# SUPPORTING STATEMENT REGIONAL ECONOMIC DATA COLLECTION PROGRAM FOR SOUTHEAST ALASKA OMB CONTROL NO. 0648-XXXX

#### A. JUSTIFICATION

#### 1. Explain the circumstances that make the collection of information necessary.

Regional or community economic analysis of proposed fishery management policies is required by the Magnuson-Stevens Fishery Conservation and Management Act (MSA), National Environmental Policy Act (NEPA), and Executive Order 12866, among others. To satisfy these mandates and inform policymakers and the public of the likely regional economic impacts (REI) associated with fishery management policies, appropriate economic models and the data to implement these models are needed.

Much of the data required for REI analysis of the fishing industry in the Southeast Alaska (SE Alaska) economy are either unavailable or unreliable. Accurate fishery-level data on employment, labor income, and expenditures are needed to estimate the effects of fisheries on the economy. To remedy this information gap, this information collection will gather data from industry sources (i.e., commercial fishing vessel owners, local businesses) on these important regional economic variables needed to develop REI models. The modeling results will provide more reliable estimates about fishery management alternatives and significantly improve information available to management policy-makers for their decision making.

2. Explain how, by whom, how frequently, and for what purpose the information will be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, then explain how the collection complies with all applicable Information Quality Guidelines.

The information collected will be used by economists at the National Ocean and Atmospheric Administration's (NOAA's) Alaska Fisheries Science Center (AFSC) and AFSC contractors to supplement deficient fishery data in IMpact analysis for PLANning, Minnesota IMPLAN Group (IMPLAN). IMPLAN is a commercially available economic modeling system. The data collected by this project will be made available to develop regional economic models for fisheries in SE Alaska, including input-output (IO) models and computable general equilibrium (CGE) models. The resulting regional economic models will be used to estimate the impacts resulting from changes in fishery management policies for Alaska fisheries, and thus provide policy-makers with additional information to aid in decision making.

In this project, two different data collection methods will be used: (1) a mail survey of vessel owners, and (2) personal interviews with "key informants", consisting of vessel owners and representatives from local fishing industry-related businesses (see page 3, Heading B for definition and determination of "key informants", including input suppliers and seafood processors. The mail survey will be administered to six different vessel classes. The vessel

classes were determined by analyzing the vessels' main target fishery. The vessel classification system is more thoroughly described in The Research Group (TRG 2007). The mail-out survey will include an option for the respondent to fill out a survey form by accessing an internet website. The key informant interviews of vessel owners, seafood processors and other local fishery-related businesses will generally take place in SE Alaska communities.

The data collection method is more fully described below. Attached documents include the mail-out survey instruments, including the questionnaire, an advance letter for the mail survey, the questionnaire's transmittal letter, a postcard reminder for the mail survey, and a follow-up phone call script for non-responders to the mail survey. The key informant interviews will be used to (1) follow-up with vessel owners in order to fill in blanks created by incomplete or unreturned survey responses, and (2) gather information about expenditures in and outside SE Alaska economies by processors and input suppliers. The interviews will be informal and, compared with the mail out surveys, use a less-rigidly structured conversational approach to glean information from the key informants.

#### a. Mail Surveys for Vessel Owners

The vessel owner survey is structured to gather a limited amount of information related to specific vessel expenditures for labor and other inputs. Questions will be asked about the number and remuneration of crew members and skippers, and their participation in particular fishing activities. An additional question will be asked about expenditures related to operating, maintaining, and owning the vessel. These expenditures include variable expenses e.g., for fuel and lubricants, groceries, fishing gear, vessel mechanical parts, vessel equipment, repair services, bait, etc., and capital expenditures and other fixed costs. A question about net return to the vessel owner will also be asked. The resulting information will contribute to a complete set of data for use in constructing six fishing vessel economic sectors in SE Alaska. Detailed explanations of each question in the vessel survey are given below.

• Question 1 is intended to demonstrate the accuracy of data that is in the possession of the researchers. Showing this information to the respondent elicits confidence. This confidence should help raise survey response rates.<sup>3</sup>

Cook, Karen. Charting Futures for Sociology: Structure and Action. Contemporary Sociology 29: 685-692. 2000.

Dillman, Don. Constructing the questionnaire. Mail and internet surveys. New York: John Wiley & Sons. 2000.

