



**DRAFT ENVIRONMENTAL BASELINE STUDIES  
2005 STUDY PLANS**

**CHAPTER 18. SOCIOECONOMICS**

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## ACRONYMS

AASHTO	American Association of State and Highway Transportation Officials
ABA	Acid Base Accounting
ACHP	Advisory Council on Historic Preservation
ACLS	Alternative Cleanup Levels
ADEC	Alaska Department of Environmental Conservation
ADF&G	Alaska Department of Fish and Game
agl	above ground level
AHRS	Alaska Heritage Resource Survey
APE	Area of Potential Effect
ARD/ML	Acid Rock Drainage/Metal Leaching
ASCI	Alaska Stream Condition Index
BEESC	Bristol Environmental & Engineering Services Corporation
CC	Comprehensive Stations with Continuous Stage Monitoring
CH2M	CH2M HILL, Inc.
CIR	Color Infrared
CWOC	Comprehensive Stations without Continuous Stage monitoring
DECD	Alaska Department of Economic and Community Development
DNR	State of Alaska Department of Natural Resources
DO	Dissolved Oxygen
DOT&PF	State of Alaska Department of Transportation & Public Facilities
DQOs	Data Quality Objectives
EC	Environmental Consequences
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EBR	Environmental Baseline Document
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FSP	Field Sampling Plan
GIS	Geographic Information System
GPS	Global Positioning System
HGM	Hydrogeomorphic
IM	Initial Monitoring Station
BMR	Baseline Monitoring Report
mg/L	milligrams per liter

mm	millimeters
MRLs	Method Reporting Limits
NDM	Northern Dynasty Mines Inc.
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOAA	National Oceanic & Atmospheric Administration
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
ORP	Oxidation Reduction Potential
PJD	Preliminary Jurisdictional Determination
PSD	Prevention of Significant Deterioration
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
SHPO	State Historic Preservation Officer
SOPs	Standard Operating Procedures
SWANCC	Solid Waste Agency of Northern Cook County v. U.S. Army Corp of Engineers
SWE	Snow-Water equivalent
TOC	Table of Contents
TPH	Total Petroleum Hydrocarbons
USACE	United States Army Corp of Engineers
USFWS	United States Fish & Wildlife Service
USGS	United States Geological Survey
WMP	Water Monitoring Plan

## 18. SOCIOECONOMICS

Kevin Waring Associates, supported by the McDowell Group, will develop the description of the socioeconomic environment for the mine site, road, and port. As appropriate, this effort will be coordinated with related aspects of the environmental baseline studies for subsistence, land use, and recreation.

### 18.1 Objective of Study

The objective of the socioeconomic baseline study is to describe the baseline socioeconomic conditions in the study area as a basis for assessing the impacts of various alternatives for project development and operation on the socioeconomic environment.

### 18.2 Proposed Study Plan

#### 18.2.1 Study Area/Scope

The socioeconomic baseline description must be sufficiently broad and detailed in geographic and topical scope to facilitate assessment of the impact of project alternatives on areas and issues of concern under NEPA's EIS guidelines. Further, the findings of the baseline study may inform decisions about some project aspects (e.g., workforce recruitment, job rotation, workforce housing options) that could have substantial implications for the socioeconomic environment.

While the impetus for impacts on the socioeconomic environment originates from the project facilities (mine site, transportation/utility corridor, port site) and their operation and logistics, the actual study area for the socioeconomic baseline description lies largely outside the project area proper because that is where socioeconomic impacts will occur. The most meaningful and practical geographic units for purposes of the socioeconomic baseline study and subsequent assessment of socioeconomic impacts are the communities and regions potentially affected by the project.

The four small communities (Iliamna, Newhalen, Nondalton, and Pedro Bay) nearest the proposed project facilities would be linked by road to the project and each other. The communities of Igiugig, Kokhanok, and Port Alsworth also are situated in close geographic relationship to project facilities. These seven communities and their residents and local institutions would most directly experience socioeconomic impacts. Therefore, the primary study area consists of these core communities that warrant the most extensive and detailed description and analysis in the socioeconomic baseline study.

Beyond the primary study area, socioeconomic impacts will mainly be mediated through the economic system and through the local and regional governing institutions responsible for addressing incremental demands for community services and facilities that stem from the proposed project. The scale and import of such socioeconomic impacts will be modulated by community proximity and access to project facilities and operations, population size, and developmental status of community infrastructure. On this basis, secondary and tertiary study areas have been defined for socioeconomic study.

