

# **The Atlantic Coastal Cooperative Statistics Program**

## **The First Ten Years**

### **August 2005**

#### **Introduction**

The Atlantic Coastal Cooperative Statistics Program (ACCSP) requires an external peer review every five years. This report provides background information on the program to start the process for the 2006 review. It is intended to elicit the views of the ACCSP Coordinating Council on the establishment, implementation, and future of the program. The report contains a brief overview of the purpose, scope, and history of the Program; its operations; current status of the data warehouse and data collection programs; and funding distributions by partner and module from 1999 to the present. The final section lists issues and concerns, along with key questions that will form the basis of the facilitated August 15<sup>th</sup>, 2005, meeting of the ACCSP Coordinating Council.

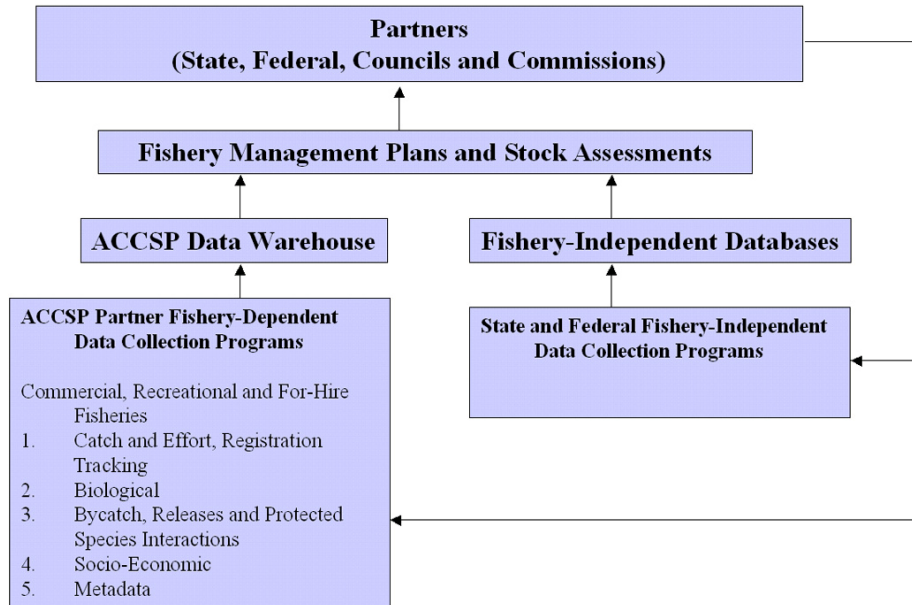
#### **History, Purpose and Scope**

Initial planning for an Atlantic coast cooperative state-federal fisheries-dependent statistics program began in 1994 (Figure 1). The scope of the ACCSP was determined to be "commercial, recreational and for-hire fisheries-dependent statistics for all living marine resources, including finfish, crustaceans and shellfish; live rock and corals; marine mammal and endangered species release, discard, and protected species interactions; aquaculture; and internationally managed species."

The mission of the ACCSP is to be a "cooperative state-federal program to design, implement, and conduct marine fisheries statistics data collection programs and to integrate those data into a single data management system that will meet the needs of fishery managers, scientists, and fishermen."

ACCSP data will be combined with fishery-independent data to improve stock assessments and the development of fishery management plans to improve marine resource conservation (Figure 2).

Figure 2. Flow of Data for Fisheries Management.



## Operations

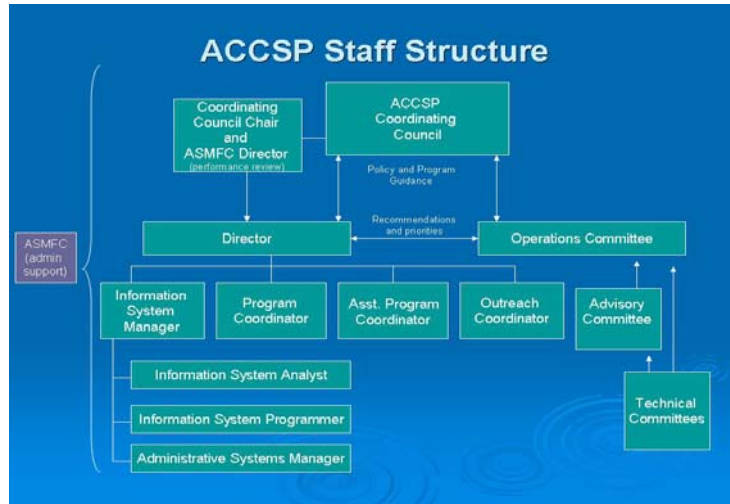
The ACCSP functions through committees composed of partner representatives, a small program staff, and administrative support provided by the Atlantic States Marine Fisheries Commission (ASMFC) (Figure 3).

