

Enclave Choice Model

INSTRUCTIONS

Introduction

The purpose of the enclave choice model is to define the range of enclave types which are possible at a given site. The model defines these types primarily in terms of the degree of integration of the industrial facility and the community at the site. This model determines the degree of integration for each major enclave component.

The model has two primary uses. First, the model can be used by the OCS office to determine the type of enclave which will most likely be developed at a particular site. In using the model to forecast the most likely outcomes, it must be emphasized that the model is not deterministic; there is no single outcome. The possibility of negotiation between the industry and the community makes many alternatives possible. The model describes the set of possible outcomes given the site's existing facilities and resources, industry and community preferences, and the ability of the industry to control development.

The second use of the model is as a learning tool. The model describes in a highly simplified manner the process of enclave choice. In this way, we have isolated the fundamental elements of this choice process. Working through the model provides the user with an understanding of how this choice process works.

Four general elements of the model's design can be discussed before the detailed elements are presented.

1. Flexibility. The enclave choice model can be used on two different levels. The choice of the level depends on the amount of effort the user wishes to put into the exercise and his desire for specificity. The two levels differ in the definition of capacity of facilities and resources at the site. First, a detailed analysis of industrial requirements and community capacity can be conducted and used in working through the model. The second level of use is a more general analysis which allows the user to subjectively estimate whether excess capacity will be available.
2. Hierarchy. The enclave choice process is really a series of complex interactive decisions, where the decision on one component is influenced by the decisions on other components. The model, by necessity, reduces this complexity. The hierarchy framework of the model is one way of incorporating some of the interdependencies of the actual process. Components are addressed in a hierarchy, with those components which are essential (cannot be improvised or imported) addressed first. When these essential components cannot be obtained in the region, no enclave will develop and the analysis will terminate. This hierarchy of decisions is described by the order of the worksheets. For this reason, the worksheets must be addressed in the order provided.
3. Time Period of Analysis. The time period for which the model is conducted will usually be some time in the future. For this reason, this future point in time is the reference point for answering the questions on the worksheets. Since information on capacity and resource availability will be available for the current or historical period, some projections of these levels to the period of OCS activity is required.
4. Stage of Development. There are three stages of OCS development: exploration, development, and production. The set of enclave choice worksheets must be answered for each stage separately. The possibility of different answers in each stage results primarily from different industry requirements and preferences.

The remainder of the model description is in two parts:

1. The industrial requirement and site characteristic worksheets and
2. The enclave component worksheets.

## INSTRUCTIONS

### A. Industrial Requirements and Site Characteristics (No. 1, No. 2)

1. Fill out industrial requirement worksheet (No. 1) based on OCS scenario information. These scenarios are based on average industrial requirements and scenario resource estimates.
2. This worksheet, when completed, will describe the industrial demand for facilities and resources at the site.
3. Fill out site characteristic worksheet (No. 2) based on secondary information sources described on worksheets or through interviews with local sources (i.e., city managers, utility officials, native corporation employees).
4. This worksheet will describe the capacity of the facilities and resources at the site at the time of OCS activity.

### B. Enclave Component Worksheets

These instructions describe how each enclave component worksheet should be answered. These instructions are general enough to describe all of the worksheets. Where special instructions are required, they are found in the notes at the end of the worksheet (i.e., labor).

In general the worksheets seek answers to five generic questions. These generic questions are

- I. Are existing facilities adequate?
- II. Will existing facilities be used?
- III. Can adequate facilities be developed?
- IV. Will local resources be developed?
- V. Will enclave development occur?

The worksheets are set up so that by answering the questions under each generic question, the generic questions will be answered. Questions are addressed in their order of appearance; unless instructions on the sheet direct user to some other section, questions are to be answered in order.

There are two general types of questions which are used to address each generic question. The first type of question is a sorting question. The answer to these sorting questions will direct the user to the next question. An example of a sorting question is whether a water facility is available; if the answer to this question is no, the user is directed to bypass questions of whether the system will be used. The sorting questions are used to direct users to the next appropriate question.

The second type of question is that which describes possibilities. Choice is described over a set of possibilities. The possibility questions are used to define that set of possibilities from which the choice will be made.

