,202	-25
FY85 ABI Forecasts	3,814	60	5,476	121	7,861	6	10,498	66	13,042	8	16,202	3
FY85 AB2 Forecasts	3,814	41	5,476	86	7,861	б	10,498	45	13.042	8	16.202	3
FY85 AB3 Forecasts	3, 814	70	5,476	147	7,861	6	10,498	82	13,042	ent the	16,202	3

Summary of Project Effects on Population FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

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	19	85	19	90	19	95	1999		2002		20	105
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Houston												
FERC Forecasts	878	4	1,415	44	2,278	35	3, 335	37	4,439	33	5,909	26
FY84 Forecasts	733	35	1,181	122	1,902	95	2,785	105	3,706	95	4, 933	91
FY85 Car Forecasts	813	59	1,309	105	2,108	-б	3,087	58	4,109	3	5,469	-14
FY85 ABI Forecasts	813	27	1,309	59	2,108	0	3, 087	29	4,109	5	5,469	0
FYB5 AB2 Forecasts	813	19	1,309	40	2,108	0	3,087	18	4,109	3	5,469	0
FY85 AB3 Forecasts	813	35	1,309	72	2,108	0	3,087	40	4,109	5	5,469	0
Talkeetna												
FERC Forecasts	780	25	1,000	335	1,281	222	1,563	257	1,814	209	2,106	169
FY84 Forecasts	358	52	457	195	584	148	709	164	821	147	951	44
FY85 Car Forecasts	288	22	350	99	426	-3	499	72	561	3	631	~6
FY85 ABI Forecasts	288	11	350	81	426	0	499	62	561	3	631	0
FY85 AB2 Forecasts	288	5	350	75	426	0	499	56	561	0	631	0
FY85 AB3 Forecasts	288	11	350	86	426	0	499	64	561	3	631	0
Trapper Creek												
FERC Forecasts	263	32	320	475	390	227	456	314	513	212	577	169
FY84 Forecasts	246	78	299	285	363	219	425	241	478	211	538	203
FY85 Car Forecasts	243	22	282	47	327	-3	368	24	402	3	439	~б
FY85 AB1 Forecasts	243	11	282	24	327	0	368	11	402	0	439	0
FY85 AB2 Forecasts	243	5	282	16	327	0	368	5	402	0	439	0
FY85 AB3 Forecasts	243	14	282	29	327	0	368	13	402	3	439	0
Suburban												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	23,929	114	31,613	388	38, 508	313	43,204	347	46,658	307	50,260	302
FY85 Car Forecasts	24,198	361	27,291	648	29,989	-8	32,913	370	33,985	52	34,272	-67
FY85 ABI Forecasts	24,198	179	27,291	381	29,989	27	32,913	215	33, 985	43	34,272	at an other
FY85 AB2 Forecasts	24,198	124	27,291	274	29,989	27	32,913	149	33, 985	30	34,272	17
FY85 AB3 Forecasts	24,198	225	27,291	472	29,989	27	32,913	273	33, 985	48	34,272	17

Summary of Project Effects on Population

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/

1985-2005

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	19	85	19	90	19	95	1999		2002		2005	
Area/Community	Basellne	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Rural/Remote												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	3, 450	48	4,557	161	5,552	125	6,228	142	6,726	128	7,246	124
FY85 Car Forecasts	3,489	48	3, 934	83	4,323	0	4,745	47	4,899	6	4,941	~8
r 185 ABI Forecasts	3,489	27	3,934	62	4,323	5	4,745	32	4,899	8	4,941	3
FY85 AB2 Forecasts	3,489	19	3,934	46	4,323	5	4,745	24	4,899	8	4,941	Ŋ
FY85 AB3 Forecasts	3, 489	35	3,934	72	4,323	5	4,745	42	4,899	8	4,941	3
Borough Subtotal												
FERC Forecasts	31,202	110	42,964	2,478	54,607	1,802	66,338	2,136	76,295	1,502	88,069	676
FY84 Forecasts	35,224	117	47,246	2,622	58,975	1,943	68,514	2,365	76,452	1,631	85,509	1, XKC
FY85 Car Forecasts	35,721	743	41,976	2,552	48,994	1,020	56,654	1,906	62,036	779	67,540	and an
FY85 ABI Forecasts	35,721	366	41,976	1,993	48,994	1,096	56,654	1,581	62,036	756	67,540	524
FY85 AB2 Forecasts	35,721	248	41,976	1,767	48,994	1,098	56,654	1,442	62,036	739	67,540	524
FY85 AB3 Forecasts	35, 721	458	41,976	2,172	48,994	1,096	56,654	1,699	62,036	681	67, 540	524
Kenal Pen. Borough												
Soldotna												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	· N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	3,752	9	4,223	11	4,757	-2	5,369	3	5,785	-2	6,206	-6
FY85 ABI Forecasts	3,752	0	4,223	-8	4,757	-2	5,369	-6	5,785	-2	6,206	0
FY85 AB2 Forecasts	3,752	0	4,223	-б	4,757	0	5,369	2	5,785	0	6,206	0
FY85 AB3 Forecasts	3,752	0	4,223	~8	4,757	-6	5,369	-6	5,785	-2	6,206	0
Summary of Project Effects on Por"'ation FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

				Nu	mber of Pe	ople						
	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Seward												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	NZA	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A
FY85 Car Forecasts	2,016	14	2,094	14	2,190	-5	2,338	12	2,421	3	2,499	-6
FY85 ABI Forecasts	2,016	13	2,094	18	2,190	-2	2,338	11	2,421	3	2,499	0
FYB5 AB2 Forecasts	2,016	10	2,094	14	2,190	-2	2,338	8	2,421	0	2,499	0
FY85 AB3 Forecasts	2,016	16	2,094	21	2,190	-2	2,338	12	2,421	1	2,499	0
Homer												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
FY85 Car Forecasts	3,568	6	4,016	8	4,524	-2	5,106	5	5,502	0	5,902	-3
FY85 AB1 Forecasts	3,568	1 5	4,016	11	4,524		5,106	9	5,502	0	5,902	0
FY85 AB2 Forecasts	3, 568	5	4,016	7	4,524	-2	5,106	3	5,502	0	5,902	0
FY85 AB3 Forecasts	3,568	11	4,016	16	4, 524	-3	5,106	7	5,502		5,902	0
Kenal												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	6,438	5	7,246	3	8,162	-8	9,212	3	9,926	~2	10,648	-6
FY85 ABI Forecasts	6,438	11	7,246	8	8,162	-5	9,212	5	9,926	-2	10,648	0
FY85 AB2 Forecasts	6,438	6	7,246	5	8,162	1	9,212	2	9,926	~2	10,648	0
FY85 AB3 Forecasts	6,438	14	7,246	13	8,162	~5	9.212	10	9,926	an f	10.648	0

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Summary of Project Effects on Population FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u> 1985-2005

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	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Borough Subtotal												
FERC Forecasts	N/A	20	N/A	-24	N/A	-75	N/A	-54	N/A	-79	N/A	N/A
FY84 Forecasts	30,970	N/A	37,754	N/A	43,611	N/A	48,080	N/A	51,817	N/A	56,154	N/A
FY85 Car Forecasts	40,312	22	45,065	-40	50,469	-59	56,729	-24	60,950	- Ą	65,215	-20
FY85 ABI Forecasts	40, 312	49	45,065	3	50,469	-45	56,729	-2	60,950	-5	65,215	0
FY85 AB2 Forecasts	40,312	29	45,065	-12	50,469	-24	56,729	-12	60,950	-7	65,215	0
FY85 AB3 Forecasts	40,312	63	45,065	9	50,469	-58	56,729	5	60,950	-12	65,215	0
Anchorage Area Subtotal												
FERC Forecasts	N/A	565	320,030	2,027	N/A	293	382.256	957	N/A	227	N/A	N/A
FY84 Forecasts	269,300	N/A	308,196	N/A	335,464	N/A	353.531	N/A	368,801	N/A	387,267	N/A
FY85 Car Forecasts	323,270	1,054	335,809	3,342	351,210	1,103	374,946	2,726	388,212	1,776	400,833	885
FY85 ABI Forecasts	323,270	1,053	335,809	3,342	351,210	1,103	374,946	2,726	388,212	1,773	400, 833	885
FY85 AB2 Forecasts	323,270	485	335,809	2,321	351,210	1,097	374,946	2,262	388,212	1,694	400,833	885
FY85 AB3 Forecasts	323,270	1,524	335,809	4,211	351,210	1,106	374,946	3,283	388,212	1,839	400, 833	885
Fairbanks Area												
Fairbanks-N.S. Bor.												
Mun. of Falrbanks												
FERC Forecasts	28,798	82	29,628	-173	31,886	-323	34,555	-271	37,041	-341	39, 354	N/A
FY84 Forecasts	30,370	-48	36,266	-196	42,177	93	46,483	-31	50,241	181	54,473	216
FY85 Car Forecasts	27,574	-59	29,821	-83	30,735	-155	32,372	-64	33, 101	88	33,744	68
FY85 AB1 Forecasts	27,574	-7	29,824	153	30, 735	86	32, 372	90	33, 101	148	33, 744	178
FY85 AB2 Forecasts	27,574	166	29,824	320	30,735		32,372	146	33,101	196	33,744	178
FY85 AB3 Forecasts	27,574	-791	29,824	-90	30,735	191	32,372	112	33, 101	249	33, 744	178

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Summary of Project Effects on Population FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

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	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Basalina	Effect
North Pole												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	1,079	-5	1,181	21	1,233	t	1,312	12	1,351	б	1,388	0
FY85 ABI Forecasts	1,079	3	1,181	29	1,233	3	1,312	19	1,351	8	1,388	0
FY85 AB2 Forecasts	1,079	19	1,181	58	1,233	5	1,312	38	1,351	9 9	1,388	0
FY85 AB3 Forecasts	1,079	0	1,181	0	1,233	5	1,312		1,351	10	1,388	0
Borough Subtotal												
FERC Forecasts	69,168	82	71,162	-173	76,585	-323	82,996	-271	88,193	-341	93,701	0
FY84 Forecasts	65,769	-48	73,516	-196	80,033	93	83,663	-31	86,913	181	90, 572	216
FY85 Car Forecasts	67,435	-98	73,839	666	77,049	251	81,974	616	84,463	378	86,787	178
FY85 ABI Forecasts	67,435	-9	73,839	760	77,049	258	81,974	683	84,463	381	86,787	178
FY85 AB2 Forecasts	67,435	547	73,839	1,768	77,049	264	81,974	1,329	84,463	460	86,787	178
FY85 AB3 Forecasts	67,435	-480	73,839	-90	77,049	255	81,974	133	84,463	317	86, 787	J 78
Railbelt Portion of												
Yukon-Koyukuk												
Cantwell												*
FERC Forecasts	194	430	214	1,000	237	785	256	788	272	744	N/A	N/A
FY84 Forecasts	201	368	222	797	245	627	265	701	281	619	298	608
FY85 Car Forecasts	197	338	217	124	240	0	260	10	276	0	293	0
FY85 ABI Forecasts	197	322	217	115	240	0	260	0	276	0	293	0
FY85 AB2 Forecasts	197	322	217	115	240	0	260	0	276	0	293	0
FY85 AB3 Forecasts	197	322	217	115	240	0	260	0	276	0	293	0

Summary of Project Effects on Population FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

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	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Healy												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	378	84	427	289	483	228	533	252	574	225	619	220
FY85 Car Forecasts	639	16	763	23	884	3	995	13	1,087	0	1,188	0
FY85 ABI Forecasts	639	3	763	3	884	3	995	3	1,087	0	1,188	0
FY85 AB2 Forecasts	639	3	763	5	884	3	995	3	1,087	0	1,188	0
FY85 AB3 Forecasts	639	3	763	3	884	3	995	3	1,087	0	1,188	0
Nenana												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	532	38	602	140	681	112	752	122	810	105	872	105
FY85 Car Forecasts	573	46	711	78	882	7	1,047	49	1,192	3	1,356	0
FY85 AB1 Forecasts	573	3	711	8	882	0	1,047	5	1,192	3	۱,356	0
FY85 AB2 Forecasts	573	3	711	11	882	3	1,047	8	1,192	3	1,356	0
FY85 AB3 Forecasts	573	3	711	3	882	0	1,047	5	1,192	3	1,356	0
Census Area Subtotal												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	2,316	490	2,471	1,226	2,636	1,125	2,776	1,162	2,886	1,074	3,001	933
FY85 Car Forecasts	2,580	414	2,759	229	2,938	10	3,092	72	3,222	б	3,348	0
FY85 AB1 Forecasts	2,580	328	2,759	123	2,938	3	3,092	5	3,222	3	3, 348	0
FY85 AB2 Forecasts	2,580	328	2,759	131	2,938	5	3,092	11	3,222	3	3,348	0
FY85 AB3 Forecasts	2,580	328	2,759	117	2,938	3	3,092	5	3,222	3	3, 348	0

Summary of Project Effects on Population FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

				NU	mdør of Pe	opie						
	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Eífect	Baseline	Effect
SE Fairbanks C.D.												
Delta Junction												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	1,191	0	1,278	0	1,309	0	1,371	0	1,396	0	1,418	0
FY85 ABI Forecasts	1,191	0	1,278	3	1,309	0	1,371	0	1,396	0	1,418	0
FY85 AB2 Forecasts	1,191	3	1,278	5	1,309	0	1,371	3	1,396	0	1,418	0
FY85 AB3 Forecasts	1,191	0	1,278	0	1,309	0	1,371	0	1,396	0	1,418	0
Cen. DIv. Subtotal												
FERC Forecasts	6,691	0	6,884	0	7,409	0	8,029	0	8,502	0	8,985	0
FY84 Forecasts	6,544	N/A	7,315	N/A	7,964	N/A	8,325	N/A	8,648	N/A	9,012	N/A
FY85 Car Forecasts	6,726	0	7,220	-7	7,396	0	7,744	-3	7,889	0	8,011	0
FY85 ABI Forecasts	6,726	-3	7,220	5	7,396	0	7,744	-3	7,889	0	8,011	0
FY85 AB2 Forecasts	6,726	10	7,220	-2	7,396	-3	7,744	-5	7,889	0	8,011	0
FY85 AB3 Forecasts	6,726	0	7,220	0	7,396	0	7,744	0	7,889	0	8,011	0
Paxcon												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FYB4 Forecasts	39	N/A	51	N/A	66	N/A	81	N/A	· 95	N/A		N/A
FY85 Car Forecasts	38	0	42	0	44	0	46	0	48	0	49	0
FY85 ABI Forecasts	38	0	42	0	44	0	46	0	48	0	49	0
FY85 AB2 Forecasts	38	0	42	0	44	0	46	0	48	0	49	0
FY85 AB3 Forecasts	38	0	42	0	44	0	46	0	48	0	49	0

Summary of Project Effects on Population FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

\$	******	\$	and an	NL	mber of Pe		n in de la company and an internet and a company a		n geogra og skaladige Øssikane (som Son	an a		and a second
	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Basel i ne	Effect	Baseline	Effect
Falrbanks Area												
FERC Forecasts	75,859	82	77,969	-172	83,911	-323	90,935	-271	96,695	-341	102,686	N/A
FY84 Forecasts	74,668	-48	83, 353	-196	90,699	93	94,845	-31	98, 542	181	102,696	216
FY85 Car Forecasts	76,779	316	83,860	888	87,427	261	92,857	685	95,622	384	98,175	178
FY85 AB1 Forecasts	76,779	316	83,860	888	87,427	261	92,857	685	95,622	384	98,175	178
FY85 AB2 Forecasts	76,779	885	83,860	1,897	87,427	266	92,857	1,345	95,622	463	98,175	178
FY85 AB3 Forecasts	7 <i>3</i> ,779	-152	83,860	27	87,427	258	92,857	138	95,622	320	98,175	178
Total Relibeit												
FERC Forecasts	N/A	N/A	397,999	1,867	N/A	N/A	473, 191	691	N/A	N/A	N/A	N/A
FY84 Forecasts	343,929	N/A	391,498	N/A	426,097	N/A	448,295	N/A	467,248	N/A	489,852	N/A
FY85 Car Forecasts	400,049	1,370	419,669	4,232	438,637	1,362	467,803	3,414	483,834	2,154	499,008	1,064
FY85 ABI Forecasts	400,049	1,369	419,669	4,229	438,637	1,364	467,803	3,410	483, 834	2,155	499,008	1,063
FY85 AB2 Forecasts	400,049	1,370	419,669	4,218	438,637	1,363	467,803	3,408	483,834	2,154	499,008	1,063
FY85 AB3 Forecasts	400,049	1,372	419,669	4,238	438,637	1,364	467,803	3,421	483,834	2,159	499,008	1,063

N/A Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.

Source: Frank Orth & Associates, Inc., 1985.

Summary of Project Effects on Households FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY25 Air and Bus Scenarios 1/ 1985-2005

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	19	85	19	90	. 19	95	19	99	20	02	20	105
Area/Community	Baseline	Effect	Baseline	Effect	Basellne	Effect	Baseline	Effect	<u>Baseline</u>	Effect	Baseline	Effect
Anchorage Area												
Mun. of Anchorage												
FERC Forecasts	69,920	N/A	79,028	213	63,923	N/A	89,664	N/A	97,209	-171	101,409	N/A
FY84 Forecasts	72,331	50	79,232	63	82,406	483	83,634	416	84,724	589	86, 359	615
FY85 Car Forecasts	83,603	110	86,184	354	90,647	99	93, 304	367	97,167	410	99,246	263
FY85 AB1 Forecasts	83,603	209	86,184	494	90,647	66	93, 304	452	97,167	415	99,246	194
FY85 AB2 Forecasts	83,603	49	86,184	207	90,647	58	93, 304	258	97,167	393	99,246	194
FY85 AB3 Forecasts	83,603	573	86,184	742	90,647	72	93, 304	613	97,167	437	99,246	194
Mat-Su Borough												
Palmer												
FERC Forecasts	1,083	N/A	1,551	17	1,928	N/A	2,299	14	2,573	N/A	2,853	N/A
FY84 Forecasts	1,073	9	1,476	33	1,762	28	2,028	31	2,255	27	2,507	27
FY85 Car Forecasts	915	36	1,103	66	1,383	-2	1,591	37	1,828	5	2,068	-8
FY85 AB1 Forecasts	915	19	1,103	41	1,383	2	1,591	23	1,828	3	2,068	1
FY85 AB2 Forecasts	915	13	1,103	28	1,383	2	1,591	15	1.828	2	2,068	100 B
FY85 AB3 Forecasts	915	25	1,103	52	1, 783	2	1,591	30	1,828	4	2,068	, B
Wasilla												
FERC Forecasts	930	N/A	1,404	20	2.124	N/A	2,965	17	3.672	N/A	4.536	N/A
FY84 Forecasts	1,102		1,615	39	2,365	32	3,210	35	4,039	30	5,082	30
FY85 Car Forecasts	1,225	39	1,825	71	2,757	~3	3,686	40	4,739	5	5,998	-9
FY85 AB1 Forecasts	1,225	22	1,825	45	2,757	2	3,686	25	4,739	3	5,998	-
FY85 AB2 Forecasts	1,225	15	1,825	32	2,757	2	3,686	17	4,739	3	5,998	1
FY85 AB3 Forecasts	1,225	26	1,825	55	2,757	2	3,686	31	4,739	1	5,998	1

Summary of Project Effects on Households

FERC License Application, FY04 Car Transportation, FY05 Car Transportation, and FY05 Air and Bus Scenarios 1/

1985-2005

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	19	985	19	90	19)95	19	99	20	02	20	105
Area/Community	Basellne	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Houston												
FERC Forecasts	308	N/A	508	15	837	N/A	1,249	13	1,671	N/A	2,224	N/A
FY84 Forecasts	254	10	411	36	664	28	975	31	1,300	28	1,735	21
1985 Car Forecasts	264	19	439	35	743	-2	1,088	20	1,495	ļ	2,024	-5
FY85 ABI Forecasts	264	10	439	22	743	0	1,088	11	1,495	2	2,024	0
FY85 AB2 Forecasts	264	7	439	15	743	0	1,088	7	1,495	CALCER D	2,024	0
FY85 AB3 Forecasts	264	13	439	27	743	0	1,088	15	1,495	2	2,024	0
Talkeetna												
TERC Forecasts	246	9	334	117	453	77	581	87	683	65	792	64
FY84 Forecasts	114	16	149	59	195	46	242	51	284	46	334	44
FY85 Car Forecasts	112	8	1 35	49	164	-	186	36	210	ļ	233	-2
FY85 ABI Forecasts	112	4	135	43	164	0	186	33	210	Į	233	0
FY85 AB2 Forecasts	112	2	135	41	164	0	186	31	210	0	233	0
FY85 AB3 Forecasts	112	4	135	45	164	0	186	34	210	1	233	0
Trapper Creek												
FERC Forecasts	83	11	107	168	138	79	169	111	193	73	217	63
FY84 Forecasts	78	23	97	86	121	67	145	74	165	65	189	63
FY85 Car Forecasts	77	7	92	15	114		128	8	146	1	162	~2
FY85 ABI Forecasts	77	4	92	9	114	0	128	4	146	0	162	0
FY85 AB2 Forecasts	77	2	92	б	114	0	128	2	146	0	162	0
FY85 AB3 Forecasts	77	5	92	11	114	0	128	5	146	1	162	0
Suburban												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	7,468	34	10.152	116	12.734	94	14,636	105	16,100	93	17.672	92
FY85 Car Forecasts	7,759	117	9,082	214	10.511	- 1	11,551	125	12.345	19	12.688	-2A
FYR5 ABI Forenete	7.750	66	9.082	142	10.511	10	11 551		12,245	, , , , , , , , , , , , , , , , , , ,	12 699	6. N
FYR5 AR2 Forecaste	7,750	46	9,082	102	10,211	10	11 551	01 56	12,272	10	12 600	c E
EY95 AB3 Eproporte	7 750	27 29	0,022	176	10 511	10	11,551	20	129272) «	12 600	U E
FIDS NOS FUI ACOSIS	2000	20	29 VOZ	170	100211	5 V	1000	CVI	848249	0	12,000	O

Summary of Project Effects on Households FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

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	19	85	19	990	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Rural/Remote												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A
FYB4 Forecasts	1,074	14	1,461	47	1,834	37	2,108	42	2,320	38	2,548	37
FY85 Car Forecasts	1,308	17	1,472	30	1,638	0	1,745	16	1,822	2	1,829	-3
FY85 AB1 Forecasts	1,308	10	1,472	23	1,638	2	1,745	12	1,822	3	1,829	80
FY85 AB2 Forecasts	1,308	r	1,472	17	1,638	2	1,745	9	1,822	3	1,829	
FY85 AB3 Forecasts	1,308	13	1,472	27	1,638	2	1,745	16	1,822	exectly.	1,829	realizer Sector
Borough Subtotal												
FERC Forecasts	9,927	38	14,417	836	19,371	658	24,670	716	28,715	527	33,146	424
FY84 Forecasts	11,186	117	15,375	766	19,678	625	23, 336	719	26, 454	574	30,066	490
FY85 Car Forecasts	11,656	243	14, 157	830	17,327	338	19,989	632	22,598	271	25,004	117
FY85 AB1 Forecasts	11,656	135	14, 157	675	17,327	366	19,989	539	22,598	266	25,004	179
FY85 AB2 Forecasts	11,656	92	14, 157	591	17,327	366	19,989	487	22,598	258	25,004	179
FY85 AB3 Forecasts	11,656	169	14, 157	743	17,327	366	19,989	584	22,598	271	25,004	179
Kenal Pen. Borough												
Soldotna												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	1,279	3	1,472	4	1,720		1,920	ş	2,122	-	2,297	-2
FY85 ABI Forecasts	1,279	0	1,472	-3	1,720	-]	1,920	-2	2,122	-	2,297	0
FY85 AB2 Forecasts	1,279	0	1,472	~2	1,720	0	1,920	-	2,122	0	2,297	0
FY85 AB3 Forecasts	1,279	0	1,472	~3	1,720	2	1,920	-2	2,122	an g	2,297	0

* Summary of Project Effects on Households FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u> 1985-2005

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	19	85	19	90	19	95	19	99	20	02	20	105
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Seward												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	708	5	746	5	804	-2	844	4	893	9	925	-2
FY85 ABI Forecasts	708	5	746	7	804		844	4	893	9	925	0
FY85 AB2 Forecasts	708	4	746	5	804	-	844	3	893	0	925	0
FY85 AB3 Forecasts	708	6	746	8	804	(m	844	5	893	2	925	0
Homer												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	1,273	2	1,449	3	1,673	~	1,851	2	2,032	0	2,185	C# 1
FY85 AB1 Forecasts	1,273	4	1,449	4	1,673	0	1,851	3	2,032	0	2,185	0
FY85 AB2 Forecasts	1,273	2	1,449	3	1,673		1,851	1	2,032	0	2,185	0
FY85 AB3 Forecasts	1,273	4	1,449	б	1,673	-1	1,851	3	2,032	0	2,185	0
Kənal												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	2,206	2	2,537	1	2,960	-3	3,300	1	3,643	ane (3,942	-2
FY85 ABI Forecasts	2,206	4	2,537	3	2,960	-2	3,300	2	3,643	8	3,942	0
FY85 AB2 Forecasts	2,206	2	2,537	2	2,960	0	3,300	1	3,643		3,942	0
FY85 AB3 Forecasts	2,206	5	2,537	5	2,960	-2	3,300	4	3,643	and a set	3,942	0

Summary of Project Effects on Households FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u> 1985-2005

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	19	85	19	90	19	95	19	99	20	02	20	105
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baselina	Effect	Baseline	Effect
Borough Subtotal												
FERC Forecasts	11,234	N/A	14,277	N/A	16,891	N/A	19,737	N/A	22,022	N/A	24,353	N/A
FY84 Forecasts	10,538	-11	12,952	-56	15,080	12	16,736	-12	18,131	25	19, 745	31
FY85 Car Forecasts	13,579	9	15,568	-7	18,139	-18	20,214	-4	22,314	an f	24,145	-7
FY85 AB1 Forecasts	13,579	18	15,568	8	18,139	-13	20,214	4	22,314	-	24,145	0
FY85 AB2 Forecasts	13,579	11	15,568	1	18,139	-7	20,214		22,314	-2	24,145	0
FY85 AB3 Forecasts	13,579	18	15,568	5	18,139	-15	20,214	4	22,314	-3	24,145	0
Anchorage Area Subtotal												
FERC Forecasts	91,081	N/A	107,722	1,049	120,185	N/A	134.071	N/A	147,945	468	158,908	N/A
FY84 Forecasts	94,055	156	107,559	773	117.164	1,120	123,706	1,123	129, 309	1,188	136,170	1,136
FY85 Car Forecasts	108,838	362	115,909	1,177	126,113	419	133,507	997	142,079	679	148,395	373
FY85 AB1 Forecasts	108,838	362	115,909	1,177	126,113	419	133,507	997	142,079	679	48, 395	375
FY85 AB2 Forecasts	108,838	152	115,909	799	126,113	418	133,507	745	142,079	649	148,395	373
FYB5 AB3 Forecasts	108,838	534	115,909	1,497	126,113	422	133,507	1,206	142,079	705	148, 395	373
Fairbanks Area												
Fairbanks-N.S. Bor.												
Mun. of Fairbanks												
FERC Forecasts	N/A	N/A	11,104	-56	N/A	N/A	N/A	N/A	15,287	-110	N/A	N/A
FY84 Forecasts	11,575	-6	13,537	-32	15,427	16	16,733	-9	17,874	31	19,153	39
FY85 Car Forecasts	10,545	-34	11,303	-30	11,672	-45	11,798	-18	12,092	38	12,160	19
FY85 ABI Forecasts	10,545	18	11,303	44	11,672	38	11,798	35	12,092	61	12,160	17
FY85 AB2 Forecasts	10,545	76	11,303	101	11,672	-	11,798	55	12,092	77	12,160	77
FY85 AB3 Forecasts	10,545	-202	11,303	-54	11,672	79	11,798	30	12,092	100	12,160	77

Summary of Project Effects on Households FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

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	19	985	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Basellne	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
North Pole												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	364	-2	407	7	439	0	460	Ą	485	2	500	0
FY85 AB1 Forecasts	364	1	407	11	439		460	7	485	3	500	° 0
FY85 AB2 Forecasts	364	7	407	22	439	2	460	14	485	4	500	0
FY85 AB3 Forecasts	364	0	407	0	439	1	460	4	485	4	500	0
Borough Subtotal												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	23, 347	-18	26,033	-71	28,270	32	29, 500	-12	30,603	63	31,847	75
FY85 Car Forecasts	23,399	31	26,028	234	27,888	98	29,028	233	30,414	148	31,267	77
FY85 ABI Forecasts	23, 399	52	26,028	261	27,888	100	29,028	254	30,414	149	31,267	77
FY85 AB2 Forecasts	23,399	257	26,028	635	27,888	102	29,028	499	30,414	179	31,267	77
FY85 AB3 Forecasts	23, 399	-122	26,028	-54	27,888	99	29,028	45	30, 414	125	31,267	77
Rallbelt Portion of												
Yukon-Koyukuk												
Cantwell												
FERC Forecasts	71	126	78	333	86	264	93	264	99	250	N/A	N/A
FY84 Forecasts	83	112	88	241	93	189	98	211	101	186	105	182
FY85 Car Forecasts	69	62	78	54	87	0	93	3	100	0	106	0
FY85 AB1 Forecasts	69	59	78	52	87	0	93	0	100	0	106	0
FY85 AB2 Forecasts	69	59	78	52	87	0	93	0	100	0	106	0
FY85 AB3 Forecasts	69	59	78	52	87	0	93	0	100	0	106	0

Summary of Project Effects on Households

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 🗹

1985-2005

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	19	85	19	90	19	95	19	99	20	02	2(105
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Healy												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	122	25	141	86	163	67	182	74	199	66	218	65
FY85 Car Forecasts	198	5	246	7	301	1	339	4	384	0	428	0
FY85 ABI Forecasts	198	1	246	ł	301	9	339		384	0	428	0
FY85 AB2 Forecasts	198	1	246	2	301	1	339	5	384	0	428	0
FY85 AB3 Forecasts	198	1	246		301		339		384	0	428	0
Nenana												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	185	11	210	41	238	33	264	36	284	31	307	31
FY85 Car Forecasts	206	14	257	25	324	2	374	16	431	\$	489	0
FY85 ABI Forecasts	206	Î	257	3	324	0	374	2	431	1	489	0
FY85 AB2 Forecasts	206	1	257	4	324	1	374	3	431	9	489	0
FY85 AB3 Forecasts	206	I	257	١	324	0	374	2	431	and the second se	489	0
Census Area Subtotal									· .			
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	741	172	809	452	883	355	948	394	000 ا	346	1,055	340
FY85 Car Forecasts	828	81	916	86	1,021	3	1,069	23	1,146	2	1,206	0
FY85 ABI Forecasts	828	61	916	55	1,021	1	1,069	2	1,146		1,206	0
FY85 AB2 Forecasts	828	61	916	58	1,021	2	1,069	4	1,146	ş	1,206	0
FY85 AB3 Forecasts	828	61	916	53	1,021	\$	1,069	2	1,146	Gradues	,206	0

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Summary of Project Effects on Households

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 🗹

1985-2005

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	19	985	19	90	19	95	19	99	20	02	20)05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
SE Fairbanks C.D.												
Delta Junction												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	R/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
FY85 Car Forecasts	447	0	478	0	493	0	497	0	509	0	511	0
FY85 AB1 Forecasts	447	0	478	ł	493	0	497	0	509	0	511	0
FY85 AB2 Forecasts	447	1	478	2	493	0	497	1	509	0	511	0
FY85 AB3 Forecasts	447	0	478	0	493	0	497	0	509	0	511	0
Cen. Dlv. Subtotal												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	2,323	1	2,590	5	2,813	2	2,935	3	3,045		3,169	l
FY85 Car Forecasts	2,131	0	2,374	-2	2,554	0	2,664	en	2,800	0	2,887	0
FY85 AB1 Forecasts	2,131	- 1	2,374	2	2,554	0	2,664	400F	2,800	0	2,887	0
FY85 AB2 Forecasts	2,131	3	2,374	0	2,554	en	2,664	2	2,800	0	2,887	0
FY85 AB3 Forecasts	2,131	0	2,374	0	2,554	0	2,664	0	2,800	0	2,887	0
Paxson												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A.	N/A
FY85 Car Forecasts	12	0	14	0	15	0	16	0	17	0	18	0
FY85 ABI Forecasts	12	0]4	0	15	0	16	0	17	0	18	0
FYB5 AB2 Forecasts	12	0	14	0	15	0	16	0	17	0	18	0
FY85 AB3 Forecasts	12	0	14	0	15	0	16	0	17	0	8	0

Summary of Project Effects on Households FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

47147204009482458742849444680486948594989468946894824593646384899499546844894499448944894489448944994	ar yn ar fefer af fel ar gynaf ferfan yn ar y		n an	Numb	er of Hous	eholds	nijemiljene od na objek fiječne kralju beza posobola od 198	00.00200.00000000000000000000000000000	y den man yw ar yw ar wran yw ar	ayan daga kayan karan da	ning (nin selenger Senior Adrian I av 17.200)	nang ang ang ang ang ang ang ang ang ang
	19	85	19	90	19	195	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Fairbanks Area												
FERC Forecasts	25,554	N/A	26,673	N/A	29,133	N/A	31,950	N/A	36,392	N/A	38,647	N/A
FY84 Forecasts	25,670	152	28,623	386	31,083	389	32,435	385	33,648	410	35,016	416
FY85 Car Forecasts	26,370	112	29,332	318	31,478	101	32,777	255	34,377	150	35,378	77
FY85 AB1 Forecasts	26,370	112	29, 332	318	31,478	101	32,777	255	34, 377	150	35, 378	77
FY85 AB2 Forecasts	26,370	321	29,332	634	31,478	103	32,777	505	34,377	180	35,378	77
FY85 AB3 Forecasts	26,370	-61	29, 332	-1	31,478	100	32,777	47	34, 377	126	35, 378	77
Total Rallbelt												
FERC Forecasts	120,801	N/A	138,938	675	154,518	N/A	171,895	261	190,670	N/A	204,320	N/A
FY84 Forecasts	120,466	308	136,991	1,159	149, 130	1,509	157,089	1,508	163,957	1,598	172,241	1,552
FY85 Car Forecasts	135,208	630	145,241	1,657	157,591	1,016	166,284	1,521	176,456	999	183,773	620
FY85 ABI Forecasts	135,208	629	145,241	1,657	157,591	1,016	166,284	1,523	176, 456	999	183,773	620
FY85 AB2 Forecasts	135,208	629	145,241	1,654	157,591	1,016	166,284	1,523	176,456	999	183,773	620
FY85 AB3 Forecasts	135,208	628	145,241	1,658	157,591	1,016	166,284	1,525	176,456	1,001	183, 773	620

N/A Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.

Source: Frank Orth & Assoclates, Inc., 1985.