The ACCSP staff provide programmatic support; routine coordination among partners; programmatic support for committees; outreach support; and Information Systems (IS) expertise, including IS support for some partner projects, operation of the ACCSP data warehouse, and creation and maintenance of multi-partner data collection applications. The current ACCSP staff includes the Director, Program Coordinator, Assistant Program Coordinator, Outreach Coordinator, Information System Manager, Programmer, Analyst, and Systems Administrator (Figure 3). The ACCSP also hires staff for some partners with ACCSP-funded projects.

The ACCSP staff and Operations Committee develop annual Operations Plans based on the implementation schedules in the 2004-2008 Implementation Plan, with adjustments for past progress, resources available, and new developments. The Operations Plans detail major tasks to be accomplished annually by staff and committees, list the responsible parties, and set schedules. They form the basis for the administrative grant from the National Marine Fisheries Service (NMFS).

While the ACCSP is not an ASMFC program, the ASMFC provides administrative support for the ACCSP, including personnel services, meeting logistics, grants management, and office space for all present and future ACCSP staff.

Figure 3. Atlantic Coastal Cooperative Statistics Program Organizational Chart.



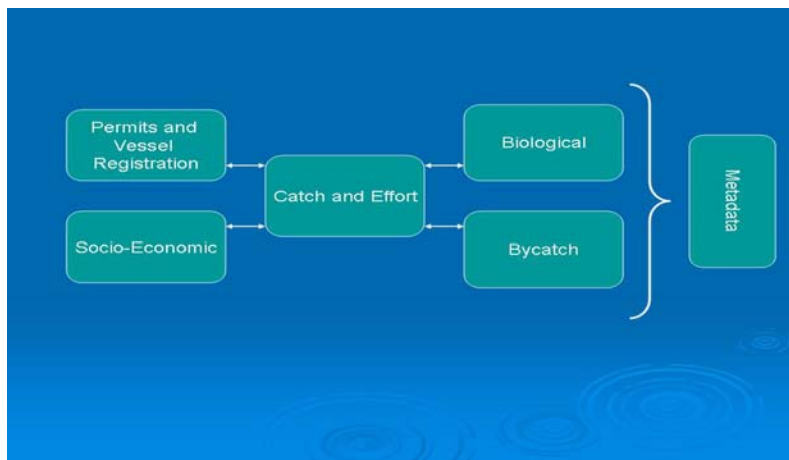
**Program Status**

*Data Warehouse*

The ACCSP data warehouse is a fully integrated system that will contain all of the major types of fisheries-dependent statistics. These include landings, catch and effort, biological, observer, socio-economic, and other data. The system will allow linking of all data to a specific trip (Figure 4). The ACCSP data warehouse is accessible by all partners, subject to confidentiality protocols.

Database structures have been established for all data modules, except for some recreational and for-hire effort tables, and the socio-economic module, which has some commercial tables but is not fully developed.

Figure 4. Atlantic Coastal Cooperative Statistics Program Information Modules.



Catch and effort databases have been populated for partners with commercial trip-level data and with some legacy summary data, recreational MRFSS catch and effort estimates, and MRFSS raw intercept data. Registration tracking databases have data from all state and federal partners. Biological databases have been populated for lobsters, but little exists in the warehouse for other species. Bycatch databases are not yet populated. Socio-economic databases have been populated only for the Northeast commercial pilot survey.