Fanning, Elizabeth. "Formatting a Paper-based Survey Questionnaire: Best Practices" in Practical Assessment, Research & Evaluation. Volume 10 Number 12, August 2005.

<sup>&</sup>lt;sup>1</sup> The Research Group. Estimating Economic Impacts of Alaska Fisheries Using a Computable General Equilibrium Model Data Acquisition and Reduction Task Documentation. Draft. Prepared for National Marine Fisheries Service Alaska Fisheries Science Center. November 2007.

<sup>&</sup>lt;sup>2</sup> IMPLAN data provides only aggregate information on harvesting activity; there is only a single harvesting sector in IMPLAN data. To estimate the potential impacts of fishery management actions on individual harvesting sub-sectors, it is necessary to disaggregate this into different sub-sectors.

<sup>&</sup>lt;sup>3</sup> According to Social Exchange Theory (Cook 2000), survey response can be improved if the responder has confidence that effort expended to complete the survey will be rewarded by meeting some of their needs (Dillman 2000). Fanning (2005) argues that a survey provides respondents with an opportunity to voice their concerns and incept change and/or the survey is a means of validating their participation or association with a group or endeavor. Eliciting this motivation can be facilitated through proper formatting and question flow.

- Question 2 will provide information on how many months in the calendar year the survey respondent was an owner of the vessel. If the owner owned the vessel for less than a full year, the expenditure information would need to be pro-rated to represent annual expenditures. Vessel identification doesn't change with transfer of ownership, so it will be possible to screen responses to avoid double counting.
- Question 3 will provide a gross employment number associated with vessel operations. The question directs the responder's thinking to the vessel's labor requirements. The logical flow from general questions to more specific ones should improve survey accuracy.
- Question 4 provides information needed to determine employment by fishery and residency. The question will account for regional (SE Alaska) employment of crew, skipper(s), and owners by species fished.
- Question 5 will request information on remuneration paid to crew and skippers.
- Question 6 is designed to get overall information about other expenditures made in and outside SE Alaska. A redundant item about labor expenditures in this question will serve as a validity check for answers supplied in Question 5. Information on itemized labor related expenses such as principle and interest (P&I) payments are also solicited. The information from Question 6 will contribute to the research goal of determining employee compensation, proprietor income, and other non-labor expenditures made in the regional economy.

The survey concludes with space for respondents to comment on the survey.

#### **b.** Personal Interviews with Key Informants

Personal interviews will be conducted with key informants selected from among vessel owners, seafood processors and input suppliers. For our purposes, "key informant" means any representative of commercial fishing, seafood processing, or input supplier businesses who has expert knowledge of their industry in Southeast Alaska and who is willing to provide that information. For survey accuracy and representativeness it is important to have an acceptable response rate in each vessel stratification. Attempts will therefore be made to follow-up with owners of vessels who were unresponsive to the mail out survey. The selection of these vessel owner key informants to be interviewed will be determined by the response rate to the mail-out survey. It is expected that certain vessel sampling stratifications will have higher non-response rates and therefore require extra efforts to generate complete data. For example, it is predictable that there will be a relatively lower response rate for higher-earning vessels such as catcherprocessors and longliners owned by large business enterprises. Key informants from seafood processor and input supplier businesses will be solicited through contact with fishing industry associations, SE Alaska port staff, and other industry representatives. Processor and supplier key informants will be selected so that a high proportion of SE Alaska spending by these business types is included in the responses.

Several days before an interview is desired, candidate key informants will be contacted to schedule interviews. This contact call will inform them of the purpose of the study and describe the type of questions to be asked. Interviews will take the form of informal conversations, with interviewer worksheets (included in this request) used as a guide.

Personal interviews with key informants from seafood processors will be used to determine relative expenditures for inputs (including workforce) made in and outside SE Alaska. It will not be necessary to ask processors about their harvest purchases since this information is available from fish tickets.

Personal interviews with key informants from input supply industries will gather information on the level of supplier sales made to fishing industry businesses inside and outside SE Alaska, and the portion of business expenditures for labor and non-labor inputs made inside and outside SE Alaska.