The results of the worksheets are of two general types. First, if enclave development is possible in the region, the result will define the most likely form of component development (i.e., use of existing facility, construction of a new facility, or some alternative). The definition of the most likely form of component development provides the link to direct OCS impacts. The second type of result is that OCS development is not possible in the region. If no existing facility is available, no resources are available to develop the facility, and no alternative is available and the component is essential to OCS development, then OCS development will not occur at the site. If the result is that OCS development will not occur, the exercise is ended with that worksheet. If not, the user should continue to the next worksheet.

One specific section of the worksheet which needs to be addressed is the negotiation matrix. This matrix describes the set of possible outcomes for any component. The most likely outcome will be determined as a result of industrial preferences, community attitudes, and the community's ability to control the OCS activity. The user is asked to define the community in terms of its attitude toward development and its ability to control development. This description determines the possible industry choices from the community perspective. Industry preferences across options are provided. We assume the most likely outcome will be the industry's highest preference possible option. Possible options are those allowed by the community controls and which are physically possible (i.e., expansion of the existing facility is not a possible option if no facility exists.) The negotiation matrix describes all potential options given community preferences, controls, and industry preferences. We cannot determine the exact outcome in any case because negotiation will affect the outcome.

The matrix defines potential outcomes (p) and those which community controls and attitude prohibit. Each outcome provided by the negotiation matrix relates to a direct impact. The last section of each component worksheet describes this relation. This section provides the link between enclave choice and community impacts.

OCS REQUIREMENTS

<u>Component</u>	<u>Units for Reporting Industrial Requirement</u>	<u>Special Considerations</u>	<u>Requirement</u>	<u>Land Requirement</u> (Only if no existing facility)		
				<u>Waterfront Footage</u>	<u>Waterfront Acreage</u>	<u>Other Acreage</u>
I. Production & Processing Facilities	1. Acres of land					
II. Transport Facilities	1. Size					
A. Harbor	2. Draft (in feet)	3. Ice conditions				
B. Dock	1. Berthing Capacity (in feet)					
C. Airport	1. Runway length (in feet)	2. Surface conditions 3. Load capacity				
D. Roads	2. Load capacity	1. Existence between dock & airport 3. Seasonality				
III. Service Base	1. Acres of land 2. Warehouse footage 3. Open storage footage					
IV. Utilitfes						
A. Water	1. Gallons/day	existing infrastructure seasonality				
B. Electricity	1. Kilowatts	reliability of system				
C. Communications	?					
D. Sewage	1. Gallons/day					
E. Solid Waste	1. Cubic yards over life of project 2. Handling capacity in tons/day	compatibility of wastes				
IV. Housing	Persons housed					

WORKSHEET 2

SITE CHARACTERISTICS

I. Transportation

- A. Harbor
  - 1. Size
  - 2. Draft (in feet)
  - 3. Ice conditions
- B. Dock
  - 1. Berthing space
- C. Airport
  - 1. Runway length
  - 2. Runway condition

∞

Total Usable Available      Current Usage      Available for OCS Use      Percent of Total

II. Land

- A. Usable waterfront footage
- B. Waterfront acreage
- C. Nonwaterfront acreage

System Capacity      Current Usage      Available for OCS Use      Percent of Total

III. Utilities

- A. Water (gallons/day)
- B. Electricity (kilowatts)
- C. Communications
- D. Sewage (gallons/day)
- E. Solid waste
  - 1. Storage capacity (cubic yards)
  - 2. Handling capacity (tons/day)

IV. Housing

- A. Units available



## Site Characteristics Data Sources

### Community Characteristics

1. Labor. (a) Employment (by occupational category): Bureau of Census; Alaska Department of Labor. (b) Work force: Alaska Department of Labor Statistics. (c) Average wage rate: Alaska Department of Research and Analysis.  
  
Housing. (a) Existing units: Bureau of Census. (b) Building permits: HUD Area Office. (c) Housing authority: HUD Area Office.
2. Transport Facilities. (a) Port and harbors: U.S. Coast Pilot; U.S. Maritime Administration; Barge Companies. (b) Airports: Air Charters; Alaska Department of Transportation and Public Facilities.
3. Service Base and Facilities (Land and Location). (a) Land status and availability: Alaska Division of Lands; Community; Local Realtors. (b) Cost of land and facilities: Local Realtors; Local Contractors; Community Officials.
4. Utilities. Alaska Public Utilities Commission; Utilities Manager.
5. Resources. Regional Corporations.
6. Industrial Services. (a) Medical: Health System Agency. (b) Transport: Alaska Shippers Guide; Private Carriers by Mode (Marine). (c) Construction: Community Officials; Licensing Boards.
7. Community Interaction. (a) Schools: School District Office; REAA; Borough. (b) Private business (gross receipts): Alaska Department of Commerce; Division of Economic Enterprise. (c) Private business (number of retail establishments): Community Officials; Site Visits.
8. Community Controls. (a) Type of goal + authority: Alaska Department of Community and Regional Affairs; Community Officials.
9. Community Financial Structure. (a) Taxation + rate: Community and Regional Affairs; Alaska Bond Bank; Regional Corporation Annual Reports.

