



E-FAN-04-005-3

June 2004

Establishing a Web-Based Data Collection System for National School Lunch and National School Breakfast Program Data

Technical Report

By Loren Bell, Health Systems Research, Inc., and Anne Kenyon, Todd Heinrich, and Dea Zullo, RTI

ERS project representatives: Parke Wilde and Alex Majchrowicz

Abstract

This report is a followup to an initiative to establish a central website to collect data from States on the National School Lunch and the School Breakfast Programs. A central website could be used by researchers and program administrators to compare and analyze data across State and local areas for participation trends in local school district programs. The report provides an implementation plan for establishing a central website, including potential costs, benefits, and alternatives. The initiative is one of three that have the potential to improve the usefulness and cost-effectiveness of research on Federal food assistance and nutrition programs. The other initiatives are addressed in the reports, *Linking the Current Population Survey to State Food Stamp Program Administrative Data* (E-FAN-04-005-1) and *Linking WIC Program Data to Medicaid and Vital Records Data* (E-FAN-04-005-2).

This report was prepared by Health Systems Research, Inc., and RTI under a research contract from the Economic Research Service. The views expressed are those of the authors and not necessarily those of ERS or USDA.

TABLE OF CONTENTS

I.	OVERVIEW	1
II.	BACKGROUND	4
III.	INITIATIVE SUMMARY	6
	STRUCTURE AND CONTENT	6
	IMPORTANCE FOR RESEARCH AND ADMINISTRATIVE PURPOSES	7
IV.	OVERVIEW OF THE IMPLEMENTATION PLAN	10
	DESCRIPTION OF ACTORS	10
	OVERVIEW OF THE ACTIVITIES	11
	POTENTIAL IMPLEMENTATION BARRIERS	13
V.	DESCRIPTION OF SPECIFIC TASKS	14
	TASK 1 – CONDUCT INITIAL AND SUBSEQUENT STEERING COMMITTEE MEETINGS	14
	TASK 2 – DEVELOP CONTACT LISTS	14
	TASK 3 – CONDUCT ASSESSMENT OF STATE-LEVEL DATA BEING COLLECTED ..	15
	TASK 4 – COLLECT SAMPLE OF ARCHIVED DATA FROM STATES.....	16
	TASK 5 – IDENTIFY AND CONDUCT REVIEW OF EXISTING DATABASES	17
	TASK 6 – ANALYZE DATA ELEMENTS, ASSESS AVAILABILITY, AND DEFINE CORE DATA SET	17
	TASK 7 – EXPLORE AND POTENTIALLY DEVELOP OPTIONS FOR USING AUTOMATED UPLOADS TO RETRIEVE DATA FROM STATES OR EXISTING DATABASES	18
	TASK 8 – DESIGN THE WEBSITE, INCLUDING DEFINING DATA SECURITY AND ACCESS	19
	TASK 9 – BUILD COMPUTER-ASSISTED DATA ENTRY PROGRAMS.....	20
	TASK 10 – BUILD TOOLS TO QUERY, SORT, AND EXPORT THE DATA.....	21
	TASK 11 – DESIGN SUMMARY TABLES, REPORTS, AND ARTICLES TO BE POSTED TO THE WEB.....	21
	TASK 12 – IMPLEMENT INITIAL DATA COLLECTION FOR NINE STATES	22
	TASK 13 – OBTAIN OMB CLEARANCE.....	23
	TASK 14 – PREPARE TO ADD ADDITIONAL STATES	23
VI.	SUMMARY OF COSTS AND SCHEDULE	25
VII.	SUMMARY OF INITIATIVE ALTERNATIVES	27
	SNPIIS PIGGY-BACK ALTERNATIVE	27
	OTHER ALTERNATIVES	28
VIII.	REFERENCES	31

TABLE OF CONTENTS (Continued)

IX.	APPENDIX A: DETAILED COST ASSUMPTIONS FOR SPECIFIC TASKS: BASE INITIATIVE	32
X.	APPENDIX B: DETAILED COST ASSUMPTIONS FOR SPECIFIC TASK ALTERNATIVES AND SUMMARY OF SNPIIS PIGGY-BACK INITIATIVE ALTERNATIVE	44

LIST OF EXHIBITS

EXHIBIT 1. EXAMPLE OF A “MOCK” REPORT WITH EMBEDDED WEB LINKS	8
---	---

LIST OF TABLES

TABLE 1. SUMMARY OF COSTS OF BASE INITIATIVE BY GOVERNMENT AGENCY ...	25
TABLE 2. SUMMARY BY PROPOSED TASK OF SCHEDULE AND ESTIMATED COST ...	25
TABLE A-1. LABOR AND NON-LABOR COSTS BY TASK, WEB-BASED DATA COLLECTION SYSTEM INITIATIVE.....	32
TABLE A-2. SUMMARY OF WEB-BASED INITIATIVE LABOR AND NON-LABOR COSTS.....	35
TABLE B-1. COST OF TASK ALTERNATIVES FOR WEB-BASED INITIATIVE.....	46
TABLE B-2. SUMMARY OF WEB-BASED INITIATIVE ALTERNATIVE TASK COSTS ...	47
TABLE B-3. SNPIIS PIGGY-BACK INITIATIVE ALTERNATIVE: TASKS RETAINED/ELIMINATED	48

I. OVERVIEW

The purpose of this report is to establish a central website to collect data from States about the National School Lunch Program (NSLP) and the School Breakfast Program (SBP). This report is a follow-up to Wittenburg, et al. (2001), which included a summary of ten data collection/enhancement initiatives that have the potential to improve the utility and cost-effectiveness of research on federal food assistance and nutrition programs. Economic Research Service (ERS) selected three initiatives from that report for further development. This report, along with Wittenburg, et al. (2001) and Bell (2001), provide a specific implementation plan, including potential costs, benefits, and alternative options, for the three initiatives selected by ERS.

This initiative proposes to establish a central website to collect data from States about the National School Lunch Program (NSLP) and the School Breakfast Program (SBP), which together served approximately 34 million children daily in FY2000 at a cost of approximately \$7 billion¹. Data would be collected at the School Food Authority level (i.e., these are typically school districts) and would include information about the characteristics of participating SFAs and students. In addition to serving as a data collection point, the proposed website will be used to disseminate resulting databases, summary reports, and articles.

A phased approach is suggested, which will query state-level contacts to obtain SFA-level data and gradually increase the respondent pool and expand the nature of the data being collected, as much as is feasible. Although States cannot be required to participate, FNS could tie participation to program funding to encourage compliance. However, some considerations weigh against mandating participation, at least in the early stages of this initiative. After this initiative has been piloted, FNS may need to consider additional rulemaking to require states' participation in order for the database to be representative. The first phase of implementation will include the design of the website, identification of state-level contacts (i.e., "respondents") for approximately 20 states, and collection of data from an initial set of nine states. A core set of data elements will be identified and collected from these state contacts, and initial reports to be posted on the web will be designed. Subsequent phases of the initiative will include the expansion of the respondent base to incorporate additional states, a possible expansion of the data collection requests to include school-level data, and the development of a school food authorities contact list to which web-based queries will be directed. This initiative provides an initial framework upon which relevant stakeholders—including the Education Information Advisory Council (EIAC), States, the American School Food Service Association (ASFS), and USDA—can build; it must be recognized that part of this initiative is an exploration of available data and their potential uses for researchers.