Personal interviews with vessel owners will seek to fill in gaps in cases of incomplete or missing responses to the mail out survey. These interviews will also be informal but attempt to gather useable information from vessel owners especially in cases of sample strata where the number or quality of survey responses was inadequate. Other informants with expert knowledge of the harvesting sectors who are willing to provide information will also be interviewed to provide background information and ground-truthing of survey and interview responses.

Information collected from these interviews will be used to amend survey-collected vessel data and to construct regional data for the supplier and processing industries.

The survey information gathered by the contractors will be turned over to NOAA's National Marine Fisheries Service (NMFS). NMFS will retain control over the information and safeguard it from improper access, modification, and destruction, consistent with NOAA standards for confidentiality, privacy, and electronic information. See Question 10 below of this supporting statement for more information on confidentiality and privacy. The information collection is designed to yield data that meet all applicable information quality guidelines. Although the information collected is not expected to be disseminated directly to the public, results may be used in scientific, management, technical or general informational publications. Should NMFS decide to disseminate the information, it will be subject to the quality control measures and predissemination review pursuant to Section 515 of Public Law 106-554.

## 3. <u>Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology.</u>

The mail-out survey will have an optional response procedure for filling out the questionnaire using a form hosted on an internet website. A unique password provided on the mailed questionnaire will allow the responder to gain access to a form. The form will contain the same pre-coded information and ask the same questions as the mail-out questionnaire. The responder will be informed that there is a 72-hour remorse period during which time submitted answers can be edited. After the 72-hour period expires, the information will be tendered as final. In the case that both a mail and a web-base response are received, the web-base response will have precedence.

#### 4. Describe efforts to identify duplication.

There have been several other economic data collection efforts in Alaska that are noteworthy. Hartman (2002) collected regional economic information for SE Alaska from 1995-96 (for data year 1994). Another study [Hermann, et al. (2004)] tried to collect regional economic information in Alaska related to the snow crab fishery in the Bering Sea and Aleutian Islands region. More recently, surveys gathering regional economic information from harvesting vessels have been completed for Alaska's Southwest and Gulf Coast regions (OMB Control Nos. 0648-0562 and 0648-0571). Although Hartman (2002) also gathered regional economic data for SE Alaska, the data collected from that study is outdated and so needs to be updated with information from this data collection project.

### 5. <u>If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.</u>

The mail-out survey and personal interviews will be used to obtain information about expenditures for goods and services made in the regional economy. Many of the vessel ownership arrangements and the supplier/processor businesses contacted will meet the definition of a small business. Questions are limited in number and scope, thereby minimizing the burden to each respondent. The vessel owner mail-out survey should not take more than 20 minutes to complete, and the business interviews will take less than 40 minutes each on average.

The vessel owner survey was specifically developed so as to minimize the amount of time required to answer questions. For example, the question on vessel expenditures asks for corrections to be made to a prepared income statement rather than asking the responder to supply original information. The income statement shows example shares of expenditures rather than actual dollar expenditures and is tailored to each respondent's vessel class. Income statements are adapted from an earlier economic model that should provide a reasonable starting point. Also, characteristics specific to the vessel are pre-printed in each individual survey so that the respondent does not need to spend time recalling or looking these things up.

The unstructured interviews with vessel owners, suppliers and processor businesses will be conducted by experienced personnel with many years of experience in fishing industry economics. Conversations will be informal but guided to gather useable data about processes, sales and expenditures made within and outside the regional economy. Examples of personal interview worksheets to be used to guide interviews with suppliers and processors are attached. In the case of input supplier businesses the main goal will be to determine how well the regional

<sup>&</sup>lt;sup>4</sup> Hartman, J. 2002. Economic Impact Analysis of the Seafood Industry in Southeast Alaska: Importance, Personal Income, and Employment in 1994. Regional Information Report No. 5J02-07. Alaska Department of Fish and Game.

<sup>&</sup>lt;sup>5</sup> Herrmann, M., J. Greenberg, C. Hamel, and H. Geier. 2004. *Regional Economic Impact Assessment of the Alaska Snow Crab Fishery Integrated with an International Snow Crab Market Model*. University of Alaska, Fairbanks, School of Management Working Series Report 2004-001.