WORKSHEET 3

PRODUCTION AND PROCESSING FACILITIES

Stage \_\_\_\_\_

I. Is existing facility adequate?

- A. Are these existing production and processing facilities in acceptable proximity to lease tracts? \_\_\_\_\_ (If no, go to III.)
- B. Are they suitable for proposed use? \_\_\_\_\_ (If no, go to III.)

II. Will existing facilities be used?

- A. Industry will select least-cost alternative.
  - 1. If this is to build a new facility, go to III.A.
  - 2. If this is to use the existing facility, where is existing facility? (If outside region, go to V.E; if inside region, go to V.A.)

III. Can an adequate facility be developed?

- A. Is development of the proposed facility possible? Development is possible if sufficient land is available and regulations do not prohibit its use.
  - 1. Is development possible in the community? \_\_\_\_\_ In the region? \_\_\_\_\_ (If development is impossible in both community and region, go to V.B.)

IV. Will local land be developed?

- A. Industry will select least cost possible alternative.
  - 1. If this is to build in the community, go to V.C.
  - 2. If this is to build in the region, go to V.D.
  - 3. If this is to build out of the region or use offshore facilities, go to V.B.

## V. Enclave Component Choice

- A. Use existing facility inside region.
- B. Build outside region or offshore.
- C. Build new facility in community.
- D. Build new facility in region.
- E. Use existing facility outside region.

### Appropriate Definitions

1. Production and processing facilities include crude oil terminals, primary processing facilities, LNG plant, and tanker facilities.
2. Proximity (II.A) is defined by distance between lease sale and facility. Existing facility may be outside of region of study and still be in proximity to sale area. Acceptable proximity must be within \_\_\_\_\_ miles of lease area.
3. Suitable (II.B) facilities are those with sufficient excess capacity to handle proposed production. The products of the proposed use must also be compatible with those of the existing use. Suitable facilities may require minor modifications.
4. Cost (IV.A) is defined by the combination of operations, capital investment, and transportation costs over the project life. Each of these will differ at different locations and may be influenced by the development of other lease sale areas.

HARBOR AND PORTS

I. Is existing facility adequate?

- A. Does the proposed site have a sheltered harbor? \_\_\_\_\_  
(If no, go to V.)
- B. Is the harbor of adequate size and draft for use in this stage? \_\_\_\_\_ (If no, go to V.)
- C. Does the proposed site have a dock? \_\_\_\_\_ (If no, go to III.)
- D. Is the dock suitable for use in this stage of OCS activity? \_\_\_\_\_ (If no, go to III.)

II. Will existing facility be used?

- A. Will proposed OCS activity result in congestion of the facility? \_\_\_\_\_ (If no, go to VI.A.)
- B. Can existing users influence OCS's use of the facility? \_\_\_\_\_ (If no, go to VI.B.)
  - 1. Can they prohibit use? \_\_\_\_\_ (If yes, go to III.A.)
  - 2. Can they place conditions on use of facilities which are unacceptable to the industry? \_\_\_\_\_ (If no, go to VI.B.)

III. Can an adequate port be developed?

- A. Is improvement of the existing port to meet OCS requirements in this stage possible? \_\_\_\_\_ (Answer yes or no.)
- B. Is there a site available within the sheltered harbor at which it would be possible to develop a dock and at which regulations do not prohibit use? \_\_\_\_\_ (Answer yes or no.)  
(If both A and B are no, go to V.)

IV. Will local port be built or expanded?

- A. Is nonindustry financing available from sources which support or are neutral toward OCS development? \_\_\_\_\_  
(Answer yes or no.)

- B. What will be the most likely outcome? Select column which best describes the community. Most likely outcome will be industry's highest possible preference which is not prohibited by community preferences and control. (negotiation matrix 4.1)

V. Will enclave development occur?

- A. Are there alternatives to a local port which are acceptable to industry? \_\_\_\_\_ (If yes, go to VI.F.) (If there are no alternatives, OCS development will not occur.)