Communities in the secondary area are judged likely to experience proportionally greater socioeconomic impacts than communities in the tertiary area. The rural communities of the Lake and Peninsula Borough (except the seven primary communities), Bristol Bay Borough, and the Dillingham census area are small in population, with generally less well-developed community infrastructure. These communities and surrounding regions share definite institutional ties to the project vicinity through such regional entities as the Bristol Bay Native Association, the Bristol Bay Native Corporation, and the Southwest Alaska Municipal Conference. Their economies have also been adversely affected by recent trends in Alaska's commercial salmon fishing and processing industry. For these reasons, these communities and regions are assigned to the secondary study area.

The tertiary study area extends to the Kenai Peninsula Borough, the Municipality of Anchorage, and the Matanuska-Susitna Borough. These populous and developed regions have potential to supply a substantial portion of the project workforce. They also have the capacity to absorb socioeconomic impacts with proportionately less disruption than smaller communities. Because the City of Homer in the Kenai Peninsula Borough could be chosen as a staging area and marine logistics center for project development, relevant features of that community will be described in the baseline study.

The topical scope of the socioeconomic baseline description is designed to include the major dimensions of potential socioeconomic impacts that may be attributed to project development and operations. Topics to be addressed in the baseline description are outlined below:

- History and culture — culture and developmental history of the study area as it may interact with the proposed project.
- Population — census and composition of population, migration patterns, and population trends and forecasts.
- Economy — traditional economic resources and economic structure, resident and non-resident workforce and workforce participation, employment and unemployment rates, workforce skills and mobility, wage and income levels, sources of cash and non-cash income, local suppliers of business goods and services, economic trends and forecasts, and outlook for traditional economy.
- Community infrastructure — community facilities and services, housing, etc.
- Governance — city, borough, and traditional/tribal governments and non-profit service organizations; their legal status, powers, and finances; and their inter-relationships.
- Attitudes toward development — local and regional attitudes toward the proposed project and similar non-traditional economic resource development.
- Transportation — facilities and services for intra- and inter-regional transport of passengers and cargo by air, water, and overland.
- Community utilities — electric power, water/sewer systems, communications, etc.

Communities in the primary study area will be characterized in greater detail and depth than communities and regions in the secondary and tertiary study areas. This is appropriate because of their potential exposure to proportionately greater direct impacts on their socioeconomic environment. Conversely, the description of communities and regions in the tertiary study area will focus mainly on their demographic and economic characteristics consistent with the nature of expected project impacts to them.

### 18.2.2 Methods/Approach

Much of the information required for the description of socioeconomic baseline conditions is obtainable from published and unpublished data sources, supplemented by interviews of local public officials and similar informants. The method of research will make full use of these available resources. However, certain selected information essential to the baseline description and later assessment of project alternatives is not routinely available or up-to-date. In particular, current detailed information about the employment, employability, and household incomes of residents of the primary communities is lacking, but needed to make a realistic assessment of potential project impacts on their economic status. Up-to-date information about workforce availability and skills in communities in the secondary study area is similarly needed to assess socioeconomic impacts therein. The study program specifies research tasks to assemble this essential information.

As feasible, certain of the field data-collection tasks identified below may be coordinated with field work undertaken as part of other project baseline studies (e.g., ADF&G household subsistence surveys) or may be implemented in collaboration with appropriate local organizations.

### 18.2.3 Major Tasks/Activities

The tasks and activities for this study element involve both critical distillation and analysis of information from existing bibliographic resources, plus field work geared to develop essential information not otherwise available. These tasks include the following:

- Compile and critically review published and unpublished data, including agency file data, for all socioeconomic topics.
- Interview local and agency officials and other informants to supplement published and unpublished data sources.
- Compile socioeconomic profiles for primary communities and field-verify community data for accuracy.
- Conduct a household personal income/employment survey for the primary communities.
- Conduct a manpower inventory and skills survey for the primary communities and a sample of the secondary communities.
- Draft the baseline description of socioeconomic conditions.

## 18.3 Deliverables

The chief deliverable will be the baseline description that documents existing socioeconomic conditions and trends. This baseline description will incorporate major findings from the field-work tasks — that is, the surveys of household income, employment, and workforce characteristics. The survey findings will also be more fully reported in stand-alone supplemental deliverables.

Transportation facilities — particularly the proposed road corridor and port improvements — and delivery of electric power to the mine site represent two major components of the mine project. To

facilitate later analysis of the impacts of these components on potentially affected communities, the baseline descriptions for transportation and community utilities will be designed to stand alone.