This initiative seeks to capitalize on information routinely collected by state agencies and aggregated across SFAs but not systematically compiled for research use as

¹ Child Nutrition Web Pages, U.S. Department of Agriculture Website.

a database of SFA-level observations. Often these data become part of higher-order aggregates reported and analyzed as state totals, but the details—easily accessed at the prior step—are then lost. A "data capture" of these local-level aggregates could produce important benefits for the NSLP and SBP, and possibly be extended to the other food assistance and nutrition programs. We acknowledge that this initiative will require states to report more "data fields" than they are currently reporting and that this may increase their reporting burden; however, since states are already required to collect these data to support their aggregate-level reporting requirements, the increase in reporting burden should not be extreme.

A national database that contains data at the SFA level could be used by researchers and program administrators to compare and analyze data across both state and local geographic areas (e.g., school districts or regions). For example, SFAs with similar demographic characteristics would be able to compare percentages of free or reduced-price meals across different grade levels to identify programs with high success rates. SFAs that have lower rates may then be able to identify some of the key elements of success that contribute to higher rates.

Where possible, SFAs would be mapped to school districts, enabling the incorporation of district-level data, such as name, geographic location, size (number of students), and meals served broken out by paid, free, and reduced price categories. The 2000 Census geographic files include school district boundaries, and an initial exploration could be done on the viability of using these linkages. The resulting data could permit characterization of the school districts based on the following factors:

- Degree of poverty (i.e., high vs. low)
- Degree of urbanicity (i.e., urban vs. suburban vs. rural)
- Level of NSLP/SBP participation

The initiative proposes that SFA data² be collected for one month each year corresponding to the timing of the states' annual reporting requirement to FNS. While there is much variability in when SFAs report data to the States, part of this initiative will explore the optimal time to request these data. Thus, this initiative seeks to create as much as possible, a point-in-time view of program characteristics and participation of low-income children, providing comparable information that highlights differences across SFAs. The resulting database would contain SFA-level information about children who qualify for free and reduced-price meals, as well as the number of meals served to all children in the SFA.

Users will be able to query the system for information contained in the resulting database or view summary tables, reports, and articles designed to highlight the collected data. At the same time, to keep the information on the website from becoming static, this initiative proposes to periodically download information that is reported by states to the

² As mentioned earlier, subsequent phases of this initiative will potentially expand the number and type of respondents to include survey requests to school district food authorities and requests to states or individual school districts for school-level data.

federal government, such as the aggregated data that go into producing the federally mandated monthly and annual *Reports of School Program Operations*, and incorporate it into the reports and tables posted on the website. This will allow researchers to examine trends in participation at the state level and compare them to local school district demographics. Due to the “phased” nature of the proposed implementation as well as the fact that data collection requests will take place annually (at least initially), it must be noted that it will take several years to create a database that will provide sufficient data to permit longitudinal analyses.

II. BACKGROUND

Many of the NSLP/SBP data are already collected by local school districts and reported to their state Departments of Education, where they are aggregated to produce the federally mandated monthly and annual *Reports of School Program Operations* for each state. Because the use of Netscape and Explorer browsers is so widespread among organizations today, and most computer programs developed to collect information are supported by these browsers, the Internet represents an ideal medium for providing nearly universal access to the resulting program data from almost any geographic location. This initiative would permit dissemination of the collected data in a variety of formats, including tables, articles, and reports.

Over the years, a number of national databases have been developed to track participation in food assistance programs (e.g., the WIC program participant characteristics database). These national databases rely on state program administrators to collect data from local programs delivering services and to aggregate the information into a format prescribed by USDA. In general, these national databases tend to focus on client and program participation issues, benefit distribution, and client demographics. However, state and local food assistance programs often provide far more details in their data than ever are reported at the national level. For example, data regarding the number of school meals served in the NSLP and SBP are collected first *for individual schools*, then reported to school districts, passed on to state agencies as district-wide aggregates, and finally aggregated into a single state total reported to the Food and Nutrition Service. By the time the information is collected and aggregated at the federal level, it is impossible to compare demographics or participation rates between school districts within a state, let alone among school districts of similar size located in different states. As discussed earlier, there is also potentially some important program descriptive and cost information collected locally but never aggregated or reviewed at either the state or federal level.

Part of this initiative includes an exploration of data currently available from existing databases and whether that data might be useful to include in the proposed database. For example, the National Center for Education Statistics maintains a comprehensive national statistical database [i.e., the Common Core of Data (CCD)] of all public elementary and secondary schools containing data on school lunch participation rates, demographics, school type and geographic location. By consolidating the data that are already collected by school districts into a single, accessible database, researchers would be able to both conduct analyses of those district-level data and potentially combine these data with existing databases, such as the CCD, to conduct trend analysis related to school district demographics.

Having better access to state and local data is important if research is to be expanded beyond simple information about program participation. Issues related to the effectiveness of program services can only be examined if more and better data are available. The problem of limited access to local data was cited by the report of the Advisory Panel on the Research Uses of Administrative Data, which noted that "program

administrators and policymakers will need reliable state and local data if, among other things, they are to summarize program operations; determine who is being served by which programs; who is being underserved; who is not being served; and how services can best be targeted to those in greatest need..." (Hotz, et al., 1998). In addition, the Panel noted that national survey research could not adequately monitor the diverse local programs currently being funded by state and local governments. To better understand the dynamics of food assistance programs at the local level, as well as to better understand how well clients are being served, better access to local data seems critical.

III. INITIATIVE SUMMARY

Structure and Content

This initiative seeks to address current data access limitations for NSLP/SBP by using the Internet to host surveys and computer-assisted data entry programs to collect SFA data in a uniform way. Data can be collected, cleaned, and posted back to a central website location quickly, enabling more timely use of the data by interested (and authorized) USDA agency and program staff, and state- and school district-level authorities. The ability to obtain expedited data will allow USDA to better deal with current policy and program issues and may also broaden the types of research it conducts.

The website will be designed to allow directors of food service programs within State Departments of Education and other State-level officials to submit and obtain SFA-level food and nutrition program data. Not only would state-level authorities have access to the database, but also individuals at the federal level and potentially public users would have access to the data. The website will be developed to allow states to report the relevant data via electronic upload where possible or via a computer assisted data entry program. Researchers and state level officials (i.e., the target constituents) could access the data by querying the system or downloading any of the summary-level reports posted to the website. The website will serve both those who are “browsing” or seeking particular information and those who may be looking for a dataset to download for research purposes.

The potential exists for the national database to include both current information about the school food service programs in each SFA, as well as demographic information about the SFAs themselves. One of the distinct advantages of using the web-based approach to creating the national database is that relevant data regarding some of the demographic characteristics of the food service programs can be captured through the use of standardized request forms (i.e., computer-assisted data entry forms). These forms would yield standardized demographic summaries for each SFA, which can provide some consistency in conducting data analysis by demographic variables. This type of data provides a “value added” to the database and provides an opportunity for researchers and program administrators to conduct comparisons using standardized demographic variables. As part of the development of these forms (Task 9), standardized definitions would be developed and provided to users, to attempt to collect standardized data during the data collection process. However, as with any data collection activity, there is still some probability that states or localities may interpret definitions differently during the reporting or data entry process. To the extent that this initiative will provide useful data to the states, we hope that there will be an incentive to report better quality data.

Exhibit 1 displays a “mock” summary-level report that is geared to a broad audience and is designed to allow the reader to click on various links within the report to access data files or related tables. These types of reports can be automatically generated, depending on the types of tables or text required.

Importance for Research and Administrative Purposes

A national database that contains data at the SFA level could be used by researchers and program administrators to compare and analyze data across both state and local geographic areas. These data could be used to answer some basic questions about participation trends in local school district programs. Some examples of the types of research questions that this initiative could address include:

- To what extent do SFAs of similar size and demographic characteristics succeed in enrolling low-income clients into the free and reduced-price school meals programs?
- What are the characteristics of SFAs that serve a high percentage of students in their school meals programs?
- How does enrollment in the free and reduced-price school meals programs compare with enrollment in other food assistance programs within specific geographic areas?
- What trends in NSLP/SBP participation occur over time? How do these trends vary by type of SFA?