IV. Enclave Choice Component

<u>Choice</u>	<u>Direct Impact</u>	
	<u>Impact No.</u>	<u>Description of Impact</u>
A. Use existng	8	shared use
B. Use existing, congestion	8	shared use with congestion
C. Build new, exclusive use	8 13, 14	(no impact) tax base increase
D. Build new, shared use	8 13, 14	shared use tax base increase
E. Expand existing	8 13, 14	shared use tax base increase
F. Use alternative	8	no impact

Appropriate Definitions

1. Suitable dock (I.D) is defined by physical characteristics which meet OCS requirements.

NEGOTIATION MATRIX 4.1

PRO-DEVELOPMENT

ANTI-DEVELOPMENT

NEUTRAL

	Industry Preference	Control			Control			Control			Result (Go To)
		Prohibit	Conditions	None	Prohibit	Conditions	None	Prohibit	Conditions	None	
Build		P	P	P		P	P	P	P	P	VI.C
Build Only If No Conditions		P	P	P			P			P	VI.C
Build Only If Financial Assistance		P	P	P		P	P	P	P	P	VI.D
Build Only If Financial Assistance and No Conditions		P	P	P			P			P	VI.D
Expand		P	P	P		P	P	P	P	P	VI.E
Expand Only If No Conditions		P	P	P			P			P	VI.E
Expand Only If Financial Assistance		P	P	P		P	P	P	P	P	VI.E
Expand Only If Financial Assistance and No Conditions		P	P	P			P			P	VI.E
Don't Expand or Build		P	P	P	P	P	P	P	P	P	V

AIRPORT

Stage \_\_\_\_\_

## I. Is existing facility adequate?

- A. Does the proposed site have an airport within acceptable proximity to the waterfront? \_\_\_\_\_ (If no, go to V.)
- B. Does the existing airport have a runway which is at least 4,500 feet and suitable for cargo transport planes? \_\_\_\_\_ (If no, go to III.)

## II. Will the existing facility be used?

- A. Will proposed OCS activity result in congestion of the facility? \_\_\_\_\_ (If no, go to VI.A.)
- B. Can the existing users influence OCS's use of the facility? (If no, go to VI.A.)
1. Can they prohibit use. \_\_\_\_\_ (If yes, go to III.)
  2. Can they place conditions on use of facility which are unacceptable to the industry? \_\_\_\_\_ (If yes, go to III; if no, go to VI.B.)

## III. Can an adequate airport be developed?

- A. Is improvement of the existing airport to meet OCS requirements in this stage possible? \_\_\_\_\_ (Answer yes or no.)
- B. Is a site available within proximity to the waterfront at which an adequate airport can be developed and at which regulations do not prohibit development? \_\_\_\_\_ (Answer yes or no.) (If both A and B are no, go to V.)

## IV. Will local airport be built or expanded?

- A. Is nonindustry financing available from sources which support or are neutral toward OCS development? \_\_\_\_\_ (Answer yes or no.)
- B. What will be the most likely outcome? Select column which best describes the community. Most likely outcome will be industry's highest possible preference which is not prohibited by community preference and control. (negotiation matrix 5.1)

NEGOTIATION MATRIX 5.1

PRO-DEVELOPMENT

ANTI-DEVELOPMENT

NEUTRAL

	Industry Preference	Control			Control			Control			Result (Go To)
		Prohibit	Conditions	None	Prohibit	Conditions	None	Prohibit	Conditions	None	
Build		P	P	P		P	P	P	P	P	VI.C
Build Only If No Conditions		P	P	P			P			P	VI.C
Build Only If Financial Assistance		P	P	P		P	P	P	P	P	VI.D
Build Only If Financial Assistance and No Conditions		P	P	P			P			P	VI.D
Expand		P	P	P		P	P	P	P	P	VI.E
Expand Only If No Conditions		P	P	P			P			P	VI.E
Expand Only If Financial Assistance		P	P	P		P	P	P	P	P	VI.E
Expand Only If Financial Assistance and No Conditions		P	P	P			P			P	VI.E
Don't Expand or Build		P	P	P	P	P	P	P	P	P	V



V. Will enclave development occur?

- A. Are there alternatives to a local airport which are acceptable to industry? \_\_\_\_\_ (If yes, go to VI.F.) (If there are no alternatives, OCS development will not occur.)