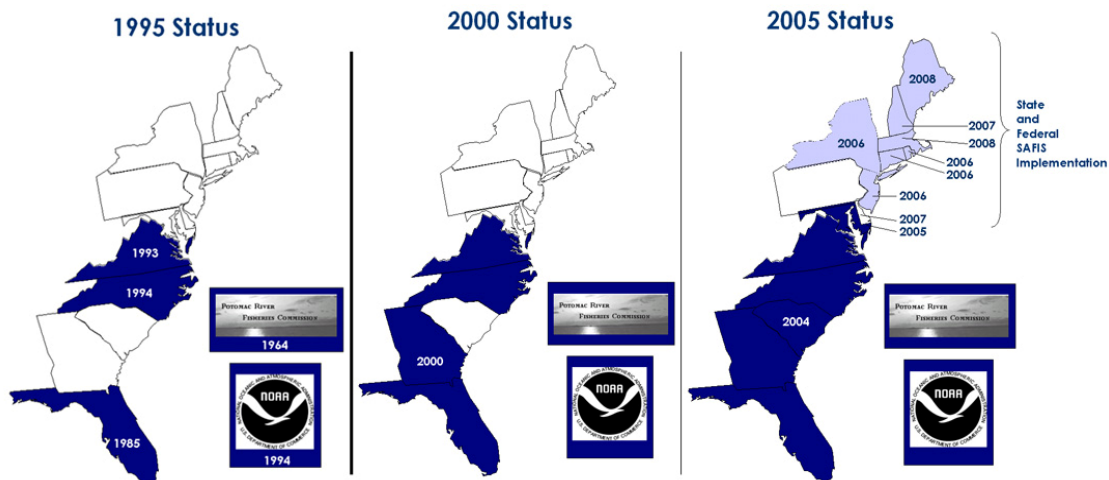
Legacy data will be acquired after implementation of higher priority standards, or as time allows.

Metadata applications have not yet been developed.

### **Commercial Fisheries**

Catch and Effort: Trip-level reporting systems for dealers and/or fishermen have been established from Maryland to Florida. All states from Virginia south require trip-level reporting of all species landed in all areas of the state (Figure 5). Maryland completed implementation of reporting for all counties and species in 2005. Routine data feeds have been established for all these states.

Figure 5. Implementation of Atlantic Coastal Cooperative Statistics Program Standards for Commercial Catch and Effort.



The ACCSP collaborated with the NMFS Northeast Regional Office (NER) and Fisheries Science Center (FSC), and northeast state partners to develop the Standard Atlantic Fisheries Information System (SAFIS), an integrated state-federal set of systems for commercial fisheries electronic reporting. SAFIS is being used to implement trip-level dealer reporting north of Maryland (Figure 5).

Some state and federal partners already require vessel/fishermen trip reports and some have been submitted to the ACCSP warehouse, although routine data feeds are still needed. Vessel/fishermen trip reports are being incorporated into SAFIS in 2006. Full implementation is expected in 2006 for Rhode Island, Connecticut, and New York; in 2007 for New Hampshire, New Jersey, and Delaware; and in 2008 for Maine and Massachusetts.

Quota monitoring is supported by SAFIS and other electronic reporting applications, which allow real-time data entry. In the northeast, this has replaced the federal IVR system and may eventually replace existing state systems. Existing federal paper-based systems and electronic systems implemented by some states support quota monitoring in the southeast.

Registration Tracking: A regional database of fishermen, vessels, operators and dealers permitted or licensed by all Atlantic state and federal partners has been assembled, and a system to assign a unique identifier to each entity was developed. Some partner systems still need changes to meet ACCSP standards to uniquely identify entities across jurisdictions.

Biological: The ACCSP has developed an application to display annual sampling targets and actual samples that have been collected: that system will be tested and implemented in 2006-2007. Existing biological data will be incorporated into the data warehouse beginning in 2006. Samples are collected through long-standing state and federal sampling programs. More funding for sampling is needed to fully implement biological sampling at current ACCSP target levels, which are derived annually from partner input based on management needs.

Bycatch, Releases, Discards, and Protected Species Interactions: Program standards, sampling targets, and priorities are in place for this module. There are some longstanding observer programs, and the ACCSP has provided funding for some of them; however, no data feeds have occurred. There are many fisheries with inadequate or no sampling or baseline data for bycatch and discards.

Socio-economic: Some partners have conducted periodic cost-earnings and other socio-economic surveys of some commercial fisheries. The ACCSP funded a 3-year socio-economic pilot study in the Northeast and Georgia in the late 1990s to evaluate methodologies. That pilot was completed, and when the analysis is completed, standards will be finalized.