During the key informant interviews conducted for this project, representatives from NSLP/SBP noted that it would be valuable to compare program participation trends across local school districts with similar demographics and characteristics, but not located within the same state. An example that was noted was the ability to compare the number of free and reduced price meals served and the rates of school lunch and school breakfast participation between large school districts located in inner cities across various states.

The number of school meals served, broken out by free, reduced price, and paid, will be available at an aggregated level for each school district. This will allow researchers to examine the extent to which school districts of similar size and demographics are serving these client groups as well as the proportion of children enrolled in local schools who eat meals funded by the NSL and SB programs. These outcomes can then be examined in relation to school district policies, procedures, or outreach methods. The ability to examine program outcomes from other state and local

Exhibit 1. Example of a “Mock” Report with Embedded Web Links

Digest

Summary of USDA Food Assistance and Nutrition Program Data

Volume 1, Issue 1, Fall 2001



A New Database: Information At Your Fingertips

The ability to examine program outcomes from other state and local programs around the country will help local school districts identify and contact other programs to discuss why some are more successful than others. Because data from local school districts can be identified by a specific geographic unit (e.g. counties), these data can be compared with data from other food assistance programs serving the same geographic areas.

This type of comparison allows program administrators and researchers to examine the extent to which programs are reaching those in need of services. ■

Back to the Basics
In this report

[What is the National School Lunch Program? The National School Breakfast Program?](#)

[How does the NSL Program work?](#)

[What are the nutritional requirements for school lunches?](#)

[How do children qualify for free and reduced-price meals?](#)
(click here for more...)

Participation Trends - How They Compare

Examine data from local school districts

Current Focus: **Maryland**

Here is a sample chart of the number of free, reduced price, and paid meals served, and the rates of school lunch and school breakfast participation in large school districts located in Maryland.

[Table 1a](#) provides details on the top ten school districts in this state.

Next month's focus: **Florida's panhandle**

*“Eat Smart.
Play Hard.”*



United States Department of Agriculture

Food and Nutrition Service

Child Nutrition Division

3101 Park Center Drive
Alexandria, VA 22302

Food Authority Survey

Examine the issues that many School Food Authorities say concern them today.

Administrative issues rated as "concerns" by School Food Authorities		
Issue	Responses	Rank
Issue 1	XXX	X
Issue 2	XX	XX
Issue 3	XXX	X
Issue 4	XXX	X
Issue 5	XXXX	XX

Appendix A provides definitions of each issue.

Demographic Data Now Available On-line

Now you can run comparative queries using the NSL/NSB Demographic Detailer. This database allows you to compare ten primary variables.

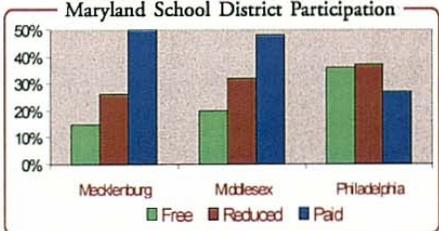
Compare

Select State (1)

Select SchoolDistrict (1)

Select State (2)

Select School District (2)



District	Free	Reduced	Paid
Mecklenburg	~15%	~25%	~40%
Middlesex	~20%	~30%	~40%
Philadelphia	~35%	~35%	~25%

Volume 1, Issue 1

programs around the country will help local school districts identify and contact other programs to discuss why some programs are more successful than others.

Researchers could merge the aggregated file with individual records to examine correlations between broad trends in the NSLP/SBP at the local level and individual participant characteristics. In addition, data could be merged with Census data to examine trends in program participation based upon community demographics and income levels of school district residents.

Because data from local school districts can be identified by a specific geographic unit (e.g., counties), these data can be compared with data from other food assistance programs serving the same geographic areas. This type of comparison would allow program administrators and researchers to examine the extent to which programs are reaching those in need of services.

IV. OVERVIEW OF THE IMPLEMENTATION PLAN

This section introduces the proposed methodology for the initiative to establish a web-based data collection framework. Specifically, it provides a description of the primary actors, activities, and implementation barriers.

Description of Actors

The implementation of the website as a data collection tool and data repository will be conducted by two primary actors: USDA and state government employees. The likely state government actors will be individuals within each State's Department of Education, although it is not clear whether these individuals will be directors of food and nutrition programs or individuals from other departments. Additional players may include district-level school authorities (for specific data collection requests).

USDA will be responsible for:

- Conducting an initial meeting to identify the required “core” database elements, target constituents, and data collection schedules, and hosting subsequent “steering committee” meetings during the first phase of the project;
- Developing contact lists for food and nutrition program directors within each state and selecting a representative nine states to include in the first round of data collection;
- Conducting an assessment of SFA-level data currently being collected by the States;
- Collecting a sample of archived data from States;
- Identifying and conducting a review of existing databases;
- Analyzing data elements, assessing availability, and defining the core data set;
- Exploring options for using automated uploads to retrieve data from states or existing databases;
- Designing the website, including defining data security and access;
- Building computer-assisted data entry programs;
- Building tools to query, sort, and export the data;
- Designing summary tables, reports, and articles to be posted to the Web;

- Conducting training and implementing data collection for the initial nine selected states;
- Obtaining OMB clearance to increase the number of participating states; and
- Preparing to add additional states.

State-level employees (i.e., directors of food and nutrition programs within State Departments of Education) will be responsible for:

- Participating in an interview to report data currently collected at the SFA level, their structures, and their format;
- Obtaining requested archived data and sending the data to USDA for review;
- Using the web-based computer assisted data entry programs to provide requested data for data elements not subject to automatic upload.

Additional actors who may be involved include:

- Individuals from the US Department of Education (to answer questions about publicly available databases); and
- District-level school authorities to answer questions about data currently being collected and possibly to respond to Web-initiated surveys.

Neither of these two actors' roles will be costed in this report due to the uncertainty surrounding their roles.

Overview of the Activities

The proposed initiative will be conducted in several phases, implemented over a period of at least two years. Several preliminary activities need to take place prior to initiating data collection requests and producing final databases and reports. A comprehensive task list is provided in *Section V*; however, we note the preliminary activities below because of their importance in defining the final scope of this initiative. These activities, along with the remaining steps that will be taken to implement this initiative, are discussed briefly in the paragraphs that follow:

- Conduct an initial meeting with FNS, ERS, the Education Information and Advisory Committee (EIAC), and the American School Food Service Association (ASFSA) to define minimum and desired database elements and research objectives (including whether periodic downloads from federally available data are desired);
- Develop contact lists of Directors of Food Service programs within State Departments of Education and conduct an inventory of the data currently

collected, their format (e.g., how are these data received from school districts: electronically or via hard copy); and

- Conduct a review of existing databases and their contents (such as the aforementioned CCD maintained by the National Center for Education Statistics) to determine whether any essential elements of the database can be pulled in from existing, available databases.

Conduct Initial and Subsequent Steering Committee Meetings. It will be important not to simply collect data because they are available but to set the proper context by identifying how collecting these data at the local program level will enhance program research efforts. Hence the importance of an initial meeting among the initiative's target constituents. As part of the initial evaluation of what data elements should be collected, it will be important to consider whether these data are valuable to program administrators or researchers in achieving national research goals. It must be remembered that some of the data collected by local programs may serve a limited purpose related to local program administration, and may not be useful or important in conducting research on national issues. These preliminary evaluations and discussions should help in limiting the overall size of the database to the most important data elements. We also recommend identifying a steering committee to provide input and guidance during the first phase of this initiative.