VI. Enclave Choice Component

		<u>Direct Impact</u>	
<u>Choice</u>	<u>Impact No.</u>	<u>Description of Impact</u>	
A. Use existing	8	shared use	
B. Use existing, congestion	8	shared use with congestion	
C. Build new, exclusive use	8	no impact	
D. Build new, shared use	13, 14	tax base increase	
E. Expand existing	8	shared use	
F. Use alternative	8	no impact	

Appropriate Definitions

1. Acceptable proximity (I.A) is defined by access. Access is a function of distance and road infrastructure.
2. Suitable (I.B) is capable of supporting weight of cargo aircraft.

SERVICE BASE

I. Is existing facility adequate?

- A. Does the proposed site have facilities suitable for use as OCS service base? \_\_\_\_\_
  - 1. If facilities which are not suitable exist, go to III.A.
  - 2. If no facilities, go to III.B.

II. Will existing facilities be used?

- A. Are existing facilities currently being used? \_\_\_\_\_ (If no, go to V.I.)
- B. Will current owners allow use? (If no, go to III.)
- C. What will be the most likely outcome? Select column which best describes the community. Most likely outcome will be industry's highest possible preference which is not prohibited by community preference and control. (negotiation matrix 6.1)

III. Can an adequate service base facility be developed?

- A. Is improvement of existing facilities to meet OCS service base requirements possible? \_\_\_\_\_ (Answer yes or no.)
- B. Is there sufficient waterfront footage and acreage within harbor to develop service base facilities for this stage and which is not prohibited by regulation? \_\_\_\_\_ (Answer yes or no.) (If both A and B are no, go to V.)

IV. Will a local facility be built or improved?

- A. What will be the most likely outcome? Select column which best describes the community. Most likely outcome will be industry's highest possible preference which is not prohibited by community preference and control. (negotiation matrix 6.2)

V. Will enclave development occur?

NEGOTIATION MATRIX 6.2

PRO-DEVELOPMENT

ANTI-DEVELOPMENT

NEUTRAL

	Industry Preference	Control			Control			Control			Result (Go To)
		Prohibit	Conditions	None	Prohibit	Conditions	None	Prohibit	Conditions	None	
Build		P	P	P		P	P	P	P	P	VI.B
Build Only If No Conditions		P	P	P			P			P	VI.B
Expand		P	P	P		P	P	P	P	P	VI.C
Expand Only If No Conditions		P	P	P			P			P	VI.C
Don't Expand or Build		P	P	P	P	P	P	P	P	P	V

NEGOTIATION MATRIX 6.1

PRO-DEVELOPMENT

ANTI-DEVELOPMENT

NEUTRAL

	Industry Preference	Control			Control			Control			Result (Go To)
		Prohibit	Conditions	None	Prohibit	Conditions	None	Prohibit	Conditions	None	
Use Existing		P	P	P		P	P	P	P	P	VI.A
Use Existing Only If No Conditions		P	P	P			P			P	VI.A
Don't Use Existing		P	P	P	P	P	P	P	P	P	III

- A. Are there alternatives to use of a service base? \_\_\_\_\_  
(If yes, go to V.I.)

(If there are no alternatives, OCS development will not occur.)

VI. Enclave Component Choice

	<u>Direct Impacts</u>
A. Use existing	See land summary
B. Build new, exclusive use	See land summary
C. Expand existing	See land summary
D. Use alternative	See land summary

Appropriate Definitions

1. Service base is the primary storage and staging area for onshore service and industrial supplies.
2. Suitable (I.A) is defined by enclosed storage space, storage yard, and access to waterfront.
3. Sufficient (III.B) as defined by industrial requirements.

### Instructions for Use of Utility Worksheets

1. Work through the utility worksheet for each of five utility types: water, electricity, communications, sewage, and solid waste.
2. Place enclave choice answer for each utility on utility summary sheet which follows this worksheet.
3. Measures of sufficient capacity can be derived from information on industrial requirement and site characteristics worksheet.

Worksheet 7

Utilities

Stage \_\_\_\_\_

I. Is existing utility adequate?

- A. Does the proposed site have a \_\_\_\_\_ system?  
(If no, go to III.)
- B. Does the existing system have sufficient capacity to satisfy existing community and proposed OCS demand? \_\_\_\_\_  
(If no, go to III.)