<sup>&</sup>lt;sup>6</sup>A fish harvesting business is considered a small business by the Small Business Administration if it has annual receipts not in excess of \$4.0 million. For related fish-processing businesses, a small business is one that employs 500 or fewer persons. For wholesale businesses, a small business is one that employs not more than 100 people.

industry is represented by IMPLAN data. A few questions about the suppliers' customer base and sales levels in and outside SE Alaska will provide sufficient information for this determination. The conversations will also pursue information about sources of supply and locus of expenditures. In the case of processors, rather than simply asking the respondent to provide original numbers, they will be shown an income statement (derived from an earlier economic model) containing financial accounting information itemized in a way they are accustomed to seeing. The respondent will review and correct the income statement. The processor interviews will also gather information about product forms and yields as well as destination sales markets. Processor representatives are generally open-minded about providing such information as they are proud of their business successes. In turn, the experienced interviewer may be able to provide general information about the fishing industry to assist the responder in making future business decisions.

### 6. <u>Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently.</u>

No other entity is likely to collect the information needed for resolving the IMPLAN data deficiencies. Therefore, if the data collection is not conducted by us, the deficiencies in the regional data will not be corrected, and therefore, the mandates of MSA, NEPA, and Executive Order 12866 described in Question1 above will not be satisfied.

### 7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.

None.

8. Provide information on the PRA Federal Register Notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments. Describe the efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

A <u>Federal Register</u> Notice published on May 7, 2010 (75 FR 25203) solicited public comment. No comments were received.

### 9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.

We do not have any plan to provide any payments or other gifts to the respondents.

### 10. <u>Describe any assurance of confidentiality provided to respondents and the basis for</u> assurance in statute, regulation, or agency policy.

On the last page of the survey, we provide a confidentiality statement as follows:

CONFIDENTIALITY: Per Section 402(b) of the Magnuson-Stevens Act (16 U.S.C. 1801, et seq.), all individual surveys will be held by only a limited number of researchers at AFSC and the contractors who will enter or work with the data. After the data are entered in an electronic format, only these researchers will have password-protected access to the data. After data from the surveys have been entered into an electronic format, the hard copies will be kept in a locked metal cabinet. These individual surveys will be destroyed upon completion of the study. Your name, vessel identification and address will be used only for mailing and survey administration purposes. Only summary results will be reported to the public. NMFS and other agencies will receive only aggregate results in summary form.

## 11. <u>Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.</u>

No sensitive questions will be asked.

### 12. Provide an estimate in hours of the burden of the collection of information.

The mail-out survey will be used to gather information from vessel owners on the harvesting sector, and key informant interviews will be conducted to follow-up this information and also to gather information from seafood processors and local input suppliers. The mail-out survey will be sent to a sample of vessel owners. Ex-vessel revenue information contained in the Alaska Fisheries Information Network (AKFIN) database for vessels delivering to Southeast Alaska ports was used to derive the sample. The sample size was determined using an unequal probability sampling (UPS) method to account for the unequal distribution of harvest in each vessel stratification. The questions to be asked of survey respondents will pertain to their activities during calendar year 2009. AKFIN data for 2009 will be used to tabulate survey results and perform a non-response analysis. The AKFIN database will also provide information about ex-vessel sales and processor purchases at Southeast Alaska ports. While the survey of vessel owners uses scientific procedures to determine an optimal sample size in order to achieve statistical significance, the selection of key industry informants to be interviewed will use much less formal selection procedures. The following describes the estimated responder burden for both the vessel owner and key informant survey procedures.

It was found using AKFIN data that 2,271 vessels delivered to SE Alaska ports during 2008. Therefore, the total population size is 2,271 vessels consisting of six subpopulations corresponding to the six distinct vessel classes. Given the population size, desired level of precision, choice of confidence level, and variance of an expenditure proxy variable (i.e., exvessel revenue), the target sample size is 284. The expected response rate is 25%, so the number of vessels whose owners will receive a mail-out questionnaire is 1,136. The subpopulation sizes and the number in each vessel class who will receive a mail-out questionnaire are: catcher-

processors (75 receiving the survey, 46 expected to respond); trawlers (5, 2); longliners (414, 343); crabbers (147, 67); salmon vessels (1,419, 593); and other vessels (211, 85). A questionnaire will take about 20 minutes to complete. Therefore the expected 284 responses will represent a total burden of about 95 hours.