Conduct Inventory of State-level Data. To explore whether nutritional program data currently collected at the SFA level can be combined with school district demographic information to facilitate comparisons of program participation between districts of comparable size and demographics, it will be important to conduct an inventory to determine the nature of the data currently collected by states on their school districts' NSLP and SBP. Included in this assessment will be the development of criteria for creating an accessible national database, the limitations on the amount of data that will be made available to persons outside the federal government, and methods by which these data could be accessed. As it is not likely that all state or local programs will collect the same or similar data, this preliminary evaluation will also serve to identify the similarities and differences in the types of data collected and any variations in the data definitions across states. Consistent data definitions for client and agency data will need to be developed. Once the inventory is complete, data elements will be analyzed to determine the extent to which they are consistent and are collected and available in electronic format. From this information, profiles of data sets can be developed to begin the process of designing the database and computer-assisted data entry programs.

Once the above activities have been completed, the rest of the initiative can proceed with the design of the website, the development of computer-assisted data entry programs to collect the required data should the data not be readily accessible in electronic form from the states, and the population of the database through queries to individual states. As part of this initiative, a preliminary set of summary tables, reports, and articles will also be designed for posting to the web.

Potential Implementation Barriers

Although we feel that the advantages of participating far outweigh the disadvantages, there are potential barriers to implementing this system. For example, there may be states that are unwilling to participate, either because of resource constraints or an unwillingness to share information in this manner. There may be difficulty in defining common data elements such that correlations and analyses are valid. Finally, although unlikely, there may be regions where access to internet systems is either restricted or non-existent.

V. DESCRIPTION OF SPECIFIC TASKS

This section presents the 14 tasks we suggest to implement this initiative. For each task description, we provide a summary of the goals and activities that would take place, as well as a list of the key subtasks or deliverables. At the end of each task description, we present an estimated cost for each of the key actors in the task. Where applicable, task alternatives are discussed and their costs summarized. In many cases, no alternative tasks are suggested. For most of the tasks, USDA is assumed to have primary responsibility for the task activities; however, USDA could choose to contract out some or all of these activities. States' involvement is noted in brackets next to the subtask lists.

Task 1 – Conduct Initial and Subsequent Steering Committee Meetings

Conduct an initial meeting with FNS, ERS, EIAC, and ASFSA to define minimum and desired database elements and research objectives (including whether periodic downloads from federally available data are desired). To obtain continued feedback/oversight from these key constituents, select a committee to serve as a “steering committee” and establish a series of approximately four steering committee meetings throughout the duration of the project. The budget assumes that USDA will pay for travel associated with steering committee meetings. Deliverables and subtasks will include:

- A final definition of desired database elements and research objectives.
- A preliminary schedule for querying States and, possibly, district school authorities.
- Identification of steering committee members and schedule for steering committee meetings.
- A final workplan.

USDA Costs:	\$28,945
State Costs:	\$40
Total Task Cost:	\$28,985

Task 2 – Develop Contact Lists

Develop contact lists of directors of food service programs within an initial set of 20 State Departments of Education. The deliverable of this task will be a list that will include at least one contact within each of the 20 State Departments of Education. If all parties agree in the initial meeting, Task 2 will also include creating a preliminary list of district school food authorities, if this information is easily available. While a contact will be developed for each of the 20 States' Department of Education, it is recommended that only nine states be selected for the initiative tasks. Adding additional states will

require obtaining OMB clearance, which should not be necessary if only nine states are used initially. The selection of both the initial 20 States for which contacts will be developed as well as the final nine States to select for participation will be made in conjunction with ERS and FNS to ensure representation across states with varying school districts, demographics, sizes, etc. Once the website has been developed and the nine states are participating, additional states will be added.

Subtasks:

- Define an initial group of 20 States to call and the 9 states to sample (i.e., participate) in the initiative.
- Use a combination of phone calls, emails and letters to various individuals in the State Departments of Education or state food service programs to request the name of individuals to contact for the desired elements outlined in the initial meeting. [States and USDA]
- Develop a list of key contacts that will be used for the data collection effort. This may require more than one contact in each state.
- Send the members on the contact list a letter to outline the actors and objective of the collection project and define the anticipated roll of the contact.

USDA Costs:	\$8,366
State Costs:	\$2,224
Total Task Cost:	\$10,590

Task Alternative: Solicit Contact Information and Participation from the States

One possibility for determining contacts and selecting the nine initial states to participate in the initiative is to take a less proactive approach than the task above suggests and send an email or letter to States asking if they would like to participate in this initiative and to identify the appropriate contact person if so. This might lead to a less diverse selection of nine states for the first phase of the initiative, but it would reduce labor required to identify contacts.

USDA Costs:	\$5,332
State Costs:	\$2,780
Total Alternative Cost:	\$8,111

[Totals may not add due to rounding.]

Task 3 – Conduct Assessment of State-Level Data Being Collected

For Task 3, develop a structured interview form to be used to conduct interviews with directors of food service programs within State Departments of Education. Use of a

standardized form will ensure that terminology used and questions asked during each interview are consistent. Using the contact list developed in Task 2, conduct structured interviews with contacts in nine States to identify data currently reported to the State by SFAs, formats in which data are delivered, and what data are regularly aggregated and reported to the federal level. As part of the interview, it will be critical to examine how eligibility data are collected and reported at the SFA level, to what extent these data are broken out by participant demographics, and how feasible it would be to incorporate these data into the envisioned database.

The deliverable of this task will be a matrix of data elements currently available at the school district level by each of the nine states, as well as a final contact for each of the states. It may also be necessary to contact some of the school districts within the nine states to examine the variability of data between districts and the capabilities of districts to report electronically.

Subtasks:

- Develop a structured interview form to be used to conduct interviews with state contacts (to report on the data they are currently collecting).
- Determine the best method for executing the survey (e.g., phone, mail, web, etc.).
- Initiate the survey. [States and USDA]
- Compile the survey results into a document that outlines the current elements collected by the states.

USDA Costs:	\$16,046
State Costs:	\$9,318
Total Task Cost:	\$25,364

Task 4 – Collect Sample of Archived Data from States

This task will occur simultaneously with Task 3. During the interviews with each of the nine states, a request will be made for that state to provide archived data (e.g., data collected from 1998-2000). Examining the data will help identify and design the data elements that will ultimately be collected from the states. Further, it will help determine common formats and structures. For example, files can be formatted in different ways, such as comma-delimited text files, Excel files, MS Access files, etc. The phrase, “data structures,” refers to how the data are organized (for example, one file may contain district names, another enrollment information, another program participation data, etc.) During this task, the data will be collected, either via hard copy or electronically, and set aside for review in a later task.

Subtasks:

- Create an ftp (file transfer protocol) site to allow states to upload any archived data.
- Create an email address to allow states to email any archived data.

USDA Costs:	\$4,811
State Costs:	\$16,175
Total Task Cost:	\$20,986

Task 5 – Identify and Conduct Review of Existing Databases

Task 5 can occur simultaneously with Tasks 3 and 4. In this task, identify and conduct a review of existing databases and their contents, such as the Common Core of Data (CCD) maintained by the National Center for Education Statistics, to determine whether any essential elements of the database can be extracted from existing databases. The product of this task will be a matrix of data elements available by database source.

Subtasks:

- Search the web for online data sources that could be used with State program data.
- Contact education researchers to find any data that have been used on prior projects that might be applicable.
- Create a document outlining the data that are currently available.
- Highlight elements from existing databases that will not need to be collected from the state contacts.