II. Will existing facility be used?

- A. Will current owners allow use? \_\_\_\_\_  
(If no, go to III.)
- B. What will be the most likely outcome? Select column which best describes community. Most likely outcome will be industry's highest possible preference which is not prohibited by community preferences and control.  
(negotiations matrix 7.1)

III. Can an adequate utility be developed?

- A. Is improvement of the existing utility to meet OCS requirements in this stage possible? \_\_\_\_\_ (Answer yes or no.)
- B. Is there a site and/or resource available within acceptable proximity to service base site at which it would be possible to develop utility and at which regulations do not prohibit use? \_\_\_\_\_ (Answer yes or no.)

(If both A and B are no, go to V.)

IV. Will a local utility be built or expanded?

- A. Is nonindustry financing available from sources which support or are neutral toward OCS development? \_\_\_\_\_
- B. What will be most likely outcome? Select column which best describes community. Most likely outcome will be industry's highest possible preference which is not prohibited by community preferences and control. (negotiations matrix 7.2)

NEGOTIATION MATRIX 7.1

PRO-DEVELOPMENT

ANTI-DEVELOPMENT

NEUTRAL

	Industry Preference	Control			Control			Control			Result (Go To)
		Prohibit	Conditions	None	Prohibit	Conditions	None	Prohibit	Conditions	None	
Use Existing		P	P	P		P	P	P	P	P	VI.A
Use Existing Only If No Conditions		P	P	P			P			P	VI.A
Don't Use Existing		P	P	P	P	P	P	P	P	P	III

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Industry Preferences by Utility

	Use Existing	Use Existing Only If No Conditions	Don't Use Existing
Water			
Electricity			
Communications			
Sewage			
Solid Waste			



NEGOTIATION MATRIX 7.2

PRO-DEVELOPMENT

ANTI-DEVELOPMENT

NEUTRAL

	Industry Preference	Control			Control			Control			Result (Go To)
		Prohibit	Conditions	None	Prohibit	Conditions	None	Prohibit	Conditions	None	
Build		P	P	P		P	P	P	P	P	VI.B
Build Only If No Conditions		P	P	P			P			P	VI.B
Build Only If Financial Assistance		P	P	P		P	P	P	P	P	VI.C
Build Only If Financial Assistance and No Conditions		P	P	P			P			P	VI.C
Expand		P	P	P		P	P	P	P	P	VI.D
Expand Only If No Conditions		P	P	P			P			P	VI.D
Expand Only If Financial Assistance		P	P	P		P	P	P	P	P	VI.E
Expand Only If Financial Assistance and No Conditions		P	P	P			P			P	VI.E
Don't Expand or Build		P	P	P	P	P	P	P	P	P	V

V. Will enclave development occur?

- A. Are there alternatives to providing this utility through a local system which are acceptable to industry? \_\_\_\_\_  
 (If yes, go to VI.F.)
- B. Is this utility essential to OCS development? \_\_\_\_\_  
 (If yes, proposed site is inadequate and OCS development will not occur.)

VI. Enclave Component Choice

<u>Choice</u>	<u>Impact No.</u>	<u>Direct Impact</u>
A. Use existing	9	Shared use
B. Build new, exclusive use	9 10 13, 14	Utilities separate No joint financing Increase in tax base
C. Build new, shared use	9 10	Shared use Joint financing
D. Expand existing	9	Shared use
E. Expand existing, joint financing	9 10	Shared use Joint financing
F. Use alternative	9	No impact

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(Repeat for all utilities)

Utility Summary Sheet

(Place check in appropriate box.)

Utility	Exclusive Industry Use	Shared Use, No Joint Financing	Shared Use, Joint Financing
Water			
Electricity			
Communications			
Sewage			
Solid Waste			

Worksheet 8

Labor

Stage \_\_\_\_\_

I. Local Labor Supply

- A. Is there local labor which would be available to the OCS industry which possesses the minimum necessary skills?  
\_\_\_\_\_ (If no, local labor supplied is zero; go to III.)
- B. How many potential workers are
  - 1. Employed? \_\_\_\_\_
  - 2. Unemployed? \_\_\_\_\_
  - 3. Not in the labor force but able to work? \_\_\_\_\_
- C. Are the workers with experience in relevant sectors? \_\_\_\_\_  
If yes, how many? \_\_\_\_\_

II. Will local labor work in the OCS?

- A. How many of employed workers would move to OCS jobs? \_\_\_\_\_
- B. How many of those not in the labor force would take OCS jobs? \_\_\_\_\_
- C. How many unemployed would work in OCS jobs? \_\_\_\_\_
- D. Total local labor supplied. \_\_\_\_\_
- E. How many skilled workers would take OCS jobs? \_\_\_\_\_

III. Net Labor Demand (requires importing labor)

- A. Unskilled labor supply equals total labor supplied minus skilled. What is the level of unskilled labor supplied?  
\_\_\_\_\_
- B. Net unskilled labor demand (fill out table).