Summary of Project Effects on Housing Units

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/

1985-2005

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	19	85	19	90	19	95	19	99	20	02	20	105
Area/Community	Basellne	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Anchorage Area												
Mun. of Anchorage												
FERC Forecasts	73,416	N/A	83,061	213	88,119	N/A	94, 147	N/A	102,069	-171	106,479	N/A
FY84 Forecasts	78,196	50	85,656	63	89,088	483	90,415	416	91,594	589	93, 361	615
FY85 Car Forecasts	95,623	110	98,014	354	102,507	99	105,037	367	109,017	410	110,976	263
FY85 AB1 Forecasts	95,623	209	98,014	494	102,507	66	105,037	452	109,017	415	110,976	194
FY85 AB2 Forecasts	95,623	49	98,014	207	102,507	58	105,037	258	109,017	393	110,976	194
FY85 AB3 Forecasts	95,623	573	98,014	742	102,507	72	105,037	613	109,017	437	110,976	194
Mat-Su Borough												
Palmer												
FERC Forecasts	1,137	N/A	1,628	17	2,024	N/A	2,413	14	2,702	N/A	2,996	NA
FY84 Forecasts	1,103	9	1,517	33	1,811	28	2,084	31	2,318	27	2,577	27
FY85 Car Forecasts	1,000	36	1,196	66	1,500	-2	1,726	37	1,983	5	2,243	-8
FY85 AB1 Forecasts	1,000	19	1,196	41	1,500	2	i,726	23	1,983	3	2,243	8
FY85 AB2 Forecasts	1,000	13	1,196	28	1,500	2	1,726	15	1,983	2	2,243	1
FY85 AB3 Forecasts	1,000	25	1,196	52	1,500	2	1,726	30	1,983	4	2,243	8
Wasilla												
FERC Forecasts	976	N/A	1,474	20	2,230	N/A	3,113	17	3,856	N/A	4,763	NZA
FY84 Forecasts	1,258	11	1,844	39	2,700	32	3,664	35	4,611	30	5,801	30
FY85 Car Forecasts	1,346	39	2,005	71	3,030	~3	4,051	40	5,208	5	6,591	-9
FY85 ABI Forecasts	1,346	22	2,005	45	3,030	2	4,051	25	5.208	3	6.591	100 M
FY85 AB2 Forecasts	1,346	15	2,005	32	3,030	2	4,051	17	5,208	3	6,591	ş
FY85 AB3 Forecasts	1, 346	26	2,005	55	3,030	2	4,051	31	5,208	Constant of the second s	6,591	Godes

Summary of Project Effects on Housing Units FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u> 1985-2005

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	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
					•							
Houston												
FERC Forecasts	324	N/A	533	15	879	N/A	1,312	13	1,754	N/A	2,335	N/A
FY84 Forecasts	317	10	513	36	829	28	1,217	31	1,623	28	2,166	27
FY85 Car Forecasts	361	19	567	35	960	-2	1,406	20	1,932	l	2,615	-5
FY85 ABI Forecasts	361	10	567	22	960	0	1,406	11	1,932	2	2,615	0
FY85 AB2 Forecasts	361	7	567	15	960	0	1,406	7	1,932	ŝ	2,615	0
FY85 AB3 Forecasts	361	13	567	27	960	0	1,406	15	1,932	2	2,615	0
Talkeetna												
FERC Forecasts	251	9	340	117	462	77	592	87	696	65	808	64
FY84 Forecasts	140	16	170	59	219	46	268	51	311	46	362	44
FY85 Car Forecasts	168	8	186	49	214)	233	36	255		275	-2
FY85 ABI Forecasts	168	4	186	43	214	0	233	33	255	8	275	0
FY85 AB2 Forecasts	168	2	186	41	214	0	233	31	255	0	275	0
FY85 AB3 Forecasts	168	4	186	45	214	0	233	34	255	8	275	0
Trapper Creek												
FERC Forecasts	84	11	108	168	139	79	171		195	73	219	63
FYB4 Forecasts	87	23	107	86	133	67	157	74	178	65	203	63
FYB5 Car Forecasts	106	7	122	15	146	-	160	8	179	1	195	-2
FY85 ABI Forecasts	106	4	122	9	146	0	160	4	179	0	195	0
FY85 AB2 Forecasts	106	2	122	6	146	0	160	2	179	0	195	0
FY85 AB3 Forecasts	106	5	122		146	0	160	5	179	5	195	0
Suburban												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	10,174	34	13,554	116	16,668	94	18,861	105	20,510	93	22,257	92
FY85 Car Forecasts	10,660	117	12,158	214	13,794	-3	14,924	125	15,766	18	16,020	-24
FY85 ABI Forecasts	10,660	66	12,158	142	13,794	10	14,924	81	15,766	16	16,020	6
FY85 AB2 Forecasts	10,660	46	12,158	102	13,794	10	14,924	56	15,766		16,020	6
FY85 AB3 Forecasts	10,660	83	12,158	176	13,794	10	14,924	103	15,766	6	16,020	5

Summary of Project Effects on Housing Units

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/

1985-2005

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	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Rural/Remote												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	1,969	14	1,969	47	2,293	37	2,596	42	2,826	38	3,070	37
FY85 Car Forecasts	1,861	17	2,008	30	2,147	0	2,217	16	2,263	2	2,222	- 3
FY85 ABI Forecasts	1,861	10	2,008	23	2,147	2	2,217	12	2,263	3	2,222	a çanş
FY85 AB2 Forecasts	1,861	7	2,008	17	2,147	2	2,217	9	2,263	3	2,222	1
FY85 AB3 Forecests	1,861	13	2,008	27	2,147	2	2,217	16	2,263	1	2,222	
Borough Subtotal												
FERC Forecasts	11,730	38	16,754	836	22,043	658	27,672	716	32,115	527	37,023	424
FY84 Forecasts	15,048	117	19,674	766	24,653	625	28,847	719	32, 377	574	36, 436	490
FY85 Car Forecasts	15,502	243	18,242	830	21,791	338	24,717	632	27,586	271	30,161	117
FY85 ABI Forecasts	15,502	135	18,242	675	21,791	366	24,717	539	27,586	266	30,161	179
FY85 AB2 Forecasts	15,502	92	18,242	591	21,791	366	24,717	487	27,586	258	30,161	179
FY85 AB3 Forecasts	15,502	169	18,242	743	21,791	366	24,717	584	27,586	271	30,161	179
Kenal Pen. Borough												
Soldotna												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/n	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
FY85 Car Forecasts	1,505	3	1,712	4	1,978		2,188	I	2,401	-	2,582	~2
FY85 ABI Forecasts	1,505	0	1,712	-3	1,978	-)	2,188	-2	2,401	5	2,582	0
FY85 AB2 Forecasts	1,505	0	1,712	-2	1,978	0	2,188	era (2,401	0	2,582	0
FY85 AB3 Forecasts	1,505	0	1,712	۳3	1,978	2	2,188	-2	2,401	39 ST	2,582	0

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Summary of Project Effects on Housing Units FERC License Application, FY84 Car Transportation, F785 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

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	19	85	19	90	15	95	19	999	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Basellne	Effect	Baseline	Effect	Baseline	Effect
Soward			NI 7 A		63 4 8	11 4 4				2140		ht da
FERC FORGCASTS	N/ A	N/ A	NZA	NZ A	NZA	NZA	NZA	NA	NZ A	N/A	NZ A	N/ A
FY84 Forecasts	N/A	N/A	N/A	N/A	NZA	N/A	N/A	N/ A	N/A	N/A	N/A	NA
FY85 Car Forecasts	828	5	847	5	903	-2	940	4	988		1,016	-2
FY85 ABI Forecasts	828	5	847	7	903		940	4	988	1	1,016	0
FY85 AB2 Forecasts	828	4	847	5	903	- j	940	3	988	0	1,016	0
FY85 AB3 Forecasts	828	6	847	8	903	- 1	940	5	988	2	1,016	0
Homer												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	1,549	2	1,732	3	1,965	-	2,143	2	2,329	0	2,478	~
FY85 ABI Forecasts	1,549	4	1,732	4	1,965	0	2,143	3	2,329	0	2,478	0
FY85 AB2 Forecasts	1,549	2	1,732	3	1,965		2,143	i	2,329	0	2,478	0
FY85 AB3 Forecasts	1,549	4	1,732	б	1,965		2,143	3	2,329	0	2,478	0
Konal												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	2.714	2	3,046	1	3,471	-3	3,798	1	4.136	-	4.415	-2
EYR5 ABL Forecasts	2.714	Â	3,046	3	3.471	- ∞2	3,798	2	4,136	-	4.415	0
EVEL AD2 Eprocente	2 711	ື ວ	3 046	2	3 471	0	3 708	a. 1	A 136		A A15	Ő.
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Summary of Project Effects on Housing Units

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/

1985-2005

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	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Basellne	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Borough Subtotal												
FERC Forecasts	11,796	N/A	14,991	N/A	17,736	N/A	20,724	N/A	23,123	N/A	25,571	N/A
FY84 Forecasts	11,093	-11	13,634	-56	15,873	12	17,617	-12	19,086	25	20, 784	31
FY85 Car Forecasts	18,122	9	20,369	-7	23,276	-18	25,545	-4	27,883	-1	29,834	-7
FY85 ABI Forecasts	18,122	18	20,369	8	23,276	-13	25,545	4	27,883	~	29,834	0
FY85 AB2 Forecasts	18,122	11	20,369	ł	23,276	-7	25,545		27,883	-2	29,834	0
FY85 AB3 Forecasts	18,122	18	20,369	6	23,276	-15	25,545	4	27,883	్రె	29,834	0
Anchorage Area Subtotal												
FERC Forecasts	96,942	N/A	114,806	1,049	127,898	N/A	142,543	N/A	157,307	468	169,074	N/A
FY84 Forecasts	104, 337	156	118,964	773	129,614	1,120	136,879	1,123	143,057	1,188	150, 581	1,136
FY85 Car Forecasts	129,247	362	136,625	1,177	147,574	419	155,299	997	164,486	679	170,971	373
FY85 ABI Forecasts	129,247	362	136,625	1,177	147,574	419	155,299	997	164,486	679	170,971	373
FY85 AB2 Forecasts	129,247	152	136,625	799	147,574	418	155,299	745	164,486	649	170,971	373
FY85 A83 Forecasts	129,247	534	136,625	!,497	147,574	422	155,299	1,206	164,486	705	170,971	373
Fairbanks Area												
Falrbanks-N.S. Bor.												
Mun. of Fairbanks												
FERC Forecasts	N/A	N/A	N/A	-56	N/A	N/A	N/A	N/A	N/A	-110	N/A	N/A
FY84 Forecasts	12,500	-6	14,619	-32	16,660	16	18,070	~9	19,302	31	20, 684	39
FY85 Car Forecasts	11,388	-34	12,206	~30	12,605	-45	12,741	-18	13,058	38	13,132	19
FY85 ABI Forecasts	11,388	18	12,206	44	12,605	38	12,741	35	13,058	61	13,132	77
FY85 AB2 Forecasts	11,388	76	12,206	101	12,605	-	12,741	55	13,058	77	13,132	77
FY85 AB3 Forecasts	11,388	-202	12,206	-54	12,605	79	12,741	38	13,058	100	13,132	77

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Summary of Project Effects on Housing Units

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/

1985-2005

				Number	of Housin	g Units						
	19	85	19	90	ļç	95	19	99	20	02	20)05
Area/Community	Basellne	Effect	Baseline	Effect	Baseline	Effect	Baseline	F.ffoct	Baseline	Effect	Baseline	Effect
North Pole												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FYB5 Car Forecasts	49 7	-2	545	7	576	0	595	4	620	2	632	0
FY85 AB1 Forecasts	497	1	545	11	576	J	595	7	620	3	632	0
FYB5 AB2 Forecasts	497	7	545	22	576	2	595	14	620	4	632	0
FY85 AB3 Forecasts	497	0	545	0	576	1	595	4	620	4	632	0
Borough Subtotal												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	24,576	-18	27,403	-71	29,758	32	31,053	-12	32,214	63	33, 523	75
FY85 Car Forecasts	28,661	31	31,496	234	33,343	98	34,377	233	35,764	148	36,510	77
FY85 AB1 Forecasts	28,661	52	31,496	261	33, 343	100	34,377	254	35, 764	149	36, 510	77
FY85 AB2 Forecasts	28,661	257	31,496	635	33,343	102	34,377	499	35,764	179	36,510	77
FY85 AB3 Forecasts	28,661	-122	31,496	-54	33, 343	99	34,377	45	35, 764	125	36,510	77
Railbelt Portion of												
Yukon-Koyukuk												
Cantwell												
FERC Forecasts	97	126	105	333	114	264	122	264	128	250	N/A	N/A
FY84 Forecasts	127	112	131	241	135	189	139	211	140	186	144	182
FY85 Car Forecasts	102	62	112	54	121	0	127	3	134	0	140	0
FY85 ABI Forecasts	102	59	112	52	121	0	127	0	134	0	140	0
FY85 AB2 Forecasts	102	59	112	52	121	0	127	0	134	0	140	0
FY85 AB3 Forecasts	102	59	112	52	121	0	127	0	134	0	140	0

Summary of Project Effects on Housing Units FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

ФРИНИКАЛИ СИЛТОН (Sprider) (Sprider) и солосу (CMV) (Sprider) (Sprider) (Sprider) (Sprider) (Sprider) (Sprider)	na postanini in anteri de secondo na terra de secondo de secondo de secondo de secondo de secondo de secondo de	\$\$`\$\$\$\$\$\$\$\$\$`*`\$`\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	anan an	Number	of Housi	ng Units	NEW COMMANNERS CONTRACTOR OF CONTRACTOR		an a	a palaan Casa ya amaa maada ahaa ah		
	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Basel Ine	Effect	Baseline	Effect
Healy												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	162	25	187	86	216	67	242	74	264	66	290	65
FY85 Car Forecasts	219	5	272	7	333	1	375	4	425	0	473	0
FY85 ABI Forecasts	219	1	272	1	333)	375	8	425	0	473	0
FY85 AB2 Forecasts	219	1	272	2	333	1	375	ļ	425	0	473	0
FYB5 AB3 Forecasts	219	1	272	ţ	333	1	375	1	425	0	473	0
Nenana												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	NZA	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	246	11	279	41	316	33	351	36	377	31	408	31
FY85 Car Forecasts	227	14	283	25	357	2	412	16	475	1	539	0
FY85 AB1 Forecasts	227	ł	283	3	357	0	412	2	475	1	539	0
FY85 AB2 Forecasts	227	1	283	4	357	4	412	3	475	· 1	539	0
FY85 AB3 Forecasts	227	ł	283	1	357	0	412	2	475	1	539	0
Census Area Subtotal												3
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	984	172	1,074	452	1.173	355	1,259	394	1,328	346	1,401	340
FY85 Car Forecasts	1,000	81	1,216	86	1,356	3	1,420	23	1,522	2	1,602	0
FY85 AB1 Forecasts	1,000	61	1,216	55	1,356	-	1,420	2	1,522	1	1,602	0
FY85 AB2 Forecasts	1,000	61	1,216	58	ا,356 ا	2	1,420	4	1,522	ł	1,602	0
FY85 AB3 Forecasts	١,000	61	1,216	53	1,356	1	1,420	2	1,,522	8	1,602	0

Summary of Project Effects on Housing Units FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

				Number	r of Housi	ng Units						
	19	85	19	90	19	95	19	99	20	02	20)05
Area/Community	Baseline	Effect	Basellne	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Eifect
SE Fairbanks C.D.												
Delta Junction												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	598	0	627	0	634	0	629	0	637	0	633	0
FY85 AB1 Forecasts	598	0	627	1	634	0	629	0	637	0	633	0
FY85 AB2 Forecasts	598	1	627	2	634	0	629	J	637	0	633	0
FY85 AB3 Forecasts	598	0	627	0	634	0	629	0	637	0	633	0
Cen. Div. Subtotal												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	2,445	ł	2,726	5	2,961	2	3,089	3	3,205	8	3, 336	1
FY85 Car Forecasts	3,087	0	3, 389	-2	3,595	0	3,708		3,865	0	3,953	0
FY85 ABI Forecasts	3,087	-	3,389	2	3,595	0	3,708	-	3,865	0	3,953	0
FY85 AB2 Forecasts	3,087	3	3, 389	0	3,595		3,708	2	3,865	0	3,953	0
FY85 AB3 Forecasts	3,087	0	3, 389	0	3,595	0	3,708	0	3,865	0	3,953	0
Paxson												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Foracasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	13	0	15	0	16	0	17	0	18	0	19	0
FY85 ABI Forecasts	13	0	15	0	16	0	17	0	18	0	19	0
FY85 AB2 Forecasts	13	0	15	0	16	0	17	0	18	0	19	0
FY85 AB3 Forecasts	13	0	15	0	16	0	17	0	18	0	19	0

	S	ummary of Projec	t Effects	on Housing Unit:	S			
FERC License Application,	FY84 Car	Transportation,	FY85 Car	Transportation,	and FY85	Air and	8us Scen	arlos $\frac{1}{2}$
			1985-2005					

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				Numbei	r of Housi	ng Unlts						
	19	185	15	90	19	95	19	199	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Fairbanks Area												
FERC Forecasts	26,832	N/A	28,007	N/A	30,598	N/A	33,548	N/A	38,212	N/A	40,580	N/A
FY84 Forecasts	27,021	152	30,129	386	32,719	389	34,142	385	35,419	410	36,859	416
FY85 Car Forecasts	32,861	112	36,116	318	38,310	101	39,522	255	41,169	150	42,084	77
FY85 AB1 Forecasts	32,861	112	36,116	318	38, 310	101	39,522	255	41,169	150	42,084	77
FY85 AB2 Forecasts	32,861	321	36,116	694	38,310	103	39,522	505	41,169	180	42,084	77
FY85 AB3 Forecasts	32,861	-61	36,116	-1	38,310	i 00	39,522	47	41,169	126	42,084	77
Total Rallbelt												
FERC Forecasts	128,148	N/A	147,583	675	163,948	N/A	182,239	261	202,168	N/A	216,756	N/A
FY84 Forecasts	132,342	308	150, 167	1,159	163,500	1,509	172,280	1,508	179,804	1,598	188,841	1,552
FY85 Car Forecasts	162,108	630	172,741	1,657	185,884	1,016	194,821	1,521	205,655	999	213,055	620
FY85 AB1 Forecasts	162,108	629	172,741	1,657	185,884	1,016	194,821	1,523	205,655	999	213,055	620
FY85 AB2 Forecasts	162,108	629	172,741	1,654	185,884	1,016	194,821	1,523	205,655	999	213,055	620
FY85 AB3 Forecasts	162,108	628	172,741	1,658	185,884	1,016	194,821	1,525	205,655	1,001	213,055	620

N/A Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.

Source: Frank Orth & Assoclates, Inc., 1985.

Summary of Project Effects on Vacant Housing Units FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

			N	umber of	Vacant Ho	using Un	lts					
	19	85	19	90	19	95	19	99	20	02	2()05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Basellne	Effect	Baseline	Effect
Anchorage Area												
Mun. of Anchorage												
FERC Forecasts	3,496	N/A	4,033	-213	4,196	N/A	4,483	N/A	4,860	-171	5,070	N/A
FY84 Forecasts	5,865	-50	6,424	-63	6,682	-483	6,781	-416	6,870	-589	7,002	-615
FY85 Car Forecasts	12,020	-110	11,830	-354	11,860	-99	11,733	-367	11,850	-410	11,730	-263
FY85 ABI Forecasts	12,020	-209	11,830	-494	11,860	-66	11,733	-452	11,850	-415	11,730	-194
FY85 AB2 Forecasts	12,020	-49	11,830	-207	11,860	58	11,733	258	11, 22	-393	11,730	-194
FY85 AB3 Forecasts	12,020	-573	11,830	-742	11,860	-72	11,733	-613	11,8.	1	11,730	-194
Mat-Su Borough												
Palmer												
FERC Forecasts	54	N/A	78	-17	96	N/A	115	-14	129	N/A	143	N/A
FY84 Forecasts	30	-9	41	-33	49	-28	56	~31	63	-27	70	-27
FY85 Car Forecasts	85	-36	93	-66	117	2	135	-37	155	-5	175	8
FY85 ABI Forecasts	85	-19	93	-41	117	-2	135	-23	155	~3	175	(
FY85 AB2 Forecasts	85	-13	93	-28	117	2	35	-15	155	-2	175	ano è
FY85 AB3 Forecasts	85	-25	93	-52	117	-2	135	-30	155	-4	175	4965
Wasilla												
FERC Forecasts	46	N/A	70	-20	106	N/A	148	-17	184	NA	227	N/A
FY84 Forecasts	156	-	229	-39	335	-32	454	~35	572	-30	719	-30
FY85 Car Forecasts	121	-39	180	-71	273	3	365	-40	469	-5	593	9
FY85 ABI Forecasts	121	-22	180	-45	273	-2	365	-25	469	-3	593	~~ }
FY85 AB2 Forecasts	121	-15	180	-32	273	-2	365	-17	469	-3	593	420
FY85 AB3 Forecasts	121	-26	180	-55	273	~2	365	-31	469	-	593	470 B

Summary of Project Effects on Vacant Housing Units FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

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	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Houston												
FERC Forecasts	15	N/A	25	-15	42	N/A	62	-13	84	N/A	11	N/A
FY84 Forecasts	63	-10	102	-36	165	-28	242	-31	323	-28	431	~27
FY85 Car Forecasts	97	-19	128	-35	217	2	318	-20	437	-	591	~5
FY85 ABI Forecasts	97	~10	128	-22	217	0	318	~	437	2	591	0
FY85 AB2 Forecasts	97	 7	128	-15	217	0	318	-7	437	4240 B	591	0
FY85 AB3 Forecasts	97	-13	128	-27	217	0	318	-15	437	~2	591	0
Talkeetna												
FERC Forecasts	5	-7	7	-87	9	-67	12	-77	14	-65	16	~64
FY84 Forecasts	26	-16	21	-59	24	-46	26	-51	27	-46	28	-44
FY85 Car Forecasts	56	-8	51	-49	50	an	47	-36	45		42	-2
FY85 ABI Forecasts	56	-4	51	~43	50	0	47	-33	45	670 J	42	0
FY85 AB2 Forecasts	56	-2	51	-41	50	0	47	-31	45	0	42	0
FY85 AB3 Forecasts	56	-4	51	-45	50	0	47	-34	45		42	0
Trapper Creek												
FERC Forecasts	ś	-9	ł	-114	ł	-70	2	-92	2	~66	2	~63
FY84 Forecasts	9	-23	10	~86	12	-67	12	-74	13	65	14	~63
FY85 Car Forecasts	29	-7	30	-15	32	0	32	~8	33	50 A	33	2
FY85 ABI Forecasts	29	-4	30	-9	32	0	32	-4	33	0	33	0
FY85 AB2 Forecasts	29	-2	30	-6	32	0	32	-2	33	0	33	0
FY85 AB3 Forecasts	29	-5	30	-11	32	0	32	- J	33	294 B	33	0
Suburban												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	2,706	-34	3,402	-116	3,934	-94	4,225	-105	4,410	-93	4,585	-92
FY85 Car Forecasts	2,901	-117	3,076	-214	3,283	3	3,373	-125	3,421	-18	3, 332	24
FY85 ABI Forecasts	2,901	-66	3,076	-142	3,283	-10	3,373	-81	3,421	-16	3,332	6
FY85 AB2 Forecasts	2,901	-46	3,076	-102	3,283	-10	3, 373	-56	3,421	-11	3,332	-6
FY85 AB3 Forecasts	2,901	-83	3,076	-176	3,283	-10	3,373	-103	3,421	-6	3, 332	6

Summary of Project Effects on Vacant Housing Units FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u>/ 1985-2005

nnn y ferson en se fan inne konstruction fan die regen de net fan de	&##\$\$\$\$\$\$\$\$\$\$\$\$\$\$</th><th>949-2017-90-00-00-000-000-000-000-000-000-000-0</th><th>N</th><th>umber of</th><th>Vacant Ho</th><th>using Un</th><th>ilts</th><th>and and an /th><th></th><th></th><th></th><th></th></tr><tr><th></th><th>19</th><th>85</th><th>19</th><th>90</th><th>19</th><th>95</th><th>19</th><th>99</th><th>20</th><th>02</th><th>20</th><th>)05</th></tr><tr><th>Area/Community</th><th>Baseline</th><th>Effect</th><th>Baseline</th><th>Effoct</th><th>Baseline</th><th>Effect</th><th>Baseline</th><th>Effect</th><th>Baseline</th><th>Effect</th><th>Baseline</th><th>Effect</th></tr><tr><td>Rural/Remote</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>FERC Forecasts</td><td>N/A</td><td>N/A</td><td>. N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td></tr><tr><td>FY84 Forecasts</td><td>895</td><td>-14</td><td>508</td><td>-47</td><td>459</td><td>-37</td><td>488</td><td>-42</td><td>506</td><td>-38</td><td>522</td><td>-37</td></tr><tr><td>FY85 Car Forecasts</td><td>553</td><td>-17</td><td>536</td><td>-30</td><td>509</td><td>0</td><td>472</td><td>-16</td><td>441</td><td>~2</td><td>393</td><td>3</td></tr><tr><td>FY85 ABI Forecasts</td><td>553</td><td>-10</td><td>536</td><td>-23</td><td>509</td><td>-2</td><td>472</td><td>-12</td><td>441</td><td>~3</td><td>393</td><td>tao ĝ</td></tr><tr><td>FY85 AB2 Forecasts</td><td>553</td><td>7</td><td>536</td><td>-17</td><td>509</td><td>-2</td><td>472</td><td>-9</td><td>441</td><td>~3</td><td>393</td><td></td></tr><tr><td>FY85 AB3 Forecasts</td><td>553</td><td>-13</td><td>536</td><td>-27</td><td>509</td><td>-2</td><td>472</td><td>~16</td><td>441</td><td></td><td>393</td><td>-1</td></tr><tr><td>Borough Subtotal</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>FERC Forecasts</td><td>1,803</td><td>-38</td><td>2,336</td><td>-836</td><td>2,672</td><td>-658</td><td>3,002</td><td>-716</td><td>3,400</td><td>-527</td><td>877</td><td>-424</td></tr><tr><td>FY84 Forecasts</td><td>3,862</td><td>-117</td><td>4,299</td><td>-766</td><td>4,975</td><td>-625</td><td>5,511</td><td>-719</td><td>5,923</td><td>-574</td><td>5,370</td><td>-490</td></tr><tr><td>FY85 Car Forecasts</td><td>3,846</td><td>-243</td><td>4,085</td><td>830</td><td>4,464</td><td>-338</td><td>4,728</td><td>-632</td><td>4,988</td><td>-271</td><td>5,157</td><td>-117</td></tr><tr><td>FY85 ABI Forecasts</td><td>3,846</td><td>-135</td><td>4,085</td><td>-675</td><td>4,464</td><td>~366</td><td>4,728</td><td>-539</td><td>4,988</td><td>-266</td><td>5,157</td><td>-179</td></tr><tr><td>FY85 AB2 Forecasts</td><td>3,846</td><td>-92</td><td>4,085</td><td>-591</td><td>4,464</td><td>~366</td><td>4,728</td><td>-487</td><td>4,988</td><td>-258</td><td>5,157</td><td>-179</td></tr><tr><td>FY85 AB3 Forecasts</td><td>3,846</td><td>-169</td><td>4,085</td><td>-743</td><td>4,464</td><td>~366</td><td>4,728</td><td>-584</td><td>4,988</td><td>-274</td><td>5,157</td><td>-179</td></tr><tr><td>Kenal Pen. Borough</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Soldotna</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>FERC Forecasts</td><td>N/A</td><td>N/A</td><td>NZA</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td></tr><tr><td>FY84 Forecasts</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td></tr><tr><td>FY85 Car Forecasts</td><td>226</td><td>-3</td><td>240</td><td>-4</td><td>258</td><td>8</td><td>268</td><td>a0</td><td>279</td><td>đ</td><td>285</td><td>2</td></tr><tr><td>FY85 AB1 Forecasts</td><td>226</td><td>0</td><td>240</td><td>3</td><td>258</td><td></td><td>268</td><td>2</td><td>279</td><td>ł.</td><td>285</td><td>0</td></tr><tr><td>FY85 AB2 Forecasts</td><td>226</td><td>0</td><td>240</td><td>2</td><td>258</td><td>0</td><td>268</td><td></td><td>279</td><td>0</td><td>285</td><td>0</td></tr><tr><td>FY85 AB3 Forecasts</td><td>226</td><td>0</td><td>240</td><td>3</td><td>258</td><td>~2</td><td>268</td><td>2</td><td>279</td><td>1000</td><td>285</td><td>0</td></tr></tbody></table>
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Summary of Project Effects on Vacant Housing Units

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/

1985-2005

	*****	2000/05-0940920002-004400200-	N	lumber of	Vacant Ho	using Ur	ilts	i ar edi xangametri ashkan dini gan t	gannelisin (di ministra Constanti di Padri instrum	negalagi erekonekkabilen minteksahet kun		
	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	8asəlinə	Effect	Baseline	Effect
Seward												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	120	-5	101	~5	99	2	96	-4	95	eno ĝ	91	2
FY85 ABI Forecasts	120	~5	101	-7	99	1	96	-4	95		91	0
FY85 AB2 Forecasts	120	-4	101	-5	99	ĥ	96	-3	95	0	91	0
FY85 AB3 Forecasts	120	-6	101	-8	99	1	96	-5	95	-2	91	0
Homer												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	276	-2	283	-3	292	1	292	-2	297	0	293	ŝ
FY85 ABI Forecasts	276	-4	283	-4	292	0	292	-3	297	0	293	0
FY85 AB2 Forecasts	276	2	283	-3	292	1	292	-	297	0	293	0
FY85 AB3 Forecasts	276	••• A	283	-6	292	I	292	-3	297	0	293	0
Kenal												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/i	N/A
FY85 Car Forecasts	508	-2	509	-	511	3	498		493	ð	473	-2
FY85 ABI Forecasts	508	-4	509	-3	511	2	498	-2	493	6	473	0
FYB5 AB2 Forecasts	508	-2	509	-2	511	0	498	a ao	493	- no	473	0
FY85 AB3 Forecasts	508	-5	509	-5	511	2	498	۹۳ <u>م</u> ر	493	emi e	473	0

Summary of Project Effects on Vacant Housing Units

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/

1985-2005

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	19	85	19	90	19	95	19	99	20)02	20)05
Area/Community	Basellne	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Borough Subtotal												
FERC Forecasts	562	N/A	714	N/A	845	N/A	987	N/A	1,101	N/A	1,218	N/A
FY84 Forecasts	555		682	56	793	12	881	12	955	25	1,039	-31
FY85 Car Forecasts	4,543	-9	4,801	7	5,137	-18	5,331	4	5,569	I	5,689	7
FY85 ABI Forecasts	4,543	-18	4,801	-8	5,137	-13	5,331	-4	5,569	1	5,689	0
FY85 AB2 Forecasts	4,543		4,801	-1	5,137	-7	5,331	1	5,569	2	5,689	0
FY85 AB3 Forecasts	4,543	-18	4,801	-6	5,137	-15	5,331	-4	5,569	3	5,689	0
Anchorage Area Subtotal												
FERC Forecasts	5,861	N/A	7,084	-1,049	7,713	N/A	8,472	N/A	9,362	-468	10,166	N/A
FY84 Forecasts	10,282	-156	11,405	-773	12,450	-1,120	13,173	-1,123	13,748	-1,188	14,411	-1,136
FY85 Car Forecasts	20,409	-362	20,716	-1,177	21,461	-419	21,792	-997	22,407	-679	22,576	-373
FY85 ABI Forecasts	20,409	-362	20,716	-1,177	21,461	-419	21,792	-997	22,407	-679	22,576	-373
FY85 AB2 Forecasts	20,409	-152	20,716	-799	21,461	-418	21,792	-745	22,407	-649	22,576	-373
FY85 AB3 Forecasts	20,409	-534	20,716	-1,497	21,461	-422	21,792	-1,206	22,407	-705	22,576	-373
Fairbanks Area												
Fairbanks-N.S. Bor.												
Mun. of Falrbanks												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	925	6	1,082	32	1,233	-16	1,337	9	1,428	-31	1,531	- 39
FY85 Car Forecasts	843	34	903	30	933	45	943	18	966	-38	972	-19
FY85 ABI Forecasts	843	-18	903	-44	933	-38	943	-35	966	-61	972	-77
FY85 AB2 Forecasts	843	-76	903	-101	933	ŝ	943	-55	966	-77	972	-77
FY85 AB3 Forecasts	843	202	903	54	933	-79	943	-38	966	-100	972	-77

	Summar	y of Project Et	ffects c	n Vacant	Housing U	Inits				
FERC License Application,	FY84 Car	Transportation,	FY85 C	ar Transı	portation,	and FY8	5 Alr	and Bus	Scenarlos 1	/
			1985-200)5						

ennstandariseruntikinsi Meterrangunalar Meterrangunatariseruntikinganataristikangunatar dask meterrangunatar L	######################################	1999-1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1	N	lumber of	Vacant Ho	using Un	ilts	6 (Bandon 1999)(Bri Dandyan Canton	annan ann an Anna ann an Anna a' Anna a	n fan general fan de	ngarangan selan	anaan araa araa ahaa ahaa ahaa ahaa ahaa
	19	985	19	90	19	95	19	999	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Basellne	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
North Pole												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	133	2	138	-7	137	0	135	~4	135	-2	132	0
FY85 ABI Forecasts	133	- 1	138	-	137	- 1	135	-7	135	-3	132	0
FY85 AB2 Forecasts	133	-7	158	22	137	-2	135	-14	135		132	0
FY85 AB3 Forecasts	133	0	138	0	137	-	135	4	135	• 4	132	0
Borough Subtotal												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	1,229	18	1,370	71	1,488	-32	1,553	12	1,611	-63	1,676	-75
FY85 Car Forecasts	5,262	-31	5,468	-234	5,455	-9 8	5,349	-233	5, 350	-148	5,243	-77
FY85 ABI Forecasts	5,262	-52	5,468	-261	5,455	-100	5,349	-254	5,350	-149	5,243	-77
FY85 AB2 Forecasts	5,262	-257	5,468	-635	5,455	-102	5,349	-499	5,350	-179	5,243	-77
FY85 AB3 Forecasts	5,262	122	5,468	54	5,455	-99	5,349	-45	5,350	-125	5,243	~77
Ralibelt Portion of												
Yukon-Koyukuk												
Cantwell												
FERC Forecasts	26	-126	27	-333	28	-264	29	-264	29	-250	N/A	N/A
FY84 Forecasts	44	-112	43	-241	42	-189	41	-211	39	-186	39	-182
FY85 Car Forecasts	33	-62	34	-54	34	0	34	~3	34	0	34	0
FY85 ABI Forecasts	33	-59	34	-52	34	0	34	0	34	0	34	0
FY85 AB2 Forecasts	33	-59	34	-52	34	0	34	0	34	0	34	0
FY85 AB3 Forecasts	33	59	34	-52	34	0	34	0	34	0	34	0

Summary of Project Effects on Vacant Housing Units FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

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	19	185	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Efrect	Baseline	Effect	Baseline	Effect
Healy												
FERC Forecasts	N/A	NVA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	40	-25	46	-86	53	-67	60	-74	65	-66	72	-65
FY85 Car Forecasts	21	-5	26	-7	32	.ar \$	36	-4	41	0	45	0
FY85 AB1 Forecasts	21	-1	26	~	32	-1	36		41	0	45	0
FY85 AB2 Forecasts	21		26	-2	32	-	36	~	41	0	45	0
FY85 AB3 Forecasts	21	-	26	~ [32	300 B	36	-	41	0	45	0
Nonana												
FERC Forecasts	N/A	N/A	N/A	N/A	NZA	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	61	-11	69	-41	78	~33	87	-36	93	-31	101	-31
FY85 Car Forecasts	21	-14	26	-25	33	2	38	-16	44		50	0
FY85 ABI Forecasts	21	-	26	-3	33	0	38	-2	44	co	50	0
FY85 AB2 Forecasts	21	-1	26	-4	33	~~ į	38	-3	44	8	50	0
FY85 AB3 Forecasts	21		26	nes ĝ	33	0	38	-2	44	-ca-	50	0
Census Area Subtotal												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	243	-172	265	-452	290	-355	311	-394	328	-346	346	-340
FY85 Car Forecasts	272	-81	300	-86	335	~3	351	-23	376	~2	396	0
FY85 ABI Forecasts	272	-61	300	-55	335	-	351	-2	376	-	396	0
FY85 AB2 Forecasts	272	-61	300	-58	335	-2	351	-4	376	~	396	0
FY85 AB3 Forecasts	272	-61	300	-53	335		351	~2	376	- 1	396	0

Summary of Project Effects on Vacant Housing Units

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 🗹

1985-2005

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	19	985	19	90	19	95	19	999	20	02	20)05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Basoline	Effect	Baseline	Effect
SE Fairbanks C.D.												
Delta Junction												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	151	0	149	0	141	0	132	0	128	0	122	0
FY85 ABI Forecasts	151	0	149	-	141	0	132	0	128	0	122	0
FY85 AB2 Forecasts	151	-1	149	-2	141	0	132	-1	128	0	122	0
FY85 AB3 Forecasts	151	0	149	0	141	0	132	0	128	0	122	0
Can. DIv. Subtotal												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	122	(136	∽ 5	148	-2	154	-3	160	one	167	
FY85 Car Forecasts	956	0	1,015	2	1,041	0	1,044	1 Ng	1,065	0	1,066	0
FY85 ABI Forecasts	956	ĝ	1,015	-2	1,041	0	1,044	-	1,065	0	1,066	0
FY85 AB2 Forecasts	956	-3	1,015	0	1,041	l	1,044	-2	1,065	0	1,066	0
FY85 AB3 Forecasts	956	0	1,015	0	1,041	0	1,044	0	1,065	0	1,066	0
Paxson												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NVA
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	1	0	1	0	1	0	ł	0	8	0	-	0
FY85 AB1 Forecasts	l	0	ł	0	ł	0	1	0	2	0	ą k	0
FY85 AB2 Forecasts	1	0	I	0	ł	0	I	0		0	1	0
FY85 AB3 Forecasts	1	0	1	0	ň,	0	ł	0	1	0	ş	0

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Summary of Project Effects on Vacant Housing Units

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/

1985-2005

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	19	85	19	90	19	995	19	99	20	02	20)05
Area/Community	Baseline	Effect	Baseline	Effect	Basellne	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Falrbanks Area												
FERC Forecasts	1,278	N/A	1,334	N/A	1,457	N/A	1,598	N/A	1,820	N/A	1,933	N/A
FY84 Forecasts	1,351	17	1,506	66	1,636	-34	1,707	9	1,771	-64	1,843	-76
FY85 Car Forecasts	6,491	-112	6,784	-318	6,832	-101	6,745	-255	6,792	-150	6,706	-77
FY85 ABI Forecasts	6,491	-112	6,784	-318	6,832	-101	6,745	-255	6,792	-150	6,706	-77
FY85 AB2 Forecasts	6,491	-321	6,784	-694	6,832	-103	6,745	-505	6,792	-180	6,706	~77
FY85 AB3 Forecasts	6,491	61	6,784	1	6,832	-100	6,745	-47	6,792	-126	6,706	-77
Total Rallbelt												
FERC Forecasts	7,347	N/A	8,645	N/A	9,430	N/A	10,344	-261	11,498	N/A	12,436	N/A
FY84 Forecasts	11,876	-308	13,176	-1,159	14,376	-1,509	15,191	-1,508	15,847	-1,598	16,600	-1,552
FY85 Car Forecasts	26,900	-630	27,500	-1,657	28,293	-1,016	28,537	-1,521	29,199	-999	29,282	620
FY85 ABI Forecasts	26,900	-629	27,500	-1,657	28,293	-1,016	28,537	-1,523	29, 199	999	29,282	-620
FY85 AB2 Forecasts	26,900	-629	27,500	-1,654	28,293	-1,016	28,537	-1,523	29,199	-999	29,282	-620
FY85 AB3 Forecasts	26,900	-628	27,500	-1,658	28,293	-1,016	28,537	-1,525	29,199	-1,001	29,282	-620

N/A Not Available or Not Applicable.