USDA Costs:	\$15,466
State Costs:	\$0
Total Task Cost:	\$15,466

Task 6 – Analyze Data Elements, Assess Availability, and Define Core Data Set

Once the State inventory and review of existing databases are complete, all of the data elements will be analyzed to determine the extent to which they are consistent and available in electronic or hard copy format. This information will be used to design the database and computer-assisted data entry programs necessary to ensure standardized data capture. An assessment will also be made of the best time of year to collect the data. The deliverable of this task will be a matrix, by state, showing the final set of core data

elements that will be “collected” from the States on a yearly basis, with a notation indicating how the data will be derived (electronically or via a survey query, and whether they will be collected from the States or downloaded from existing databases).

Subtasks:

- Create a document that outlines the different elements available and highlight areas of similarity and difference.
- Meet to discuss and define which items will be used as the core data to be collected.
- Determine if some elements should be defined as ‘optional.’ Some elements may be desirable to collect but may not be added to the core because of inconsistencies or lack of availability.
- Draft a list of core elements.

USDA Costs:	\$20,830
State Costs:	\$0
Total Task Cost:	\$20,830

Task 7 – Explore and Potentially Develop Options for Using Automated Uploads to Retrieve Data from States or Existing Databases

During this task, which will begin simultaneously with Tasks 3, 4, and 5, the archived data provided by the States and information collected during the interviews will be reviewed to determine whether there are any software packages or formats commonly used to warehouse the core data. If common formats are identified, applications will be developed to allow contacts to submit core data by uploading files over the Internet. Also during this task, applications will be developed to retrieve data that are currently available on-line. The deliverable of this task will be a set of applications to facilitate collection of the core data with minimal burden to the State-level contacts.

Subtasks:

- Analyze the archived data that is collected in Task 4, looking for common formats and/or identifying common software packages used by the state.
- Determine if there are enough similarities in the data that would allow the creation of an automated process to gather some of the core data from the state. This could include applications where the states upload data to the centralized website or where applications are written to retrieve data from existing databases.

- Build a set of applications for the formats that are common among the different data sets.

USDA Costs:	\$14,594
State Costs:	\$0
Total Task Cost:	\$14,594

Task Alternative: Eliminate Use of Automatic Uploads from States

While this alternative still includes the review and potential development of tools to retrieve data automatically from existing databases, it defines an option for not building tools to automatically upload data from the States. The cost of this task would decrease; however, in not automatically uploading data from States, States would have to key the data into a worksheet (if a web-based system is used) or send the data on hard copy. If States elect to send hard copy data to USDA, USDA will have to key the hard copy data directly into a database (or into a worksheet that can be uploaded to the database), thus increasing labor hours for USDA if an automatic upload is not used. However, until USDA conducts interviews with States to determine how these data are stored, it is not clear whether the use of automatic uploads will be useful or not.

USDA Costs:	\$7,477
State Costs:	\$0
Total Alternative Cost:	\$7,477

Task 8 – Design the Website, including Defining Data Security and Access

Design the website. Include links that provide background and information about the purpose of the website and its contents, including descriptions and availability of the core data. During this task, identify and define user groups and create a security structure to restrict levels of user access. Establish procedures to manage requests for restricted levels of access.

Subtasks:

- Create images and design elements to be used in the website.
- Define structure and sections to be used on the website.
- Set up a web server to host the web site.
- Determine if a unique URL should be used and register it, if needed.
- Set up the security structure for the web site.
- Determine which content will/will not be restricted to authorized personnel.

- Establish a procedure to determine who should have access to the restricted areas.
- Build an application to manage users and security.
- Establish an approval procedure for posting content.

USDA Costs:	\$17,900
State Costs:	\$0
Total Task Cost:	\$17,900

Task 9 – Build Computer-Assisted Data Entry Programs

To accommodate states that are not equipped to handle the automated tools developed in Task 7, an Internet-based computer-assisted data entry application will be developed to allow contacts to submit the core data. A series of browser-based worksheets will be designed to collect the data. The web application will include detailed instructions and validation features to ensure that data collected are consistent across States. Sample worksheets will also be developed to help the States gather and organize the data before data are keyed in the requested format.

Subtasks:

- Determine who will be using the computer-assisted data program.
- Create username/password for each respondent.
- Notify each respondent of the username/password and login process.
- Create a ‘paper version’ of the worksheets to collect the core data.
- Build the web application to handle entry of the data in the worksheets via a browser.
- Create a user manual to answer questions about the collection program.
- Set up an email address or toll-free number for technical support.
- Notify users of the option and allow users to request a ‘paper version’ of the worksheet if they do not have Internet access.

USDA Costs:	\$31,153
State Costs:	\$1,001
Total Task Cost:	\$32,154

Task 10 – Build Tools to Query, Sort, and Export the Data

In this task, build a web-based interface to the database to allow users to query, sort, and perform other activities on the collected program data. Initial and continuing discussions with ERS and FNS will help inform this process and ensure that users will be able to sort and query the database as anticipated. A search tool, which will allow simultaneous access by multiple users, will be developed. Download functionality will be incorporated into the Internet application. A Quality Assurance protocol will be developed to fully exercise the application and toolset prior to release to the user community.

Subtasks:

- Build an interface to allow users to select how they want to view the data.
- Determine key variables that users might want to query and sort.
- Develop an online glossary that defines each variable in the data set to be easily accessible while working with project data.

USDA Costs:	\$28,313
State Costs:	\$0
Total Task Cost:	\$28,313

Task 11 – Design Summary Tables, Reports, and Articles to be Posted to the Web

Templates for summary reports and data views will be designed for posting on the web site, based on discussions during the initial meeting with staff identified in Task 1. Automated content management tools, which will allow selected individuals (e.g., at ERS or FNS) to post new articles, graphs, and reports to the website without programmer intervention, will be developed.

Subtasks:

- Build a tool to allow validated users to post content to the web site.
- Define the type of reports that should be presented.
- Develop a series of reports.
- Establish a procedure to validate data included in reports and to ensure that the reports are current.

USDA Costs:	\$25,188
State Costs:	\$0
Total Task Cost:	\$25,188

Task 12 – Implement Initial Data Collection for Nine States

In this task, implement a round of data collection for all of the participating nine States. This will include all of the mechanisms that have been constructed to facilitate this process, including data entry, automatic uploading of data, and extractions from existing databases. The estimated budget includes a half-day training session at each of the nine State sites on the web-based data entry program³. It is assumed that there will be some “testing” of the final database by States and that some revisions will be made as a result of States’ comments. This initial data collection will serve to populate the database. Reports and articles can be generated based on these data. The costs are broken out by “initial” and “on-going” data collection activities, where on-going activities reflect the costs of undertaking the data collection activity on an annual basis.

Subtasks:

- Ensure that appropriate data collection mechanisms are in place.
- Develop training materials and conduct on-site half-day training sessions at each of the nine State sites.
- Implement data collection. [States and USDA]
- Conduct automatic uploads from existing databases and/or States.
- Manually enter any paper versions received from States.
- Clean and merge data.
- Produce reports and articles as desired.
- Make changes to reports, query tools, database structure as needed

³ We have budgeted the trainings as half-day on-site in-person sessions; however, it may be more cost-effective to produce a streaming video that can be accessed at any time or conduct training via teleconference instead.

	Initial	On-going
USDA Costs:	\$27,026	\$26,405
State Costs:	\$8,256	\$15,938
Total Task Cost:	\$35,282	\$42,343

Task 13 – Obtain OMB Clearance

In this task, an OMB package will be prepared and submitted authorizing the additional States to be contacted and queried for participation in the website data collection effort. The number of States to be added will depend on discussions with ERS and FNS. However, this step is necessary before additional States can be added.

Subtasks:

- Prepare a draft and final OMB package for USDA, including copies of data collection protocols.
- Make revisions to protocols as required.