	Number Which Could Be Hired Locally	-	Local Unskilled Labor	=	Net Unskilled Labor Demand
Unskilled Labor					

C. Net Skilled Labor Demand (fill out table).

	Number Which Could Be Hired Locally	-	Local Skilled Labor	=	Net Skilled Labor Demand
Skilled Labor					

D. Is there an excess supply of unskilled labor? \_\_\_\_\_  
(If no, go to IV.)

E. Will unskilled be trained?

1. Is there an excess of skilled jobs? \_\_\_\_\_  
(If no, go to IV.)

2. Are training and labor hire conditions a likely outcome  
of negotiations? \_\_\_\_\_ (If no, go to IV.) How many  
will be trained? \_\_\_\_\_

IV. Labor Summary

A. Skilled Labor

1. How many hired? \_\_\_\_\_  
2. How many trained? \_\_\_\_\_  
Total \_\_\_\_\_

B. Unskilled Labor

1. How many hired? \_\_\_\_\_

C. Imported Labor

1. Net unskilled demand \_\_\_\_\_  
2. Net skilled demand \_\_\_\_\_  
3. Labor not hired locally \_\_\_\_\_  
Total \_\_\_\_\_

D. Share of Local Labor Hired

1. If 0 - 10 percent, low local labor  
2. If 10 - 30 percent, moderate local labor  
3. If 30 percent <, high local labor

## V. In-migration Summary

### A. Imported labor as a proportion of population

1. If 0 - 5 percent, low population impact
2. If 5 - 15 percent, moderate population impact
3. If 15 percent <, high population impact

#### Notes:

1. Minimum necessary skills defined by industry.
2. Number of potential workers (I.B) must be estimated. Short of an actual census, there is no single source which will provide these numbers. Each number may be estimated by interview. An alternative technique is to use census data (or more recent survey information) and current estimates of the population. Census data provides a detailed description of the population. Estimates of employment and unemployed derived from the census can be checked against estimates made by the Alaska Department of Labor for the census division.

The estimate of those able to work, but not in the labor force, requires more restrictive assumptions. In rural Alaska residents drop out of the labor force because no jobs are available. If jobs become available, these residents would enter. One way to estimate the potential for this effect would be to assume if there were jobs, the labor force pattern would resemble the urban native labor force pattern. Census data could be used to estimate the labor force if, for example, natives at the site followed Anchorage patterns.

3. Experienced workers (I.C.) would have to be estimated. If surveys cannot be conducted, the estimate could be based on the knowledge of previous OCS activities in the region or closely associated activities (i.e., skills to operate supply boat for OCS are closely related to fishing boat skills).
4. The response of local workers to OCS employment opportunities must also be assumed (II). Two major factors will influence the response--relative wages and subsistence. In areas with high wages (relative to OCS) and ample job opportunities, we would expect the movement from employed workers to OCS to be low; in areas of relatively low wages, we would expect the movement to be high.

Subsistence activities will also affect OCS employment. In areas where subsistence is an important activity and where OCS employment conflicts, we would expect only limited response from those not already employed or seeking employment.

We would assume that those unemployed workers would take advantage of OCS opportunities.

Worksheet 9

Housing

Stage \_\_\_\_\_

I. Is the existing housing adequate?

- A. Is there excess housing in the community? \_\_\_\_\_  
(If no, go to III.)
- B. Is the housing within proximity to shore-based facilities and suitable for housing OCS employees during this phase? \_\_\_\_\_  
(If no, go to III.)

II. Will existing housing be used?

- A. Is the community against development and does it have the ability to prohibit use? \_\_\_\_\_ (If yes, go to III.)
- B. Can all workers be housed in existing buildings? \_\_\_\_\_  
(If no, go to III.)