L/ Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scanarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.

Source: Frank Orth & Associates, Inc., 1985.

Summary of Project Effects on Net Worker Migration FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u>/ 1985-2005

				Number	of Migrati	ng Worke	rs					
	19	985	19	90	19	95	19	99	20	02	20)05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Anchorage Area												
Mun. of Anchorage												
FERC Forecasts	N/A	155	N/A	250	N/A	-179	N/A	-12	N/A	-182	N/A	-104
FY84 Forecasts	N/A	99	N/A	225	N/A	485	N/A	421	N/A	598	N/A	625
FY85 Car Forecasts	N/A	103	N/A	296	N/A	51	N/A	301	N/A	358	N/A	198
FY85 ABI Forecasts	N/A	228	N/A	481	N/A	19	N/A	410	N/A	365	N/A	129
FY85 AB2 Forecasts	N/A	73	N/A	202	N/A	8	N/A	226	N/A	344	N/A	129
FY85 AB3 Forecasts	N/A	359	N/A	724	N/A	24	N/A	563	N/A	387	N/A	129
Mat-Su Borough												
FERC Forecasts	N/A	38	N/A	836	N/A	658	N/A	716	N/A	528	N/A	N/A
FY84 Forecasts	N/A	122	N/A	789	N/A	693	N/A	845	N/A	583	A/K	170
FY85 Car Forecasts	N/A	247	N/A	911	N/A	364	N/A	681	N/A	278	N/A	179
FY85 ABI Forecasts	N/A	135	N/A	712	N/A	391	N/A	565	N/A	270	N/A	179
FY85 AB2 Forecasts	N/A	93	N/A	631	N/A	392	N/A	515	N/A	264	N/A	179
FY85 AB3 Forecasts	N/A	169	N/A	776	N/A	391	N/A	607	N/A	271	N/A	179
Kenal Penin. Borough									Ì			
FERC Forecasts	N/A	7	N/A	~7	N/A	-26	N/A	-18	N/A	-27	N/A	0
FY84 Forecasts	N/A	-7	N/A	-43	N/A	22	N/A	-2	N/A	34	N/A	0
FY85 Car Forecasts	N/A	8	N/A	-14	N/A	-21	N/A	-9	N/A		N/A	~7
FY85 ABI Forecasts	N/A	18	N/A	1	N/A	-16	N/A	-	N/A	-2	N/A	0
FY85 AB2 Forecasts	N/A	10	N/A	-4	N/A	-9	N/A	-4	N/A	-2	N/A	0
FY85 AB3 Forecasts	N/A	23	N/A	3	N/A	-21	N/A	2	N/A	Q	N/A	0

Summary of Project Effects on Net Worker Migration 1/ FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 2/ 1985-2005

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	1985		1990		1995		1999		2002		2005	
Area/Community	Baseline	Effect	Basellnø	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Anchorage Area Subtotal												
FERC Forecasts	N/A	200	N/A	1,079	N/A	453	N/A	688	N/A	319	N/A	N/A
FY84 Forecasts	N/A	214	N/A	971	N/A	1,200	N/A	1,264	N/A	1,215	N/A	795
FY85 Car Forecasts	N/A	358	N/A	1,193	N/A	394	N/A	973	N/A	635	N/A	370
FY85 ABI Forecasts	N/A	381	N/A	1,194	N/A	394	N/A	974	N/A	633	N/A	308
FY85 AB2 Forecasts	N/A	176	N/A	829	N/A	391	N/A	737	N/A	606	N/A	308
FY85 AB3 Forecasts	N/A	551	N/A	1,503	N/A	394	N/A	1,172	N/A	654	N/A	308
Fairbanks Area												
Fairbanks-N.S. Bor.												
FERC Forecasts	N/A	29	N/A	-58	N/A	-111	N/A	-92	N/A	-117	N/A	N/A
FY84 Forecasts	N/A	-17	N/A	-68	N/A	34	N/A	-13	N/A	62	N/A	74
FY85 Car Forecasts	N/A	-21	N/A	230	N/A	87	N/A	212	N/A	130	N/A	61
FY85 ABI Forecasts	N/A	-3	N/A	262	N/A	89	N/A	236	N/A	131	NA	61
FY85 A82 Forecasts	N/A	189	N/A	610	N/A	91	N/A	458	N/A	159	N/A	61
FY85 AB3 Forecasts	N/A	-166	N/A	-31	N/A	88	N/A	46	N/A	109	N/A	61
Railbelt Portion of												
Yukon-Koyukuk												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	177	N/A	464	N/A	365	N/A	405	N/A	355	N/A	349
FY85 Car Forecasts	N/A	236	N/A	86	N/A	3	N/A	26	N/A	2	N/A	0
FY85 ABI Forecasts	N/A	216	N/A	55	N/A	ł	N/A	2	N/A	5	N/A	0
FY85 AB2 Forecasts	N/A	216	N/A	58	N/A		N/A	4	N/A		N/A	0
FY85 AB3 Forecasts	N/A	216	N/A	53	N/A	l	N/A	2	N/A	and the second	N/A	0

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Summary of Project Effects on Net Worker Migration 1/

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 2/

1985-2005

				Number (of Migrati	ng Worke	rs		n fersen for an and an and an and an and an and an and an an an an an an an an an an an an an	(um deschanden den zusannen im	den allen generalen in den generet (Der sin allen landen	Control of the second second second second second second second second second second second second second second
	1985		1990		1995		1999		2002		2005	
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
SE Fairbanks C.D.												
FERC Forecasts	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
FY84 Forecasts	N/A	1	N/A	5	N/A	2	N/A	3	N/A	1	N/A	I
FY85 Car Forecasts	N/A	0	N/A	7	N/A	U.	N/A	-3	N/A	0	N/A	0
FY85 ABI Forecasts	N/A	-3	N/A	2	N/A	0	N/A	-3	N/A	0	N/A	0
FY85 AB2 Forecasts	N/A	8	N/A	-5	N/A	-3	N/A	2	N/A	0	N/A	0
FY85 AB3 Forecasts	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0
Fairbanks Area Subtotal												
FERC Forecasts	N/A	29	N/A	-58	N/A	-111	N/A	-92	N/A	-117	N/A	N/A
FY84 Forecasts	N/A	161	N/A	401	N/A	401	N/A	395	N/A	418	N/A	424
FY85 Car Forecasts	N/A	215	N/A	309	N/A	90	N/A	235	N/A	132	N/A	61
FY85 ABI Forecasts	N/A	210	N/A	319	N/A	90	N/A	235	N/A	132	N/A	61
FY85 AB2 Forecasts	N/A	413	N/A	663	N/A	89	N/A	464	N/A	160	N/A	61
FY85 AB3 Forecasts	N/A	40	N/A	22	N/A	89	N/A	48	N/A	110	N/A	61
Total Rallbelt												
FERC Forecasts	N/A	229	N/A	1,021	N/A	342	N/A	596	N/A	202	N/A	N/A
FY84 Forecasts	N/A	375	N/A	1,372	N/A	1,601	N/A	1,659	N/A	1,633	N/A	1,219
FY85 Car Forecasts	N/A	573	N/A	1,502	N/A	484	N/A	1,208	N/A	767	N/A	431
FY85 ABI Forecasts	N/A	591	N/A	1,513	N/A	484	N/A	1,209	N/A	765	N/A	369
FY85 AB2 Forecasts	N/A	589	N/A	1,492	N/A	482	N/A	1,195	N/A	766	N/A	369
FY85 AB3 Forecasts	N/A	591	N/A	1,525	N/A	482	N/A	1,218	N/A	764	N/A	369

N/A Not Available or Not Applicable.

Worker migration is defined as the net number of workers that in-migrate to, or out-migrate from, each area. Worker migration at the community level is not available.

2/ Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.
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Summary of Project Effects on Net Population Change

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/

1985-2005

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	1	985	1	990	1	995	ł	999	2	002	2	005
Area/Community	Baseline	Effect	Baselinə	Effect	Baseilne	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Anchorage Area												
Mun. of Anchorage												
FERC Forecasts	N/A	435	-795	126	2,208	-118	3,634	39	3,565	-199	N/A	N/A
FY84 Forecasts	5,698	142	6,477	88	-73	102	955	-14	1,276	389	1,837	9
FY85 Car Forecasts	3,211	289	3,362	232	-1,937	-292	-537	166	557	122	1,174	-165
FY85 ABI Forecasts	3,211	639	3,362	392	-1,937	-229	~537	128	557	-б	1,174	-197
FY85 AB2 Forecasts	3,211	204	3, 362	316	-1,937	-443	-537	183	557	120	1,174	-197
FY85 AB3 Forecasts	3,211	1,004	3,362	480	-1,937	-66	-537	97	557	-105	1,174	-197
Mat-Su Borough												
FERC Forecasts	3,127	110	1,421	282	2,619	-46	3,338	15	3,564	-93	4,114	N/A
FY84 Forecasts	2,427	1,340	3,083	888	1,985	-466	2,452	92	2,734	-1,044	3,149	
FY85 Car Forecasts	1,603	743	1,788	268	971	59	1,353	~46	1,678	-286	1,924	-29
FY85 ABI Forecasts	1,603	366	1,788	81	971	-1	1,353	-7	1,678	-152	1,924	0
FY85 AB2 Forecasts	1,603	248	1,788	61	971		1,353	10	1,678	-112	1,924	0
FY85 AB3 Forecasts	1,603	458	1,788	88	971	-	1,353	-12	1,678	-170	1,924	0
Kenal Penin. Borough												
FERC Forecasts	N/A	20	N/A	-5	N/A	6	N/A	2	N/A	-12	N/A	N/A
FY84 Forecasts	1.497	N/A	1.841	N/A	860	N/A	1.142	N/A	1,290	N/A	1.514	N/A
FY85 Car Forecasts	1,375	22	1,520	3	618	10	981	9	1,284	35	1,501	-3
FY85 AB1 Forecasts	1.375	49	1.520	24	618	7	981	8	1,284	29	1,501	0
FY85 AB2 Forecasts	1.375	29	1,520	-12	618	A	981	2	1.284	22	1,501	0
FY85 AB3 Forecasts	1,375	63	1,520	8	618	~6	981	-3	1,284	17	1,501	Ō

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# Summary of Project Effects on Net Population Change

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/

1985-2005

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	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Basellne	Effect	Baseline	Effect	Baseline	Effect	Basellne	Effect	Baseline	Effect
Anchorage Area Subtotal												
FERC Forecasts	N/A	565	N/A	403	N/A	-170	N/A	57	N/A	-303	N/A	N/A
FY84 Forecasts	9,622	N/A	11,401	N/A	2,772	N/A	4,549	N/A	5,300	N/A	6,500	N/A
FY85 Car Forecasts	6,188	1,054	6,671	497	-347	-223	1,798	129	3,518	-129	4,599	-197
FY85 ABI Forecasts	6,188	1,054	6,671	497	-347	-223	1,798	129	3,518	-129	4,599	-197
FYB5 AB2 Forecasts	6,188	481	6,671	365	-347	-440	1,798	195	3,518	30	4,599	-197
FY85 AB3 Forecasts	6,188	1,525	6,671	576	-347	-73	1,798	82	3,518	-258	4,599	-197
Fairbanks Area												
Fairbanks-N.S. Bor.												
FERC Forecasts	7,195	N/A	i 45	-37	1,257	-17	1,710	5	1,763	-32	1,873	N/A
FY84 Forecasts	1,628	-48	2,381	72	510	40	879	-3	1,115	105	1,299	0
FY85 Car Forecasts	702	-98	798	92	-481	-11	. 479	19	550	-	775	-38
FY85 ABI Forecasts	702	-9	798	114	-481	-7	479	18	550	-134	775	38
FYB5 AB2 Forecasts	702	547	798	224	-481	210	479	-51	550	-297	775	-38
FY85 AB3 Forecasts	702	-480	798	42	-481	-171	479	62	550	1	775	-38
Railbelt Portion of												
Yukon-Koyukuk												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NZA	N/A
FY84 Forecasts	30	500	32	270	34	-20	36	12	37	-49	39	1
FY85 Car Forecasts	26	414	37	35	36	7	36	-7	49	-25	49	0
FY85 ABL Forecasts	26	328	37	0	36	3	36	-3	49	-7	49	0
FY85 AB2 Forecasts	26	328	37	ñ	36	5	36	-2	0	~?	AQ	0
EVAS AR3 Forecaste	26	328	27	2	20 74	ু হ	70 ZA	<u>د</u>	40 AQ	یہ س	40	õ
1 100 ADD FOI BUBSTS	20	030	1	4	0	J	טכ	v	49	-2	47	v

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#### Summary of Project Effects on Net Population Change

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/

1985-2005

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	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
SE Fairbanks C.D.												
FERC Forecasts	696	N/A	14	I	122	0	165	0	156	0	164	N/A
FY84 Forecasts	162	N/A	237	N/A	61	N/A	88	N/A		N/A	129	N/A
FY85 Car Forecasts	45	0	51	-4	-70	0	16	0	23	3	41	0
FY85 ABI Forecasts	45	-3	51	9	-70	0	16	-3	23	3	41	0
FY85 AB2 Forecasts	45	10	51	0	~70	0	16	0	23	7	41	0
FY85 AB3 Forecasts	45	0	51	0	-70	0	16	0	23	0	41	0
Fairbanks Area												
FERC Forecasts	N/A	N/A	N/A	-36	N/A	-17	N/A	5	N/A	-32	N/A	N/A
FY84 Forecasts	1,790	N/A	2,618	N/A	571	N/A	967	N/A	1,226	N/A	1,428	N/A
FY85 Car Forecasts	773	316	887	123	-515	-4	532	12	623	-133	866	-38
FY85 ABI Forecasts	773	316	887	123	-515	-4	532	12	623	-133	866	-38
FY85 AB2 Forecasts	773	885	887	224	-515	215	532	-53	623	292	866	-38
FY85 AB3 Forecasts	773	-152	887	44	-515	-168	532	62	623	-	866	-38
Total Railbelt												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	11,442	N/A	14,051	N/A	3,377	N/A	5,552	N/A	6,563	N/A	7,967	N/A
FY85 Car Forecasts	6,961	1,370	7,558	619	-862	-178	2,330	146	4, 141	~692	5,465	-234
FY85 ABI Forecasts	6,961	1,369	7,558	620	-862	-173	2,330	138	4,141	-686	5,465	-235
FY85 AB2 Forecasts	6,961	1,370	7,558	615	-862	-172	2,330	141	4,141	-684	5,465	-235
FY85 AB3 Forecasts	6,961	1,372	7,558	621	-862	-171	2,330	143	4,141	-688	5,465	~235

N/A Not Available or Not Applicable.

1/ Effects under the FERC License Application Scenario are defined by FERC Forecasts.

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Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

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Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.

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Source: Frank Orth & Associates, Inc., 1985.

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# Summary of Project Effects on Average Annual Traffic Volumes FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u> 1985-2005

				N	umber of Ti	rips						
	19	185	19	90	19	95	19	99	20	02	20	05
Area/Road Segment	Basellne	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Anchorage Area												
Anch. to Palmer/Wasilla	3											
FY84 Forecasts	12,958	130	19,388	422	7,694	60	9,422	70	10,670	80	N/A	N/A
FY85 Car Forecasts	14,716	172	20,144	358	26,194	20	32,324	76	37,036	140	42,112	-72
FY85 ABI Forecasts	14,716	1,30	20,144	302	26,194	72	32,324	- 6	37,036	140	42,112	66
FY85 AB2 Forecasts	14,716	86	20,144	202	26,194	58	32,324	1 8	37,036	128	42,112	66
FY85 AB3 Forecasts	14,716	160	20,144	390	26,194	84	32,324	3. 4	37,036	152	42,112	66
Palmer to Anch./Wasilia	3											
FY84 Forecasts	7,578	42	11,024	146	13,224	132	15,914	154	18,212	150	N/A	N/A
FY85 Car Forecasts	7,998	128	10,456	272	13,338	8	16,268	184	18,570	58	21,094	-6
FY85 ABI Forecasts	7,998	80	10,456	208	13,338	28	16,268	150	18,570	58	21,014	26
FY85 AB2 Forecasts	7,998	54	10,456	138	13,338	24	16,268	100	18,570	50	21,09	26
FY85 AB3 Forecasts	7,998	106	10,456	268	13,338	34	16,268	188	18,570	62	21,094	26
Wasilla to Anch./Palmer	-											
FY84 Forecasts	11,484	148	16,944	480	5,330	72	6,492	84	7,542	70	NZA	N/A
FY85 Car Forecasts	12,570	216	16,904	414	21,944	4	27,184	288	31,358	98	36,013	-26
FY85 AB1 Forecasts	12,570	150	16,904	318	21,944	52	27,184	236	31,358	98	36,013	48
FY85 AB2 Forecasts	12,570	108	16,904	224	21,944	42	27,184	158	31,358	86	36,013	48
FY85 AB3 Forecasts	12,570	178	16,904	402	21,944	58	27,184	294	31,358	106	36,013	48

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# Summary of Project Effects on Average Annual Traffic Volumes FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarics 1/ 1985-2005

				N	umber of Ti	-lps						
	19	85	19	90	19	95	19	999	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Wasilla to Houston												
FY84 Forecasts	6,096	192	9,102	608	22,790	272	28,652	316	33, 938	294	/A	N/A
FY85 Car Forecasts	6,630	252	9,342	436	13,038	-16	17,266	248	21,248	36	26, 74	28
FY85 ABI Forecasts	6,630	158	9,342	298	13,038	18	17,266	164	21,248	46	26,274	16
FY85 AB2 Forecasts	6,630	122	9,342	216	13,038	14	17,266	108	21,248	34	26,274	16
FY85 AB3 Forecasts	6,630	186	9,342	362	13,038	16	17,266	210	21,248	48	26,274	16
Houston to TK Spur Road	ł				1							
FY84 Forecasts	1,732	144	2,402	432	3,106	248	3,740	328	4,280	238	N/A	N/A
FY85 Car Forecasts	1.898	102	2,490	130	3,154	-10	3.834	70	4,378	12	4,994	-4
FY85 ABI Forecasts	1.898	72	2.490	80	3.154	8	3.834	38	4,378	16	4,994	6
FY85 AB2 Forecasts	1,898	64	2,490	66	3.154	6	3,834	30	4.378	10	4,994	6
FY85 AB3 Forecasts	1,898	70	2,490	92	3, 154	4	3, 834	52	4, 378	16	4, 994	6
TK Rd. Spur to T. Creek												
FY84 Forecasts	1,352	154	1,816	472	2,250	268	2,670	342	3,028	250	N/A	Ń/A
FY85 Car Forecasts	1,486	112	1,894	116	2,346	-12	2,806	52	3,174	10	3,592	0
FY85 ABI Forecasts	1,486	80	1,894	68	2,346	6	2,806	18	3,174	14	3,592	4
FY85 AB2 Forecasts	1,486	74	1,894	50	2,346	4	2,806	16	3,174	6	3,592	4
FY85 AB3 Forecasts	1,486	78	1,894	72	2,346	2	2,806	32	3,174	14	3, 592	4
Talkeetna Road												
FY84 Forecasts	676	38	950	128	1,264	88	1.538	98	1.780	84	N/A	N/A
FY85 Car Forecasts	704	22	932	62	1,192	2	1.460	38	1.680	5	1.930	0
FY85 ABI Forecasts	704	20	932	48	1,192	2	1,460	32	1,680	б	1,930	2
FY85 AB2 Forecasts	704	14	932	36	1,192	2	1,460	26	1,680	Â	1,930	2
FY85 AB3 Forecasts	704	20	932	56	1,192	2	1,460	36	1,680	6	1,930	2
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# Summary of Project Effects on Average Annual Traffic Volumes FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u>/ 1985-2005

APPEN AND AND AND AND AND AND AND AND AND AN				N	umber of Ti	-1ps		00	20	0.0	° 20	05
	19	85		90	- 19	90	2 12	99	20	102 566.00	Deseline	C44004
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	LITOCT	Baseline	ETTOCT	Daserine	
Trapper Cr. to Cantwell												
F/84 Forecasts	1,022	130	۱,354	390	1,646	218	1,944	294	3,198	204	N/A	N/A
FY85 Car Forecasts	1,136	110	1,446	84	1,782	-12	2,120	36	2,396	10	2,714	4
FY85 ABI Forecasts	1,136	84	1,446	44	1,782	4	2,120	8	2,396	12	2,714	2
FY85 AB2 Forecasts	1,136	78	1,446	38	1,782	4	2,120	12	2,396	4	2,714	2
FY85 AB3 Forecasts	1,136	78	1,446	44	1,782	0	2,120	20	2,396	14	2,714	2
Fairbanks Area												
Cantwell to Healy												
FY84 Forecasts	1,176	224	1,530	644	1,918	472	2,270	566	2,586	482	N/A	NZA
FY85 Car Forecasts	1,508	196	1,960	118	2,488	-2	3,018	42	3,482	4	4,002	-2
FY85 ABI Forecasts	1,508	168	1,960	72	2,488	4	3,018	10	3,482	6	4,002	0
FY85 AB2 Forecasts	1,508	166	1,960	74	2,488	6	3,018	12	3,482	6	4,002	0
FY85 AB3 Forecasts	1,508	160	1,960	68	2,488	4	3,018	10	3,482	6	4,002	0
Healy to Nenana												
FY84 Forecasts	924	68	1,190	230	1,472	152	1,724	196	1,946	162	N/A	N/A
FY85 Car Forecasts	1,038	46	1,310	50	1,624	-4	1,948	26	2,228	Ą	2,552	-2
FY85 ABI Forecasts	1,038	32	1,310	20	1,624	4	1,948	10	2,228	ర	2,552	2
FY85 AB2 Forecasts	1,038	36	1,310	26	1,624	6	1,948	12	2,228	6	2,552	2
FY85 AB3 Forecasts	1,038	18	1,310	12	1,624	2	1,948	10	2,228	6	2,552	2
Nenana to Falrbanks												
FY84 Furecasts	1,316	48	1,656	168	2,000	112	2,316	146	2,584	118	N/A	N/A
FY85 Car Forecasts	1,310	36	1,580	46	1,878	-4	2,200	28	2,476	8	2,798	-4
FY85 ABI Forecasts	1,310	24	1,580	20	1,878	8	2,200	10	2,476	8	2,798	4
FY85 AB2 Forecasts	1,310	32	1,580	32	1,878	12	2,200	16	2,476	10	2,798	L.
FY85 AB3 Forecasts	1,310	-2	1,580	8	1,878	21	2,200	10	2,476	10	2,798	4

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#### Summary of Project Effects on Average Annual Traffic Volumes FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u> 1985-2005

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	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Cantwell to Project AR	30	170	0.0	740	1.00	130		204	1.00	h th 4**	51 / A	41.7 A
F184 FORECASTS	70	178	90	248	120	122	140	224	108	110	N/A	N/ A
FY85 Car Forecasts	74	146	86	162	100	86	110	62	120	32	32	2
FY85 AB1 Forecasts	74	102	86	102	100	32	110	32	120	32	132	2
FY85 AB2 Forecasts	74	102	86	102	100	32	110	32	120	32	132	2
FY85 AB3 Forecasts	74	102	86	102	100	32	110	32	120	32	132	2
Paxson to Project AR												
FYB4 Forecasts	70	8	96	22	120	10	146	16	168	8	N/A	N/A
FY85 Car Forecasts	74	2	86	2	100	2	110	2	120	0	132	0
FY85 AB1 Forecasts	74	2	86	2	100	2	110	2	120	0	132	0
FY85 AB2 Forecasts	74	2	86	2	100	2	110	2	120	0	132	0
FY85 AB3 Forecasts	74	2	86	2	100	2	110	2	120	0	132	- 0
Prolect Access Road											•	
FERC Forecasts 2/	0	N/A	0	708	0	N/A	0	N/A	0	N/A	0	N/A
FYB4 Forecasts	0	308	0	724	0	168	0	396	0	120	N/A	N/A
FY85 Car Forecasts	0	186	0	224	0	26	n n	98	0	34	0	2
EV85 AB1 Forecasts	Ő	114	0	168	0	44	0	70	Ő	34	0	2
	0	144	0	169	0		0	70	0	34	~	2
FIGS ADZ FUIGCOSIS	0	144	0	100	0	44	0	70	0	بەر مەر	0	د م
F TOD ABD FORGCASTS	U	144	U	100	0	44	0	68	U	24	U	2

N/A Not Available or Not Applicable.

AR Access Road

1/ Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.

2/ Effects under the FERC License Application Scenario are provided under the FERC forecasts for the Project Access Road only. Forecasts for other road segments were not made.

# Summary of Project Effects on Number of Trucks

FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios  $\underline{I'}$ 

1985-2005

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# Summary of Project Effects on Number of Trucks FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

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	19	985	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Basellne	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Wentlin to Houston												
Wastila to Houston	770	12	FAC	20	1 400	10	1.000	17	2 106	a <b>-</b> 0	N1 / A	N/A
F184 FORGCASTS	5/2	12	545	26	1,499	10	1,862	17	2,185	17	N/A	NVA 2
Fibb Car Forecasts	398	14	561	24	782	0	1,036	14	1,275	2	1,970	2
FT85 ABL FORECASTS	598	9	501	18	/82	4	1,055	10	1,275	د	1,976	8
FY85 AB2 Forecasts	398	7	561	13	782	I	1,036	б	1,275	2	1,576	1
FY85 AB3 Forecasts	398	10	561	21	782	ł	1,036	12	1,275	3	1,576	9
Houston to TK Spur Road	ł											
FY84 Forecasts	221	18	312	- 38	398	41	478	46	546	41	N/A	N/A
FY85 Car Forecasts	247	10	324	12	410	0	498	6	569	. 2	649	
FY85 ABI Forecasts	247	8	324	10	410	l	498	5	569	2	649	l.
FY85 AB2 Forecasts	247	8	324	8	410	ł	498	4	569	1	649	8
FY85 AB3 Forecasts	247	8	324	11	410	1	498	7	569	2	649	8.
TK Rd Sour to T. Creek												ŕ
FY84 Forecasts	170	20	236	43	285	43	338	40	383	43	N/A	N/A
FY85 Car Forecasts	193	11	246	10	305		365	4	A13		467	0
FY85 ABL Forecasts	193	,, Q	246	9	305	1	365	ว	413	2	167	1
EX85 AB2 Forecasts	193	9	246	5	305		365	2	413	ے ا	467	1
EY85 AB3 Eprecasts	193	- 0	246	0 0	305	, 0	365	A	413	, 2	467	ę
	, ))	,	240	3		0	202	~	-942	2	407	9
Talkeetna Road												
FY84 Forecasts	88	7	124	16	165	16	199	17	230	16	N/A	N/A
FY85 Car Forecasts	92	3	121	8	155	0	190	5	218	1	250	0
FY85 ABI Forecasts	92	3	121	6	155	0	190	Ą	218	Į.	250	0
FY85 AB2 Forecasts	92	2	121	4	155	0	190	3	218	1	250	0
FY85 AB3 Forecasts	92	3	121	7	155	0	190	4	218	à	250	0
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S. the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s . Al Malanes all and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second seco A. and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s

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# Summary of Project Effects on Number of Trucks FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1/</u> 1985-2005

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	19	985	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseilne	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Trapper Cr. to Cantwell												
FY84 Forecasts	160	21	227	40	260	AA	308	52	348	46	NZA	N/A
FY85 Car Forecasts	101	14	243	70	200	0	356	2	403	2	456	1
FY85 ABI Forecasts	191	13	243	, 7	299	ĩ	356	1	403	2	456	ò
FY85 AB2 Forecasts	191	12	243	5	299		356	2	403	1	456	0
FY85 AB3 Forecasts	191	11	243	7	299	0	356	3	403	2	456	o
Fairbanks Area												
Cantwell to Healy												
FY84 Forecasts	142	44	205	79	258	97	314	114	364	104	N/A	N/A
FY85 Car Forecasts	202	25	263	14	333	0	404	5	467	. 1	536	0
FY85 ABI Forecasts	202	22	263	10	333	1	404	l	467	1	536	0
FY85 AB2 Forecasts	202	22	263	10	333	1	404	2	467	1	536	0
FY85 AB3 Forecasts	202	21	263	9	333	1	404	I	467	ţ	536	0
Healy to Nenana												
FY84 Forecasts	137	11	159	25	235	33	281	39	322	37	N/A	N/A
FY85 Car Forecasts	139	5	176	5	218	0	261	3	299	ł	342	0
FY85 ABI Forecasts	139	4	176	3	218	I	261	4 m.P	299		. 342	0
FY85 AB2 Forecasts	139	4	176	3	218	ł	261	2	299	´ I	342	0
FY85 A83 Forecasts	139	2	176	2	218	0	261	1	299	. 1	342	0
Nenana to Fairbanks												
FY84 Forecasts	145	5	166	13	210	11	236	12	259	12	N/A	N/A
FY85 Car Forecasts	131	3	158	3	188	0	220	2	248	l	280	0
FY85 ABI Forecasts	131	2	158	2	188	1	220	ŝ	248	ł	280	0
FY85 AB2 Forecasts	131	3	158	3	188	I	220	2	248	ţ	280	0
FY85 AB3 Forecasts	131	0	158	ŝ	188	0	220		248	cter.	280	0

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#### Summary of Project Effects on Number of Trucks FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios $\underline{V}$ 1985-2005

₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩	204.537 (M/M-2014-13) (M/M-2015) (M/M-2014-23)	2.45 (Kr.2)****	a fan fan fan fan fan fan fan fan fan fa	Nu	mber of Tr	ucks	94934634.66334639463946334536994699468946894	ter an air air an an an an an an an an an an an an an	anan karan menangkan karan dan kebuah karan yang ke	\$211\$949\$\$\$#5\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	ġĊġĸĸġġĸĸĸġġĸĸĸġĊĸĸĊġĊĸĸĊĸġġŔĸĸĸţĸĸĸ	949-040-940-270-940-920-920-920-920-920-920-920-920-920-92
	15	985	19	90	19	95	15	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Cantwell to Project AR												
FYB4 Forecasts	12	72	16	72	20	73	24	74	28	- 73	NZA	NZA
FY85 Car Forecasts	13	70	5	70	17	0	19	0	20	0	22	0
FY85 ABI Forecasts	13	70	15	70	17	0	19	0	20	0	22	0
FY85 AB2 Forecasts	13	70	15	70	17	0	19	0	20	0	22	0
FY85 AB3 Forecasts	13	70	15	70	17	0	19	0	20	0	22	0
Paxson to Project AR												
FY84 Forecasts	12	2	16	2	20	3	24	4	28	3	N/A	N/A
FY85 Car Forecasts	13	0	15	0	17	0	19	0	20	0	22	0
FY85 ABI Forecasts	13	0	15	0	17	0	19	0	20	0	22	0
FY85 AB2 Forecasts	13	0	15	0	17	0	19	0	20	0	22	0
FY85 AB3 Forecasts	13	0	15	0	17	0	19	0	20	0	22	0
Project Access Road												
FY84 Forecasts	0	70	0	70	0	70	0	70	0	70	N/A	N/A
FY85 Car Forecasts	0	70	0	70	0	0	0	0	0	0	0	0
FY85 AB1 Forecasts	0	70	0	70	0	0	0	0	0	0	0	0
FY85 AB2 Forecasts	0	70	0	70	0	0	0	0	0	0	0	0
FY85 AB3 Forecasts	0	70	0	70	0	0	0	0	0	0	0	0

N/A Not Available or Not Applicable.

AR Access Road

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Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.

Source: Frank Orth & Associates, Inc., 1985.