### ***Recreational Fisheries***

Catch and Effort: The NMFS Marine Recreational Fisheries Statistics Survey (MRFSS), which is the primary ACCSP standard for recreational fisheries data collection, has been ongoing since 1981. Some states conduct the intercept survey and/or augment the intercept and/or telephone surveys. The ACCSP funded increased sampling in the Northeast from 2001-2004 and in 2006, but not in 2005. The ACCSP recently completed an analysis to determine the increase in sample sizes needed to reduce proportional standard errors of annual estimates of managed species to 20% or less. More research is needed to improve recreational fisheries statistics and close data gaps. Some partners collect data on highly migratory species, but monitoring of highly migratory species has not been fully addressed by ACCSP standards.

Biological: Trained interviewers routinely collect length and weight data as part of the MRFSS intercept survey. Other biological samples are not collected during routine interviews, as it is too disruptive, thus special add-ons are needed.

*Bycatch, Releases, Discards, and Protected Species Interactions:* Intercept survey interviewers routinely ask the number of finfish by species that are discarded dead or released alive.

*Socio-economic:* The MRFSS has periodically conducted NMFS-funded add-ons to determine the demographics and economic value and impact of recreational fisheries. The NMFS economists are developing new surveys for modeling angler management preferences. ACCSP standards are being updated to reflect current theory.

***For-Hire:***

*Catch and Effort:* The ACCSP standard for for-hire (charter and head boats) fisheries data collection is the NMFS For-Hire Survey (FHS), which was implemented in Florida in 2000 and north of Florida in 2003. This major change in methodology has improved precision in estimates and has been supported by ACCSP funding.

Some states conduct and/or augment the intercept and/or telephone surveys. Some partners collect data on highly migratory species, but monitoring of highly migratory species has not been fully addressed by ACCSP standards.

*Registration Tracking:* Implementation of the FHS required development of a vessel directory; however, the data structures have not been modified to accommodate the data in the ACCSP warehouse.

*Biological:* Trained interviewers routinely collect length and/or weight data during dockside and at-sea interviews. Other biological samples are not collected during routine interviews, as it is too disruptive, thus special add-ons are needed.

*Bycatch, Releases, Discards, and Protected Species Interactions:* Intercept survey interviewers routinely ask the number of finfish by species that are discarded dead or released alive for charter and head boats. Interviewers board head boats to directly observe and record finfish bycatch.

*Socio-economic:* Some partners have periodically conducted studies to determine the demographics and economic value and impact of for-hire fisheries. Standards for for-hire fishermen have been established, but not for captains and crew.

**Program Funding**

Funding for the ACCSP is allocated in an annual competitive process, via a Request For Proposals. The Operations and Advisory Committees and ACCSP Director review all proposals and make funding recommendations to the Coordinating Council for final decisions. The ACCSP funding rules differ from many other government-funded grants, which usually are allocated to participating entities by a formula. Instead, the funds are directed to the top priorities for filling data gaps and making needed improvements in the following order of priority established by the 2002-2006 Strategic Plan: 1) catch and effort--commercial, recreational and for-hire; 1a) permit and vessel registration data; 2) biological data; 3) bycatch, releases, discards and protected species data; 4) quota monitoring data; 5) economic data; and 6) sociological data.

The ACCSP has funded a variety of projects across all modules since 1999 (Figure 6; Table 1; Appendix A).

Figure 6. Atlantic Coastal Cooperative Statistics Program Funding Distributions by Module and Year from 1998-2006.