USDA Costs:	\$6,742
State Costs:	\$0
Total Task Cost:	\$6,742

Task 14 – Prepare to Add Additional States

In this task, preparations will take place to add additional States to the website. Adding states will require that states be queried in much the same way as the initial nine. That is, States with the capability to provide their data electronically must be identified and States that do not have this capability will be targeted as potential users of the data entry application. For purposes of costing this initiative, this task includes developing a plan for adding states and finalizing a contact person within the remaining states. States contacted during Task 2 but not participating in the group of nine will be called to confirm the contact person; additional state contacts will be developed. USDA can make a decision at this point as to the number of states to phase in for the next round of data collection.

Subtasks:

- Developing a plan for the phased addition of states.
- Calling contacts developed in Task 2 to confirm appropriate contact person. [States and USDA]

- Developing additional contacts within all remaining states. [States and USDA]

USDA Costs:	\$8,051
State Costs:	\$3,336
Total Task Cost:	\$11,387

VI. SUMMARY OF COSTS AND SCHEDULE

A caveat to this chapter is that the full costs of expanding the database to all states and territories that participate in NSLP and SBP are not included here. Task 14 includes developing a plan to phase in additional states. The first phase of this initiative, collecting data from nine states, will be used to help inform future cost estimates. *Table I* summarizes the costs of the Base Initiative by government agency.

Table 1. Summary of Costs of Base Initiative by Government Agency

Agency	Total Cost
USDA	\$279,837
States	\$56,248
Total	\$336,085

Table 2 summarizes the schedule and estimated cost for each of the proposed tasks described in *Section V*. A detailed itemization of the estimated costs for each task in the Base Initiative is presented in *Section IX (Appendix A)*. A detailed itemization of the estimated costs for each alternative task is presented in *Section X (Appendix B)*.

Table 2. Summary by Proposed Task of Schedule and Estimated Cost

Task	Description	Duration of Activity	Estimated Cost	Estimated Cost of Alternative
<u>Task 1</u> Conduct Initial and Subsequent Steering Committee Meetings	Conduct meeting(s) with FNS, ERS, EIAC, and AFSA	Month 1	\$28,985	NA
<u>Task 2</u> Develop Contact Lists	Develop contact lists within State Departments of Education	Month 1	\$10,590	\$8,111
<u>Task 3</u> Conduct Assessment of State-level Data	Conduct structured telephone interviews with nine States to identify data currently collected	Months 1-3	\$25,364	NA
<u>Task 4</u> Collect Sample of Archived Data from States	Collect archived data from nine States interviewed in Task 3	Months 1-3	\$20,986	NA
<u>Task 5</u> Identify and Conduct Review of Existing Databases	Identify existing databases and review their contents	Months 2-3	\$15,466	NA

(Continued)

Table 2. Summary by Proposed Task of Schedule and Estimated Cost (Concluded)

Task	Description	Duration of Activity	Estimated Cost	Estimated Cost of Alternative
Task 6 Analyze Data Elements, Assess Availability, and Define Core Data Set	Examine interview data, archived data, and existing database information to define core data and their sources	Months 3-5	\$20,830	NA
Task 7 Explore and Potentially Develop Options for Using Automated Uploads to Retrieve Data	Analyze interview data, archived data, existing databases to identify what can be uploaded. Develop applications to retrieve on-line data	Months 2-6	\$14,594	\$7,477
Task 8 Design the Website, including Data Security and Data Access	Design the Website, including user groups, security structure, and procedures.	Months 5-7	\$17,900	NA
Task 9 Build Computer-assisted Data Entry Programs	Build web application to allow States to submit core data via the Website.	Months 5-8	\$32,154	NA
Task 10 Build Tools to Query, Sort and Export the Data	Build the web-based interface to allow users to query, sort, and export the collected data.	Months 6-8	\$28,313	NA
Task 11 Design Summary Tables, Reports, and Articles to be posted to the Web	Design the templates for summary reports and views of the data	Months 5-8	\$25,188	NA
Task 12 Implement Initial Data Collection for Nine States	Implement a round of core data collection using all applications for the nine participating states. Populate summary tables and reports.	Months 9-12	\$77,625	NA
Task 13 Obtain OMB Clearance	Prepare and submit OMB package. Respond to OMB comments as needed.	Months 6-12	\$6,742	NA
Task 14 Prepare to Add Additional States	After obtaining OMB clearance, select additional states for querying and repeat Tasks 3 and 7 as needed to determine how each State's data will be obtained	Month 12+	\$11,387	NA
Total Cost			\$336,085	NA

VII. SUMMARY OF INITIATIVE ALTERNATIVES

This section provides a discussion of alternatives to conducting this initiative.

SNPIIS Piggy-back Alternative (*Summary of Costs provided in Appendix B*)

Before discussing this alternative, we want to stress that the intent of the proposed initiative is not only to use a new data collection methodology to capture existing data but also to develop an interactive communication tool in the form of the proposed website. However, given the current effort to develop the School Nutrition Programs Integrated Information System (SNPIIS), we recognize that parts of the proposed initiative may result in duplication of effort and increased (and unnecessary) burden to the States. Although not definite, it is possible that SNPIIS will eventually collect School Food Authority data; this presents a unique opportunity to tailor *this* initiative to capture those data elements directly from SNPIIS. In effect, this would eliminate the need to develop computer assisted data entry programs and conduct annual data collections under this initiative.

However, collecting the data is only part of the proposed initiative. The need still exists to design a research-friendly database, tables, query tools, and articles that will be useful to researchers, States, and district personnel. As such, we suggest in this alternative to eliminate some of the proposed activities yet retain the basic elements of identifying and working with a steering committee, designing a research-friendly website, developing table and article formats, and pursuing ad hoc inquiries with School Food Authorities if possible. We also retain activities related to developing automatic data uploads, not only from SNPIIS, but also from other databases, since not all of the data elements are expected to be available from SNPIIS. Finally, if SNPIIS data becomes available for all States, this initiative alternative would not need to be limited to nine states. Similarly, OMB clearance would no longer be necessary, as no new data collections would be required.

While not addressed in this alternative, it is also worth considering that many of the proposed tasks that attempt to lay the groundwork for the kind of data that would be collected in this initiative could help inform the eventual collection of SFA data through SNPIIS. For example, developing contact lists at the State level, conducting structured interviews with States to assess the format, and type of data available, reviewing archived data, identifying existing databases from which data elements can be extracted, are all critical steps in building a database that will be useful to the relevant stakeholders. For the purposes of costing this initiative alternative, however, we assume that SNPIIS will collect many of the SFA data elements sought in this initiative. Thus, we eliminated certain tasks and reduced others with this assumption in mind.

A summary of the costs associated with this initiative alternative is presented in Appendix B, along with a discussion of the hours associated with the initiative tasks.

Other Alternatives (Not Costed)

As previously mentioned, many of the proposed tasks are necessary regardless of how the data are ultimately collected; however, the use of a web-based data collection and display system is not necessary. An alternative to developing the website is to collect the data using a mail survey, possibly with a telephone follow-up to clarify or collect missing data. The final datafile can then be made available through USDA. Since costing out a mail survey of this magnitude would require that many of the proposed tasks be redefined or deleted, and new tasks added, we will not attempt to cost this initiative in this report.

Initial tasks of defining the key elements of the database, the schedule of data collection, and the selection of the initial nine states will be fairly common across any means of collecting the data. Similarly, there will need to be an analysis of which data elements are currently available from existing database sources. While this initiative proposes to design a system that ostensibly should be able to be used indefinitely, a mail survey would require the production and receipt of hard copy forms each time a survey is implemented.