# Summary of Project Effects on Total Accidents FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u>/ 1985-2005

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	19	985	19	90	19	95	19	99	20	02	20	05
Area/Road Segment	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Anchorage Area												
Anch. to Palmer/Wasilla	1											
FY84 Forecasts	90	I	135	3	55	0	66	0	74	I	N/A	N/A
FY85 Car Forecasts	102	1	140	2	182	0	225	2	258	. <b>Q</b>	293	0
FY85 ABI Forecasts	102	I	140	2	182	1	225	2	258	1	293	0
FY85 AB2 Forecasts	102	l	140	l	182	0	225	I	258	8	293	0
FY85 AB3 Forecasts	102	l	140	3	182	ł	225	2	258	ł	293	0
Paimer to Anch./Wasilla	l											
FY84 Forecasts	16	0	24	0	29	0	34	0	39	0	N/A	N/A
FY85 Car Forecasts	17	0	23	1	29	0	35	0	40	0	46	0
FY85 ABI Forecasts	17	0	23	0	29	0	35	0	40	0	46	0
FY85 AB2 Forecasts	17	0	23	0	29	0	35	0	40	0	46	0
FY85 AB3 Forecasts	17	0	23	I	29	0	35	0	40	0	46	0
Wasilla to Anch./Palmer												
FY84 Forecasts	6	0	9	0	3	0	4	0	4	0	N/A	N/A
FY85 Car Forecasts	7	0	9	0	12	0	15	0	17	0	20	0
FY85 ABI Forecasts	7	0	9	0	12	0	15	0	17	0	20	0
FY85 AB2 Forecasts	7	0	9	0	12	0	15	0	17	0	20	0
FY85 AB3 Forecasts	7	0	9	0	12	0	15	0	17	0	20	0

		Summary	ОĨ	Proj	oct Effocts on "	tote i	Acci	den	's			
FY84	Car	Transportation, F	Y85	Car	Transportation,	and	FY85	Alr	and	Bus	Scenarios	
					1985-2005							

Number of Accidents												
	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Wasiila to Houston												
FY84 Forecasts	24	1	36	2	90	l	113	1	134	l	N/A	N/A
FY85 Car Forecasts	26	ł	37	2	52	0	68	1	84	0	104	0
FY85 ABI Forecasts	26	1	37	1	52	0	68	I	84	0	104	0
FY85 AB2 Forecasts	26	0	37	I	52	0	68	0	84	0	104	0
FY85 AB3 Forecasts	26	I	37	ł	52	0	68	I	84	0	104	0
Houston to TK Spur Roa	d											
FY84 Forecasts	5	0	8	I	10	1	12	I	14	1	N/A	N/A
FY85 Car Forecasts	6	0	8	0	10	0	12	0	14	0	16	0
FY85 ABI Forecasts	6	0	8	0	10	0	12	0	14	0	16	0
FY85 AB2 Forecasts	6	0	8	0	10	0	12	0	14	0	16	0
FY85 AB3 Forecasts	6	0	8	0	10	0	12	0	14	0	16	0
TK Rd. Spur to T. Cree	k											
FY84 Forecasts	10	I	14	4	17	2	20	3	23	2	N/A	N/A
FY85 Car Forecasts	1 1		14	l	18	0	21	0	24	0	27	0
FY85 ABI Forecasts	1	ł	14	ł	18	0	21	0	24	0	27	0
FY85 AB2 Forecasts	11	1	14	0	18	0	21	0	24	0	27	0
FY85 AB3 Forecasts	11	ł	14	ł	18	0	21	0	24	0	27	0
Talkeetna Road												
FY84 Forecasts	5	0	8	1	10	1	12	1	14	g	N/A	N/A
FY85 Car Forecasts	6	0	8	1	10	0	12	0	14	0	16	0
FY85 ABI Forecasts	6	0	8	0	10	0	12	0	14	0	16	0
FY85 AB2 Forecasts	6	0	8	0	10	0	12	0	14	0	16	0
FY85 AB3 Forecasts	6	0	8	0	10	0	12	0	14	0	16	0

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# Summary of Project Effects on Total Accidents FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u> 1985-2005

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	19	85	19	90	19	95	19	99	20	02	20	105
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Trapper Cr. to Cantwel	i											
FY84 Forecasts	9	1	11	3	14	2	16	2	19	2	N/A	N/A
FY85 Car Forecasts	10	l	12	l	15	0	18	0	20	0	23	0
FY85 ABI Forecasts	10	1	12	0	15	0	18	0	20	0	23	0
FY85 AB2 Forecasts	10	ł	12	0	15	0	18	0	20	0	23	0
FY85 AB3 Forecasts	10	I	12	0	15	0	18	0	20	0	23	0
Fairbanks Area												
Cantwell to Healy												
FY84 Forecasts	6	1	8	3	10	2	12	3	13	2	N/A	N/A
FY85 Car Forecasts	8	1	10	1	13	0	16	0	18	0	21	0
FY85 ABI Forecasts	8	1	10	0	13	0	16	0	18	0	21	0
FY85 AB2 Forecasts	8	1	10	0	13	0	16	0	18	0	21	0
FY85 AB3 Forecasts	8	I	10	0	13	0	16	0	18	0	21	0
Healv to Nenana												
FY84 Forecasts	12	1	16	3	19	2	23	3	26	2	N/A	N/A
FY85 Car Forecasts	14	ł	17	1	21	0	26	0	29	0	34	0
FY85 ABI Forecasts	14	0	17	0	21	0	26	0	29	0	34	0
FY85 AB2 Forecasts	14	0	17	0	21	0	26	0	29	0	34	0
FY85 AB3 Forecasts	14	0	17	0	21	0	26	0	29	0	34	0
Nenana to Fairbanks												
FY84 Forecasts	10	0	12	ł	15	I	17	I	19	1	N/A	N/A
FY85 Car Forecasts	10	0	12	0	14	0	16	0	18	0	21	0
FY85 AB1 Forecasts	10	0	12	0	14	0	16	0	18	0	21	0
FY85 AB2 Forecasts	10	0	12	0	14	0	16	0	18	0	21	0
FY85 AB3 Forecasts	10	0	12	0	14	0	16	0	18	0	21	0

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# Summary of Project Effects on Total Accidents FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios $\underline{I'}$

1985-2005

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	19	85	19	90	15	195	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Basellne	Effect	Baseline	Effect	Baseline	Effect
Cantwell to Project AR		-		_	-		-		-	~		61.64
FY84 Forecasts	1	2	1	5	2	4	2	3	2	2	N/A	N/ A
FY85 Car Forecasts	1	2	1	2	1	l	1	2	2		L	0
FY85 ABI Forecasts	l	ł	ł	1	1	l	1		2		2	0
FY85 AB2 Forecasts	I	l	ł		ł,	ł	Ą	ß	2	1	2	0
FY85 AB3 Forecasts	ł	l	ł		8		ł		2	ł	2	0
Paxson to Project AR												
FY84 Forecasts	1	0	ł	1	2	0	2	0	2	0	N/A	N/A
FY85 Car Forecasts	1	0.	1	0	ł	0	1	0	2	0	2	0
FY85 ABI Forecasts	1	0	1	0	1	0	I	0	2	0	2	0
FY85 AB2 Forecasts	1	0	l	0	l	0	l	· 0	2	0	2	0
FY85 AB3 Forecasts	1	0	ł	0	1	0	ŝ	0	2	0	2	0
Project Access Road												
FY84 Forecasts	0	0	0	0	0	0	0	0	0	0	N/A	N/A
FY85 Car Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 ABI Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB2 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB3 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0

N/A Not Available or Not Applicable.

AR Access Road

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1/ Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.

Source: Frank Orth & Associates, Inc., 1985.

# Summary of Project Effects on Injury Accidents FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u>/ 1985-2005

₩₩₩₽₩₩₽₩₩₽₩₽₩₩ [₩] ₩₩₩₽₩₽₩₽₩₽₩₽₩₩₩₩₩₩₩₩₽₩₩₽₩₩₽₩₩₽₩₩₽₩₩₽₩₩	Mganatin th'm Atanganas na isantaniki kum	KORMELING COMPANY OF THE MELLICEN	ŔĨŀŧŎĬĸſġĊĸţĊŢĸŢĬĬĿĔĸŒĿĸŎŀĸŔĬġĸĊĬĸĸ	Number	of Injury	Accident	·S	an an an an an an an an an an an an an a	an an an an an an an an an an an an an a	alaan ahaa ahaa ahaa ahaa ahaa ahaa ahaa	alangunan antarahan antarahan antarahan san	nan anan dalam (kan ji turgan dalam dalam kan kan kan kan kan kan kan kan kan kan
	19	985	19	90	19	95	19	199	20	02	20	05
Area/Road Segment	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Anchorage Area												
Anch. to Palmer/Wasill	8											
FY84 Forecasts	27	0	41		17	0	20	0	22	0	N/A	N/A
FY85 Car Forecasts	31	0	42	I	55	0	68	1	78	0	89	0
FY85 ABI Forecasts	31	0	42	ł	55	0	68	Ì	78	0	89	0
FY85 AB2 Forecasts	31	0	42	0	55	0	68	. 0	78	0	89	0
FY85 AB3 Forecasts	31	0	42	4	55	0	68		78	0	89	0
Palmer to Anch./Wasill	5											
FY84 Forecasts	7	0	11	0	. 14	0	16	0	18	0	N/A	N/A
FY85 Car Forecasts	8	0	11	0	13	0	16	0	18	0	21	0
FY85 ABI Forecasts	8	0	11	0	13	0	16	0	18	0	21	0
FY85 AB2 Forecasts	8	0	11	0	13	0	16	0	18	0	21	0
FY85 AB3 Forecasts	8	0		0	13	0	16	0	18	0	21	0
Wasilla to Anch./Paime	r											
FY84 Forecasts	1	0	1	0	0	0	1	0	I	0	N/A	N/A
FY85 Car Forecasts	â	0	ł	0	2	0	2	0	2	0	3	0
FY85 ABI Forecasts	1	0	ł	0	2	0	2	0	2	0	3	0
FY85 AB2 Forecasts	1	0	1	0	2	0	2	0	2	0	3	0
FY85 AB3 Forecasts	1	0	1	0	2	0	2	0	2	0	3	0

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# Summary of Project Effects on Injury Accidents FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

Number of injury Accidents													
	19	985	19	90	19	95	19	99	20	02	20	05	
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	
Wasilla to Houston													
FY84 Forecasts	6	0	10	l	24	0	30	0	35	0	N/A	N/A	
FY85 Car Forecasts	7	0	10	1	14	0	18	0	22	0	27	0	
FY85 ABI Forecasts	7	0	10	0	14	0	18	0	22	0	27	0	
FY85 AB2 Forecasts	7	0	10	0	14	0	18	0	22	0	27	0	
FY85 AB3 Forecasts	7	0	10	0	14	0	18	0	22	0	27	0	
Houston to TK Spur Road													
FY84 Forecasts	ł	0	3	0	1	0	2	0	2	0	N/A	N/A	
FY85 Car Forecasts	l	0	1	0	ł	0	2	0	2	0	2	0	
FY85 ABI Forecasts	1	0	1	0	ł	0	2	0	2	0	2	0	
FY85 AB2 Forecasts	1	0	4	0	ł	0	2	0	2	0	2	0	
FY85 AB3 Forecasts	1	0	ł	0	<b>Geo</b>	0	2	0	2	0	2	0	
TK Rd. Spur to T. Creek													
FY84 Forecasts	2	0	3	1	4	0	4	i	5	1	N/A	N/A	
FY85 Car Forecasts	2	0	3	0	4	0	5	0	5	0	6	0	
FY85 ABI Forecasts	2	0	3	0	4	0	5	0	5	0	6	0	
FY85 AB2 Forecasts	2	0	3	0	4	0	5	0	5	0	б	0	
FY85 AB3 Forecasts	2	0	3	0	4	0	5	0	5	0	б	0	
Talkeetna Road													
FY84 Forecasts	2	1	3	l	4	I	5	i	6	0	N/A	N/A	
FY85 Car Forecasts	3	0	3	0	4	0	5	0	6	0	7	0	
FY85 ABI Forecasts	3	0	3	0	4	0	5	0	б	0	7	0	
FY85 AB2 Forecasts	3	0	3	0	4	0	5	0	6	0	7	0	
FY85 AB3 Forecasts	3	0	3	0	4	0	5	0	6	0	7	0	

# Summary of Project Effects on Injury Accidents FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u>/ 1985-2005

Number of Injury Accidents												
	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Basellne	Effect	Baseling	Effect	Baseline	Effect
Trease On the Contract	1											
Trapper CF. TO Cantwell	· · · · · · · · · · · · · · · · · · ·	•	7	2	٨		c	,	E	0	NZA	M/A
F184 Forecasts	د	0	د د	2	4	1	5	1	0	0	N/A 7	NV A 0
F 185 Gar Forecasts	5	U	4	U	5	0	0	v	0	0	<del>ر</del> م	Ň
FY85 ABI Forecasts	3	0	4	0	5	0	6	0	6	0	/	v
FY85 AB2 Forecasts	3	0	4	0	5	0	6	0	0	0	/	0
FY85 AB3 Forecasts	3	0	4	0	5	0	6	0	б	0	7	0
Fairbanks Area												
Cantwell to Healy												
FY84 Forecasts	4	l	5	2	6	1	8	2	8		N/A	N/A
FY85 Car Forecasts	5	1	6	I	8	0	10	0	8 8	0	13	0
FY85 ABI Forecasts	5	1	б	0	8	0	10	0	11	0	13	0
FY85 AB2 Forecasts	5	ł	6	0	8	0	10	0	1	0	13	0
FY85 AB3 Forecasts	5	1	б	0	8	0	10	0		0	13	0
Healy to Nenana												
FY84 Forecasts	3	0	4	1	5	ł	6	I	7	6	N/A	N/A
FY85 Car Forecasts	4	0	5	0	6	0	7	0	8	0	9	0
FY85 ABL Forecasts	4	0	5	0	6	0	7	0	8	0	9	0
EY85 AB2 Forecasts	4	0	5	0	6	0	7	0	8	0	9	0
FY85 AB3 Forecasts	4	0	5	0	6	0	7	0	8	0	9	0
Nenana to Fairbanks												
FY84 Forecasts	5	0	6	0	7	0	8	0	9	0	N/A	N/A
FY85 Car Forecasts	- 5	0	6	0	6	0	7	0	8	0	10	0
FY85 ABL Forecasts	5	0	6	0	6	0	7	0	8	0	10	0
FY85 AB2 Forecasts	- 5	0	6	0	6	0	7	0	8	Ő	10	0
FY85 AB3 Forecasts	5	0	6	0	6	0	7	0	8	0	10	0

#### Summary of Project Effects on Injury Accidents FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

Number of Injury Accidents												
	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Basellne	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Cantwell to Project AR												
FYB4 Forecasts	0	0	0	1	0	0	0	1	0	0	N/A	N/A
FY85 Car Forecasts	0	0	0	Ó	Ő	0	0	Ó	0	. 0	0	0
FY85 ABI Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB2 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB3 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
Paxson to Project AR												
FY84 Forecasts	0	0	0	0	0	0	0	0	0	0	N/A	N/A
FY85 Car Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 ABI Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB2 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB3 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
Project Access Road												
FY84 Forecasts	0	0	0	0	0	0	0	0	0	0	N/A	N/A
FY85 Car Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 ABI Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 A82 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB3 Forecasts	0	0	0	0	C	C	0	0	0	0	0	0

N/A Not Available or Not Applicable.

AR Access Road

1/ Effects under the FERC License Application Scenario are defined by FERC Forecasts.

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Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.

Source: Frank Orth & Associates, Inc., 1985.

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# Summary of Project Effects on Animal Road Kill Accidents FY84 Car Transportetion, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u>/ 1985-2005

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	19	985	19	90	19	95	19	99	20	02	20	105
Area/Road Segment	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Anchorage Area												
Anch. to Palmer/Wasilla	ì											
FY84 Forecasts	13	0	20	0	8	0	9	0	11	0	N/A	N/A
FY85 Car Forecasts	14	0	20	0	26	0	32	0	37	0	42	0
FY85 ABI Forecasts	14	0	20	Ô	26	0	32	0	37	0	42	0
FY85 AB2 Forecasts	14	0	20	0	26	0	32	0	37	0	42	0
FY85 AB3 Forecasts	14	0	20	0	26	0	32	0	37	0	42	0
Palmer to Anch./Wasilla	8											
FY84 Forecasts	2	0	3	0	4	0	5	0	6	0	N/A	N/A
FY85 Car Forecasts	2	0	3	0	4	0	5	0	б	0	7	0
FY85 ABI Forecasts	2	0	3	0	4	0	5	0	6	0	7	0
FY85 AB2 Forecasts	2	0	3	0	4	0	5	0	6	0	7	0
FY85 AB3 Forecasts	2	0	3	0	4	0	5	0	6	0	7	0
Wasilia to Anch./Palmer												
FY84 Forecasts	0	0	0	0	0	0	0	0	0	0	N/A	N/A
FY85 Car Forecasts	0	0	0	0	0	0	0	0	0	0	0	O
FY85 ABI Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB2 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB3 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0

# Summary of Project Effects on Animal Road Kiil Accidents FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u> 1985-2005

En mennen von 25 °CH 135 maar zu zahr 14 Mar Banna vorken Kahman var het het het het het het het het het het	DORUGINA (CALL & ANDROLD CONTRACTOR	g same Sinon Affaire di Serre scope di Cana Scoper Scope	Numb	er of An	Imal Road	KIII Acc	ldents	ang ng managan ting ang mang mang mang mang mang mang man	nter for anne son anne son anne son anne son anne son anne son anne son anne son anne son anne son anne son an	VENILLENGE, MENNEGENJUNN	aria konstanta ana konstanta kakangiliketa	gan an
	19	985	19	90	19	195	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Wasilia to Houston												
FY84 Forecasts	7	l	11	1	27	0	34	10	40	0	N/A	N/A
FY85 Car Forecasts	8	0	11	1	16	0	21	Ó	25	0	31	0
FY85 ABI Forecasts	8	0	11	0	16	0	21	0	25	0	31	0
FY85 AB2 Forecasts	8	0	11	0	16	0	21	0	25	0	31	0
FY85 AB3 Forecasts	8	0	5 8	0	16	0	21	0	25	0	31	0
Houston to TK Spur Road												
FY84 Forecasts	ł	0	2	0	3	0	3	0	Ą.	0	N/A	N/A
FY85 Car Forecasts	2	0	2	0	3	0	3	0	4	0	Ą	0
FY85 ABI Forecasts	2	0	2	0	3	0	3	0	4	0	4	0
FY85 AB2 Forecasts	2	0	2	0	3	0	3	0	4	0	4	0
FY85 AB3 Forecasts	2	0	2	0	3	0	3	0	4	0	4	0
TK Rd. Spur to T. Crook												
FY84 Forecasts	4	0	5	ł	6	1	7	1	8		N/A	N/A
FY85 Car Forecasts	4	0	5	0	7	0	8	0	9	0	10	0
FY85 ABI Forecasts	4	0	5	0	7	0	8	0	9	0	10	0
FY85 AB2 Forecasts	4	0	5	0	7	0	8	0	9	0	10	0
FY85 AB3 Forecasts	4	0	5	0	7	0	8	0	9	0	10	0
Talkeetna Road												
FY84 Forecasts	2	0	3	0	3	0	4	0	5	0	N/A	N/A
FY85 Car Forecasts	2	0	3	0	3	0	4	0	5	0	5	0
FY85 ABI Forecasts	2	0	3	0	3	0	4	0	5	0	5	0
FY85 AB2 Forecasts	2	0	3	0	3	0	4	0	5	0	5	0
FY85 AB3 Forecasts	2	0	3	0	3	0	4	0	5	0	5	0

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		Summary of	Project E	ffects on Animal	Road Kil	I Accidents	
F 784	Car	Transportation,	FY85 Car	Transportation,	and FY85	Air and Bus	Scenarios $L'$
				1985-2005			

Number of Animal Road Kill Accidents												
	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effoct	Baseline	Effect
Trapper Cr. to Cantwell												
FY84 Forecasts	2	0	2	l	3	0	3	0	4	0	N/A	N/A
FY85 Car Forecasts	2	0	2	0	3	0	4	0	4	0	5	0
FY85 ABI Forecasts	2	0	2	0	3	0	4	0	4	0	5	0
FY85 AB2 Forecasts	2	0	2	0	3	0	4	0	4	0	5	0
FY85 AB3 Forecasts	2	0	2	0	3	0	4	0	4	0	5	0
Fairbanks Area												
Cantwell to Healy												
FY84 Forecasts	0	0	0	I	l	0	ł	0	4	0	N/A	N/A
FY85 Car Forecasts	0	0	1	0	I	0	1	0	ę	0	ł	0
FY85 ABI Forecasts	0	0	1	0	ł	0	1	0	ł	0	8	0
FY85 AB2 Forecasts	0	0	1	0	ł	0	l	0	*****	0	2	0
FY85 AB3 Forecasts	0	0	I	0	I	0	I	0	1	0	1	0
Healy to Nenana												
FY84 Forecasts	-	0	ł	0	1	0	ł	0	1	0	N/A	N/A
FY85 Car Forecasts	ł	0	1	0	8	0	3	0	ł	0	8	0
FY85 ABI Forecasts	1	0	ł	0	ł	0	1	0	R.	0	1	0
FY85 AB2 Forecasts	1	0	ł	0	ł	0	1	0	â	0	Ą	0
FY85 AB3 Forecasts	ł	0	l	0	ŝ	0	l	0	â	0	1	0
Nenana to Fairbanks												
FY84 Forecasts	0	0	0	0	0	0	0	0	0	0	N/A	N/A
FY85 Car Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 ABI Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB2 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB3 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0

#### Summary of Project Effects on Animal Road Kill Accidents FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

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	19	85	19	90	19	95	19	99	20	02	20	05
Area/Community	Baseline	Effect	Baseline	Effect	Basellne	Effect	Baseline	Effect	Baseline	Effect	Baseline	Effect
Cantwell to Project AR												
FY84 Forecasts	0	0	0	0	0	0	0	0	0	0	N/A	N/A
FY85 Car Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB1 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB2 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB3 Forecasts	0	0	0	0	0	0	0	0	0	0	. 0	0
Paxson to Project AR												
FY84 Forecasts	0	0	0	0	0	0	0	0	0	0	N/A	N/A
FY85 Car Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB1 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB2 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB3 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
Project Access Road												
FY84 Forecasts	0	0	0	0	0	0	0	0	0	0	NZA	N/A
FY85 Car Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 ABI Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB2 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0
FY85 AB3 Forecasts	0	0	0	0	0	0	0	0	0	0	0	0

N/A Not Available or Not Applicable.

AR Access Road

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L/ Effects under the FERC License Application Scenario are defined by FERC FC scasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.

Source: Frank Orth & Associates, Inc., 1985.

# Summary of Project Effects on Capacity Utilization of Water Systems FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

####\$\$##\$\$############################	nun managungun gungu andaran kepangan Ana - Volkova	<b>₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩</b>	Gallons Pe	or Day	<u>๛๛฿๛๛๚๛๚๛๛๛๛๚๛๚๛๚๛๚๛๚๛๚๛๚๛๚๛๚๛๚๛๚๛๚๛๚๛๚</u>	2000 JANU 73 552 STORE TO BE  ₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩	
	1985	19	985	1	990	ł	995
	Current	Baseline	Project Effect	Baseline	Project Effect	Baseline	Project Effect
	& Planned	% Capacity	🖇 Capacity	% Capacity	% Capacity	\$ Capacity	\$ Capacity
Area/Community	Capacity	Used	Used	Used	Used	Used	
Anchorage Area							
Mun. of Anchorage							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	36,000,000	82.4	0.1	82.9	0.4	83.9	0.1
FY85 ABI Forecasts	36,000,000	82.4	0.3	82.9	0.6	83.9	0.0
FY85 AB2 Forecasts	36,000,000	82.4	0.1 '	82.9	0.3	83.9	0.0
FY85 AB3 Forecasts	36,000,000	82.4	0.4	82.9	0.9	83.9	0.0
Palmer							
FERC Forecasts	1,368,000	N/A	N/A	44.4	0.5	N/A	N/A
FY84 Forecasts	1,030,000	42.9	0.4	59.8	1.5	72.3	1.3
FY85 Car Forecasts	1,030,000	39.7	1.5	46.9	2.8	56.7	-0.1
FY85 AB1 Forecasts	1,030,000	39.7	0.7	46.9	1.5	56.7	0.1
FY85 AB2 Forecasts	1,030,000	39.7	0.4	46.9	1.1	56.7	0.1
FY85 AB3 Forecasts	1,030,000	39.7	0.9	46.9	2.0	56.7	0.1
Wasilla							
FERC Forecasts	864,000	N/A	N/A	64.7	0.9	N/A	N/A
FY84 Forecasts	900.000	53.7	0.6	78.5	2.1	114.8	1.8
FY85 Car Forecasts	907.000	87.4	1.9	88.1	3.4	128.7	-0.1
FY85 ABL Forecasts	900.000	87.4	0.9	88.1	1.9	128.7	0.1
FY85 AB2 Forecasts	900,000	87.4	0.6	88.1	1.4	128.7	0.1
FY85 AB3 Forecasts	900,000	87.4	1.1	88.1	2.4	128.7	0.1

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# Summary of Project Effects on Capacity Utilization of Water Systems FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

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	1985	1	999	2	002	2	005
	Current	Baseline	Project Effect	Baseline	Project Effect	Baseline	Project Effect
	& Planned	\$ Capacity	\$ Capacity	% Capacity	\$ Capacity	\$ Capacity	\$ Capacity
Area/Community	Capacity	Used	Used	Used	Used	Used	Used
Anchorage Area							
Mun. of Anchorage							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	36,000,000	87.2	0.4	88.4	0.4	89.4	0.2
FY85 ABI Forecasts	36,000,000	87.2	0.5	88.4	0.5	89.4	0.2
FY85 AB2 Forecasts	36,000,000	87.2	0.3	88.4	0.4	89.4	0.2
FY85 AB3 Forecasts	36,000,000	87.2	0.7	88.4	0.5	89.4	0.2
Palmer							
FERC Forecasts	1,368,000	67.0	0.4	N/A	N/A	N/A	N/A
FY84 Forecasts	1,030,000	84.2	1.5	93.6	1.3	103.8	1.3
FY85 Car Forecasts	1,030,000	65.9	1.6	73.4	0.2	81.3	-0.3
FY85 ABI Forecasts	1,030,000	65.9	0.9	73.4	0.1	81.3	0.0
FY85 AB2 Forecasts	1,030,000	65.9	0.6	73.4	0.1	81.3	0.0
FY85 AB3 Forecasts	1,030,000	65.9	1.2	73.4	0.2	81.3	0.0
Wasilla							
FERC Forecasts	864,000	137.3	0.8	N/A	N/A	N/A	N/A
FY84 Forecasts	900,000	155.5	2.0	193.9	1.7	240.9	1.7
FY85 Car Forecasts	900,000	174.3	2.0	217.3	0.2	270.0	-0.4
FY85 ABI Forecasts	900,000	174.3	1.1	217.3	0.1	270.0	0.1
FY85 AB2 Forecasts	900,000	174.3	0.7	217.3	0.1	270.0	0.0
FY85 AB3 Forecasts	900,000	174.3	1.4	217.3	0.2	270.0	0.1

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# Summary of Project Effects on Capacity Utilization of Water Systems FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/

1985-2005

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	1985	1	985	1	990	į.	995
	Current & Planned	Baseline \$ Capacity	Project Effect \$ Capacity	Baseline ≸ Capacity	Project Effect \$ Capacity	Basell <b>ne</b> \$ Cap <i>a</i> clty	Project Effect \$ Capacity
Area/Community	Capacity	Used	Used	Used	Used	Used	Used
Falrbanks Area							
Mun. of Fairbanks							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	4,000,000	60.7	-0.1	65.6	-0.2	67.6	-0.3
FY85 AB1 Forecasts	4,000,000	60.7	0.0	65.6	0.3	67.6	0.2
FY85 AB2 Forecasts	4,000,000	60.7	0.4	65.6	0.7	67.6	0.0
FY85 AB3 Forecasts	4,000,000	60.7	-1.7	65.6	-0.2	67.6	0.4
Nenana							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	430,000	12.3	1.0	15.7	1.7	20.0	0.2
FY85 ABI Forecasts	430,000	12.3	0.1	15.7	0.2	20.0	0.0
FY85 AB2 Forecasts	430,000	12.3	0.1	15.7	0.2	20.0	0.1
FY85 AB3 Forecasts	430,000	12.3	0.1	15.7	0.2	20.0	0.0

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#### Summary of Project Effects on Capacity Utilization of Water Systems FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u> 1985-2005

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	1985	19	999	20	002 •	20	005
	Current & Planned	Bas⊖line \$ Capacity	Project Effect % Capacity	Baseline \$ Capacity	Project Effect % Capacity	Baseline \$ Capacity	Project Effect \$ Capacity
rea/Community	Capacity	Used	Usød	Used	Used	Used	Used
airbanks Area							
Mun. of Fairbanks							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	4,000,000	71.2	-0.1	72.8	0.2	74.2	0.2
FY85 ABI Forecasts	4,000,000	71,2	0.2	72.8	0.3	74.2	0.4
FY85 AB2 Forecasts	4,000,000	71.2	0.3	, 72.8	0.4	74.2	0.4
FY85 AB3 Forecasts	4,000,000	71.2	0.2	72.8	0.5	74.2	0.4
Nenana							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	430,000	24.2	1.1	27.7	0.1	31.5	0.0
FY85 ABI Forecasts	430,000	24.2	0,1	27.7	0.1	31.5	0.0
FY85 AB2 Forecasts	430,000	24.2	0.2	27.7	0.1	31.5	0.0
FY85 AB3 Forecasts	430,000	24.2	0.1	27.7	0.1	31.5	0.0

N/A--Not Available or Not Applicable.

- L/ Effects under the FERC License Application Scenario are defined by FERC Forecasts.
  - Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts.
  - Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% to construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.

Source: Frank Orth & Associates, Inc., 1985.

Summary of Project Effects on Capacity Utilization for Sewer Systems FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u>/ 1985-2005

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	1985	1	985	1	990	1	995
	Current & Planned	Baseline \$ Capacity	Project Effect \$ Capacity	Baseline \$ Capacity	Project Effect % Capacity	Baseline ≸ Capacity	Project Effect % Capacity
Area/Community	Capacity	Used	Used	Used	Used	Used	Used
Anchorage Area							
Mun. of Anchorage							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	34,000,000	81.2	0.1	81.7	0.4	82.6	0.1
FY85 AB1 Forecasts	34,000,000	81.2	0.3	81.7	0.6	82.6	0.0
FY85 AB2 Forecasts	34,000,000	81.2	0.1	81.7	0.3	82.6	0.0
FY85 AB3 Forecasts	34,000,000	81.2	0.5	81.7	0.9	82.6	0.0
Palmer							
FERC Forecasts	500,000	N/A	N/A	108.6	1.2	N/A	N/A
FY84 Forecasts	300,000	107.9	1.1	155.3	4.0	193.3	3.5
FY85 Car Forecasts	300,000	99.9	3.4	121.7	7.3	151.5	-0.2
FY85 ABI Forecasts	300,000	99.9	1.8	121.7	4.0	151.5	0.2
FY85 AB2 Forecasts	300,000	99.9	1.2	121.7	2.7	151.5	0.2
FY85 AB3 Forecasts	300,000	99.9	2.3	121.7	5.1	151.5	0.2
Wasilla							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FYB4 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	441,000	90.1	2.8	136.0	5.3	204.5	-0.2
FY85 ABI Forecasts	441,000	90.1	1.4	136.0	3.0	204.5	0.2
FY85 AB2 Forecasts	441,000	90.1	1.0	136.0	2.1	204.5	0.2
FY85 AB3 Forecasts	441,000	90.1	1.4	136.0	3.7	204.5	0.2

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# Summary of Project Effects on Capacity Utilization for Sewer Systems FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>V</u> 1985-2005

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	1985		999	2	002	20	005
	Current	Basellne	Project Effect	Baseline	Project Effect	Baseline	Project Effect
	& Planned	\$ Capacity	🖇 Capacíty	% Capacity	🖇 Capacity	\$ Capacity	\$ Capacity
Area/Community	Capacity	Used	Used	Used	Used	Used	Used
Anchorage Area							
Mun. of Anchorage							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	34,000,000	85,9	0.4	87.1	0.5	88.0	0.3
FYB5 AB1 Forecasts	34,000,000	85.9	0.5	87.1	0.5	88.0	0.2
FY85 AB2 Forecasts	34,000,000	85.9	0,3	87.1	0.4	88.0	0.2
FY85 AB3 Forecasts	34,000,000	85.9	0.7	87.1	0.5	88.0	0.2
Palmer							
FERC Forecasts	500,000	148.0	1.0	N/A	N/A	N/A	N/A
FY84 Forecasts	300,000	229.9	4.1	257.2	3.6	285.2	3.6
FYB5 Car Forecasts	300,000	180.2	4.4	201.5	0.5	223.4	-0.9
FY85 AB1 Forecasts	300,000	180.2	2.4	201.5	0.3	223.4	0.1
FY85 AB2 Forecasts	300,000	180.2	1.6	201.5	0.2	223.4	0.1
FY85 AB3 Forecasts	300,000	180.2	3.2	201.5	0.4	223.4	0.1
Wasilla							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	0	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	441,000	283.0	3.2	354.9	0.4	440.8	-0.7
FY85 ABI Forecasts	441,000	283.0	1.8	354.9	0.2	440.8	0.1
FY85 AB2 Forecasts	441,000	283.0	1.2	354.9	0.2	440.8	0.1
FY85 AB3 Forecasts	441,000	283.0	2.2	354.9	0.3	440.8	0.1

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# Summary of Project Effects on Capacity Utilization for Sewer Systems FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u> 1985-2005

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			Gallons Pe	or Day			
	1985	1	985	ĝ.	990		995
	Current	Baseline	Project Effect	Baseline	Project Effect	Baseline	Project Effect
	& Planned	\$ Capacity	\$ Capacity	\$ Capacity	\$ Capacity	\$ Capacity	\$ Capacity
Area/Community	Capacity	Used	Used	Used	Used	Used	Used
airbanks Area							
Mun. of Fairbanks							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	6,500,000	54.5	-0.1	59.6	0.7	62.2	0.3
FY85 AB1 Forecasts	6,500,000	54.5	0.0	59.6	0.8	62.2	0.3
FY85 AB2 Forecasts	6,500,000	54.5	0.6	59.6	1.9	62.2	0.3
FY85 AB3 Forecasts	6,500,000	54.5	~0,5	59.6	-0.1	62.2	0.3
Nenana							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	60,000	88.0	7.0 /	112.3	12.2	143.1	1.2
FY85 ABI Forecasts	60,000	88.0	0.5	112.3	1.3	143.1	0.0
FY85 AB2 Forecasts	60,000	88.0	0.5	112.3	1.7	143.1	0.5
FY85 AB3 Forecasts	60,000	88.0	0.5	112.3	0.5	143.1	0.0

	Summa	iry of	Project	· Effects on	Capac	1†y	Utilization	for	Seve	r Sys	tens			
FERC License	Application,	FY84	Car Tra	nsportation,	FY85	Car	Transportat	îon,	and	F Y 85	Alr	ond Bus	Scenario	15 <u>1</u>
					1985-2	005								

			Gallons Pe	or Day			
	1985	1	999	20	002	20	005
	Current & Planned	Baseline \$ Capacity	Project Effect % Capacity	Basellne ≸ Capaclty	Project Effect \$ Capacity	Baseline \$ Capacity	Project Effect % Capacity
Area/Community	Capacity	Used	Used	Used	Used	Used	Used
Fairbanks Area							
Mun. of Fairbanks							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	6,500,000	66.2	0.7	68.2	0.4	70.1	0.0
FY85 ABI Forecasts	6,500,000	66.2	0.7	68.2	0.4	70. I	0.2
FY85 AB2 Forecasts	6,500,000	66.2	1.4	68.2	0.5	70.1	0.2
FY85 AB3 Forecasts	6,500,000	66.2	0.1	68.2	0.3	70.1	0.2
Nenana							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	60,000	173.5	8.2	198.7	0.5	226.0	0.0
FY85 ABI Forecasts	60,000	173.5	0.8	198.7	0.5	226.0	0.0
FY85 AB2 Forecasts	60,000	173.5	1.3	198.7	0.5	226.0	0.0
FY85 AB3 Forecasts	60,000	173.5	0.8	198.7	0.5	226.0	0.0

N/A--Not Available or Not Applicable.

 $\underline{M}$  Effects under the FERC License Application Scenario are defined by FERC Forecasts.

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Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% to construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.

Source: Frank Orth & Associates, Inc., 1985.