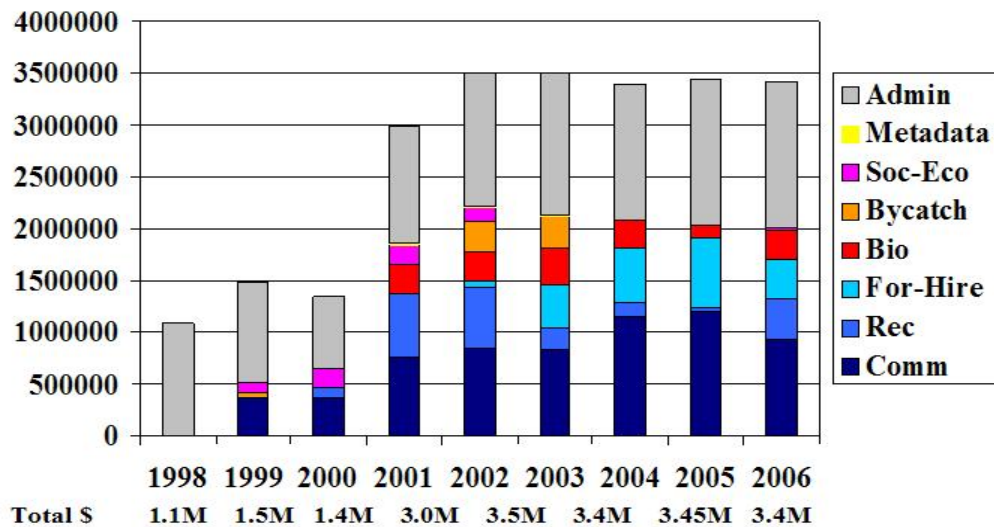


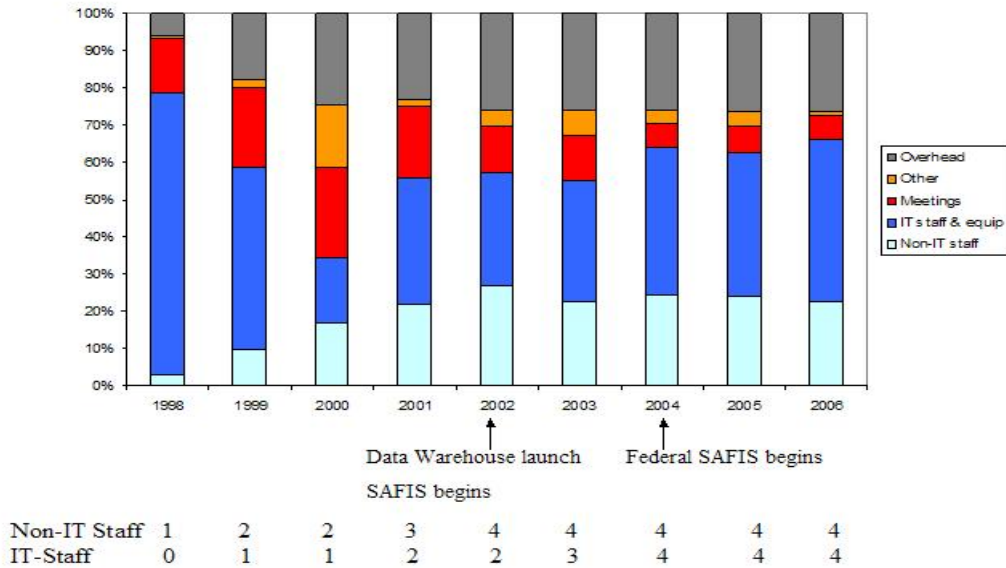
Table 1. Total Atlantic Coastal Cooperative Statistics Program Funding by Year and Module, 1998-2006.

Module	1998	1999	2000	2001	2002	2003	2004	2005	2006	Total
Com. C&E	0	358,844	359,398	766,420	846,529	838,842	1,143,600	1,199,102	924,724	5,512,735
Rec. C&E	0	0	0	593,899	591,484	291,122	133,296	38,224	390,787	1,648,125
For-Hire C&E	0	5,000	94,082	7,695	66,000	418,972	533,410	666,740	390,713	1,791,899
Biological	0	0	0	283,560	266,751	351,077	265,880	120,186	273,255	1,287,454
Bycatch	0	50,000	0	0	300,000	300,000	0	0	0	650,000
Socio-Eco.	0	107,000	196,178	185,153	131,506	0	0	0	20,835	619,837
Metadata	0	0	0	19,938	15,101	17,229	0	0	0	52,268
Admin*	1,092,103	970,902	688,173	1,132,035	1,282,568	1,369,758	1,318,319	1,425,545	1,418,871	8,187,300
Total	1,092,103	1,491,746	1,337,831	1,988,700	3,499,939	3,587,000	3,394,605	3,449,797	3,419,185	19,749,618

\* Administrative funds also include grants to partners for staffing and travel, in addition to the ACCSP Administrative Grant.

While funding for the administrative support makes up approximately 40% of the annual budget, the largest component of the administrative budget is for information management staff and systems (Figure 7).

Figure 7. Atlantic Coastal Cooperative Statistics Program Administrative Grant Funds by Category (percent), 1998-2006.