III. Can adequate new housing be developed?

- A. Is there sufficient land upon which use is not prohibited by regulations within proximity to shore-based facilities?
  - 1. For onshore crew quarters? \_\_\_\_\_
  - 2. For worker/family housing? \_\_\_\_\_
- B. Could local housing market provide new housing to meet onshore worker/family housing? \_\_\_\_\_

IV. Will local housing be developed?

- A. Is there nonindustry financing available which can be used to finance housing? \_\_\_\_\_  
(If yes, (1) worker housing \_\_\_\_\_  
(2) family housing \_\_\_\_\_ )
- B. Will OCS workers relocate to the community? \_\_\_\_\_
- C. What will be the most likely outcome? Select column which best describes community attitudes and controls. Most likely outcome will be highest possible industry preference which is not prohibited by community. (negotiation matrix 9.1)

NEGOTIATION MATRIX 9.1  
Development Attitude

PRO-DEVELOPMENT

ANTI-DEVELOPMENT

NEUTRAL

	Industry Preference	Control			Control			Control			Result (Go To)
		Prohibit	Conditions	None	Prohibit	Conditions	None	Prohibit	Conditions	None	
Build Family Housing		P	P	P		P	P	P	P	P	VI.B
Build Worker Housing		P	P	P		P	P	P	P	P	VI.C
Build Family Housing, No Conditions		P	P	P			P			P	VI.B
Build Worker Housing, No Conditions		P	P	P			P			P	VI.C
Build Family Housing if Financial Assistance		P	P	P		P	P	P	P	P	VI.B
Build Worker Housing if Financial Assistance		P	P	P		P	P	P	P	P	VI.C
Rely Partly on Local Housing Market		P	P	P		P	P	P	P	P	VI.D
Rely Totally on Local Housing Market		P	P	P		P	P	P	P	P	VI.A
Don't Build Housing		P	P	P		P	P	P	P	P	V



V. Will enclave development occur?

A. Are there alternatives to local onshore housing? \_\_\_\_\_

1. If yes, go to VI.E.
2. If no, is onshore housing essential? \_\_\_\_\_

(If yes, enclave development will not occur.)

VI. Enclave Component Choice

	<u>Direct Impact</u>
A. Local housing	A5
B. Build new family housing	C5
C. Build new worker housing	C5
D. Build some new; use some existing	B5
E. Use alternative	C5

Land Summary

I. Land in Community

	Waterfront Footage	Waterfront Acreage	Other Acreage
A. Total Usable Land			
B. Undeveloped Usable Land Available for OCS use			

(SOURCE: Site Characteristics Worksheet)

II. OCS Land Requirement

- A. Acreage required for OCS development. This applies to a component only when worksheet indicates that a new facility will be built. Use or modification of existing facilities does not require additional land.

- B.                      Inside Community                      Outside Community

Component	Inside Community			Outside Community		
	Waterfront Footage	Waterfront Acreage	Other Acreage	Waterfront Footage	Waterfront Acreage	Other Acreage
1. Production & Processing Facilities						
2. Dock						
3. Airport						
4. Service Base						
5. Housing						
Total OCS Land Requirement						
OCS Requirement						
As Percent of Undeveloped Land Available						
As Percent of Usable Land						

III. Impacts

(Relative impacts are based on proportion of community land used).









Industry Preference	Control			Control			Control			Result (Go To)
	Prohibit	Conditions	None	Prohibit	Conditions	None	Prohibit	Conditions	None	
	P	P	P		P	P	P	P	P	VI,A
ly s	P	P	P			P			P	VI,A
	P	P	P	P	P	P	P	P	P	III

Industry Preferences by Utility

Use Existing      Use Existing Only      Don't  
 If No Conditions      Use Existing






RIX 9.1  
tude

PRO-DEVELOPMENT

ANTI-DEVELOPMENT

NEUTRAL

Industry Preference	Control			Control			Control			Result (Go To)
	Prohibit	Conditions	None	Prohibit	Conditions	None	Prohibit	Conditions	None	
	P	P	P		P	P	P	P	P	VI.B
	P	P	P		P	P	P	P	P	VI.C
	P	P	P			P			P	VI.B
	P	P	P			P			P	VI.C
	P	P	P		P	P	P	P	P	VI.B
	P	P	P		P	P	P	P	P	VI.C
	P	P	P		P	P	P	P	P	VI.D
	P	P	P		P	P	P	P	P	VI.A
	P	P	P		P	P	P	P	P	V