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#### Summary of Project Effects on Capacity Utilization for Police Services FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u>/ 1985-2005

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	1985	1	985		990	1. 1	995
	Current & Planned	Baseline \$ Capacity	Project Effect \$ Capacity	Baseline \$ Capacity	Project Effect \$ Capacity	Baseline \$ Capacity	Project Effect \$ Capacity
Area/Community	Capacity	Used	Used	Used	Used	Used	Used
Anchorage Area							
Mun. of Anchorage							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	393	125.8	0.1	126.6	0.2	128.1	0.0
FY85 AB1 Forecasts	393	125.8	0.2	126.6	0.3	128.1	0.0
FY85 AB2 Forecasts	393	125.8	0.1	126.6	0.1	128.1	0.0
FY85 AB3 Forecasts	393	125.8	0.3	126.6	0.5	128.1	0.0
Palmer							
FERC Forecasts	9	N/A	N/A	88.9	0.0	N/A	N/A
FY84 Forecasts	14	33.3	0.4	45.6	1.2	54.1	1.0
FY85 Car Forecasts	9	47.9	1.9	55.6	3.3	66.0	-0.1
FY85 AB1 Forecasts	9	47.9	0,9	55.6	1.9	66.0	0.1
FY85 AB2 Forecasts	9	47.9	0.6	55.6	1.2	66.0	0.1
FY85 AB3 Forecasts	9	47.9	1.1	55.6	2.3	66.0	0.1
Matanuska-Susitna Borough							
FERC Forecasts	20	N/A	N/A	240.0	5.0	N/A	N/A
FY84 Forecasts	29	134.0	4.5	180.7	17.7	227.4	7.3
FY85 Car Forecasts	30	131.6	4.0	156.7	10.6	186.5	3.8
FY85 ABI Forecasts	30	131.6	3.2	156.7	9.5	186.5	4.0
FY85 AB2 Forecasts	30	131.6	2.9	156.7	8.8	186.5	4.0
FY85 AB3 Forecasts	30	131.6	3.5	156.7	10.0	186.5	4.0

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Summary of Project Effects on Capacity Utilization for Police Services
FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/
1985-2005

Number of Police Officers								
	1985	1999		2002		2005		
Anon (Communitation	Current & Planned	Baseline % Capacity	Project Effect \$ Capacity	Baseline % Capacity	Project Effect % Capacity	Baseline \$ Capacity	Project Effect \$ Capacity liced	
Area/ Community	Сарастту	USEQ	USed	USOU	0200	0500		
Anchorage Area								
Mun. of Anchorage								
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
FY85 Car Forecasts	393	133.1	0.2	135.0	0.3	136.4	0.1	
FY85 ABI Forecasts	393	133.1	0.3	135.0	0.3	136.4	0.1	
FY85 AB2 Forecasts	393	133.1	0.2	135.0	0.3	136.4	0.1	
FY85 AB3 Forecasts	393	133.1	0.4	135.0	0.3	136.4	0.1	
Palmer								
FERC Forecasts	9	100.0	0.0	N/A	N/A	N/A	N/A	
FY84 Forecasts	14	62.1	1.1	68.9	1.0	76.4	1.0	
FY85 Car Forecasts	9	75.8	1.9	84.0	0.2	93.1	-0.3	
FY85 ABI Forecasts	9	.75.8	1.0	84.0	0.1	93.1	0.0	
FY85 AB2 Forecasts	9	75.8	0.7	84.0	0.1	93.1	0.0	
FY85 AB3 Forecasts	9	75.8	1.3	84.0	0.2	93.1	0.0	
Matanuska-Susitna Borough								
FERC Forecasts	20	375.0	5.0	N/A	N/A	N/A	N/A	
FY84 Forecasts	29	279.3	12.1	301.2	5.9	340.6	5.1	
FY85 Car Forecasts	30	219.1	7.5	243.8	2.6	270.5	1.2	
FY85 ABI Forecasts	30	219.1	6.8	243.8	2.5	270.5	1.7	
FY85 AB2 Forecasts	30	219.1	6.4	243.8	2.5	270,5	1.7	
FY85 AB3 Forecasts	30	219.1	7.1	243.8	2.6	270.5	1.7	

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# Summary of Project Effects on Capacity Utilization for Police Services FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u> 1985-2005

Ацанаранын байт. Филик индерский даас соордин байр байт на наболой и Тара Соверский соверский на цанарании	zangalan kalan Kalanza Kanan Anan Alaman Kalama Kalan dapangga ang da sasah sasa na jaya nag	a ana ana amin'ny tanàna amin'ny tanàna amin'ny tanàna amin'ny tanàna amin'ny tanàna amin'ny tanàna dia amin'ny	Number of Pollo	e Officers	nanan dalam kanan kanan kanan kana kana kana kana	nan dan kanadarak dan kana dan kana kana kana kana kana	ан с дан цамай организация на дин ординован о най со закон са насто и с Сала (2009) Крански со с
	1985	1985		1990		1995	
	Current	Baseline	Project Effect	Baseline	Project Effect	Baseline	Project Effect
	& Planned	\$ Capacity	\$ Capacity	\$ Capacity	\$ Capacity	🖇 Capacity	\$ Capacity
Area/Community	Capacity	Used	Used	Used	Used	Used	Used
Trapper Creek							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FYB4 Forecasts	3	8.3	2.7	10.0	9.7	12.0	7.3
FY85 Car Forecasts	3	8.0	0.7	9.3	1.7	11.0	0.0
FY85 AB1 Forecasts	3	8.0	0.3	9.3	0.7	11.0	0.0
FY85 AB2 Forecasts	3	8.0	0.3	9.3	0.7	11.0	0.0
FY85 AB3 Forecasts	3	8.0	0.3	9.3	1.0	11.0	0.0
Fairbanks Area							
Mun. of Fairbanks							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FYB4 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	46	89.9	-0.1	97.3	-0.2	100.2	-0.3
FY85 ABI Forecasts	46	89.9	0.0	97.3	0.3	100.2	0.2
FY85 AB2 Forecasts	46	89.9	0.4	97.3	0.7	100.2	0.0
FY85 AB3 Forecasts	46	89.9	-1.7	97.3	-0.2	100.2	0.4
Cantwell							
FERC Forecasts	l	N/A	N/A	100.0	500.0	N/A	N/A
FY84 Forecasts	1	20.0	37.0	22.0	80.0	25.0	63.0
FY85 Car Forecasts	l	20.0	34.0	22.0	12.0	24.0	0.0
FY85 ABI Forecasts	1	20.0	32.0	22.0	12.0	24.0	0.0
FY85 AB2 Forecasts	1	20.0	32.0	22.0	12.0	24.0	0.0
FY85 AB3 Forecasts	1	20.0	32.0	22.0	12.0	24.0	0.0

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# Summary of Project Effects on Capacity Utilization for Police Services FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u> 1985-2005

Number of Police Officers								
	1985 1999			20	002	2005		
	Current & Planned	Baselin⊖ ≸ Capacity	Project Effect \$ Capacity	Baseline % Capacity	Project Effect % Capacity	Baseline \$ Capacity	Project Effect & Capacity	
Area/Community	Capacity	Used	Usød	Used	Used	Used	Used	
Tranner Crock								
EFRC Forecasts	N/A	N/A	N/A	N/A	81 / A	NZA	61/A	
FY84 Forecasts	3	14 3	80	16.0	7 0		6.7	
FY85 Car Forecasts	3	12.3	0.7	13.3	0.0	14.7	-0 3	
FY85 ABI Forecasts	3	12.3	0.0	13.3	0.0	14.7	0.0	
FY85 AB2 Forecasts	3	12.3	0.3	13.3	0.0	14.7	0.0	
FY85 AB3 Forecasts	3	12.3	0.3	13.3	0.0	14.7	0.0	
Fairbanks Area								
Mun. of Fairbanks								
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
FY85 Car Forecasts	46	105.6	-0.1	107.9	0.2	110.0	0.2	
FY85 ABI Forecasts	46	105.6	0.2	107.9	0.3	110.0	0.4	
FY85 AB2 Forecasts	46	105.6	0.3	107.9	0.4	110.0	0.4	
FY85 AB3 Forecasts	46	105.6	0.2	107.9	0.5	110.0	0.4	
Cantwell								
FERC Forecasts	1	100.0	300.0	N/A	N/A	N/A	N/A	
FY84 Forecasts	1	27.0	70.0	28.0	62.0	30.0	61.0	
FY85 Car Forecasts	1	26.0	1.0	28.0	0.0	29.0	0.0	
FY85 ABI Forecasts	ļ	26.0	0.0	28.0	0.0	29.0	0.0	
FY85 AB2 Forecasts	ł	26.0	0.0	28.0	0.0	29.0	0.0	
FY85 AB3 Forecasts	ş	26.0	0.0	28.0	0.0	29.0	0.0	

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# Summary of Project Effects on Capacity Utilization for Police Services FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>V</u> 1985-2005

	Number of Police Officers								
	1985	1985		1990		1995			
Area/Community	Current & Planned Capacity	Baseline \$ Capacity Used	Project Effect % Capacity Used	Baseline % Capacity Used	Project Effect % Capacity Used	Baseline % Capacity Used	Project Effect % Capacity Used		
Nonana		na na provenskom og og for singe en segnes af graden af	nan galan dan menjada di katigi dan yana mangkar kari mata kana di kari dan dan dan dan dan dan dan dan dan da	######################################	MEDELLOUIDEN MONGEN CONSTRUCTION CONSTRUCTION	nanto a constanta por esta e constanto da constanta da constanta da constanta da constanta da constanta da cons	unningen han an		
FERC Forecasts	N/A	N/A	N/A	NZA	N/A	N/A	N/A		
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
FY85 Car Forecasts	1	56.0	7.0	107.0	12.0	132.0	1.0		
FY85 AB1 Forecasts	i	56.0	0.0	107.0	.0	132.0	0.0		
FY85 AB2 Forecasts	1	56.0	0.0	107.0	2.0	132.0	0.0		
FY85 AB3 Forecasts	I	56.0	0.0	107.0	0.0	132.0	0.0		
Healy									
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
FY85 Car Forecasts	1	64.0	2.0	76.0	2.0	88.0	0.0		
FY85 ABI Forecasts	1	64.0	0.0	76.0	0.0	88.0	0.0		
FY85 AB2 Forecasts	1	64.0	0.0	76.0	1.0	88.0	0.0		
FY85 AB3 Forecasts	ł	64.0	0.0	76.0	0.0	88.0	0.0		

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## Summary of Project Effects on Capacity Utilization for Police Services FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ .965-2005

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	1985	l'	999	20	002	2005		
roa/Communita	Current & Planned	Baseline % Capacity	Project Effect \$ Capacity	Baseline % Capacity	Project Effect \$ Capacity	Baseline % Capacity	Project Effect \$ Capacity	
	Capacity	0500	USBU	0580	0290	0200		
Nenana								
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
FYB5 Car Forecasts	1	157.0	7.0	179.0	0.0	203.0	0.0	
FY85 AB1 Forecasts	1	157.0	1.0	179.0	0.0	203.0	0.0	
FY85 AB2 Forecasts	1	157.0	1.0	179.0	0.0	203.0	0.0	
FY85 AB3 Forecasts	1	157.0	0.0	179.0	1.0	203.0	1.0	
ealy								
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
FY85 Car Forecasts	i	100.0	1.0	109.0	0.0	119.0	0.0	
FY85 AB1 Forecasts	1	100.0	0,0	109.0	0.0	. 119.0	0.0	
FY85 AB2 Forecasts	1	100.0	0.0	109.0	0.0	119.0	0.0	
FY85 AB3 Forecasts	ł	100.0	0.0	109.0	0.0	119.0	0.0	

N/A--Not Available or Not Applicable.

 $\underline{\mathcal{U}}$  Effects under the FERC License Application Scenario are cafined by FERC Forecasts.

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- Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts.
- Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% to construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.

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Source: Frank Orth & Associates, Inc., 1985.

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	Summar	ry of Pr	oject Effects on	Capacity L	Hilization for	Solld Wa	ste 🗹	
FERC License	Application,	FY84 Ca	r Transportation,	, FY85 Car	Transportation,	and FY8	5 Air and Bu	s Scenarios Z
				1985-2005				

			Acres of La	Indfill	n dez a deze occanador modele o paneto de colasiono en si con esta macalementa en a ser a con que		en nyekonomety o nyekonin yang yang yang yang kana kana kana kana kana kana kana k	
	1985		985	1	990	1995		
	Current & Planned	Baseline % Capacity	Project Effect \$ Capacity	Baseline & Capacity	Project Effect \$ Capacity	Baseline % Capacity	Project Effect & Capacity	
rea/community	Сарастту	Used	USOO	Used	USEQ	USOG	0.2au	
inchorage Area								
Mun. of Anchorage								
FERC Forecasts	N/A	N/A	N/A	NZA	N/A	N/A	NZA	
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	NZA	N/A	
FY85 Car Forecasts	535	14.5	0.0	30.7	0.0	47.3	0.1	
FY85 ABI Forecasts	535	14.5	0.0	30.7	0.1	47.3	0.1	
FY85 AB2 Forecasts	535	14.5	0.0	30.7	0.0	47.3	0.1	
FY85 AB3 Forecasts	535	14.5	0.0	30.7	0.1	47.3	0.2	
Mat-Su Borough								
FERC Forecasts	617	N/A	N/A	10.2	0.3	N/A	N/A	
FY84 Forecasts	212	8.5	0.1	23.2	1.4	45.4	2.8	
FY85 Car Forecasts	212	8.6	0.1	22.3	1.0	41.4	.9	
FY85 AB1 Forecasts	212	8.6	0.1	22.3	0.9	41.4	1.7	
FY85 AB2 Forecasts	212	8.6	0.1	22.3	0.8	41.4	1.6	
FY85 AB3 Forecasts	212	8.6	0.1	22.3	0.9	41.4	1.8	

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Summary of Project Effects on Capacity Utilization for Solid Waste 1/ FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 2/ 1985-2005

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	1985	3	999	20	2002		005
Area/Community	Current & Planned Capacity	Baseline \$ Capacity Used	Project Effect \$ Capacity Used	Baseline % Capacity Used	Project Effect % Capacity Used	Baseline \$ Capacity Used	Project Effect \$ Capacity Used
Anchorage Area		`					
Mun. of Anchorage							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	535	60.9	0.1	71.2	0.1	81.7	0.2
FY85 ABI Forecasts	535	60.9	0.2	71.2	0.2	81.7	0.2
FY85 AB2 Forecasts	535	60.9	0.1	71.2	0.1	81.7	0.1
FY85 AB3 Forecasts	535	60.9	0.2	71.2	0.3	81.7	0.3
Mat-Su Borough							
FERC Forecasts	617	30.0	0.3	N/A	N/A	N/A	N/A
FY84 Forecasts	212	69.6	4.0	91.5	4.8	116.0	5.3
FY85 Car Forecasts	212	61.5	2.7	79.4	3.2	98.9	3.3
FY85 ABI Forecasts	212	61.5	2.4	79.4	2.9	98.9	3.0
FY85 AB2 Forecasts	212	61.5	2.3	79.4	2.7	98.9	2.9
FY85 AB3 Forecasts	212	61.5	2.5	79.4	3.0	98.9	3.2

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# Summary of Project Effects on Capacity Utilization for Solid Waste 1/ FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 2/ 1985-2005

			Acres of La	ndfill	na (19.4.22.46) (19.19.22.21) (19.42) an church ann a tha ann aide an church an tha bha fan tha a bha an church		2 (
	1985	1	985	1	990	1995	
	Current	Baseline	Project Effect	Baseline	Project Effect	Baseline	Project Effect
	& Planned	% Capacity	% Capacity	\$ Capacity	% Capacity	\$ Capacity	\$ Capacity
Area/Community	Capacity	Used	Used	Used	Used	Used	Used
airbanks Area							
Fairbanks-North Star Bor.		-					
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	75	12.7	0.0	27.3	0.1	42.6	0.2
FY85 ABI Forecasts	75	12.7	0.0	27.3	0.1	42.6	0.2
FY85 AB2 Forecasts	75	12.7	0.0	27.3	0.3	42.6	0.5
FY85 AB3 Forecasts	75	12.7	0.0	27.3	0.0	42.6	0.0
Cantwell							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	2	5.5	2.5	13.0	23.5	23.5	6.0
FY85 Car Forecasts	2	5.5	2.0	13.0	7.5	23.0	10.0
FY85 ABI Forecasts	2	5.5	2.0	13.0	7.5	23.0	10.0
FY85 AB2 Forecasts	2	5.5	2.0	13.0	7.5	23.0	10.0
FY85 AB3 Forecasts	2	5.5	2.0	13.0	7.5	23.0	10.0

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	Summary of	f Project Effects on	Capacity Utilization fo	r Solld Wasts 1/	m /
FERC LICONSO	Application, FY84	4 Car Transportation,	, FY85 Car Transportatio	n, and FY85 Air and Sus	Scenarios 🖉
			1985-2005		

ματαδραμήσει ματό δα πολογιματική του το το του το του το του του το του του	*************	ŊĸŧĸĸĸŦĸŶġŎĸŦĬĸĸŎĸŦĨĸŶĊĸġġĸĊĿġġĊĸĸĸĸĊŎŎŀŔĊĿŦĬĸŶĊĊĬĸĸĿĸĸŎĸĸĿŎĸĸ	Acres of La	Indf[]]	n an		
	1985	1	999	20	002	2005	
Area/Communitiv	Current & Planned	Baseline % Capacity	Project Effect \$ Capacity	Baseline % Capacity	Project Effect % Capacity	Baseline \$ Capacity	Project Effect \$ Capacity
	Capacity	USUU	USOU	0590	0280	0500	0.000
Falrbanks Area							
Fairbanks-North Star Bor.							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	75	55.5	0.3	65.6	0.3	75.9	0.4
FY85 ABI Forecasts	75	55.5	0.3	65.6	0.4	75.9	0.4
FY85 AB2 Forecasts	75	55.5	0.6	65.6	0.7	75.9	0.8
FY85 AB3 Forecasts	75	55.5	0.0	65.6	0.0	75.9	0.1
Cantwell							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	2	33.5	7.0	42.5	6.5	51.5	6.5
FY85 Car Forecasts	2	33.0	10.0	42.0	10.0	51.0	10.0
FY85 ABI Forecasts	2	33.0	10.0	42.0	10.0	51.0	10.0
FY85 AB2 Forecasts	2	33.0	10.0	42.0	10.0	51.0	10.0
FY05 AB3 Forecasts	2	33.0	10.0	42.0	10.0	51.0	10.0

N/A--Not Available or Not Applicable.

- Estimates for capacity are shown as acres of landfill. Percent of capacity used is measured in terms of the cumulative number of acres of landfill that have been used of the existing capacity.
- $\frac{2}{2}$  Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

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Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% to construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.

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Source: Frank Orth & Associates, Inc., 1985.

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# Summary of Project Effects on Capacity Utilization for Recreation Facilities FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u> 1985-2005

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	1985	1	985	8	990	1995	
	Current & Planned	Baseline % Capacity	Project Effect % Capacity	Basellne ≸ Capacity	Project Effect % Capacity	Baseline \$ Capacity	Project Effect § Capacity
Area/Community	Capacity	Usəd	Used	Used	Usød	Used	Used
Anchorage Area							
Mun. of Anchorage							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forocasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	910.2	67.9	0.1	68.3	0.2	69.1	0.0
FY85 ABI Forecasts	910.2	67.9	0.2	68.3	0.4	69.1	0.0
FY85 AB2 Forecasts	910.2	67.9	0.1	68.3	0.2	69.1	0.0
FY85 AB3 Forecasts	910.2	67.9	0.3	68.3	0.6	69.1	0.0
Mat-Su Borough							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	96.5	55.5	0.4	76.5	1.7	94.1	1.3
FY85 Car Forecasts	236.5	23.7	0.5	28.7	1.0	35.2	0.0
FY85 AB1 Forecasts	236.5	23.7	0.3	28.7	0.7	35.2	0.0
FY85 AB2 Forecasts	236.5	23.7	0.2	28.7	0.5	35.2	0.0
FY85 AB3 Forecasts	236.5	23.7	0.3	28.7	0.8	35.2	0.0

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# Summary of Project Effects on Capacity Utilization for Recreation Facilities FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u>/ 1985-2005

			Acres in Commun	nity Parks	and here and the second second second second second second second second second second second second second se		
	1985	1	999	2	002	2005	
	Current & Planned	Baseline % Capacity	Project Effect \$ Capacity	Bas⊖lin⊖ % Capacity	Project Effect % Capacity	Baseline \$ Capacity	Project Effect \$ Capacity
rea/Community	Capacity	Used	Used	Used	Used	Used	Used
nchorage Area							
Mun. of Anchorage							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	910.2	71.8	0.2	72.9	0.3	73.6	0.2
FY85 ABI Forecasts	910.2	71.8	0.3	72.9	0.3	73.6	0.1
F78, AB2 Forecasts	910.2	71.8	0.2	72.9	0.3	73.6	0.1
FY85 A83 Forecasts	910.2	71.8	0.4	72.9	0.3	73.6	0.1
Mat-Su Borough							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	96.5	116.1	1.5	131.5	1.3	149.5	1.2
FY85 Car Forecasts	236,5	40.6	0.6	45.9	0.1	50.7	-0.1
FY85 AB1 Forecasts	236.5	40.6	0.4	45.9	0.1	50.7	0.0
FYB5 AB2 Forecasts	236.5	40.6	0.3	45.9	0.0	50.7	0.0
FY85 AB3 Forecasts	236.5	40.6	0.5	45.9	0.1	50.7	0.0

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# Summary of Project Effects on Capacity Utilization for Recreation Facilities FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/ 1985-2005

			Acres in Commu	nity Parks	1998 in an							
1985 1985 1990 1995												
Area/Community	Current & Planned Capacity	Baseline \$ Capacity Used	Project Effect % Capacity Used	Basellne % Capacity Used	Project Effect \$ Capacity Used	Baseline \$ Capacity Used	Project Effect \$ Capacity Used					
fairbanks Area												
Mun. of Fairbanks												
FERC Forecasts	N/A	Ņ/A	N/A	N/A	N/A	N/A	N/A					
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
FY85 Car Forecasts	6,000	2.8	0.0	3.1	0.0	3.2	0.0					
FY85 ABI Forecasts	6,000	2.8	0.0	3.1	0.0	3.2	0.0					
FY85 AB2 Forecasts	6,000	2.8	0.0	3.1	0.1	3.2	0.0					
FY85 AB3 Forecasts	6,000	2.8	0.0	3.1	0.0	3.2	0.0					

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## Summary of Project Effects on Capacity Utilization for Recreation Facilities FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u>/ 1985-2005

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	1985 1999 2002 2005											
Area/Community	Current & Planned Capacity	Baseline % Capacity Used	Project Effect % Capacity Used	Baseline % Capacity Used	Project Effect % Capacity Used	Baseline % Capacity Used	Project Effect % Capacity Used					
Fairbanks Area					ne Charle Shi dhan Banci Langan Qinni - a bhan Banci ne Bang Ang Ang Ang Ang Ang Ang Ang Ang Ang A							
Mun. of Falrbanks												
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
FY84 Forecasts	N/A	N/A	NZA	N/A	N/A	N/A	N/A					
FY85 Car Forecasts	6,000	3.4	0.0	3.5	0.0	3.6	0.0					
FY85 ABI Forecasts	6,000	3.4	0.0	3.5	0.0	3.6	0.0					
FY85 AB2 Forecasts	6,000	3.4	0.1	3.5	0.0	3.6	0.0					
FY85 AB3 Forecasts	6,000	3.4	0.0	3.5	0.0	3.6	0.0					

N/A--Not Available or Not Applicable.

1/ Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

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Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% to construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.

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Source: Frank Orth & Associates, Inc., 1985.

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Summary of Project Effects on Capacity Utilization for Education Services 1/ FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 2/ 1985-2005

Фаннациниции уданности «Фаннации «Фаннации» «Фаннации и ули «Казански и Казански и «Каннации» ули «Казански ни Паннациниции уданности «Фаннации» «Фаннации» «Фаннации» ули «Казански и «Казански и «Каннации» ули «Казански ни	an dhuraidh e a' ann a' a' ann an ann an ann a' ann a' ann a' ann a' ann a' ann a' ann a' ann a' ann a' ann a'	######################################	Number of S	tudents	ĸĸĊĸĸĸĸĸĊĸĸĸĸĬŀĸĊĸĸŶĊĊĸĊĬŀĊĿĿĸĸţĿĸĊĸĸĸţĸĸţĿĿĸĊĿĸĸţĸŔĸĸţŔŶĬĬŔŎ	n an	ĊĸġŊĊŦŦŊŦŎĸĊŎŦĦŊŎĸŊĊĸĊĸĊĸŢŎŊŎŎĊĸŎĸĬŔŎŔŔŎĬŎĸĬĬŎŎĬŔĊĊŔĸŎĬŎĬĬĬĬŎŎĬĬŎŎĬĬĬŎŎŎĬĬĬŎŎŎĬĬĬŎŎŎĬĬŎ
	1985	9	990	1995			
Acon /Community	Current & Planned Capacity	Baseline % Capacity	Project Effect \$ Capacity	Baseline \$ Capacity	Project Effect & Capacity	Basellne \$ Capacity	Project Effect \$ Capacity
A BAZ COMMENTALY	Capacity	0280	USEU	USOU	0200	USEU	
Anchorage Area							
Mun. of Anchorage		*					
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	37,440	112.3	0.0	113.0	0.1	114.4	0.5
FY85 ABI Forecasts	37,440	112.3	0.3	113.0	0.5	114.4	0.4
FY85 AB2 Forecasts	37,440	112.3	0.1	113.0	0.1	114.4	0.3
FY85 AB3 Forecasts	37,440	112.3	0.4	113.0	0.8	114.4	0.5
Mat-Su Borough							
FERC Forecasts	6,516	N/A	N/A	153.6	5.5	N/A	N/A
FY84 Forecasts	8,915	90.0	1.2	122.8	8.2	159.3	5.8
FY85 Car Forecasts	8,915	97.4	2.4	114.4	9.1	133.5	3.6
FY85 ABI Forecasts	8,915	97.4	2.4	114.4	9.1	133.5	3.6
FY85 AB2 Forecasts	8,915	97.4	2.4	114.4	9.1	133.5	3.6
FY85 AB3 Forecasts	8,915	97.4	2.4	114.4	9,1	133.5	3.6
Fairbanks Area							
Mun. of Fairbanks							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	10,267	105.1	-0.3	115.1	0.8	120.1	0.6
FY85 ABI Forecasts	10,267	105.1	-0.1	115.1	1.1	120.1	0.6
FY85 AB2 Forecasts	10,267	105.1	0.8	115.1	2.6	120.1	0.8
FY85 AB3 Forecasts	10,267	105.1	-0.7	115.1	-0.1	120.1	0.4

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Table 5,18

Summary of Project Effects on Capacing Utilization for Education Services 1/ FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 2/ 1905-2005

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	1985	1	999	20	002	2	005
	Current & Planned	Baseline \$ Capacity	Project Effect \$ Capacity	Baseline \$ Capacity	Project Effect \$ Capacity	Baseline % Capacity	Project Effect % Capacity
rea/Community	Capacity	Usød	Used	Used	Used	Used	Used
Anchorage Area							
Mun. of Anchorage							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	37,440	118.8	0.5	120.4	0.6	121.7	0.5
FY85 AB1 Forecasts	37,440	118.8	0.7	20.4	0,6	121.7	0.4
FY85 AB2 Forecasts	37,440	118.8	0.4	120.4	0.6	121.7	0.4
FY85 AB3 Forecasts	37,440	118.8	0.9	120.4	0.7	121.7	0.4
Mat-Su Borough							
FERC Forecasts	6,516	252.5	4.4	N/A	N/A	N/A	N/A
FY84 Forecasts	8,915	190.7	7.3	214.4	5.1	239.8	4.6
FY85 Car Forecasts	8,915	154.4	6.4	169.1	2.3	184.1	1.0
FY85 ABI Forecasts	8,915	154.4	5.2	169.1	2.2	184.1	4 . A
FY85 AB2 Forecasts	8,915	154.4	4.8	169,1	2.2	184.1	.4
FY85 AB3 Fore casts	8,915	154.4	5.5	169.1	2.3	184.1	\$ 0 A
Fairbanks Area							
Mun. of Fairbanks							
FERC Forecasts	N/A	N/A	NZA	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	10,267	127.7	0.9	131.6	0.5	135.2	0.3
FY85 ABI Forecasts	10,267	127.7		131.6	0.5	135.2	0.3
FYB5 AB2 Forecasts	10,267	127.7	2.1	131.6	0.6	135.2	0.3
FY85 AB3 Forecasts	10,267	127.7	0.2	131.6	0.5	135.2	0.3

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Summary of Project Effects on Capacity Utilization for Education Services 1/ FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 2/ 1985-2005

			Number of S	tudønts		na na mana ana ana ana ana ana ana ana a	n an fair an fair an fair an an an an an an an an an an an an an
	1985	1	985	1	990		995
Area/Community	Current & Planned Capacity	Baseline ≸ Capacity Used	Project Effect % Capacity Used	Baseline % Capacity Used	Project Effect % Capacity Used	Baseline % Cepacity Used	Project Effect \$ Capacity Used
Nonana City Bubila Cabaa		*****		₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩	Ŵ MIREN (KARAN KARAN KARAN) KARAN KARAN KARAN KARAN KARAN KARAN KARAN KARAN KARAN KARAN KARAN KARAN KARAN KARAN	nadiardan da managan karakan k	ਜ਼ਫ਼ਗ਼ੑਖ਼ਖ਼੶੶ਖ਼ਫ਼ੑਖ਼੶੶ਫ਼ਗ਼ੑਖ਼੶੶ਗ਼ੑਗ਼ਖ਼੶ਗ਼੶ਗ਼ਗ਼ਗ਼੶ਗ਼ਗ਼ਖ਼੶ਗ਼ਗ਼੶ਗ਼ਗ਼ਖ਼੶ਗ਼ਖ਼੶ਖ਼ਗ਼੶ਫ਼ਖ਼੶ਖ਼ਗ਼੶ਗ਼ਖ਼੶ਗ਼ਖ਼੶ਗ਼ਖ਼੶ਗ਼ਖ਼੶ਗ਼ਖ਼੶ਗ਼ਖ਼੶ਗ਼ਖ਼੶ਗ਼ਖ਼੶ਗ਼ਖ਼੶ਗ਼ਖ਼੶ਗ਼ਖ਼੶ਗ਼ਖ਼
FERC Ecrecasts	1 NZA	- N Z A	NI/A	N Z A	N/A	64/A	NI/A
FYRA Forecasts	NZA	N/A	N/A	NZA NZA	NZ A	NZ A NZ A	N/A N/A
FY85 Car Forecasts	400	57.3	1.3	71 2	2 3	11V A 88 3	0.5
FY85 AB1 Forecasts	400	57.3	0.0	71.2	0.5	88.3	0.0
FY85 AB2 Forecasts	400	57.3	0.0	71.2	0.5	88.3	0.0
FY85 AB3 Forecasts	400	57.3	0.0	71.2	0.0	88.3	0.0
Railbelt School District							
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	410	84.6	11.5	86.3	9.5	86.8	0.5
FY85 ABI Forecasts	410	84.6	9.0	86.3	6.7	86.8	0.0
FY85 AB2 Forecasts	410	84.6	9.0	86.3	6,7	86.8	0.0
FY85 AB3 Forecasts	410	84.6	9.0	86.3	6.3	86.8	0.0

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Summary of Project Effects on Capacity Utilization for Education Services $\underline{I'}$	<i>~ /</i>
FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scena	rios 🗹
1985-2005	

ne davene, en veder «TT-dansen en veder standen som en veder som en en veder som en som en som en at and en en		ann ddorada shinisha rannar na quadan ha na magangan sa	Number of S	tudents	n na kanan an kanan manan kanan k		
	1985	1	999	2	002	20	005
Area/Community	Current & Planned Capacity	Baseline % Capacity Used	Project Effect \$ Capacity Used	Baselin⊖ ≸ Capacity Used	Project Effect % Capacity Used	Baseline \$ Capacity Used	Project Effect % Capacity Used
₩.\$%**\$\$%\$	ucenere in conduct in the construction of the construction of the construction of the construction of the const	9994 (1995 Bardon 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 19		24780-01	nicensetigen allem til i blevartillen men hen med for die omstande helten af an et transister. Et a	******	an generalise de la seconda de la constant de la seconda de la seconda de la seconda de la seconda de la second
Nenana City Public Schoo	ol						
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	400	104.8	1.5	119.0	0.0	135.8	0.0
FY85 ABI Forecasts	400	104.8	0.5	119.0	0.0	135.8	0.0
FY85 AB2 Forecasts	400	104.8	0.5	119.0	0.0	135.8	0.0
FY85 AB3 Forecasts	400	104.8	0.5	119.0	0.0	135.8	0.0
Rallbelt School Distric	t						
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N⁄A
FY85 Car Forecasts	410	86.3	1.7	85.9	0.0	84.1	0.0
FY85 ABI Forecasts	410	86.3	0.0	85.9	0.0	84.1	0.0
FY85 AB2 Forecasts	410	86.3	0.0	85.9	0.0	84.1	0.0
FY85 AB3 Forecasts	410	86.3	0.0	85.9	0.0	84.1	0.0

N/A--Not Available or Not Applicable.

- Education services refer to school facilities located in the Municipality of Anchorage, Fairbanks-North Star Borough, Matanuska-Susitna Borough, and the Railbelt Portion of the Yukon-Koyukuk Census Division and their ability to handle the projected number of students that would attend in each area.
- 21 Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecas. refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% to construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.