In comparing a web-based data collection system with a mail survey, one needs to consider whether the use of a web-based data collection system has advantages that a mail survey may not have, and vice versa. From USDA's perspective, the advantages of using a web-based data collection system to collect the proposed data are:

- Respondent burden is potentially reduced, especially if data can be automatically uploaded from the States (positive from OMB's perspective, as well as the participating States');
- Skip logic and range checks can be programmed into the website forms, ensuring cleaner data and a shorter "data cleaning" period;
- There are no return postage costs (unless States must send their data via hard copy);
- Labor to handle incoming hardcopy forms is substantially reduced, if not eliminated;
- Storage and eventual disposal of hardcopy forms is eliminated;
- Data entry (typically performed twice for quality control) is eliminated.
- Data can be collected, analyzed, and disseminated in a timely manner.
- Once the system is set up, data collection requests can be made with much less effort and cost than with a traditional mail survey design;

- Prompting, reminders, and questions during the data collection process can be handled via email; and
- The Web site itself can function as an interactive tool between USDA and the States, depending on the kinds of queries, reports, and articles that are posted.

From the States' perspective, if data collection is implemented as a standard mail survey, it is not clear whether the burden to the States will be higher than the proposed initiative or lower. However, several advantages to using a website still exist:

- States can automatically upload required data elements to the central database if these data elements are in a file format compatible with USDA's requirements; this reduces States' response burden;
- Skip logic and range checks can be programmed into the forms States use to key in their data, allowing States to make corrections or edits on-line;
- States will be given access to a user-friendly datafile able to be queried and displayed in a variety of formats.

It is also worth mentioning two potential disadvantages (or issues) that may arise with web-based data collection. Neither of these are insurmountable and neither may occur; however, we mention them here nonetheless.

- USDA may have to spend time working with the States to educate them on "using the web" as a data collection tool. That is, there may be a higher learning curve for respondents than one would expect to observe with a standard mail survey; and
- It is possible that the target "respondent" may pass the data entry responsibility to another individual, who may or may not be familiar with the data. Typically, in a mail survey, one can request that the person who is supposed to provide the data provide a signature authorizing that the data are correct to the best of his or her knowledge. This is not possible with a web-based data collection, as the target respondent will be given a username and password, both of which can easily be handed off to someone else.

Additional "alternatives" to this initiative exist; however, it is not clear how feasible some of these are. For example, one alternative might be to have USDA *require* that all states report SFA level data to receive funding for the NSLP/SBP programs. The proposed initiative could then be redesigned to build a web application to collect data from States or SFAs *in a format specified by USDA*. Thus, the responsibility passes to States or SFAs to provide the data elements in the specified format. The advantage to this approach is that the data will be uniform, and USDA should also be able to obtain data from a census of States, rather than a sample of States. Another alternative might be to purposively select a sample of nine states that have similar software and systems. If

one system is used or is compatible with all nine of these states, costs could be kept lower as the automatic uploading and web-based applications could be less “general” and more specific. A disadvantage to this is that it may or may not accommodate additional states’ systems if the data collection system is expanded.

VIII. REFERENCES

Hotz, J., R. Goerge, J. Balzekas, and F. Margolin (1998). *Administrative Data for Policy-Relevant Research: Assessment of Current Utility and Recommendations for Development*, A Report of the Advisory Panel on Research Uses of Administrative Data of the Northwestern University/University of Chicago Joint Center for Poverty Research.

Child Nutrition Web Pages, U.S. Department of Agriculture
(<http://www.fns.usda.gov/cnd/Lunch/AboutLunch/faqs.htm> and
<http://www.fns.usda.gov/cnd/Breakfast/AboutBFast/faqs.htm>).

IX. APPENDIX A: DETAILED COST ASSUMPTIONS FOR SPECIFIC TASKS: BASE INITIATIVE

In this section, we describe the distribution of labor and activities within each task across the key actors. *Table A-1* shows the labor and non-labor detail associated with each task, and *Table A-2* presents a summary of these costs by task. In the paragraphs that follow, we discuss the cost assumptions for each specific task. Tables A-1 and A-2 are presented at the end of the task discussions.

To be consistent with Bell (2001) and Wittenburg, et al. (2001), we assume that each agency has three labor categories: Senior Manager, Senior Analyst, and Research Assistant. The Senior Manager category includes experts who have at least ten years of research and/or program experience. The Senior Analyst category includes researchers and programmers who have between three to nine years of research and/or program experience. The Research Assistant category includes individuals with very limited experience. We generated cost estimates for these categories using a list of hourly wage rates from industry averages and a review of similar projects that RTI has performed of this type.⁴

Again, these estimates are for illustrative purposes only and reflect a modest number of “core” data elements. USDA may choose to contract out some or all of these activities and take on more or less responsibility for these tasks. A decision to implement these tasks within USDA may require additional “subtasks,” depending on the level of expertise within USDA, such as educating staff internal to USDA on website design and maintenance. These kinds of additional tasks are not considered “in scope” for purposes of costing this initiative.

Task 1: Conduct Initial and Subsequent Steering Committee Meetings

USDA Responsibilities

USDA would organize the initial and all subsequent meetings of the proposed steering committee, including developing agendas and arranging meeting locations. USDA would lead each meeting and also develop a final workplan after the initial meeting.

Estimated time requirements. 80 hrs. of Sr. Management time to plan, lead, and guide all meetings (initial meeting and 4 subsequent meetings throughout the duration of the first phase of the project). 150 hrs. of Sr. Analyst time to develop materials necessary for the meetings, summarize decisions made, and contribute to the final workplan. 250

⁴ We developed these industry averages from our original proposal to ERS for this task order.

hrs. of Research Assistant labor to assist with meeting logistics, workplan, and meeting material development.

States' Responsibilities

None.

Task 2: Develop Contact Lists

USDA Responsibilities

USDA would work with the Steering Committee and other staff to obtain contact lists and identify contacts within 20 states. Working with the Steering Committee, USDA will identify the final nine states to select for this initiative. Much of the contact will be made through a series of emails, letters, calls, etc.

Estimated time requirements. 32 hrs. of Sr. Management time to plan, lead, and guide these efforts. 40 hrs. of Sr. Analyst time to take the lead in developing letters, information to send to states and making final calls to the nine states. 60 hrs. of Research Assistant labor to make initial set of calls working off of the lists to identify contacts within 20 states.

States' Responsibilities

It is anticipated that each of the 20 States approached to develop a contact name will spend no more than an hour identifying an appropriate contact(s).

Estimated time requirements. 20 hrs. of Sr. Management time to identify a contact person within each of the 20 states approached by USDA.

Task 3: Conduct Assessment of State-Level Data Being Collected

USDA Responsibilities

USDA will develop a structured interview, conduct interviews with State contacts for the initial nine states, and compile the survey results.

Estimated time requirements. 32 hrs. of Sr. Management time to plan, lead, and guide these efforts. 100 hrs. of Sr. Analyst time to take the lead in making calls to the nine states and developing summary matrix. 160 hrs. of Research Assistant labor to make calls and assist with documentation of calls.

States' Responsibilities

The nine selected states will respond to interviews and provide requested data.

Estimated time requirements. 68 hrs. of Sr. Management time to respond to interviews; 27 hrs. of Sr. Analyst time to respond to interview requests.

Task 4: Collect Sample of Archived Data from States

USDA Responsibilities

USDA will set up mechanisms, either via email or ftp, to receive data from States. If States prefer to send hard copy data, USDA will receive that data as well.

Estimated time requirements. 16 hrs. of Sr. Management time to plan, lead, and guide these efforts. 24 hrs. of Sr. Programmer time to set up mechanisms to receive and/or receive data from the nine states. 40 hrs. of Jr. Programmer labor to assist in collecting and organizing data from states.

States' Responsibilities

Obtain requested data (from previous years) and send to USDA, either via email, ftp, or mail.