All of the partners, except Delaware, the Potomac River Fisheries Commission, and the three federal fisheries management councils, have received funds from the ACCSP to implement data collection programs (Table 2; Appendix A). In some cases, while funds have gone to an individual partner, the project has benefited multiple partners (Appendix A, Table A.1). Many partners have required multiple years of funding to implement and maintain ACCSP standards (Appendix A, Table A.4).

It is important to note that most of the partners have contributed significant amounts of their own resources to establishment of ACCSP-standard data collection programs. While there is no easy way to compile those contributions, it is believed that they exceed the funding that has come directly through the Atlantic Coastal Fisheries Cooperative Management Act (ACFCMA) and ASMFC Fish Statistics line items.



Table 2. Total Atlantic Coastal Cooperative Statistics Program Funding by Partner, 1999-2006.

Partner	Total Funds	Percent of Funds	Rank
ACCSP Administrative Grant	7,833,128	39.5	1
Recreational Technical Committee	3,115,005	15.7	2
National Marine Fisheries Service – Northeast Region/Fisheries Science Center	1,627,310	8.2	3
Maine	901,725	4.6	4
Rhode Island	770,863	3.9	5
New York	670,900	3.4	6
ASMFC Committee on Economic and Social Sciences	619,837	3.1	7
Massachusetts	542,245	2.7	8
North Carolina	507,378	2.6	9
Maryland	434,704	2.2	10
Georgia	408,069	2.1	11
Virginia	387,774	2.0	12
New Hampshire	338,638	1.7	13
New Jersey	319,817	1.6	14
National Marine Fisheries Service – Southeast Region/Fisheries Science Center	296,262	1.5	15
South Carolina	271,520	1.4	16
ASMFC	254,760	1.3	17
National Marine Fisheries Service – Headquarters	134,400	0.7	18
Florida	133,781	0.7	19
Connecticut	124,780	0.6	20
Delaware	83,657	0.4	21
United States Fish and wildlife Service	56,722	0.3	22
District of Columbia, Potomac River Fisheries Commission, and the New England, Mid-Atlantic, and South Atlantic Fishery Management Councils	0	0	23
Total	19,833,275	100	

The ACCSP funding has remained relatively stable since 2002; however, the 2004-2008 Implementation Plan details the need for additional resources to continue implementation (Table 3).

Table 3. Additional Funding Needed to Implement Atlantic Coastal Cooperative Statistics Program Standards Through 2008. (- = no funds projected or they are included in the Administrative module).

<b>Module</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Administrative	1,513,000	1,552,000	1,584,000
Commercial Catch and Effort	650,000	805,000	889,000
For-Hire/ Recreational Catch & Effort	1,684,000	3,014,000	7,009,000
Registration Tracking	-	-	-
Biological	790,000	1,340,000	1,340,000
Bycatch, Discards and Released Alive	350,000	400,000	350,000
Socio-Economic	300,000	500,000	500,000
Meta-Data	303,000	75,000	438,000
Outreach	80,000	-	-
<b>Total Funds</b>	<b>5,670,000</b>	<b>7,686,000</b>	<b>12,110,000</b>
<b>Existing Funds</b>	<b>3,500,000</b>	<b>3,500,000</b>	<b>3,500,000</b>
<b>New Funds Needed</b>	<b>2,170,000</b>	<b>4,186,000</b>	<b>8,610,000</b>

### Issues and challenges

#### *Structure and Operations of the ACCSP*

*Program Design and Standards* - Most of the program standards have been developed. Some will continue to evolve or await resolution of research, primarily improvements to the recreational and for-hire catch and effort data collection, and socio-economic surveys.

**Q: What are the Coordinating Council's highest priorities for completing, changing, or adding to the design and/or standards?**

*Administrative Home* – Though it is located within the ASMFC for administrative purposes, the ACCSP was established as a separate program from the ASMFC to avoid any perception of influence of resource management on data collection and management. The ASMFC has provided excellent administrative support for meeting logistics, office space, and personnel. Developing a completely separate ACCSP could increase administrative costs and could divert the staff's time from programmatic issues.

**Q: What, if anything, should be done to enhance the view of the ACCSP as a separate program without increasing administrative burden?**

*ACCSP Staff* - The number of staff has grown from one Program Manager in the 1990s to eight full-time staff in 2004. The number of staff is not expected to grow in the next 3-5 years, unless new programs are initiated.