Summary of Project Effects on General Fund Fiscal Balances FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u> 1985-2005

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		19	85		19	90		19	95
	Basel	Ine	Project	Basel	lno	Project	Basel	Ine	Project
	Expendi-	Fiscal	Effect on	Expendi-	Fiscal	Effect on	Expendi-	Fiscal	Effect on
Area/Community	ture	Balance	Fiscal Balance	ture	Balance	Fiscal Balance	ture	Balance	Fiscal Balance
Anchorage Area									
Mun. of Archorage		•							
FERC Forecasts	\$139,789	N/A	N/A	\$160,400	N/A	N/A	\$167,092	N/A	N/A
FY84 Forecasts	184,227	N/A	N/A	202,449	N/A	N/A	211,298	N/A	N/A
FY85 Car Forecasts	207,759	\$-1,088	\$-2	226,659	\$26,490	89	247,715	\$52,554	\$27
FY85 AB1 Forecasts	207,759	-1,088	-1	226,659	526,490	145	247,715	\$52,554	10
FY85 AB2 Forecasts	207,759	-1,088	0	226,659	\$26,490	60	247,715	\$52,554	б
FY85 AB3 Forecasts	207,759	-1,088	-2	226,659	\$26,490	217	247,715	\$52,554	14
Mat-Su Borough 2/									
FERC Forecasts	\$ 24,100	\$-4,600	\$ 600	\$ 33,100	\$-5,100	300	N/A	N/A	N/A
FY84 Forecasts	31,396	2,674	-27	42,873	-3,805	-113	\$55,036	\$ -638	\$ -12
FY85 Car Forecasts	32,898	-629	-18	39, 194	1,714	137	46,401	8,943	207
FY85 AB1 Forecasts	32,898	-629	-15	39,194	1,714	121	46,401	8,943	221
FY85 AB2 Forecasts	32,898	-629	-12	39,194	1,714	110	46,401	8,943	221
FY85 AB3 Forecasts	32,898	~629	-20	39,194	1,714	128	46,401	8, 943	223
Palmer									
FERC Forecasts	\$ 2,991	\$-1,166	\$ 459	\$ 4,198	\$-1,697	\$622	\$4,986	\$-2,015	\$ 741
FY84 Forecasts	4,506	178	5	7,104	-484	7	9,819	958	17
FY85 Car Forecasts	3,901	496	15	5,929	893	49	8,907	1,387	2
FY85 AB! Forecasts	3,901	496	6	5,929	893	27	8,907	1,387	3
FY85 AB2 Forecasts	3,901	496	6	5,929	893	18	8,907	1,387	3
FY85 AB3 Forecasts	3,901	496	6 1	5,929	893	36	8,907	1,387	0

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Summary of Project Effects on General Fund Fiscal Balances FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u>/ 1985-2005

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		19	999		20	02		20)05
	Basel	inə	Project	Basel	i ne	Project	Basel	l ne	Project
	Expendi-	Flscal	Effect on	Expendi-	Fiscal	Effect on	Expend -	Fiscal	Effect on
<u>Area/Community</u>	ture	Balance	Fiscal Balance	turo	Balance	Fiscal Balance	ture	Balance	Fiscal Balance
Anchorage Area									
Mun. of Anchorage									
FERC Forecasts	\$177,156	N/A	N/A	\$184,086	N/A	N/A	\$191,934	N/A	NZA
FY84 Forecasts	214,913	N/A	N/A	218, 174	N/A	N/A	222,276	N/A	NZA
FY85 Car Forecasts	272,970	\$68,288	\$ 216	288,853	\$81,507	\$ 309	304,305	\$94,798	\$ 195
FY85 AB1 Forecasts	272,970	\$68,288	299	288,853	81,507	317	304, 305	94, 798	128
FY85 AB2 Forecasts	272,970	\$68,288	165	288,853	81,507	296	304,305	94,798	128
FY85 AB3 Forecasts	272,970	\$68,288	411	288,853	81,507	334	304, 305	94,798	128
Mat-Su Borough									
FERC Forecasts	\$ 51,200	\$-10,200	\$ 800	\$ 58,800	\$-12,300	\$ 900	N/A	N/A	N/A
FY84 Forecasts	66,089	4,615	81	76,547	9,955	141	\$88, 995	\$16,316	\$ 201
FY85 Car Forecasts	54,287	16,821	703	59,980	25,832	329	65,903	37,816	199
FY85 AB1 Forecasts	54,287	16,821	624	59,980	25,832	317	65,903	37,816	293
FY85 AB2 Forecasts	54,287	16,821	583	59,980	25,832	310	65,903	37,816	293
FY85 AB3 Forecasts	54,287	16,821	659	59,980	25,832	325	65,903	37,816	293
Palmor									
FERC Forecasts	\$ 5,725	\$ -2,316	\$ 851	\$ 6,348	\$ -2,568	\$ 946	\$7,038	\$-2,847	\$1,049
FY84 Forecasts	12,815	1,555	17	15, 715	2,192	28	19, 337	3,052	35
FY85 Car Forecasts	12,159	1,847	44	15,302	2,216	4	19,242	2,597	
FY85 ABI Forecasts	12, 159	1,847	22	15,302	2,216	5	19,242	2,597	0
FY85 AB2 Forecasts	12,159	1,847	15	15,302	2,216	3	19,242	2,597	0
FY85 AB3 Forecasts	12,159	1,847	34	15, 302	2,216	б	19,242	2,597	1

Summary of Project Effects on General Fund Fiscal Balances FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>V</u> 1985-2005

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		19	85		19	90		19	195
	Basel	ine	Project	Basel	Ine	Project	Basel	Îne	Project
	Expendi-	Fiscal	Effect on	Expend -	Fiscal	Effect on	Expendi-	Fiscal	Effect on
Area/Community	ture	Balance	Fiscal Balance	ture	Balance	Fiscal Balance	ture	Balance	Fiscal Balance
Wasilla									
FERC Forecasts	\$ 906	\$ -26	\$ O	\$ 1,308	\$ -45	\$ O	\$ 1,878	\$ -65	\$ O
FY84 Forecasts	1,213	134	1	1.847	188	3	2,819	274	5
FY85 Car Forecasts	966	618	23	1,409	928	36	2,055	1,429	-
FY85 ABI Forecasts	966	618	10	1,409	928	20	2,055	1,429	2
FY85 AB2 Forecasts	966	618	9	1,409	928	15	2,055	1,429	2
FY85 AB3 Forecasts	966	618	11	1,409	928	24	2,055	1,429	ŝ
Houston									
FERC Forecasts	\$ 101	N/A	N/A	\$ 166	N/A	N/A	\$ 269	N/A	N/A
FY84 Forecasts	263	\$ 44	\$ 0	425	\$ 68	\$8	684	\$ 110	\$ 5
FYB5 Car Forecasts	262	-7	-2	422	-20	-3	680	-45	1
FY85 ABI Forecasts	262	-7	0	422	-20	-	680	-45	0
FY85 AB2 Forecasts	262	-7	-2	422	-20	-2	680	-45	0
FY85 AB3 Forecasts	262	-7	}	422	-20		680	-45	0
Fairbanks Area									
Mun. of Falrbanks									
FERC Forecasts	\$ 21,315	N/A	N/A	\$ 22,702	N/ 1	N/A	\$ 24,463	N/A	N/A
FY84 Forecasts	29,010	N/A	N/A	36,516	N/A	N/A	44,831	N/A	N/A
FY85 Car Forecasts	28,881	\$-8,421	\$ 21	32,738	\$-4,644	\$ 11	35,309	\$-210	\$ 0
FY85 ABI Forecasts	28,881	5-8,421	\$ 3	32,738	5-4,644	\$ -24	35, 309	\$-210	\$ -2
FY85 AB2 Forecasts	28,881	\$-8,421	\$ -51	32,738	\$-4,644	\$ -52	35,309	5-210	\$ -2
FY85 AB3 Forecasts	28,881	5-8,421	\$ 242	32,738	6-4,644	\$ 14	35,309	8-21U	\$ -3

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Summary of Project Effects on General Fund Fiscal Balances

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios 1/

1985-2005

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		19	99		20	02		20)05
	Basel	lne	Project	Basel	lne	Project	Basel	Ine	Project
	Expend1-	Fiscal	Effect on	Expendi-	Fiscal	Effect on	Expendi-	Fiscal	Effect on
Area/Community	ture	Balance	Fiscal Balance	ture	Balance	Fiscal Balance	ture	Balance	Fiscal Balance
Wasilla									
FERC Forecasts	\$ 2,511	\$ -88	\$ O	\$ 3,074	\$ -108	\$ O	\$ 3.797	\$ -133	\$ -1
FY84 Forecasts	3,959	388	8	5,108	522	4	6,597	713	4
FY85 Car Forecasts	2,779	2,056	23	3,486	2,719	4	4,370	3,625	-6
FY85 ABI Forecasts	2,779	2,056	10	3,486	2,719	4	4,370	3,625	2
FY85 AB2 Forecasts	2,779	2,056	7	3,486	2,719	4	4,370	3,625	2
FY85 AB3 Forecasts	2,779	2,056	15	3,486	2,719	2	4,370	3,625	0
Houston									
FERC Forecasts	\$ 394	N/A	N/A	\$ 525	N/A	N/A	\$ 699	N/A	N/A
FY84 Forecasts	1,000	\$162	\$6	1,331	\$ 214	\$ 6	1,772	\$ 284	\$ 7
FY85 Car Forecasts	996	-81	0	1,326	-120	0	1,764	-176	\$
FY85 AB1 Forecasts	996	-81	0	1,326	-120	j	1,764	-176	0
FY85 AB2 Forecasts	996	-81	0	1,326	-120	0	1,764	-176	0
FY85 AB3 Forecasts	996	-81	0	1,326	-120	2	1,764	-176	tates
Fairbanks Arcs									
Mun. of Fairbanks									
FERC Forecasts	\$ 26,564	N/A	N/A	\$ 28,190	N/A	N/A	\$ 29,952	N/A	N/A
FY84 Forecasts	51,642	N/A	N/A	57,734	N/A	N/A	64,769	N/A	NZA
FY85 Car Forecasts	38,530	\$ 3,619	\$ -9	40,436	\$ 6,633	\$ 20	42.286	\$9.747	\$ 20
FY85 AB1 Forecasts	38,530	\$ 3,619	\$8	40,436	\$ 6,633	\$ 31	42,286	9,747	\$ 52
FYB5 AB2 Forecasts	38,530	\$ 3,619	\$ 16	40,436	\$ 6,633	3 40	42,286	9.747	\$ 52
FY85 AB3 Forecasts	38,530	\$ 3,619	\$ 12	40,436	\$ 6,633	\$ 49	42,286	9,747	\$ 52
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Table 5,19

			Thousands o	f Constant	1983 Doll	ars			
		19	185		15	90		19	995
	Basel	Ine	Project	Basel	Ine	Project	Basel	Ine	Project
	Expendi-	Fiscal	Effect on	Expendi-	Fiscal	Effect on	Expendi-	Flscal	Effect on
Area/Community	ture	Balance	Fiscal Balance	ture	Balance	Fiscal Balance	ture	Balance	Fiscal Baiance
Cantwell									
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	\$ 22	\$ I	\$2	\$ 25	\$6	\$ 3	\$ 23	\$ 13	\$ 0
FY85 AB1 Forecasts	22	1	3	25	б	2	28	13	0
FY85 AB2 Forecasts	22	1	3	25	б	2	28	13	0
FY85 AB3 Forecasts	22	1	2	25	6	3	28	13	0
Nonana									
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	\$1,246	\$8	\$4	\$1,717	\$ -18	\$ -5	\$2,367	\$ -74	\$ -1
FY85 AB1 Forecasts	1,246	8	2	1,717	-18	-2	2,367	-74	0
FY85 AB2 Forecasts	1,246	8	2	1,717	-18	-2	2,367	-74	0
FY85 AB3 Forecasts	1,246	8	1	1,717	-18	1	2,367	-74	0

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Summary of Project Effects on General Fund Fiscal Balances FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios <u>1</u>/ 1985-2005

Summary of Project Effects on General Fund Fiscal Balances

FERC License Application, FY84 Car Transportation, FY85 Car Transportation, and FY85 Air and Bus Scenarios $\frac{17}{2}$

1985-2005

		99799999999999999999999999999999999999	Thousands o	f Constant	1983 Doll	ars	analangka kanalangia (anglangia (angla	an an an an an an an an an an an an an a	active transmission and the second operations in the operation of the second operation o
		19	99		20	02		20	005
	Basel	ine	Project	Basel	Ine	Project	Basel	ine	Project
	Expendi-	Fiscal	Effect on	Expendi-	Fiscal	Effect on	Expendi-	Flscal	Effect on
Area/Community	ture	Balance	Fiscal Balance	ture	Balance	Fiscal Balance	ture	Balance	Fiscal Balance
Cantwell									
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	\$ 33	\$ 18	\$ 1	\$ 36	\$ 25	\$ O	\$ 40	\$ 33	\$ O
FY85 ABI Forecasts	33	18	l	36	25	0	40	33	0
FY85 AB2 Forecasts	33	18	1	36	25	0	40	33	0
FY85 AB3 Forecasts	33	18	1	36	25	0	40	33	0
Nenana									
FERC Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY84 Forecasts	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FY85 Car Forecasts	\$3,065	\$ -145	\$ -2	\$3,721	\$-206	\$ -3	\$4,522	\$-554	\$ O
FY85 AB1 Forecasts	3,065	-145	2	3,721	-206	-3	4,522	-554	0
FY85 AB2 Forecasts	3,065	-145	0	3,721	-206	-3	4,522	-554	0
FY85 AB3 Forecasts	3,065	-145	0	3,721	-206	ļ	4,522	-554	0

N/A--Not Available or Not Applicable.

- Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/ 77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% to construction worker hiring in Anchorage - 0% construction worker hiring in Fairbanks.
- 2/ The Matanuska-Susitna Borcugh does not represent the sum total of Palmer, Wasilla, and Houston. The Borcugh is responsible for providing its own set of distinctive public services that are not provided by the cities.

APPENDIX A COMMUNITY SUMMARIES

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Municipality of Anchorage Population Projections FERC License Application, FY84 Car Transportation, and FY85 Car Transportation, and Air and Bus Scenarios <u>1</u>/ 1985-2002

Year	FER	ĸ	FY84	Car	FY	35 Car Trans	ortation	n Scena	FY85 Car Transportation Scenario						
	Forec	asts	Forec	asts	and Air and Bus Scenario										
	Non-Non-Notation-Landschild Kollinstein-Land	27.998.04.99747287237847.8497488 9	and a subsection of the subsec	Non-mail and colored and a color	Forecasts										
	Baseline	Effects	<u> Baseline</u>	Effects	Baseline	845 534-47 585 874 884 800 501 502 - 034 807 807 80	Effec	:ts							
van her strange og fanns	tarihi manan malananga ang ang ang ang ang ang ang ang a	alaan aa gaalah 100 ke ke ke asar gapa ya ke	100 - 100 100 - 100 100 - 100 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100	un ander de la company de la company de la company de la company de la company de la company de la company de l	anna (maadd allaa dargana (f 1936) allaa gaad	FY85 Car	ABI	AB2	AB3						
1985	200, 959	435	203,106	142	247,237	289	639	204	1,004						
1986	209,820	589	208,061	153	249,225	820	1,495	707	2,138						
1987	217,298	325	210,290	-179	246,990	280	566	-2	1,033						
1988	222,731	482	212,003	9	246,035	374	636	83	1,101						
1989	224,822	537	216, 719	92	245,405	598	954	250	1,548						
1990	224,027	663	223,196	180	248,767	830	1,346	566	2,028						
1991	226,005	556	223,780	197	254,240	873	1,597	846	2,240						
1992	227,024	254	229,944	331	256,036	544	862	714	1,016						
1993	229,940	-219	232,002	840	252,407	943	1,055	724	1,358						
1994	232,299	-405	232,952	1,264	253,684	434	281	466	134						
995	234,507	-523	232,879	1,366	251,747	142	52	23	68						
996	237,668	-411	233,733	1,263	256,771	202	235	10	377						
1997	241,086	-219	235,060	1,222	259,451	398	655	173	1,057						
998	244,125	- 75	235,981	1,194	262,099	678	1,019	449	1,480						
999	247,759	- 36	236,936	1,180	261,562	844	1,147	632	1,577						
2000	251,102	- 92	238,077	1,200	263,046	1,030	1,481	851	1,981						
2001	254,617	-333	239,256	1,284	264,669	879	1,028	842	1,188						
2002	258,182	-532	240,532	1,673	265,226	1,001	1,022	962	1,083						

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

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Municipality of Anchorage Economic-Demographic Effects Selected Scenarios 1/ 1990

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Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Employment 2/						
Baseline	131,705	129, 493	127,817	127,817	127,817	127,817
With-Project	134,715	131,995	129, 131	129, 343	128,896	129,740
Effect	3,010	2,502	1,314	1,526	1,079	1,923
2 1 1						
Population						
Baseline	224,027	223,196	248,767	248,767	248,767	248,767
With-Project	224,690	223, 376	249, 597	250,113	249, 333	230, 795
Effect	663	180	830	1,346	566	2,028
Households 3/						
Baseline	79,028	79,232	86,184	86,184	86,184	86,184
With-Project	79,241	79,295	86,538	86,678	86, 391	86,926
Effect	213	63	354	494	207	742

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- $\frac{2}{2}$ Employment represents number of workers by place of residence.
- $\frac{37}{2}$ Households represents the number of occupied housing units.

Source: Frank Orth & Associates, Inc., 1985.

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Municipality of Anchorage Public Facilities/Services Effects Selected Scenarios 1/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Solid Waste Disposal						
(Cumulative Acres)						
Baseline	N⁄A	N/A	164.2	164.2	164.2	164.2
With-project	N/A	N/A	164.2	164.7	164.2	164.7
Effect	NA	N/A	0.0	0.5	0.0	0.5
Base Year Capacity 2/	N/A	N/A	535.0	535.0	535.0	535.0
Percent Effect 3/	N/A	N/A	0.0	0.3	0.0	0.3
% of Capacity						
Utilization 4/	N/A	N/A	126.8	126.9	126.7	127.1
Police Protection 5/						
Baseline	N/A	N/A	497.5	497.5	497.5	497.5
With-project	N/A	N/A	498.3	498.7	497.5	499.5
Effect	N/A	N/A	0.8	1.2	0.4	2.0
Base Year Staff <u>2/</u>	N/A	N/A	393.0	393.0	393.0	393.0
Percent Effect $\frac{3}{2}$	h/A	N/A	0.2	0.2	0.1	0.4
🖇 Increase Over Base						
Year Staff <u>4/</u>	N/A	N/A	126.8	126.9	126.7	127.1
Recreation Facilities <u>6</u> /						
Baseline	N/A	N/A	621.7	621.7	621.7	621.7
With-project	N/A	N/ A	623.5	625.3	623.5	627.2
Effect	N/A	N/A	1.8	3.6	1.8	5.5

N/A-Not Available or Not Applicable.

 $\frac{17}{10}$ Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- $\frac{2'}{2}$ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers
- used in the revised, base case, and worker hiring projections were from 1983/1984.
- Calculated by dividing effect by baseline forecast.
- 3/4/5/6/ Calculated by dividing with-project forecast by capacity.
- Police Protection requirements are in terms of manpower.
- Recreation facility requirements are in terms of acres of community parks; FY85 facility requirements differ between the FERC License application and subsequent projections due to a change in projection methodology as well as revised population forecasts.

Municipality of Anchorage Public Facilities/Services Effects Selected Scenarios 1/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Hospital Requirements						
(Number of Beds)						
Baseline	N/A	N/A	394.1	394。1	394.1	394.1
With-project	N/A	N/A	396.3	396.6	395.3	397.7
Effect	NA	N/A	2.2	2.5	1.2	3.6
Base ear Capacity	N/A	N/A	692.0	692.0	692.0	692.0
Percent Effect 3/	N/A	N/A	0.6	0.6	0.3	0,9
% of Capacity						
Utilization $\frac{4}{2}$	N/A	N/A	57.3	57.3	57.1	57.5
Water Service (000 gal./d	ay)					
Baseline	N/A	N/A	29,852.0	29,852.0	29,852.0	29,852.0
With-project	N/A	N/A	29,984.8	30,067.4	29,942.6	30,176.5
Effect	N/A	NZA	132.8	215.4	90.6	324.5
Base Year Capar 21	N/A	N/A	36,000.0	36,000.0	36,000.0	36,000.0
Percent Effect	N/A	N/A	0.4	0.7	0.3	1.1
\$ of Capacity						
Utilization $\frac{1}{2}$	N/A	N/A	83.3	83.5	83.2	83.8
Sewer Service (000 gal./d	ay)					
Baseline	N/A	N/A	27,762.4	27,762.4	27,762.4	27,762.4
With-project	N/A	N/A	27,891.1	27,971.0	27,850.1	28,076.7
Effect	N/A	N/A	128.7	208.6	87.7	314.3
Base Year Capacity 2/	N/A	N/A	34,000.0	34,000.0	34,000.0	34,000.0
Percent Effect <u>3/</u>	N/A	N/A	0.5	0.8	0.3	1.1
\$ of Capacity						
Utilization 4/	N/A	N/A	82.0	82.3	81.9	82.6

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- 2/ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers used in the revised, base case, and worker hiring projections were from 1983/1984.
- $\frac{37}{2}$ Calculated by dividing effect by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.

Municipality of Anchorage Public Facilities/Services Effects Selected Scenarios <u>1/</u> 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Primary School Children						
Baseline	N/A	NZA	23,260	23,260	23,260	23,260
With-project	N/A	N/A	23,288	23, 357	23,287	23, 419
Effect	N/A	N/A	28	97	27	159
Base Year Capacity 2/	N/A	N/A	22,100	22,100	22,100	22,100
Percent Effect 3/	N/A	N/A	0.1	0.4	0.1	0.7
\$ of Capacity						
Utilization 4/	N/A	N/A	105.4	105.7	105.4	106.0
Secondary School Children						
Basaline	N/A	N/A	19,031	19,031	19,031	19,031
With-project	N/A	N/A	19,054	19,110	19,053	19,162
Effect	N/A	N/A	23	79	22	131
Base Year Capacity 2/	N/A	N/A	15,340	15,340	15,340	15,340
Percent Effect 3/	N/A	N/A	0.1	0.4	0.1	0.7
\$ of Capacity						
Utilization 4/	N⁄A	N/A	124.2	124.6	124.2	124.9
Total School Enrollment						
Baseline	N/A	N/A	42,291	42,291	42,291	42,291
With-project	N/A	N/A	42,342	42,467	4:, 340	42,581
Effect	N/A	N/A	51	176	49	290
Base Year Capacity 2/	N/A	N/A	37,440	37,440	37,440	37,440
Percent Effect 3/	N/A	N/A	0.1	0.4	0.1	0.7
% of Capacity					- • ·	/
Utilization 4/	N/A	N/A	113.1	113.4	113.1	113.7

N/A-Not Available or Not Applicable.

- 1/ Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.
- 2/ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers used in the revised, base case, and worker hiring projections were from 1983/1984.
- $\frac{37}{2}$ Calculated by dividing effect by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.

Municipality of Anchorage Fiscal Effects <u>1</u>/ 1990

(thousands of constant 1983 dollars)

Sociosconomic	FEI	RC	FY8	4 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts		Forecasts		Forecasts	Forecasts	Forecasts	Forecasts
General Fund								
Baseline Revenues	\$	N/A	\$	N/A	\$ 253,149	\$ 253,149	\$ 253,149	\$ 253,149
With-project Revenues		N/A		N/A	253, 993	254, 519	253,726	255,214
Baseline Expenditures	15	9,590	2	02,449	226,659	226,659	226,659	226,659
With-Project Expendi-								
tures	16	0,400	20	02,613	227,414	227,884	227,176	228,506
Net Baseline Fiscal								
Balance		N/A		N/A	26,490	26,490	26,490	26,490
Net (w/project)								
Fiscal Balance		N/A		N/A	26,579	26,635	26,550	26,708
Project Effect								

Note: Sums may not equal totals due to rounding differences.

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage = 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage = 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage = 0% construction worker hiring in Fairbanks.

Matanuska-Susitna Borough (off-site) Population Projections FERC License Application, FY84 Car Transportation, and FY85 Car Transportation, and Air and Bus Scenarios <u>1</u>/ 1985-2002

Year	FER	С	FY84	Car	FY85 Car Transportation Scenario					
	Forec	asts	Forec	asts		and Air and	Bus Sce	narlo		
						Fore	casts			
	Baseline Eff		Baseline	Effects	Baseline	n an an fair an an an an an an an an an an an an an	Effec	:†s	an an an an an an an an an an an an an a	, , , , , , , , , , , , , , , , , , ,
NEW MENTIONY, WEREINGTON	****		######################################	All and an and an an an an an an an an an an an an an		FY85 Car	ABI	AB2	AB3	
1985	31,202	110	35,224	396	35.721	743	366	248	458	
1986	33, 950	146	37.624	519	37,187	1,402	675	488	829	
1987	36,984	721	39,610	651	38,036	803	509	365	621	
1988	39, 323	985	42,004	941	39,082	775	506	356	613	
1989	41,543	1,107	44,163	1,085	40,188	1,129	757	551	929	
1990	42,964	1,389	47,246	1,393	41,976	1,397	838	612	1,017	
1991	45,263	1,337	49,168	1,362	44, 181	1,605	818	599	995	
1992	47,112	1,210	52,401	1,275	45,801	819	472	370	561	
1993	49,734	1,013	54,797	1,167	46,458	500	334	252	495	
1994	51,988	937	56,990	1,128	48,023	-91	45	45	45	
1995	54,607	891	58,975	1,099	48,994	-32	44	44	44	
996	57,191	924	61,235	1,127	51,354	82	44	44	82	
1997	60,272	975	63,675	1,183	53,306	616	345	212	451	
1998	63,000	1,032	66,062	1,213	55,301	847	483	327	606	
1999	66,338	1,047	68,514	1,220	56,654	801	476	337	594	
2000	69,334	1,021	71,079	1,199	58,472	993	514	367	639	
2001	72,731	930	73,718	1,125	60,358	381	227	167	259	
2002	76,295	837	76,452	1,079	62,036	95	75	55	89	

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

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Matanuska-Susitna Borough (off-site) Economic-Demographic Effects Selected Scenarios 1/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Employment 21						
Baseline	6,914	7,857	7,351	7,351	7,351	7,351
With-Project	7,857	8,856	8,197	7,615	7,535	7,665
Effect	943	999	846	264	184	314
Population						
Baseline	42,964	47,246	41,976	41,976	41,976	41,976
With-Project	45, 442	49,868	44,528	43,969	43,743	44,148
Effect	2,478	2,622	2,552	1,993	1,767	2,172
Households $\frac{3}{2}$						
Baseline	14,417	15,375	14, 157	14,157	14,157	14,157
With-Project	15,253	16,141	14,987	14,832	14,748	14,900
Effect	836	766	830	675	591	743

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

 $\frac{2i}{2}$ Employment represents number of workers by place of residence.

 $\frac{37}{2}$ Households represents the number of occupied housing units.

Source: Frank Orth & Associates, Inc., 1985.

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Matanuska-Susitna Borough (off-site) Public Facilities/Services Effects Selected Scenarios 1/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	A83
Varlable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Solid Waste Disposal						
(Cumulative Acres)						
Baseline	62.9	49.2	49.2	49.2	49.2	49.2
With-project	64.8	52.2	51.3	51.1	50.9	51.1
Effect	1.9	3.0	2.1	1.9	1.7	1.9
Base Year Capacity 2/	617.0	212.0	212.0	212.0	212.0	212.0
Percent Effect 3/	3.0	6.1	4.3	3.9	3.5	3.9
\$ of Capacity						
Utilization 4/	10.5	24.6	23.3	23.2	23.1	23.2
Police Protection 5/						
Baseline	48.0	52.4	47.0	47.0	47.0	47.0
With-project	49.0	54.0	48.7	48.0	41.7	48.2
Effect	1.0	1.6	1.7	1.0	0.7	1.2
Base Year Staff 2/	20.0	29.0	30.0	30.0	30.0	30.0
Percent Effect 3/	2.1	2.1	3.6	2.1	1.5	3.6
🖇 Increase Over Base						
Year Staff 4/	245.0	186.2	162.3	160.0	159.0	160.7
Recreation Facilities <u>6/</u>						
Baseline	N/A	73.8	67.9	67.9	67.9	67.9
With-project	N/A	75.4	70.3	69.6	69.1	69.8
Effect	N/A	1.6	2.4	1.7	1.2	1.9

N/A-Not Available or Not Applicable.

 $\frac{1}{2}$ Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

2/ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers

used in the revised, base case, and worker hiring projections were from 1983/1984.

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- 3/ 4/ 5/ Calculated by dividing effect by baseline forecast.
- Calculated by dividing with-project forecast by capacity.
- Police Protection requirements are in terms of manpower.

6/ Recreation facility requirements are in terms of acres of community parks; FY85 facility requirements differ between the FERC License application and subsequent projections due to a change in projection methodology as well as revised population forecasts.

Matanuska-Susitna Borough (off-site) Public Facilities/Services Effects Selected Scenarios 1/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	A82	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Hospital Requirements						
(Number of Beds)						
Baseline	48.0	60.5	53,7	53.7	53.7	53.7
With-project	49.0	62.3	55.5	54.8	54.5	55.0
Effect	1.0	1.8	1.8		0.8	1.3
Base Year Capacity 2/	20.0	30.0	30.0	30.0	30.0	30.0
Percent Effect 3	2.1	3.0	3.4	2.0	1.5	2.4
\$ of Capacity						
Utilization 4/	245.0	206.7	185.0	182.7	181.7	183.3
Water Service (000 gal./da	зү)					
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	N'A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect <u>3/</u>	N/A	N/A	N/A	N/A	N/A	N/A
\$ of Capacity						
Utilization $\frac{4}{2}$	N/A	N/A	N/A	N/A	N/A	N/A
Sewer Service (000 gal./da	зу)					
Baseline	N/A	N/A	NZA	N/A	N/A	N/A
With-project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
% of Capacity						
Utilization 4	N/A	N/A	N/A	N/A	N/A	N/A

N/A-Not Available or Not Applicable.

- Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.
- $\frac{2}{2}$ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers
- used in the revised, base case, and worker hiring projections were from 1983/1984.
- $\frac{3}{2}$ Calculated by dividing effect by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.

Matanuska-Susitna Borough (off-site) Public Facilities/Services Effects Selected Scenarios <u>1</u>/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	A83
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Primary School Children						
Baseline	5,406	5,911	5,712	5,712	5,712	5,712
With-project	5,608	6,117	5,838	5,820	5,789	5,844
Effect	202	206	126	108	77	1 32
Base Year Capacity 2/	3,136	4,835	4,835	4,835	4,835	4,835
Percent Effect <u>3/</u> % of Capacity	3.7	3.5	2.2	1.9	1.3	2.3
Utilization 4/	178.8	126.5	120.7	120.4	119.7	120.9
Secondary School Children						
Baseline	4,605	5,036	4,488	4,488	4,488	4,488
With-project	4,764	5,211	4,587	4,573	4,549	4,592
Effect	159	175	99	85	61	104
Base Year Capacity 2/	3, 380	4,080	4,080	4,080	4,080	4,080
Percent Effect $\frac{3}{2}$	3.5	3.5	2.2	1.9	1.4	2.3
\$ of Capacity						
Utilization 4/	140.9	127.7	112.4	112.1	111.5	112.5
Total School Enrollment						
Baseline	10,011	10,947	10,200	10,200	10,200	10,200
With-project	10,372	11,328	10,425	10, 393	10,338	10,436
Effect .	361	381	225	193	138	236
Base Year Capacity 2/	6,516	8,915	8,915	8,915	8,915	8,915
Percent Effect 3/	3.6	3.5	2.2	1.9	1.4	2.3
\$ of Capacity						
Utilization 4/	159.2	127.0	116.9	116.6	116.0	117.1

N/A-Not Available or Not Applicable.

- Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.
- 2/ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers used in the revised, base case, and worker hiring projections were from 1983/1984.
- $\frac{3}{2}$ Calculated by dividing effect by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.

Matanuska-Susitna Borough (off-sita) Fiscal Effects <u>1</u>/ 1990 (thousands of constant 1983 dollars)

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	A82	ABJ
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
General Fund						
Baseline Revenues	\$ 28,000	\$ 39,068	\$40,908	\$ 40,908	\$ 40,908	\$ 40,908
With-project Revenues	29,000	40,220	42,270	41,727	41,506	41,901
Baseline Expenditures	33,100	42,873	39, 739	39, 7 39	39, 739	39,739
With-Project Expendi-						
tures	34,200	44,138	41,062	40,532	40,319	40,704
Net Baseline Fiscal						
Balance	-3,100	3,805	1,169	1,169	1,169	1,169
Net (w/project)						
Fiscal Balance	-5,200	3,918	1,208	1,195	1,187	1,197
Service Area Fund						
Baseline Revenues	2,700	\$ 5,186	\$ 4,227	\$ 4,227	\$ 4,227	\$ 4,227
With-project Revenues	3,400	5,229	4,368	4,311	4,289	4.330
Baseline Expenditures	9,400	5,025	3.771	3, 771	3.771	3.771
With-Project Expendi-	0,000	59 3 40	5,000	5,101	0,	
tures	9,600	5.064	3,896	3,845	5-825	3,862
Net Baseline Fiscal	2000	5,000	2,020	29012	~; ~~~	20 C C C C
Balanca	-6.700	-161	456	456	456	456
Nat (w/project)	-,	101	450		420	120
Fiscal Balance	-6,200	-165	472	466	464	468
School District Fund						
Baseline Revenues	\$ 50,300	\$ 57,972	\$ 55,843	\$ 55,843	\$ 55.843	\$ 55.843
With-project Revenues	53,400	62,523	60,233	59, 323	59,024	59,562
Basaline Expenditures	61,100	56,804	57,707	57,707	57,707	57.707
With-Project Expendi-		·		•		
tures	65.100	60,608	62.272	61,180	60,869	61.424
Not Baseline Fiscal			,	.,,		
Balance	~10,800	-1,168	-1.864	-1,864	-1.864	-1.864
Nat (w/project)			, _y = = 1	.,	.,	.,
Fiscal Balance	-11,700	-1,129	-2,039	-1,857	-1,845	-1.862

Note: Sums may not equal totals due to rounding differences.

N/A-Not Available or Not Applicable.

L' Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

Table A-3.1

			•	19	35-2002					
Year	FER	ж	F 184	Car	FY85 Car Transportation Scenario					
	Forec	asts	Forec	asts		and Air and	Bus Sce	nario		
				anno marcanalani manana		10104	Casts		50000-010-010-00000	
	Baseline	Effects	Baseline	Effects	Baseline	a the state of the	Effec	†5	an san yan maran	
and the second second second second second second second second second second second second second second second	an an an an an an an an an an an an an a	an an an an an an an an an an an an an a		ang mangang sang sang sang sang sang sang san	@#**#\$\$\$*\$	FY85 Car	ABI	<u>A82</u>	<u>AB3</u>	
1985	3, 302	5	3,106	31	2,876		51	35	68	
1986	3,517	б	3,307	41	2,962	211	95	68	119	
1987	3,746	26	3, 522	53	3,051	121	73	45	89	
1988	3, 989	35	3, 751	73	3,142	115	73	48	89	
1989	4,248	39	3, 995	87	3,237	164	99	67	126	
1990	4,525	49	4,255	110	3, 334	201	110	75	139	
1991	4,683	48	4,404	110	3,451	229	107	72	134	
1992	4,847	44	4,558	104	3,571	113	56	40	69	
1993	5,017	39	4,718	94	3,696	71	53	35	72	
994	5,193	37	4,883	92	3, 826	-13	б	б	6	
1995	5,374	35	5,054	92	3,960	-5	6	6	6	
1996	5,562	36	5,230	92	4,098	13	6	· 6	11	
1997	5,757	37	5,414	96	4,242	84	40	32	59	
1998	5,959	39	5,603	99	4,390	117	59	35	77	
1999	6,167	39	5,799	103	4,544	110	61	40	80	
2000	6, 383	39	6,002	96	4,703	150	71	48	93	
2001	6,606	36	6,212	92	4,868	55	29	21	37	
2002	6,838	33	6,430	90	5.038	14	8	6		

 $\frac{17}{10}$ Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77\$ construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

Source: Frank Orth & Associates, Inc., 1985.

City of Palmer Population Projections FERC License Application, FY84 Car Transportation, and FY85 Car Transportation, and Air and Bus Scenarios 1/

City of Paimer Economic-Demographic Effects Selected Scenarios 1/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Employment 2/						
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-Project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N⁄A	N/A	N/A	N/A
Population						
Baseline	4,525	4,255	3, 334	3,334	3, 334	3, 334
With-Project	4,574	4,365	3,535	3,444	3,409	3,473
Effect	49	110	201	110	75	1 39
Households $\frac{3}{2}$						
Baseline	1,551	1,476	1,103	1,103	1,103	1,103
With-Project	1,568	1,509	1,169	1,144	1,131	1,155
Effect	17	33	66	41	28	52

N/A--Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

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- $\underline{\mathcal{U}}$ Employment represents number of workers by place of residence.
- $\frac{37}{2}$ Households represents the number of occupied housing units.

Source: Frank Orth & Associates, Inc., 1985.

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Table A-3.3

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City of Palmer Public Facilities/Services Effects Selected Scenarios 1/ 1990

Socioaconomic Variable	FERC Forecasts	FY84 Car Forecasts	FY85 Car Foracasts	ABI Forecasts	AB2 Forecasts	AB3 Forecasts
(Cumulative Acres)						
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	NA	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
Utilization 4/	N/A	N/A	N/A	N/A	N/A	IN/A
Police Protection 5/						
Baseline	8.0	6.4	5.0	5.0	5.0	5.0
With-project	8.0	6.6	5.3	5.2	5.1	5.2
Effect	0.0	0.2	0.3	0.2	0.1	0.2
Base Year Staff 2/	9.0	14.0	9.0	9.0	9.0	۶.0
Percent Effect <u>3</u> /	0.0	3.1	6.0	4.0	2.0	4.0
🖇 Increase Over Base						
Year Staff 4/	88.9	46.8	58.9	57.5	56.8	57.9
Recreation Facilities <u>6</u> /						
Baseline	N/A	4.8	3.6	3.6	3.6	3.6
With-project	N/A	4.9	3.9	3.7	3.7	3.8
Effect	NA	0.1	0.3	0.1	0.1	0.2

N/A-Not Available or Not Applicable.

L' Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts rafer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- $\frac{2'}{2}$ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers
- used in the revised, base case, and worker hiring projections were from 1983/1984.
- Calculated by dividing effect by baseline forecast.
- 3/ 4/ Calculated by dividing with-project forecast by capacity.
- 5/ Police Protection requirements are in terms of manpower.
- 6/ Recreation facility requirements are in terms of acres of neighborhood parks for Palmer; FY85 facility requirements differ between the FERC License application and subsequent projections due to a change in projection methodology as well as revised population forecasts.

City of Palmer Public Facilities/Services Effects Selected Scenarios 1/ 1990

Socioeconomic Variable	FERC Forecasts	FY84 Car Forecasts	FY85 Car Forecarts	AB1 Forecasts	AB2 Forecasts	AB3 Forecasts
(Number of Beds)						
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/ \$ of Capacity	N/A	N/A	N/A	N/A	N/A	N/A
Utilization 4/	N/A	N/A	N/A	N/A	N/A	N/A
Water Service (000 gal./da	y)					
Baseline	608.0	615.9	482.6	482.6	482.6	482.6
With-project	615.0	631.8	511.6	498.5	493.4	502.7
Effect	7.0	15.9	29.0	15.9	10.8	20.1
Base Year Capacity 2/	300.0	1,030.0	1,030.0	1,030.0	1,030.0	1,030.0
Percent Effect 3/	1.2	2.6	6.0	3.3	2.2	4.2
% of Capacity						
Utilization <u>4/</u>	205.0	61.3	49.7	48.4	47.9	48.8
Sewer Service (000 gal./da	y)					
Baseline	543.0	465.8	365.0	365.0	365.0	365.0
With-project	549.0	477.9	387.0	377.0	373.2	380.2
Effect	6.0	12.1	22.0	12.0	8.2	15.2
Base Year Capacity 2/	300.0	300.0	300.0	300.0	300.0	300.0
Percent Effect <u>3/</u> % of Capacity	1.1	2.6	3.3	3,3	2.2	4.2
Utilization 4/	183.0	159.3	129.0	125.7	124.4	126.7

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- $\frac{2!}{2}$ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers
- used in the revised, base case, and worker hiring projections were from 1983/1984.
- $\frac{37}{2}$ Calculated by dividing effect by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.
Table A-3.5

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City of Paimer Public Facilities/Services Effects Selected Scenarios 1/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Furecasts	Forecasts	Forecasts	Forecasts
Primary School Childron						
Baseline	569	532	454	454	454	454
With-project	N/A	549	486	469	464	473
Effect	N/A	17	32	15	10	19
Base Year Capacity 2/	N/A	725	1,225	1,225	1,225	1,225
Percent Effect 3/	N/A	3.2	7.0	3.3	2.2	4.2
\$ of Capacity						
Utilization 4/	N/A	75.7	39.7	38,3	37.9	38.6
Secondary School Children						
Baseline	485	454	356	356	356	356
With-project	N/A	467	381	368	364	371
Effect	N/A	13	25	12	8	15
Base Year Capacity 2/	N/A	1,600	1,600	1,600	1,600	1,600
Percent Effect 3/	N/A	2.9	7.0	3.4	2.2	4.2
\$ of Capacity						
Utilization 4/	N/A	29.2	23.8	23.0	22.8	23.2
Total School Enrollment						
Baseline	1,054	986	810	810	810	810
With-project	N/A	1,016	867	837	828	844
Effect	N/A	30	57	27	18	34
Base Year Capacity 2/	N/A	2,325	2,825	2,825	2,825	2,825
Percent Effect 3/	N/A	3.0	7.0	3.3	2.2	4.2
\$ of Capacity						
Utilization 4/	N/A	43.7	30.7	29.6	29.3	29.9

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts rafer to effects under Air and Bus Scenario/77\$ construction worker hiring in Anchorage - 23\$ construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50\$ construction worker hiring in Anchorage - 50\$ construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100\$ construction worker hiring Anchorage - 0\$ construction worker hiring in Fairbanks.