It is estimated that up to 60 phone calls will be made to contact local vessel owners, processors and input suppliers. It is anticipated that these calls could take up to 20 minutes each. In some cases calls will be used to gather follow-up information directly from vessel owners. Other calls will serve to arrange appointments for interviews with vessel owners and key informants. The total burden of these 60 calls is expected to be 20 hours.

The number of interviews necessary to be conducted with vessel owners will depend on response rates to the mail out survey received in the various vessel strata. It is anticipated that approximately 30 interviews with vessel owners will be required.

A review of the AKFIN database shows that in 2008 there are 310 harvest buyers in SE Alaska; however, only 10 of these purchased almost two-thirds of all harvests. All 10 of these major shoreside processors will be contacted to arrange key informant interviews.

Information about supplier businesses will be assessed by talking with fishing industry representatives during port visits. Local knowledge will be used to identify candidate supplier businesses for key informant interviews. A list of candidate business contacts for the interviews will be compiled to ensure broad coverage of business types. The evaluation will consider the range of goods and services provided to harvesters and processors, as well as the relative size of the businesses. It is anticipated that approximately 10 interviews with supplier business key informants will be conducted.

Given the interpersonal nature of these informal conversations to be held with vessel owners, suppliers and processor representatives, meetings could last between 30 minutes and one hour. It is assumed an average interview would take 40 minutes. If each of a total of 50 interviews (30 vessel owners + 10 processors + 10 suppliers) takes 40 minutes, the total burden of the key informant interviews will be 33 hours.

Therefore, the total burden of respondents is estimated to be 148 hours (95 + 20 + 33), as shown in Table 1, below.

Table 1. Estimated population, respondents and burden on data collection participants.

Respondent type	Population	Expected responses	Responses per respondent	Estimated time per response	Estimated hours (responses multiplied by time per response)
Mail Survey					
Catcher-Processor Vessels	75	12	1	20 minutes	4
Trawler Vessel	5	2	1	20 minutes	1
Longliner Vessels	414	85	1	20 minutes	28
Crabber Vessels	147	17	1	20 minutes	6
Salmon Netter/ Troller Vessels	1,419	147	1	20 minutes	49
Other Vessels	211	21	1	20 minutes	7
Phone calls to follow-up with vessel owners and to arrange interviews with input suppliers and processors.		60	1	20 minutes	20
Interviews with vessel owners and key informants from input suppliers and seafood processors		50	1	40 minutes	33
TOTALS	2,291 <sup>a</sup>	394 responses	-	-	148 hours

<sup>&</sup>lt;sup>a</sup> 2,271 vessels and 20 suppliers/processors

## 13. Provide an estimate of the total annual cost burden to the respondents or record-keepers resulting from the collection (excluding the value of the burden hours in Question 12 above).

The estimated total annual cost to the public is \$0 (mail surveys will be accompanied by postage-paid envelopes).

### 14. Provide estimates of annualized cost to the Federal government.

The total cost of this data collection project is estimated to be \$64,000. This covers compensation for labor, travel, and per diem to design and implement the surveys. Since this project will be spread over two years, the annualized cost is \$32,000. In the event that a lower than expected survey response rate is realized, a contingency budget of up to \$40,000 will be made available to increase the number of on-site interviews conducted with vessel owners in

order to assure that an adequate number of responses are obtained in key sample strata. These expanded site visits will also be used as opportunities to interview local industry key informants.

#### 15. Explain the reasons for any program changes or adjustments.

There are no program changes or adjustments.

### 16. <u>For collections whose results will be published, outline the plans for tabulation and publication.</u>

The data collected will be used to revise or replace IMPLAN data for the study region. The collection of data is expected to be implemented during late 2010 – early 2011. The construction and revision of the regional economic data set will be completed by June 2011. Summary results of data collection will be published in a project report, but will not be made available on the Alaska Fisheries Science Center's website. It is anticipated that data collected under this project will be used to construct regional economic models of SE Alaska under subsequent projects. Results from these models and descriptions of the data methods used to develop the models will be published in peer-reviewed journals.

### 17. <u>If seeking approval to not display the expiration date for OMB approval of the</u> information collection, explain the reasons why display would be inappropriate.

Not Applicable.

### 18. Explain each exception to the certification statement.

There are no exceptions.