**Q: Is the Coordinating Council satisfied with the staff's programmatic support and management of the ACCSP?**

## ***Funding***

***Funding Process*** - This document provides a look at the distribution of funds through the program's history. The implementation of ACCSP standards is dependent upon partners submitting proposals that address ACCSP priorities. In some cases, partners have implemented programs but have been unable to assume the costs of maintaining them. Some partners have been reluctant to submit funding proposals to initiate programs because their existing resources would not allow assumption of the maintenance costs.

**Q: Is this the correct business model?**

**Q: Should partners rely on ACCSP to maintain standards once programs are implemented?**

**Q: Should partners be supporting the cooperative nature of the ACCSP by establishing partner priorities in line with those of the ACCSP?**

**Q: Does the Coordinating Council believe the funding criteria ought to be changed?**

***Appropriations*** – The combined federal appropriation from the ACFCMA and ASMFC Fish Statistics line items has remained at \$3.5 million since 2002. More dedicated funding is needed to fill gaps in recreational and for-hire effort sampling, fully implement biological and observer sampling, conduct socio-economic surveys and develop metadata applications, as outlined in the 2004-2008 Implementation Plan.

**Q: What should be done to obtain additional resources?**

**Q: How should efforts to obtain additional resources be coordinated with other initiatives and the partners?**

**Q: Who should be involved in efforts to obtain additional resources?**

**Q: What would the Coordinating Council choose as the next major priorities for additional funding?**

## ***Education and Communication***

***Success Stories*** - The ACCSP is just now reaching critical mass in terms of having a data warehouse with enough spatial and temporal coverage to be useful to stock assessments and other management analyses. Some ACCSP partners have successfully used commercial trip-level data within their own jurisdictions, and some regional analyses have used the ACCSP data warehouse; however, until implementation of data collection programs is somewhat completed, the success of the ACCSP in directly influencing fisheries management decisions cannot be measured yet. Even with complete coast-wide implementation, some stock assessments may not be able to fully utilize this new database until there are multiple years of data available for analysis.

**Q: Has ACCSP progress in establishing data collection programs met the expectations of the Coordinating Council?**

**Q: What could be done to realistically define the success of the program, prior to more complete implementation of the program standards by all partners?**

*Internal Communications* - The ACCSP produces a variety of documents detailing program status. The ACCSP staff produced a monthly status report until 2004. Based on feedback, a new 1-2 page report format is being developed by staff for quarterly reports to the Coordinating Council (first issue expected in September). Six-month progress and final annual reports for previous administrative grants are available on the web site through 2004. A status report on ACCSP-funded projects is produced twice a year and provided to the Coordinating Council. The Outreach Coordinator produces monthly columns for the ASMFC's "*Fisheries Focus*". Program briefings are routinely presented to the ASMFC Management Science Committee.

**Q: Is the Coordinating Council kept sufficiently aware of the ACCSP's activities?**

**Q: Besides the current and planned reports, what additional communications would they like to see?**

*External Outreach* - In 2003 the ACCSP shifted outreach efforts from advertising a very incomplete data warehouse towards helping the partners establish commercial reporting systems and the new FHS, establishing better documentation of the program itself (Program Design, web site, etc.), and recently developing strategies to improve public perception of the recreational surveys. As the data warehouse is becoming more complete, efforts to assist partners establishing programs will continue, but focused advertising of the data warehouse will be re-established. Initial efforts will be focused on reaching stock assessment and other scientists. In addition to those actions, significant efforts were made to improve participation from the Advisory Committee at their meetings, and especially in the development of SAFIS and the FHS.

**Q: Is the Council satisfied with the direction of outreach efforts?**

**Q: Are there other types of outreach the Coordinating Council would like us to develop or focus on?**

#### *Other Issues*

**Q: Are there any other individual issues that the Coordinating Council would like to discuss and/or have the external Peer Review address?**

#### *Overall*

Having considered the individual issues and challenges facing the ACCSP, the following questions should be addressed to provide overall guidance for the 2006 External Peer Review and Strategic Plan Update:

**Q: Are the ACCSP goals being achieved?**

**Q: Is progress on track with original time expectations?**

**Q: Are they the right goals?**

Appendix A. Funding Distributions for the Atlantic Coastal Cooperative Statistics Program, 1999-2006.