2/ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers used in the revised, base case, and worker hiring projections were from 1983/1984.

 $\frac{37}{2}$ Calculated by dividing effect by baseline forecast.

4/ Calculated by dividing with-project forecast by capacity.

City of Palmer Fiscal Effects <u>1</u>/ 1990 (thousands of constant 1983 dollars)

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	A83
Varlable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
General Fund						
Baseline Revenues	\$ 3,131	\$ 7,588	\$ 6,822	\$ 6,822	\$ 6,822	\$ 6,822
With-project Revenues	3,160	7,788	7,231	7,045	6,974	7,105
Baseline Expenditures	4,197	7,104	5,929	5,929	5,929	5,929
With-Project Expendi-						
turos	4,236	7,287	6,289	6,125	6,063	6,178
Not Baseline Fiscal						
Balance	-1,066	-484	893	893	893	893
Net (w/project)						
Fiscal Balanca	-1.076	-501	942	920	911	927

Note: Sums may not equal totals due to rounding differences.

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage = 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage = 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage = 0% construction worker hiring in Fairbanks.

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City of Wasilla Population Projections FERC License Application, FY84 Car Transportation, and FY85 Car Transportation, and Air and Bus Scenarios <u>1/</u> 1985-2002

Year	FER Forec	C asts	FY84 Forec	Car asts	FY85 Car Transportation Scenario and Air and Bus Scenario Forecasts			10		
	Baseline	Effects	Baseline	Effects	Baseline		Effoc	* †\$	any w Totoria and a state and a state of a state	entar:
The second square the	a da marta agus agus an da da da da da da da da da da da da da			1997	AMILIAN AND AND AND AND AND AND AND AND AND A	FY85 Car	ABI	AB2	AB3	19407)2 105073
1985	2,895	5	3.402	38	3,814	120	60	41	70	
1986	3,112	7	3,657	48	4,100	223	108	76	127	
1987	3, 346	31	3, 932	60	4,408	130	81	57	97	
1988	3, 597	42	4,226	87	4,738	123	81	57	94	
1989	3,867	47	4,543	101	5,094	169	110	75	134	
1990	4,157	59	4,884	132	5,476	214	121	86	147	
1991	4,468	57	5,251	128	5,886	244	115	80	139	
1992	4,803	54	5,644	118	6,328	121	64	45	75	
1993	5,164	48	6,068	111	6,802	77	59	37	75	
1994	5,551	46	6,523	107	7,313	-13	б	6	6	
1995	5,967	44	7,012	107	7,861	-7	6	б	6	
1996	6,415	45	7,538	107	8,451	13	6	6	11	
1997	6,896	46	ə, 103	114	9,084	90	45	24	59	
1998	7,413	48	8,711	114	9,766	126	64	37	82	
1999	7,969	48	9, 364	118	10,498	120	66	45	82	
2000	8,474	47	10,067	114	11,295	158	79	56	95	
2001	9,093	44	10,822	107	12,132	61	37	27	40	
2002	9,756	42	11,633	101	13,042	14	8	8		

<u>i/</u> Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

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City of Wasilia Economic-Demographic Effects Selected Scenarios 1/ 1990

Socioeconomic Variable	FERC Forecasts	FY84 Car Forecasts	FY85 Car Forecasts	ABI Forecasts	AB2 Forecasts	AB3 Forecasts
Employment 2						
Baseline	N/A	N/A	N/A	N/A	NZA	NZA
With-Project	N/A	N/A	N/A	NA	NZA	N/A
Effect	N/A	N/A	N⁄A	N/A	N/A	N/A
Population						
Baseline	4,157	4,884	5,476	5,476	5,476	5,476
With-Project	4,216	5,016	5,690	5,597	5,562	5,623
Effect	59	132	214	121	86	147
Households 3/						
Baseline	1,404	1,615	1,825	1,825	1,825	1,825
With-Project	1,424	1,654	1,896	1,870	1,857	1,880
Effect	20	39	71	45	32	55

N/A-Not Available or Not Applicable.

- Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.
- $\frac{2}{2}$ Employment represents number of workers by place of residence.
- $\frac{3}{2}$ Households represents the number of occupied housing units.

City of Wasilla Public Facilities/Services Effects Selected Scenarios <u>1</u>/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Varlable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Solid Wasta Disposal						
(Cumulative Acres)						
Basel i ne	N/A	N/A	N/A	N/A	N/A	NZA
With-project	N/A	NA	NA	NA	N/A	NA
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect <u>3/</u> § of Capacity	N/A	N/A	N/A	N/A	N/A	N/A
Utilization 4/	N⁄A	N/A	N/A	N/A	N/A	N/A
Police Protection 5/						
Baseline	NA	N/A	N/A	N/A	N/A	N/A
With-project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Staff <u>2/</u>	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
% Increase Over Base						
Year Staff 4/	N/A	N/A	N/A	N/A	N/A	N/A
Recreation Facilities <u>6</u> /						
Baseline	N/A	5.3	6.0	6.0	6.0	6.0
With-project	N/A	5.4	6.3	6.2	6.1	б.2
Effect	N/A	0.1	0.3	0.2	0.1	0.2

N/A-Not Available or Not Applicable.

 $\frac{1}{2}$ Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

- Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring in Fairbanks.
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- 3/ Calculated by dividing effect by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.
- 5/ Police Protection requirements are in terms of manpower.
- 6/ Recreation facility requirements are in terms of acres of neighborhood parks for Wasilla; FY85 facility requirements differ between the FERC License application and subsequent projections due to a change in projection methodology as well as revised population forecasts.

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City of Wasilla Public Facilities/Services Effects Selected Scenarios 1/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Kospital Requirements						
(Number of Reds)						
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	NZA	N/A	N/A	NA	N/A	NA
Effect	NA	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
% of Capacity						
Utilization 4/	N/A	N/A	N/A	N/A	N/A	N/A
Water Service (000 gal./da	y)					
Baseline	559.0	706.9	792.6	792.6	792.6	792.6
With-project	567.0	726.0	823.6	810.1	805.0	813.9
Effect	8.0	19.1	31.0	17.5	12.4	21.3
Base Year Capacity 2/	N/A	900.0	900.0	900.0	900.0	900.0
Percent Effect 3/	1.4	2.7	3.9	2.2	1.6	2.7
% of Capacity						
Utilization 4/	N/A	80.7	91.5	90.0	89.4	90.4
Sewer Service (000 gal./da	y)					
Baseline	N/A	534.7	599.5	599.5	599.5	599.5
With-project	N/A	549.1	622.9	612.7	608.9	615.6
Effect	N/A	4.4	23.4	13.2	9.4	16.1
Base Year Capacity 2/	N/A	N/A	441.0	441.0	441.0	441.0
Percent Effect 3/	N/A	2.7	3.9	2.6	1.6	2.7
\$ of Capacity						
Utilization 4/	N/A	N/A	141.2	138.9	138.1	139.6

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

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- 2/ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers used in the revised, base case, and worker hiring projections were from 1983/1984.
- $\frac{37}{2}$ Calculated by dividing effect by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.

City of Wasilia Public Facilities/Services Effects Selected Scenarios 1/ 1990

Socloecononic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Primary School Children						
Baseling	523	611	745	745	745	745
With-project	N/A	631	779	761	757	765
Effect	NA	20	34	16	12	20
Base Year Capacity 2/	N/A	1,050	1,550	1,550	1,550	1,550
Percent Effect 3	N/A	3.3	4.6	2.1	1.6	2.7
\$ of Capacity						
Utilization $\frac{4}{2}$	NYA	60.1	50.3	49.1	48.8	49.4
Secondary School Children						
Baseline	446	521	585	585	585	585
With-project	N/A	538	611	598	594	601
Effect	N/A	17	26	13	9	16
Base Year Capacity 2/	N/A	1,800	1,800	1,800	1,800	1,800
Percent Effect 3/	N/A	3.3	4.4	2.2	1.5	2.7
% of Capacity						
Utilization $\frac{4}{2}$	N/A	29.9	33.9	33.2	33.0	33.4
Total School Enrollment						
Baseline	969	1,132	1,330	1,330	1,330	1,330
With-project	N/A	1,169	1,390	1,359	1,351	1,366
Effect	N/A	37	60	29	21	36
Base Year Capacity 2/	N/A	2,850	3,350	3,350	3,350	3,350
Percent Effect <u>3</u> /	N/A	3.3	4.5	2.2	1.6	2.7
\$ of Capacity						
Utilization $\frac{4}{}$	N/A	41.0	41.5	40.6	40.3	40.8

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts rater to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- $\frac{2}{2}$ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers
- used in the revised, base case, and worker hiring projections were from 1983/1984.
- $\frac{37}{2}$ Calculated by dividing effect by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.

City of Wasilla Fiscal Effects <u>1</u>/ 1990 (thousands of constant 1983 dollars)

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
General Fund						
Baseline Revenues	\$ 1,264	\$ 2,035	\$ 2,337	\$ 2,337	\$ 2,337	\$ 2,337
With-project Revenues	1,279	2,089	2,429	2,388	2,374	2,400
Baseline Expenditures With-Project Expendi-	1,308	1,847	1,409	1,409	1,409	1,409
tures	1,324	1,898	1,465	1,440	1,431	1,446
Not Baselino Fiscal Balance	-44	-188	928	928	928	928
Net (w/project) Fiscal Balance	-45	-191	964	948	943	954

Note: Sums may not equal totals due to rounding differences.

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage = 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage = 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage = 0% construction worker hiring in Fairbanks.

Source: Frank Orth & Associates, Inc., 1985.

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City of Houston Population Projections FERC License Application, FY84 Car Transportation, and FY85 Car Transportation, and Air and Bus Scenarios 1/ 1985-2002

Year	FER	c	F 184	FY84 Car		FY85 Car Transportation Scenario				
	Forec	asts	Forec	asts		and Air and	Bus Sce	nario		
						Fore	casts			
	Baseline	Effects	Baseline	Effects	Baseline		Effec	ts.		
OPhantacharacharachar	nanz z z z z z z z z z z z z z z z z z z			ALAS THE REAL PROPERTY AND A CON-	alandara ana managana ana ang ang ang ang ang ang ang	FY85 Car	ABI	AB2	A83	
1985	878	4	733	35	813	59	27	19	35	
1986	966	5	807	45	894	113	51	35	62	
1987	1,063	23	887	60	984	62	38	27	46	
1988	1,169	31	976	84	1,082	59	38	27	46	
1989	1,286	35	1,074	95	1,190	83	54	38	64	
1990	1,415	44	1,181	122	1,309	105	59	40	72	
1991	1,556	42	1,299	122	1,440	118	54	35	67	
1992	1,712	40	1,429	112	1,584	60	29	21	35	
1993	1,883	37	1,572	102	1,743	39	27	19	35	
1994	2,071	36	1,729	95	1,917	-	0	0	0	
1995	2,278	35	1,902	95	2,108	-6	0	0	0	
1996	2,506	35	2,092	95	2,319	3	0	0	3	
1997	2,,757	36	2,301	102	2,551	44	19	8	26	
1998	3,032	37	2,531	105	2,806	58	29	19	40	
1999	3, 335	37	2,785	105	3,087	58	29	18	40	
2000	3, 669	35	3,063	105	3,396	74	37	24	45	
2001	4,036	35	3, 369	98	3,735	27	16	8	16	
2002	4,439	33	3,706	95	4,109	3	5	3	5	

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

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City of Houston Economic-Demographic Effects Selected Scenarios 1/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Var iable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Employment 2/						
Basalina	N/A	N/A	N/A	N/A	N/A	N/A
With-Project	N/A	N⁄A	NA	N/A	NA	N/A
Effect	N/A	N/A	NA	N/A	N/A	N/A
Population						
Baseline	1,415	1,181	1,309	1,309	1,309	1,309
With-Project	1,459	1,303	1,414	1,368	1,349	456 م
Effect	44	122	105	59	40	147
Households 3/						
Baseline	508	411	439	439	439	439
With-Project	523	447	474	461	454	494
Effect	15	36	35	22	15	55

N/A-Not Available or Not Applicable.

- L¹ Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under AIr and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.
- 2/ Employment represents number of workers by place of residence.
- $\frac{37}{1000}$ Households represents the number of occupied housing units.

Source: Frank Orth & Associates, Inc., 1985.

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City of Houston Public Facilities/Services Effects Selected Scenarios <u>1</u>/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Solid Waste Disposal						
(Cumulative Acres)						
Basel I ne	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	NA	N/A	N/A	N/A	NA
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
% of Capacity						
Utilization 4	N/A	N/A	N/A	N/A	N/A	N/A
Police Protection 5/						
Baseline	N/A	N/A	N/A	NA	N/A	N/A
With-project	N/A	N/A	N/A	N/A	NA	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Staff 21	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect <u>3/</u>	N/A	N/A	N/A	N/A	N/A	N/A
🖇 Increase Over Base						
Year Staff 4/	N/A	N/A	N/A	N/A	N/A	N/A
Recreation Facilities <u>6</u> /						
Basaline	N/A	1.3	1.5	1.5	1.5	1.5
With-projec:	N/A	1.4	1.6	1.6	1.5	1.6
Effect	N/A	0.1	0.1	0.1	0.0	0.1

N/A-Not Available or Not Applicable.

1/ Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring in Fairbanks.

- $\frac{2\prime}{2}$ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers
- used in the revised, base case, and worker hiring projections were from 1983/1984.
- $\frac{3}{2}$ Calculated by dividing affect by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.
- 5/ Police Protection requirements are in terms of manpower.
- 6' Recreation facility requirements are in terms of acres of neighborhood parks for Houston; FY85 facility requirements differ between the FERC License application and subsequent projections due to a change in projection methodology as well as revised population forecasts.

City of Houston Public Facilities/Services Effects Selected Scenarios 1/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Hospital Requirements (Number of Beds)						
Baseline	N/A	N/A	N/A	NA	N/A	N/A
With-project	N/A	NA	N/A	N/A	NZA	NA
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3	N/A	N/A	N/A	N/A	N/A	N/A
5 of Capacity						
Utilization 4/	N/A	N/A	N/A	N/A	27 A	N/A
Water Service (000 gal./da	3Y)					
8aseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3	N/A	N/A	N/A	N/A	N/A	N/A
% of Capacity						
Utilization $\frac{4}{2}$	N/A	N/A	N/A	N/A	N/A	NZA
Sewer Service (000 gal./da	y)					
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	NZA
\$ of Capacity						
Utilization 4/	N/A	N/A	N/A	N/A	N/A	NZA

N/A-Not Available or Not Applicable.

 \underline{M} Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

 $\frac{2'}{2}$ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers

used in the revised, base case, and worker hiring projections were from 1983/1984.

 $\frac{3}{2}$ Calculated by dividing effect by baseline forecast.

4/ Calculated by dividing with-project forecast by capacity.

City of Houston Public Facilities/Services Effects Selected Scenarios <u>1/</u> 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Primary School Children						
8asel i ne	178	148	178	178	178	178
With-project	NA	166	195	186	183	188
Effect	N/A	î 8	17	8	5	10
Base Year Capacity 2/	N/A	0	525	525	525	525
Percent Effect 3/	N/A	12.2	9.6	4.5	2.8	5.6
% of Capacity						
Utilization 4/	N/A	0.0	37.1	35.4	34.9	35.8
Secondary School Children						
Baseline	152	126	140	140	140	140
With-project	N/A	142	154	146	44	148
Effect	N/A	16	14	6	4	8
Base Year Capacity 2/	N/A	600	600	600	600	600
Percent Effect 3/	N/A	12.7	10.0	4.3	. 2.9	5.7
\$ of Capacity						
Utilization 4/	N/A	23.7	25.7	24.3	24.0	24.7
Total School Enrollment						
Baseline	330	274	318	318	318	318
∀îth-project	N/A	308	349	332	327	336
Effect	N/A	34	31	14	9	18
Base Year Capacity 2/	N/A	600	1,125	1,125	1,125	1,125
Percent Effect <u>3</u> /	N/A	12.4	9.7	4.4	2.8	5.7
\$ of Capacity						
Utilization $\frac{4}{}$	N/A	51.3	31.0	29.5	29.1	29.9

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- 2/ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers used in the revised, base case, and worker hiring projections were from 1983/1984.
- $\frac{3!}{2}$ Calculated by dividing effect by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.

City of Houston Fiscal Effects <u>1</u>/ 1990 (thousands of constant 1983 dollars)

Sociosconomic Variable	FERC Forecasts	FY84 Car Forecasts	FY85 Car Forecasts	AB1 Forecasts	AB2 Forecasts	AB3 Forecasts
General Fund						
Baseline Revenues	N/A	\$ 493	\$ 402	\$ 402	\$ 402	\$ 402
With-project Revenues	N/A	544	434	420	414	423
Baseline Expenditures	N/A	425	422	422	422	422
With-Project Expendi- tures	N/A	468	457	441	436	445
Net Baseline Fiscal Balance	N/A	-68	-20	-20	-20	-20
Net (w/project) Fiscal Balance	N/A	-76	-23	-21	-22	-22

Note: Sums may not equal totals due to rounding differences.

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

Transportation, and Air and Bus Scenarios <u>1</u> / 1985-2002											
Year	FERC		FERC FY84 Car		FY8	FY85 Car Transportation Scenario					
	Poroc	asts	Porocasts			and Air and Bus Scenario					
	Recella	Féfarte	Sacelina	Fifecte	Basalino		Fffec	-t-c	atytelendford unperconnere		
						FY85 Car	ABI	AB2	AB3		
1985	263	32	246	78	243	22	19	5	14		
1986	274	43	255	107	250	47	19	16	27		
1987	285	241	266	130	258	25	13	8	16		
988	296	337	275	193	266	25	13	8	16		
989	308	378	287	217	274	34	21	16	27		
990	320	475	299	285	282	47	24	16	29		
1991	333	451	311	278	290	56	21	16	27		
992	346	387	323	260	299	25	11	9	15		
993	360	288	336	233	306	18		5	13		
994	375	250	349	222	317	-6	0	0	0		
995	390	227	363	219	327	-3	0	0	0		
996	406	247	378	222	336	0	0	0	0		
1997	422	278	393	235	347	16	8	3	11		
1998	439	306	409	241	357	24	11	5	13		
999	456	314	425	241	368	24	11	5	13		
2000	474	302	442	237	379	33	16	11	18		
2001	493	256	460	220	390	12	5	3	5		
2002	513	212	478	211	402	3	0	0	3		

Community of Trapper Creek Population Projections FERC License Application, FY84 Car Transportation, and FY85 Car Transportation, and Air and Bus Scenarios <u>1</u>/ 1985-2002

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

Community of Trapper Creek
Economic-Demographic Effects
Selected Scenarios ${ m I}^{\prime}$
1990

Sociosconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Varlable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Employment 2/						
Baseline	N/A	N/A	N/A	n/A	N/A	N/A
With-Project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Population						
Baseline	320	299	282	282	282	282
With-Project	795	584	329	306	298	311
Effect	475	285	47	24	16	29
Households <u>3/</u>						
Baseline	107	97	92	92	92	92
With-Project	275	183	107	101	98	103
Effect	168	86	15	9	6	\$

N/A-Not Available or Not Applicable.

- Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FYd4 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.
- $\frac{2}{2}$ Employment represents number of workers by place of residence.
- $\frac{37}{2}$ Households represents the number of occupied housing units.

Community of Trapper Creek Public Facilities/Services Effects Selected Scenarios 1/ 1990

Socioaconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Solid Waste Disposal						
(Cumulative Acres)						
Baseline	N/A	0.4	0.3	0.3	0.3	0.3
With-project	N/A	0.5	0.3	0.3	0.3	0.3
Effect	N/A	0.2	0.0	0.0	0.0	0.0
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3	N/A	50.0	0.0	0.0	0.0	0.0
% of Capacity						
Utilization 4/	N/A	N/A	N/A	N/A	N/A	NA
Police Protection 5/						
Baseline	N/A	0.3	0.3	0.3	0.3	0.3
With-project	N/A	0.6	0.3	0.3	0.3	0.3
Effect	N/A	0.3	0.0	0.0	0.0	0.0
Base Year Staff 2/	N/A	3.0	3.0	3.0	3.0	3.0
Percent Effect <u>3/</u>	N/A	100.0	0.0	0.0	0.0	0.0
\$ Increase Over Base						
Year Staff 4/	N/A	20.0	10.0	10.0	10.0	10.0
Recreation Facilities <u>6</u> /						
Baseline	N/A	N/A	N/A	NZA	N/A	N/A
With-project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A

N/A-Not Available or Not Applicable.

1/ Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecusts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts rater to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- $\frac{2!}{2}$ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers
- used in the revised, base case, and worker hiring projections were from 1983/1984.
- Calculated by dividing effect by baseline forecast.
- Calculated by dividing with-project forecast by capacity.
- 3/ 4/ 5/ Police Protection requirements are in terms of manpower.
- Recreation facility requirements are in terms of acres of neighborhood parks; FY85 facility requirements differ between the FERC License application and subsequent projections due to a change in projection methodology as well as revised population forecasts.

Community of Trapper Creek Public Facilities/Services Effects Selected Scenarios 1/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	A82	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Hospital Requirements						
(Number of Beds)						
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	N/A	N/A	N/A	N/A	NZA
Effect	N/A	N/A	NA	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
\$ of Capacity						
Utilization 4/	N/A	N/A	N/A	N/A	N/A	N/A
Water Service (000 gal.∕da	γ)					
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	NA	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
\$ of Capacity						
Utilization 4/	N/A	N/A	N/A	N/A	N/A	N/A
Sawar Sarvice (000 gal./da	γ)					
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
₩îth-project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
% of Capacity						
Utilization 4/	N/A	N/A	N/A	N/A	N/A	N/A

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction

worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- $\frac{21}{2}$ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers
- used in the revised, base case, and worker hiring projections were from 1983/1984.
- $\frac{3}{2}$ Calculated by dividing effect by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.

Community of Trapper Creek Public Facilities/Services Effects Selected Scenarios 1/ 1990

Sccloscononic	FERC	FY84 Car	FY85 Car	A81	A82	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Primary School Children						
Baseline	40	37	38	38	38	38
With-project	115	78	45	41	40	42
Effect	75	41	7	3	2	4
Base Year Capacity 2/	30	50	50	50	50	50
Percent Effect 3/	187.5	110.8	18.4	7.9	5.3	10.5
Utilization 4/	383.3	156.0	90.0	82.0	80.0	84.0
Secondary School Children						
Baseline	34	32	30	30	30	30
With-project	92	67	36	33	32	33
Effect	58	35	6	3	2	3
Base Year Capacity 2/	N/A	0	0	0	0	0
Percent Effect <u>3/</u> \$ of Capacity	170.6	109.4	20.0	10.0	6.7	10.0
Utilization 4/	N/A	0.0	0.0	0.0	0.0	0.0
Total School Enrollment						
Baseline	74	69	68	68	68	68
With-project	207	145	81	74	72	75
Effect	133	76	13	6	4	7
Base Year Capacity 2/	N/A	50	50	50	50	50
Percent Effect <u>3</u> \$ of Capacity	179.7	110.1	19.1	8.8	5.9	10.3
Utilization 4/	N/A	290.0	162.0	148.0	144.0	150.0

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage ~ 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage ~ 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- 2/ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers used in the revised, base case, and worker hiring projections were from 1983/1984.
- $\frac{3}{2}$ Calculated by dividing effect by baseline forecast.
- $\frac{4}{2}$ Calculated by dividing with-project forecast by capacity.

Community of Trapper Creek Fiscal Effects <u>1</u>/ 1990 (thousands of constant 1983 dollars)

Sectoeconomic Variable	FERC Forecasts	FY84 Car Forecasts	FY85 Car Forecasts	ABI Forecasts	AB2 Forecasts	AB3 Forecasts
General Fund						
Baseline Revenues	N/A	N/A	N/A	N/A	N/A	N/A
With-project Revenues	N/A	N/A	N/A	N/A	N/A	N/A
Baseline Expanditures With-Project Excandi-	N⁄A	N/A	N/A	N/A	N/A	N/A
turøs	N/A	N/A	N/A	N/A	N/A	N/A
Net Baseline Fiscal						
Balance	N/A	N/A	N/A	N/A	NA	N/ A
Net (w/project) Fiscal Balan ce	N/A	N/A	NZA	N/A	N/A	N/A

Note: Sums may not equal totals due to rounding differences.

N/A-Not Available or Not Applicable.

L' Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

Community of Talkeetna Population Projections FERC License Application, FY84 Car Transportation, and FY85 Car Transportation, and Air and Bus Scenarios 1/ 1985-2002

Year	FERC		FY84	Car	FY85 Car Transportation Scenario						
	Forec	asts	Forec	asts	and Air and Bus Scenario						
	Automotive Matter and a construction of the state of the second state of the second state of the				Forecasts						
	Baseline	Effects	Baseline	Effects	Baseline		Effec	ts.	17. up / June 19. up / June 19. up / June 19. up / June 19. up		
CSC/CLOSING MILLION CO		Construction of the constr	alian di Mangalah di Mangalah di Mangalah di Kabupatén di Kabupatén di Kabupatén di Kabupatén di Kabupatén di K	9,2009679,00020,0009000000000000000000000000000		FY85 Car	ABI	A82	AB3		
1985	780	25	358	5 2	288	22	6 8	5			
1986	820	33	376	70	300	40	19	14	24		
1987	862	174	395	90	312	22	13	5 9	19		
1988	906	237	415	132	324	22	13		19		
1989	952	267	435	152	337	84	76	71	84		
1990	1,000	335	457	195	350	99	81	75	86		
1991	1,051	323	480	190	365	109	85	77	90		
1992	1,104	294	504	180	379	78	69	66	72		
1993	1,160	250	529	162	394	13	11	5	13		
1994	1,219	233	556	155	410	-5	0	0	0		
1995	1,281	222	584	148	426	-3	0	0	0		
1996	1,347	229	613	155	443	0	0	0	3		
1997	1,415	240	643	162	461	64	57	51	59		
1998	1,487	253	676	165	480	87	76	71	79		
1999	1,563	257	709	164	499	72	62	56	64		
2000	!,642	251	745	164	519	29	13	11	18		
2001	1,726	230	782	151	540	8	5	5	5		
2002	1,814	209	821	147	561	3	3	0	3		

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77\$ construction worker hiring in Anchorage - 23\$ construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/50\$ construction worker hiring in Anchorage - 50\$ construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100\$ construction worker hiring Anchorage - 0\$ construction worker hiring in Fairbanks.

Source: Frank Orth & Associates, Inc., 1985.

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Community of Talkeetna Economic-Demographic Effects Selected Scenarios 1/ 1990

Socioeconomic Variable	FERC Forecasts	FY84 Car Forecasts	FY85 Car Forecasts	AB1 Forecasts	AB2 Forecasts	AB3 Forecasts
Employment 2/	BEADDURINEY BUYERBO FRANKING WALANG DISCON COMMERCING WAT	kritikongen in zulan bilan gurun nyegu i Kannin min si katalogi vi Kindapi (Kindapi Kindapi Kindapi (Kindapi Ki				
Baseline	NA	N/A	NA	N/A	N/A	N/A
With-Project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Population						
Baseline	1,000	457	350	350	350	350
With-Project	1,335	652	449	431	425	436
Effect	335	195	99	81	75	86
Households 3/						
Baseline	334	149	135	1 35	135	1 35
With-Project	451	208	184	- 178	176	180
Effect	117	59	49	43	4 į	45

N/A-Not Available or Not Applicable.

- Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage = 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage = 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage = 0% construction worker hiring in Fairbanks.
- $\frac{2'}{2}$ Employment represents number of workers by place of residence.
- $\frac{3!}{2}$ Households represents the number of occupied housing units.

Community of Talkeetna Public Facilities/Services Effects Selected Scenarios 1/ 1990

Sectosconente	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Solid Waste Disposal						
(Cumulative Acres)						
Baseline	N/A	0.5	0.4	0.4	0.4	0.4
With-project	N/A	0,6	0.5	0.4	0.4	0.4
Effect	N/A	0.1	0.1	0.0	0.0	0.0
Base Year Capacity $\frac{2}{2}$	N/A	5.0	5.0	5.0	5.0	5.0
Percent Effect 3/	N/A	10.0	25.0	0.0	0.0	0.0
% of Capacity						
Utilization $\frac{4}{2}$	N/A	12.0	10.0	8.0	8.0	8.0
Police Protection 5/						
Basel î ne	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	. N/A	N/A
Base Year Staff 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
\$ Increase Over Base						
Year Staff 4/	N/A	N/A	N/A	N/A	N/A	N/A
Recreation Facilities <u>6</u> /						
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	NZA	N/A	N/A	N/A	N/A	N/A

N/A-Not Available or Not Applicable.

 $\frac{17}{12}$ Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77\$ construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- \mathbb{R} Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers
- used in the revised, base case, and worker hiring projections were from 1983/1984.
- Calculated by dividing effect by baseline forecast.
- 3/ 4/ 5/ Calculated by dividing with-project forecast by capacity.
- Police Protection requirements are in terms of manpower.
- 6/ Recreation facility requirements are in terms of acres of neighborhood parks; FY85 facility requirements differ between the FERC License application and subsequent projections due to a change in projection methodology as well as revised population forecasts.

Community of Talkestna Public Facilities/Services Effects Selected Scenarios 1/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Hospital Reguirements						
(Number of Beds)						
Base i î ne	N/A	N/A	N/A	N/A	NZA	N/A
With-project	N/A	NA	N/A	N/A	NVA	N/A
Effect	MA	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
\$ of Capacity						
Utilization 4/	N/A	N/A	N/A	N/A	N/A	N/A
Water Service (000 gal./da	η γ)					
Baseline	N/A	N/A	N/A	∿/ A	N/A	N/A
With-project	N/A	N/A	N/A	N/A	N/A	NA
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
\$ of Capacity						
Utilization 4/	N/A	N/A	N/A	N/A	N/A	N/A
Sewer Service (000 gal./da	(Y)					
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
\$ of Capacity						
Utilization 4/	N/A	N/A	N/A	N/A	N/A	NZA

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77\$ construction worker hiring in Anchorage - 23\$ construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50\$ construction worker hiring in Anchorage - 50\$ construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100\$ construction worker hiring Anchorage - 0\$ construction worker hiring in Fairbanks.

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- 2/ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers used in the revised, base case, and worker hiring projections were from 1983/1984.
- $\frac{3}{2}$ Calculated by dividing effect by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.

Community of Talkeetna Public Facilities/Services Effects Selected Scenarios <u>1/</u> 1990

Sociosconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Varîable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Primary School Children						
Baseline	126	57	48	48	48	48
With-project	164	86	61	58	57	58
Effect	38	29	13	10	9	10
Base Year Capacity 2/	120	100	100	100	100	100
Percent Effect <u>3</u> \$ of Capacity	30.2	50.9	27.1	20.8	13.8	20.8
Utilization 4/	136.7	86.0	61.0	58.0	57.0	58.0
Secondary School Children						
Baseline	107	49	37	37	37	37
With-project	138	74	47	45	44	45
Effect	31	25	10	8	7	8
Base Year Capacity 2/	N/A	0	0	0	0	0
Percent Effect 3	29.0	51.0	27.0	21.6	18.9	21.6
\$ of Capacity						
Utilization 4/	N/A	0.0	0.0	0.0	0.0	0.0
Total School Enrollment						
Baseline	233	106	85	85	85	85
With-project	302	160	108	103	101	103
Effoct	69	54	23	18	16	18
Base Year Capacity 2/	N/A	100	100	100	100	100
Percent Effect 3/	29.6	50.9	27.1	21.2	18.8	21.2
\$ of Capacity						
Utilization 4/	N/A	160.0	108.0	103.0	101.0	103.0

N/A-Not Available or Not Applicable.

1/ Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

 $\frac{2'}{2}$ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers

used in the revised, base case, and worker hiring projections were from 1983/1984. $\frac{3}{}$ Calculated by dividing effect by baseline forecast.

4/ Calculated by dividing with-project forecast by capacity.

Commun î t	y of Talk	eetna	1/							
Fisc	al Effect	s 2/								
1990										
(thousands of	constant	1983	do i	lars)						

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
AGUIDIE	r ur acasts	FORECASTS	FORECASIS	FOIGCOSTS	FUIGUASIS	roraçasis
General Fund						
Baseline Revenues	N/A	\$ 1,143	\$ 876	\$ 876	\$ 876	\$ 876
With-project Revenues	N/A	\$ 1,632	1,124	1,079	1,063	1,091
Baseline Expenditures	N/A	N/A	N/A	N/A	N/A	N/A
With-Project Expendi-						
turos	N/A	N/A	N/A	N/A	N/A	N/A
Net Baseling Fiscal						
Balance	N/A	N/A	N/A	N/A	N/A	N/A
Net (w/project)						
Fiscal Balance	N/A	N/A	N/A	N/A	NA	N/A

Note: Sums may not equal totals due to rounding differences.

N/A-Not Available or Not Applicable.

- Revenues shown for Talkeetna represent revenued collected by the Mat-Su Borough on behalf of Talkeetna. Talkeetna does not have any current fiscal responsibility to provide public facilities and services.
- Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage ~ 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage ~ 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

Source: Frank Orth & Associates, Inc., 1985.

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	ři	ERC LICON	se Applica	tion, FY8	4 Car Trans	portation, a	nd FY85	Car	
		ĩ	ransportat	lon, and 19	Alr and Bus 35-2002	Scenarios 1	<i>6</i> ′		
* 427 - 1012 - 1014 - 1014 - 1014 - 1014 - 1014 - 1014 - 1014 - 1014 - 1014 - 1014 - 1014 - 1014 - 1014 - 1014	Na Tuddoon an	Terming Low states () and Some of the	and a second second second second second	uter the state of the state of the state of the state of the state of the state of the state of the state of the		a fa a far da far far far se a far se a far se a far se a far se a far se a far se a far se a far se a far se a		an Statut da angerana	town and show of
íoar				FY85 Car Transportation Scenario					
	Forec	asts	Forec	Forecasts and Air and Bus Scen					
						Fore	casts		
	Baseline	Effocts	Baseline	Effects	Baseline	n den statelingen in de statelingen finderen de statelingen de statelingen de statelingen de statelingen de st	Effe	cts	ayang tang dinang tinang tinang tinang tang tang tang dinang tang di kana kana kana kana kana kana kana kan
Chimer weeks with 100						FY85 Car	AB 1	AB2	AB3
985	28,798	82	30, 370	-48	27, 574	-59	-7	166	-791
986	31,807	107	31,536	-79	29,855	-50	77	378	-699
987	31,392	-89	32,654	-178	29,644	7	158	351	25
988	29,485	-120	33,478	-240	29,682	13	167	338.	25
989	29,568	-136	34,631	-268	29,574	19	229	508	-132
990	29,628	-173	36,266	-196	29,824	-83	153	320	-90
991	29, 892	-171	37, 149	-163	30, 348	-481	-234	-648	-16
992	30,312	-213	38,295	-160	30,648	-604	-616	-1,471	234
993	30, 887	-280	39,803	-37	30,606	-5	-90	-272	152
994	31,366	-306	41,358	53	31,004	-556	-691	-1,076	361
995	31,886	-323	42,177	93	30,735	-155	86	-11	191
1996	32,496	-312	43,198	59	31,459	-578	-548	-1,437	122
1997	33, 145	-295	44, 320	28	31,807	27	176	356	41
998	33,844	-276	45,391	-28	32,264	36	198	427	56
999	34, 555	-271	46, 483	-31	32, 372	-64	90	146	112
2000	35,266	-273	47,681	-6	32,673	45	243	456	109
2001	36,300	-309	49,097	76	32,969	-397	-318	-991	249
2002	37,041	-341	50,241	181	33, 101	88	148	196	249

Municipality of Fairbanks Population Projections

 $\frac{1}{2}$ Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

Source: Frank Orth & Associates, Inc., 1985.

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Municipality of Fairbanks
Economic-Demographic Effects
Selected Scenarios 1/
1990

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Socioeconomic	FERC	FY84 Car	FY85 Car	A8]	A82	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Employment $\frac{2}{2}$						
Baseline	N/A	N/A	15,499	15,499	15,499	15,499
With-Project	N/A	N/A	15,702	15,703	15,879	15,532
Effect	705	800	203	204	380	33
Population						
Baseline	29,628	36,266	29, 824	29,824	29,824	29,824
With-Project	29, 455	36,070	29,741	29,977	30, 144	29,734
Effect	-173	-196	-83	153	320	-90
Households $\frac{3/}{2}$						
Baseline	11,104	13,537	11,303	11,303	11,303	11,303
With-Project	11,048	13,505	11,273	11,347	11,404	11,249
Effect	-56	-32	~30	44	101	-54

N/A-Not Available or Not Applicable.

- Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.
- $\frac{2'}{2}$ Employment represents number of workers by place of residence.
- $\frac{37}{3}$ Households represents the number of occupied housing units.

Municipality of Fairbanks Public Facilities/Services Effects Selected Scenarios 1/ 1990

Sectoreconomic	FERC	FY84 Car	FY85 Car	ABI	A82	A83
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Solld Waste Disposal						
(Cumulative Acres)						
Baseline	N/A	N/A	N/A	N/A	NA	N/A
With-project	NA	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Parcant Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
\$ of Capacity						
Utilization 4/	N/A	N/A	N/A	N/A	N/A	N/A
Police Protection 5/						
Baseline	N/A	N/A	44.7	44.7	44.7	44.7
With-project	N/A	N/A	44.7	44.9	45.0	44 .7
Effect	NA	N/A	0.0	0.2	0.3	0.0
Base Year Staff 2/	N/A	N/A	46.0	46.0	46.0	46.0
Percent Effect $\frac{3}{2}$	N/A	N/A	0.0	0.4	0.7	0.0
🖇 Increase Over Base						
Year Staft 4/	N/A	N/A	97.2	97.6	97.8	97.2
Recreation Facilities <u>6</u> /						
Baseline	N/A	N/A	74.6	74.6	74.6	74.6
With-project	N/A	N/A	74.4	75.0	75.4	74.4
Effect	N/A	N/A	-0.2	0.5	0.8	-0.2

N/A-Not Available or Not Applicable.

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m I\!I}$ Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

- Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.
- $\frac{2}{2}$ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers
- used in the revised, base case, and worker hiring projections were from 1.83/1984.
- <u>3/</u> 4/ Calculated by dividing effect by baseline forecast.
- Calculated by dividing with-project forecast by capacity.
- 5/ Police Protection requirements are in terms of manpower.
- 6/ Recreation facility requirements are in terms of acres of neighborhood parks; FY85 facility requirements differ between the FERC License application and subsequent projections due to a change in projection methodology as well as revised population forecasts.

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Municipality of Fairbanks Public Facilities/Services Effects Selected Scenarios 1/ 1990

Socioeconomic	FERC	FT34 Car	FY85 Car	ABI	AB2	A83
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Macaldal Roguleonade						
(Number of Reds)						
Baseline	N/A	N/A	118.4	118.4	118.4	118.4
With-project	N/A	N/A	121.1	121.2	122.7	119.8
Effect	NZA	N/A	2.7	2.8	4.3	1.4
Base Year Capacity 2/	N/A	NA	147.0	147.0	147.0	147.0
Percent Effect 3/	NA	N/A	2.3	2.4	3.7	1.2
\$ of Capacity						
Utilization 4/	N/A	N/A	82.4	82.4	83.5	81.5
Water Service (000 gal./da	γ)					
Baseline	N/A	N/A	2,624.5	2,624.5	2,624.5	2,624.5
With-project	N/A	N/A	2,617.2	2,638.0	2,652.7	2,616.6
Effect	N/A	N/A	-7.3	13.5	28.2	-7.9
Base Year Capacity 2/	N/A	N/A	4,000.0	4,000.0	4,000.0	4,000.0
Percent Effect 3/	N/A	N/A	-0.3	0.5	1.1	-0.3
\$ of Capacity						
Utilization $\frac{4}{2}$	N/A	N/A	65.4	66.0	66.3	65.4
Sewer Service (000 gal./da	y)					
Baseline	N/A	N/A	3,876.5	3,876.5	3,876.5	3,876.5
With-project	N/A	N/A	3,923.2	3,929.7	4,000.3	3,870.2
Effect	N/A	N/A	46.7	53.2	123.8	-6.3
Base Year Capacity <u>2/</u>	N/A	N/A	6,500.0	6,500.0	6,500.0	6,500.0
Percent Effect <u>3/</u>	N/A	N/A	1.2	1.4	3.2	-0.2
% of Capacity						
Utilization $\frac{4}{2}$	N/A	N/A	60.4	60.4	61.5	59.5

N/A-Not Available or Not Applicable.

 $\underline{I'}$ Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY64 Car Transportation Scenario are defined by FY84 Car Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

- Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where AB) forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.
- 2/ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers used in the revised, base case, and worker hiring projections were from 1983/1984.
- 3/ Calculated by dividing effect by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.

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Municipality of Fairbanks Public Facilities/Services Effects Selected Scenarios <u>1</u>/ 1990

Soc i oeconom i c	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Primary School Children						
Baseline	N/A	N/A	N/A	N/A	N/A	NA
With-project	N/A	N/A	N/A	N/A	NA	NA
Effect	N/A	N/A	N/A	NA	N/A	N/A
Base Year Capacity $\frac{2}{2}$	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect <u>3</u> 5 of Capacity	N/A	N/A	N/A	N/A	N/A	N/A
Utilization 4/	N/A	N/A	N/A	N/A	N/A	N/A
Secondary School Children						
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	NZA	N/A	N/A	N/A	NA
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
\$ of Capacity						
Utilization $\frac{4}{2}$	N/A	N/A	N/A	N/A	N/A	N/A
Total School Enrollment						
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
\$ of Capacity						
Utilization 4/	N/A	N/A	N/A	N/A	N/A	N/A

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts rater to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts rater to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts rater to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- 2/ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers used in the revised, base case, and worker hiring projections were from 1983/1984.
- $\frac{3}{2}$ Calculated by dividing effect by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.

Municipality of Fairbanks Fiscal Effects <u>1</u>/ 1990 (thousands of constant 1983 dollars)

Socioeconomic Variabio	F For	ERC GCasts	FY84 Fore	l Car ocasts	FY8 For	15 Car Tocasts	ABI Forecas	<u>†5</u>	AB2 Forecasts	A83 Forecasts
General Fund										
Baseline Revenues	\$	N/A	\$	N/A	\$	28,094	\$ 28,0	94	\$28,094	\$ 28,094
With-project Revenues		N/A		N/A		28,016	28,2	39	28, 395	28,009
Baseline Expenditures With-Project Expendia		22,505	2	6,516		32,738	32,7	38	32,738	32,738
tures Net Baseline Fiscal		22,702	3	36,433		32,649	32,9	07	32,641	32,641
` Balance Net (w/project)		N/A		N/A		-4,644	-4,6	44	-4,644	-4,644
Fiscal Balance		N/A		N/A		-4,633	-4,6	68	-4,696	~4,632

Note: Sums may not equal totals due to rounding differences.

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

Table A-9.1

Community of Cantwell Population Projections FERC License Application, FY84 Car Transportation, and FY85 Car Transportation, and Air and Bus Scenarios <u>1</u>/ 1985-2002

Year	FER	c	FY84	Car	FYE)5 Car Transpo	ortation	Scenar	10		
	Forec	asts	Forec	asts	ts and Air and Bus Scenario						
					Forecasts						
	Baseline	Effects	Baseline	Effects	Baseline		Effec	ts.			
	and a substant of the substant				anner other states and a state of the states	FY85 Car	ABI	AB2	AB3		
1985	194	230	201	368	197	338	322	322	322		
1986	198	230	205	488	201	396	379	379	379		
1987	202	165	209	372	205	54	50	50	50		
1988	206	178	213	535	209	54	50	50	50		
1989	210	184	217	618	213	119	113	115	113		
1990	214	198	222	797	217	124	115	115	115		
1991	219	197	226	780	222	137	116	116	116		
1992	223	194	231	733	226	120	113	113	111		
1993	228	190	235	666	231	51	53	53	50		
1994	232	130	240	640	235	0	0	0	0		
1995	237	129	245	627	240	0	0	0	0		
1996	241	129	250	641	245	0	0	0	0		
1997	246	129	255	671	250	7	0	. 0	0		
1998	251	130	260	692	255	7	0	0	0		
1999	256	130	265	701	260	10	0	0	0		
2000	261	130	270	692	265	13	0	0	0		
2001	267	128	276	649	270	3	0	0	0		
2002	272	125	281	619	276	0	0	0	0		

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

Source: Frank Orth & Associates, Inc., 1985.

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Community of Cantwell					
Economic-Demographic Effects					
Selected Scenerios L'					
1990					

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Variable	FERC Forecasts	FY84 Car Forecasts	FY85 Car Forecasts	AB1 Forecasts	A82 Forecasts	ABJ Forecasts
Employment 2/					Gergendal (Mellow), Jedniskov (Kraftikov), Sakatisti	nernande het Rocks namme die werden der Angelen state. D
Baseline	N/A	N/A	15,499	15,499	15,499	15,499
With-Froject	N/A	N/A	15,702	15,703	15,879	15,532
Effect	85	253	203	204	380	33
Population						
Baseline	214	222	217	217	217	217
With-Project	1,214	1,019	341	332	332	332
Effect	1,000	797	124	115	115	115
Households $\frac{3}{2}$						
Baseline	78	88	78	78	78	78
With-Project	411	329	132	1 30	130	130
Effect	333	241	54	52	52	52

N/A-Not Available or Not Applicable.

- Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.
- $\frac{2\ell}{2}$ Employment represents number of workers by place of residence.
- $\frac{37}{2}$ Households represents the number of occupied housing units.

Table A-9.3

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	Community of Cantuell
Public	Facilities/Services Effects
	Selected Scenarios $\underline{1}'$
	1990

Socieeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Verlable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Solid Waste Disposal						
(Cumulative Acres)						
Baseline	N/A	0.3	0.3	0.3	0.3	0.3
With-project	N/A	0.7	0.4	0.5	0.5	0.5
Effect	NA	0.4	0.1	0.2	0.2	0.2
Base Year Capacity 2/	N/A	2.0	2.0	2.0	2.0	2.0
Percent Effect 3/	N/A	133.3	33.3	66.7	66.7	66.7
\$ of Capacity						
Utilization 4/	N/A	35.0	20.0	25.0	25.0	25.0
Police Protection $\frac{5}{}$						
Baseline	1.0	0.2	0.2	0.2	0.2	0.2
With-project	6.0	1.0	0.3	0.3	0.2	0.3
Effect	5.0	0.8	0.1	0.1	0.1	0.1
Base Year Staff 2/	1.0	1.0	1.0	1.0	1.0	1.0
Fercent Effect $\frac{3}{2}$	500.0	400.0	50.0	50.0	50.0	50.0
\$ Increase Over Base						
Year Staff 4/	600.0	100.0	30.0	30.0	30.0	30.0
Recreation Facilities <u>6</u> /						
Baseline	N/A	0.2	0.3	0.3	0.3	0.3
With-project	N/A	1.0	0.4	0.5	0.3	0.4
Effect	N/A	0.8	0.1	0.2	0.0	0.1

N/A-Not Available or Not Applicable.

1/ Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where AB1 forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- $\frac{2}{2}$ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers
- used in the revised, base case, and worker hiring projections were from 1983/1984.
- <u>3/</u> 4/ Calculated by dividing effect by baseline forecast.
- Calculated by dividing with-project forecast by capacity.
- 5/ Police Protection requirements are in terms of manpower.
- 6/ Recreation facility requirements are in terms of acres of neighborhood parks; FY85 facility requirements differ between the FERC License application and subsequent projections due to a change in projection methodology as well as revised population forecasts.

Table A-9.4

Community of Cantwell Public Facilities/Services Effects Selected Scenarios 1/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	A82	A83
Variabio	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Hospital Requirements						
(Number of Beds)						
Basel I ne	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	NA	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	· N/A	N/A	N/A
S of Capacity						
Utilization 4/	N/A	N/A	NA	N/A	N/A	N/A
Water Service (000 gal./da	sy)					
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	NA	N/A	N/A	N/A	N/A	NA
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
\$ of Capacity						
Utilization 4/	N/A	N/A	N/A	N/A	N/A	NZA
Sewer Service (000 gal./da	3y)					
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	NZA
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N'A
\$ of Capacity	-					
Utilization 4/	N/A	N/A	N/A	N/A	N/A	N/A

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- $\frac{2!}{2}$ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers
- used in the revised, base case, and worker hiring projections were from 1983/1984.
- $\frac{3}{2}$ Calculated by dividing effect by baseline forecast.
- 4/ Calculated by dividing with project forecast by capacity.
Table A-9.5

Community of Cantwell Public Facilities/Services Effects Selected Scenarios <u>1/</u> 1990

Soc Losconom I c	FERC	FY84 Car	FY85 Car	ABI	A82	A83
Veriable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Primary School Children						
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	NA	N/A	N/A	N/A	NA
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
\$ of Capacity						
Utilization 4/	N/A	N/A	N/A	N/A	N/A	N/A
Secondary School Children						
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect $\underline{3'}$	N/A	N/A	N/A	N/A	N/A	N/A
\$ of Capacity						
Utilization 4/	N/A	N/A	N/A	N/A	N/A	N/A
Total School Enrollment 5/						
Baseline	39	40	39	39	39	39
With-project	189	257	46	46	46	46
Effect	150	217	7	7	7	7
Base Year Capacity 2/	60	60	60	60	60	60
Percent Effect 3/	384.6	542.5	17.9	17.9	17.9	17.9
\$ of Capacity						
Utilization $\frac{4}{2}$	315.0	428.3	76.7	76.7	76.7	76.7

N/A-Not Available or Not Applicable.

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Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY86 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- 2/ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers used in the revised, base case, and worker hiring projections were from 1983/1984.
- 3/ Calculated by dividing effect by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.
- 5/ Cantwell has only one school that contains grades K-12.

Community of Cantwell Fiscal Effects <u>1</u>/ 1990 (thousands of constant 1983 dollars)

Socioeconomic	FERC	FY84 Car	FY85 (Car	ABI		AB	2	AB:	3
Variable	Forecasts	Forecasts	Forec	ests	Foreca	<u>sts</u>	Foreca	<u>15†5</u>	Forec	asts
General Fund										
Baseline Revenues	N/A	N/A	\$	31	\$	31	\$	31	\$	31
With-project Revenues	N/A	N/A		48		47		47		47
Baseline Expenditures	N/A	N/A		25		25		25		25
tures	N/A	N/A		39		39		39		39
Nat Baseline Fiscal Balance	N/A	N/A		6		б		б		6
Not (w/project) Fiscal Balance	N/A	N/A		9		8		8		8

Note: Sums may not equal totals due to rounding differences.

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

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Community of Healy Population Projections FERC License Application, FY84 Car Transportation, and FY85 Car Transportation, and Air and Bus Scenarios 1/ 1985-2002

Үөаг	FERC Forecasts		FY84 Forec	Car :asts	FY85 Car Transportation Scenario and Air and Bus Scenario Forecasts						
	Baseline	Effects	Baseline	Effects	Baseline	ann ga an tha an tha tha tha tha tha sha sha sha sha sha sha sha sha sha s	Effec	T's	1		
and the state of the state of the state of the state of the state of the state of the state of the state of the						FY85 Car	ABI	AB2	AB3		
1985	N/A	N/A	378	84	639	16	3	3	3		
1986	N/A	N/A	387	112	671	29	3	3	3		
1987	N/A	N/A	397	137	698	13	3	5	3		
1988	NA	NA	407	198	719	10	3	5	3		
1989	N/A	N/A	417	229	740	16	3	5	3		
1990	N/A	N/A	427	289	763	23	3	5	3		
1991	N/A	N/A	438	286	785	32	3	3	3		
1992	N/A	NA	449	268	809	16	3	8	3		
1993	N/A	N/A	460	242	833	3	3	8	3		
1994	N/A	N/A	471	235	858	0	0	0	0		
1995	N/A	N/A	483	228	884	3	3	3	3		
1996	N/A	N/A	495	235	911	3	3	3	3		
1997	N/A	N/A	508	242	938	13	3	5	3		
1998	N/A	N/A	520	252	966	16	3	5	3		
1999	N/A	NA	533	252	995	13	3	3	3		
2000	N/A	N/A	547	252	1,025	23	3	5	3		
2001	N/A	N/A	560	237	1,056	10	3	3	3		
2002	N/A	N/A	574	225	1,087	0	0	0	0		

N/A-Not Available or Not Applicable.

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Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where AB! forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage = 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/50% construction worker hiring in Anchorage = 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage = 0% construction worker hiring in Fairbanks.

Community of Healy Economic-Demographic Effects Selected Scenarios 1/ 1990

Sacioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Employment 2/						
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-Project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Perulation						
ropulation			50 A 70		40 - 20	03 / C2
Baseline	N/A	427	763	763	/63	201
With-Project	N/A	716	786	766	768	766
Effect	N⁄A	289	23	3	5	3
Households $\frac{3}{2}$						
Baseline	N/A	141	246	246	245	246
With-Project	N/A	227	253	247	248	247
Effect	N⁄A	86	7	i	2	ł

N/A-Not Available or Not Applicable.

- Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.
- $\frac{2\ell}{2}$ Employment represents number of workers by place of residence.

Community of Healy Public Facilities/Services Effects Selected Scenarios 1/ 1990

Soclosconomic	FERC	FY84 Car	FY85 Car	ABi	AB2	AB3
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Solid Waste Disposal						
(Cumulative Acres)						
Baseline	N/A	N/A	0.8	0.8	0.8	0.8
With-project	N/A	N/A	0.8	0.8	0.8	0.8
Effect	N/A	N/A	0.0	0.0	0.0	0.0
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	0.0	0.0	0.0	0.0
\$ of Capacity						
Utilization 4/	NA	N/A	N/A	N/A	N/A	N/A
Police Protection 5/						
Baseline	N/A	N/A	0.8	0.8	0.8	0.8
With-project	NA	N/A	0.8	0.8	0.8	0.8
Effect	N/A	N/A	0.0	0,0	0.0	0.0
Base Year Staff 2/	N/A	N/A	1.0	1.0	1.0	1.0
Percent Effect 3/	N/A	N/A	0.0	0.0	0.0	0.0
\$ Increase Over Base						
Year Staff 4/	N/A	N/A	80.0	80.0	80.0	80.0
Recreation Facilities <u>6</u> /						
Baseline	NA	N/A	N/A	N/A	N/A	N/A
With-project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A

N/A-Not Available or Not Applicable.

L/ Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- $\frac{2!}{2}$ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers used in the revised, base case, and worker hiring projections were from 1983/1984.
- 3/ 4/ Calculated by dividing effect by baseline forecast.
- Calculated by dividing with-project forecast by capacity.
- Police Protection requirements are in terms of manpower.
- Recreation facility requirements are in terms of acres of neighborhood parks; FY85 facility requirements differ between the FERC License application and subsequent projections due to a change in projection methodology as well as revised population forecasts.

Community of Healy Public Facilities/Services Effects Selected Scenarios <u>1</u>/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Varîable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Hospital Requirements						
(Number of Beds)						
Baseline	N/A	N/A	N/A	NZA	N/A	N/A
With-project	NA	N/A	NA	N/A	N/A	NA
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	NA
% of Capacity						
Utilization 4/	N/A	N/A	N/A	N/A	N/A	N/A
Water Service (000 gal./d	ay)					
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	NA	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
\$ of Capacity						
Utilization $\frac{4}{2}$	N/A	N/A	N/A	N/A	N/A	N/A
Sewer Service (000 gal./da	зу)					
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Base Year Capacity 🛂	N/A	N/A	N/A	N/A	N/A	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	N/A	N/A
\$ of Capacity				-		
Utilization 4/	N/A	N/A	N/A	N/A	N/A	N/A

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where AB) forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

 $\frac{2}{2}$ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers

used in the revised, base case, and worker hiring projections were from 1983/1984.

- $\frac{37}{2}$ Calculated by dividing e.fact by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.

Community of Healy Public Facilities/Services Effects Selected Scenarios 1/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Varlable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Primary School Children						
Baseline	N/A	N/A	82	82	82	82
With-project	NA	N/A	82	82	83	82
Effect	N/A	N/A	0	0		0
Base Year Capacity 2/	N/A	N/A	100	100	100	100
Percent Effect 3/	N/A	N/A	0.0	0.0	1.2	0.0
\$ of Capacity						
Utilization 4/	N/A	N/A	82.0	82.0	83.0	82.0
Secondary School Children						
Baseline	N/A	N/A	70	70	70	70
With-project	N/A	N/A	70	70	70	70
Effect	N/A	N/A	0	0	0	0
Base Year Capacity 2/	N/A	N/A	100	100	. 100	100
Percent Effect 3/	N/A	N/A	0.0	0.0	0.0	0.0
\$ of Capacity			•••	•••	•••	
Utilization 4/	NA	N/A	70.0	70.0	70.0	70.0
Total School Enrollment						
Baseline	N/A	N/A	152	152	152	152
With-project	N/A	N/A	152	152	153	152
Effect	N/A	N/A	0	0	1	0
Base Year Capacity 2/	N/A	N/A	200	200	200	200
Percent Effect 3/	N/A	N/A	0.0	0.0	0.7	0.0
\$ of Capacity				-		
Utilization 4/	N/A	N/A	76.0	76.0	76.5	76.0

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- 2/ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers used in the revised, base case, and worker hiring projections were from 1983/1984.
- $\frac{37}{2}$ Calculated by dividing effect by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.

Community of Healy Fiscal Effects <u>1</u>/ 1990

Socioeconomic	FERC	FYB4 Car	FY85 Car	ABI	AB2	A83
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
General Fund						
Baseline Revenues	N/A	N/A	N/A	N/A	N/A	N/A
With-project Revenues	N/A	N/A	N/A	NA	N/A	N/A
Baseline Expenditures	N/A	N/A	N/A	N/A	N/A	N/A
With-Project Expendi-						
tures	N/A	N/A	N/A	N/A	N/A	N/A
Net Baseline Fiscal						
Balance	N/A	N/A	N/A	N/A	N/A	N/A
Net (w/project)						
Fiscal Balance	N/A	N/A	N/A	N/A	N/A	NA

(thousands of constant 1983 dollars)

Note: Sums may not equal totals due to rounding differences.

N/A-Not Available or Not Applicable.

L' Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 30% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

Table A-II.I

íoar	FER Forec	C asts	FY84 Forec	Car :osts	FYE	15 Car Transp and Air and	ortation Bus Sce	Scenar narlo	10			
			/		Forecasts							
	Baseline	Effects	Baseline	Effects	Baseline		Effec	†s	January Hornito Jonation			
action good managed	and a second sec	an all an other states of the	@\$\$#\$\$ \$\$ \$\$ \$\$ \$	and the second second second second second second second second second second second second second second secon	na alla anta da complete y adat da atra da	FY85 Car	AB1	A82	AB3			
1985	N/A	N/A	532	38	573	46	3	3	1			
986	N/A	N/A	545	56	598	95	3	8	1			
987	N/A	NA	559	67	625	40	5	99	Ĩ			
988	N/A	N/A	573	95	652	37	5	11	7			
989	NA	N/A	587	109	681	55	8	13	1			
990	N/A	N/A	602	140	711	78	8	9.9	7			
991	N/A	N/A	617	136	742	109	3	3	3			
992	N/A	N/A	632	129	775	57	5 5	19	1			
993	N/A	N/A	648	116	809	16	13	24	3			
994	N/A	N/A	664	112	844	3	0	0	C			
1995	N/A	N/A	681	112	882	7	0	3	C			
996	N/A	N/A	698	112	920	1	0	0	C			
997	NA	NVA	716	116	961	40	5	8	2			
998	N/A	N/A	733	119	1,003	55	5		Ę			
999	N/A	N/A	752	122	1,047	49	5	8	5			
2000	N/A	N/A	771	116	1,098	68	5	11	5			
2001	N/A	N/A	790	112	1,142	21	3	3	5			
2002	N/A	N/A	810	105	1,192	3	3	3	14			

City of Nanana Population Projections FERC License Application, FY84 Car Transportation, and FY85 Car

N/A-Not Available or Not Applicable.

- Wing

L' Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77\$ construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/50% construction worker hiring in Anchorage ~ 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

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City of Nanana Economic-Demographic Effects Selected Scenarios 1/ 1990

Socioeconomic	FERC Sorocec*s	FY84 Car	FY85 Car	AE1 Forecasts	AB2 Forecasts	AB3 Forecasts
Employment 2/	101000313					
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-Project	N/A	N/A	N/A	N/A	N/A	N/A
Effect	N/A	N/A	N/A	N/A	N/A	N/A
Population						
Baseline	N/A	602	711	711	711	711
With-Project	N/A	742	789	719	722	714
Effect	N/A	140	78	8	8 8	3
Households $\frac{3}{2}$						
Baseline	N/A	210	257	257	257	257
With-Project	N/A	251	282	260	261	258
Effect	N/A	41	25	3	4	ę

N/A-Not Available or Not Applicable.

- Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.
- $\frac{2'}{2}$ Employment represents number of workers by place of residence.
- $\frac{3!}{2}$ Households represents the number of occupied housing units.

City of Nenana Public Facilities/Services Effects Selected Scenarlos 1/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	A81	A82	A83
Varleb'e	Forecasts	Forecasts	Foracasts	Forecasts	Forecasts	Forecasts
Solid Waste Disposal						
(Cumulative Acres)						
Baseline	N/A	N/A	0.8	0.8	0.8	0.8
With-project	N/A	N/A	0.9	0.8	0.8	0.8
Effect	N/A	N/A	0.1	0.0	0.0	0.0
Base Year Capacity 2/	NA	N/A	35.0	35.0	35.0	35.0
Percent Effect 3/	N/A	N/A	16.7	0.0	0.0	0.0
\$ of Capacity						
Utilization 4/	N/A	N/A	2.6	2.3	2.3	2.3
Police Protection 5/						
Baseline	N/A	N/A	1.1	1.1	. 1.1	1.1
With-project	N/A	N/A	1.2	1.1	1.1	1 . 1
Effect	N/A	N/A	0.1	0.0	0.0	0.0
Base Year Staff 2/	N/A	N/A	1.0	1.0	1.0	1.0
Percent Effect <u>3/</u>	N/A	N/A	9.0	0.0	0.0	0.0
🖇 Increase Over Base						
Year Staff <u>4</u> /	N/A	N/A	120.0	110.0	110.0	110.0
Recreation Facilities 6/						
Baseline	N/A	N/A	0.9	0.9	0.9	0.9
With-project	N/A	N/A	0.9	0.9	0.9	0.9
Effect	N/A	N/A	0.0	0.0	0.0	0.0

N/A-Not Available or Not Applicable.

 $\underline{1'}$ Effects under the FERC License Application Scenario are defined by FERC Forecasts.

Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts.

Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts.

- Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.
- $\frac{2!}{2}$ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers
- used in the sylsed, base case, and worker hiring projections were from 1983/1984.
- Calculated by gividing effect by baseline forecast.
- <u>3/</u> 4/ Calculated by dividing with-project forecast by capacity.
- 5/ Police Provection requirements are in terms of manpower.
- 6/ Recreation facility requirements are in terms of acres of neighborhood parks; FY85 facility requirements differ between the FERC License application and subsequent projections due to a change in projection methodology as well as revised population forecasts.

City of Nanana Public Facilities/Services Effects Selected Scenarios 1/ 1990

Socioeconomic	FERC	FY84 Car	FY85 Car	ABI	AB2	A83
Variable	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
Hospital Requirements						
(Number of Beds)						
Baseline	N/A	N/A	N/A	N/A	N/A	N/A
With-project	NA	NA	NZA	N/A	N/A	NA
Effect	N/A	N/A	N/A	NA	N/A	N/A
Base Year Capacity 2/	N/A	N/A	N/A	N/A	NA	N/A
Percent Effect 3/	N/A	N/A	N/A	N/A	NA	N/A
% of Capacity						
Utilization 4/	N/A	N/A	N/A	N/A	NA	N/A
Water Service (000 gal./da	(برو					
Baseline	N/A	N/A	67.4	67.4	67.4	67.4
With-project	N/A	NA	74.8	68.1	68.4	67.6
Effect	N/A	N/A	7.4	0.7	1.0	0.2
Base Year Capacity 2/	N/A	N/A	430.0	430.0	430.0	430.0
Percent Effect 3	N/A	N/A	11.0	1.0	1.5	0.3
\$ of Capacity						
Utilization 4/	N/A	N/A	17.4	15.8	15.9	15.7
Sewer Service (000 gal./da	1Y)					
Baseline	N/A	N/A	67.4	67.4	67.4	67.4
With-project	N/A	N/A	74.8	68.1	68.4	67.6
Effect	N/A	N/A	0.4	0.7	1.0	0.2
Base Year Capacity 2/	N/A	N/A	60.0	60.0	60.0	60.0
Percent Effect 3/	N/A	N/A	11.0	1.0	1.5	0.3
\$ of Capacity						
Utilization 4/	N/A	N/A	124.7	113.5	114.0	112.7

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

- 2/ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers used in the revised, base case, and worker hiring projections were from 1983/1984.
- $\frac{3}{2}$ Calculated by dividing effect by baseline forecast.
- 4/ Calculated by dividing with-project forecast by capacity.

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City of Nenana Public Facilities/Services Effects Selected Scenarios 1/ 1990

FERC	FY84 Car	FY85 Car	ABI	AB2	AB3
Forecasts	Forecasts	Forecasts	Forecasts	Forecasts	Forecasts
N/A	N/A	154	154	154	154
N/A	N/A	159	155	155	154
N/A	N/A	5	8	100 B	0
N/A	N/A	200	200	200	200
N/A	N/A	3.2	0.6	0.6	0.0
N/A	N/A	79.5	77.5	77.5	77.0
NA	N/A	131	131	131	131
N/A	N/A	135	132	: 32	131
N/A	N/A	4	4	2	0
N/A	N/A	200	200	200	200
N/A	N/A	3.1	0.8	0.8	0.0
N/A	N/A	67.5	66.0	66.0	65.5
N/A	N/A	285	285	285	285
N/A	N/A	294	287	287	285
N/A	N/A	9	2	2	0
N/A	N/A	400	400	400	400
N/A	N/A	3.2	0.7	0.7	0.0
N/A	N/A	73.5	71.8	71.8	71.3
	FERC Forecasts N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	FERCFY84 CarForecastsForecastsN/A	FERCFY84 CarFY85 CarForecastsForecastsForecastsN/AN/A154N/AN/A159N/AN/A5N/AN/A200N/AN/A3.2N/AN/A79.5N/AN/A131N/AN/A135N/AN/A135N/AN/A4N/AN/A200N/AN/A3.1N/AN/A3.1N/AN/A67.5N/AN/A294N/AN/A3.2N/AN/A3.2	FERC FY84 Car FY85 Car ABI Forecasts Forecasts Forecasts Forecasts Forecasts N/A N/A 154 154 N/A N/A 159 155 N/A N/A 5 1 N/A N/A 200 200 N/A N/A 3.2 0.6 N/A N/A 79.5 77.5 N/A N/A 131 131 N/A N/A 4 1 N/A N/A 4 1 N/A N/A 3.1 0.8 N/A N/A 3.1 0.8 N/A N/A 294 285 N/A N/A 9 2 N/A N/A 3.2 0.7 N/A N/A 200 200 N/A N/A 2.5 285 N/A N/A 2.0 7 N/A <td< td=""><td>FERC FY84 Car FY85 Car AB1 AB2 Forecasts Forecasts Forecasts Forecasts Forecasts Forecasts NVA N/A 154 154 154 154 N/A N/A 159 155 155 N/A N/A 5 1 1 N/A N/A 200 200 200 N/A N/A 3.2 0.6 0.6 N/A N/A 79.5 77.5 77.5 N/A N/A 131 131 131 N/A N/A 4 1 1 N/A N/A 4 1 1 N/A N/A 200 200 200 N/A N/A 2.1 0.8 0.8 N/A N/A 200 200 200 N/A N/A 294 287 285 N/A N/A 294 287 287<!--</td--></td></td<>	FERC FY84 Car FY85 Car AB1 AB2 Forecasts Forecasts Forecasts Forecasts Forecasts Forecasts NVA N/A 154 154 154 154 N/A N/A 159 155 155 N/A N/A 5 1 1 N/A N/A 200 200 200 N/A N/A 3.2 0.6 0.6 N/A N/A 79.5 77.5 77.5 N/A N/A 131 131 131 N/A N/A 4 1 1 N/A N/A 4 1 1 N/A N/A 200 200 200 N/A N/A 2.1 0.8 0.8 N/A N/A 200 200 200 N/A N/A 294 287 285 N/A N/A 294 287 287 </td

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 25% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.

2/ Capacity/staff numbers used in FERC forecasts were from 1981; the similar numbers used in the revised, base case, and worker hiring projections were from 1983/1984.

 $\frac{3'}{2}$ Calculated by dividing effect by baseline forecast.

4/ Calculated by dividing with-project forecast by capacity.

City of Nenana Fiscal Effects <u>1</u>/ 1990 (thousands of constant 1983 dollars)

Castananala	FEDA	EVOA Cam		ADI	100	FOA
Sociosconomic	PERG	FIG4 Lar	F187 Car	AD1	106 Easaaada	607 Concepto
Variable	Forecasts	rorecasts	rorecasts	FCTECASTS	rorocasts	rorecasts
General Fund						
Baseline Revenues	N/A	N/A	\$ 1,699	\$ 1,699	\$ 1,699	\$ 1,699
With-project Revenues	N/A	N/A	1,684	1,717	1,725	1,705
Baseline Expenditures	N/A	N/A	1,717	1,717	1,717	1,717
With-Project Expendi-						
tures	N/A	N/A	1,907	1,737	1,745	1,725
Not Baseline Fiscal						
Balance	N/A	N/A	-18	-18		-18
Net (w/project)						
Fiscal Balance	N/A	N/A	-23	-20	-20	-20
School District Fund						
Baseline Revenues	N/A	N/A	\$ 2,963	\$ 2,963	\$ 2,963	\$ 2,963
With-project Revenues	N/A	N/A	3,059	2,983	2,983	2,963
Baseline Expenditures	N/A	N/A	3, 204	3,204	3,204	3,204
With-Project Expendi-						
tures	N/A	N/A	3,306	3,227	3,227	3,204
Net Baseline Fiscal						
Balance	N/A	N/A	-241	-241	-241	-241
Net (w/project)						
Fiscal Balance	N/A	N/A	-247	-244	-244	-241

Note: Sums may not equal totals due to rounding differences.

N/A-Not Available or Not Applicable.

Effects under the FERC License Application Scenario are defined by FERC Forecasts. Effects under the FY84 Car Transportation Scenario are defined by FY84 Car Forecasts. Effects under the FY85 Car Transportation Scenario are defined by FY85 Car Forecasts. Effects under the FY85 Air and Bus Scenarios are defined by FY85 AB forecasts where ABI forecasts refer to effects under Air and Bus Scenario/77% construction worker hiring in Anchorage - 23% construction worker hiring in Fairbanks, AB2 forecasts refer to effects under the Air and Bus Scenario/ 50% construction worker hiring in Anchorage - 50% construction worker hiring in Fairbanks, AB3 forecasts refer to effects under Air and Bus Scenario/100% construction worker hiring Anchorage - 0% construction worker hiring in Fairbanks.