Estimated time requirements. 80 hrs. of Sr. Management time to identify sources of archived data. 90 hrs. of Sr. Programmer time to obtain the archived data and prepare it for sending to USDA. 36 hrs. of Jr. Programmer labor to assist with sending the data to USDA.

Task 5: Identify and Conduct Review of Existing Databases

USDA Responsibilities

USDA will identify and conduct a review of existing databases and their contents. This will include web searches, contacting education researchers to identify relevant databases, summarizing data that are available, and determining which of the core elements can be collected from existing sources.

Estimated time requirements. 40 hrs. of Sr. Management time to plan, lead, and guide these efforts. 100 hrs. of Sr. Programmer time to take the lead in investigating the formats, content, and structures of existing databases. 120 hrs. of Jr. Programmer labor to conduct web searches and take a preliminary pass at identifying required data base elements from existing databases.

States' Responsibilities

None.

Task 6: Analyze Data Elements, Assess Availability, and Define Core Data Set

USDA Responsibilities

USDA will conduct a review of all of the potential sources of key data elements and their format (e.g., electronic or hard copy). This information will be put into a matrix showing which core elements will be collected from the States or existing databases, when they will be collected, and how they will be derived (or downloaded).

Estimated time requirements. 60 hrs. of Sr. Management time to plan, lead, and guide these efforts. 100 hrs. of Sr. Programmer time to take the lead in investigating the formats, content, and structures of existing databases, archived data from States, and results of interviews conducted with the State contacts. 80 hrs. of Jr. Programmer labor to assist with analysis of available data and development of core data elements.

States' Responsibilities

None.

Task 7: Explore and Potentially Develop Options for Using Automated Uploads to Retrieve Data from States or Existing Databases

USDA Responsibilities

USDA will conduct a review of all of the information collected during the interviews with the State contacts and from a review of existing databases to determine whether there are software packages commonly used to warehouse the data that would permit an automated process to be developed to retrieve data currently available electronically. The cost estimate assumes that applications can be developed fairly easily; however, this task could cost more depending on the number of applications that must be developed and the number of data elements being collected.

Estimated time requirements. 40 hrs. of Sr. Management time to plan, lead, and guide these efforts. 80 hrs. of Sr. Programmer time to take the lead in investigating the formats used to warehouse data and whether there are software packages that are commonly used. Also includes time for the Sr. Programmer to develop necessary applications to “retrieve” relevant data. 80 hrs. of Jr. Programmer labor to assist with analysis of available data and development of automated processes to retrieve selected data elements from States or existing databases.

States' Responsibilities

None.

Task 8: Design the Website, Including Defining Data Security and Access

USDA Responsibilities

USDA will design the website, including all background information and relevant links to other sites, if desired. USDA will be responsible for all activities associated with the design of a website, including defining user groups, creating a security structure, and managing user access.

Estimated time requirements. 40 hrs. of Sr. Management time to plan, lead, and guide these efforts. 160 hrs. of Sr. Programmer time to take the lead designing the website and all relevant access and security structures associated with it. 80 hrs. of Jr. Programmer labor to assist with design of the website.

States' Responsibilities

None.

Task 9: Build Computer-Assisted Data Entry Programs

USDA Responsibilities

USDA will be responsible for developing programs necessary to accommodate states that are not equipped to handle any of the automated tools developed in Task 7. USDA will develop the browser-based worksheets to collect the required data and build the web application to collect and validate the data.

Estimated time requirements. 40 hrs. of Sr. Management time to plan, lead, and guide these efforts. 320 hrs. of Sr. Programmer time to build the computer-assisted data entry programs, worksheets, and applications for validating the data keyed in by the States and develop a user manual. 160 hrs. of Jr. Programmer labor to assist with development of the web application, the user manual and development of technical support guidelines.

States' Responsibilities

States would be asked to provide information on potential users so that usernames/passwords could be established.

Estimated time requirements. 9 hrs. of Sr. Management time to provide a list of names of individuals who might directly interact with the system during data collection.

Task 10: Build Tools to Query, Sort, and Export the Data

USDA Responsibilities

USDA will be responsible for building an interface to allow users to select how they want to view the data, determine key variables that users might want to query and sort, and develop an online glossary that defines each variable in the data set.

Estimated time requirements. 40 hrs. of Sr. Management time to plan, lead, and guide these efforts. 320 hrs. of Sr. Programmer time to build tools to allow data to be queried and viewed in numerous ways, including tabular formats. Also build tools to allow users to export the data. 80 hrs. of Jr. Programmer labor to assist with development of query, sorting, and exporting tools.

States' Responsibilities

None.

Task 11: Design Summary Tables, Reports, and Articles to be Posted to the Web

USDA Responsibilities

USDA will be responsible for building a tool to allow validated users to post content to the web site, defining the types of reports that could be presented, and developing a series of reports.

Estimated time requirements. 80 hrs. of Sr. Management time to plan, lead, and guide these efforts. 160 hrs. of Sr. Programmer time to build tool to allow users to post content to the web site and developing series of reports for posting on the web site . 160 hrs. of Jr. Programmer labor to assist with development of the web reports.

States' Responsibilities

None.

Task 12: Implement Initial Data Collection for Nine States

USDA Responsibilities

USDA will be responsible for implementing a round of data collection for the initial nine states. This includes supporting all features of the web site as they pertain to the States' interaction with the web site, cleaning and merging the data as necessary, producing reports and articles, and making changes to any aspect of the data collection system as needed based on feedback from the States. It also includes the time and travel costs associated with conducting a half-day on-site training session on the web-based system with personnel from each State.

Estimated time requirements. 60 hrs. of Sr. Management time to plan, lead, and guide these efforts, of which 30 hrs. are for start-up activities only. 360 hrs. of Sr. Programmer time to manage the data collection process, including providing technical support; 120 hrs. of these are assumed to be for start-up activities only. Also includes time for making changes to any aspect of the web-based data collection system, from user interface through design of reports. 320 hrs. of Jr. Programmer labor to provide technical support to States, key in data received via hard copy, and assist with any required programming changes, of which 120 hrs. are assumed to be for start-up activities. 150 hrs. of Sr. Research Assistant time to prepare materials and conduct nine on-site training sessions, all of which are assumed to be start-up activities only.

States' Responsibilities

Each of the nine States will be responsible for attending a half-day training session and providing the requested data, unless data are being automatically uploaded. States will also provide comments on the usability of the system and suggestions for reports, query tools, etc.

Estimated time requirements. 45 hrs. of Sr. Management time to respond to data collection request and provide feedback to USDA on usability of the system, of which 27 hrs. is assumed to be for start-up activities. 200 hrs. of Sr. Programmer /Sr. Analyst time to attend training and key data into the web-based worksheets or otherwise make data available to USDA for downloading to the database; of these hours, 50 are assumed to be start-up (i.e., training-related) activities. 100 hrs. of Jr. Programmer labor to assist in responding to the data collection request; all of these hours are assumed to be on-going.

Task 13: Obtain OMB Clearance

USDA Responsibilities

USDA will be responsible for preparing an OMB package requesting approval to implement data collection beyond the initial nine states.

Estimated time requirements. 24 hrs. of Sr. Management time to plan, lead, and guide these efforts. 40 hrs. of Sr. Analyst time to prepare the draft and revised OMB packages. 40 hrs. of Research Assistant labor to contribute to the development of the OMB package, including all supporting materials.

States' Responsibilities

None.

Task 14: Prepare to Add Additional States

USDA Responsibilities

USDA will be responsible developing a plan for the phased addition of states. This will include calling contacts developed during Task 2 to verify contact information and identifying new contacts in remaining states.

Estimated time requirements. 24 hrs. of Sr. Management time to plan, lead, and guide these efforts. 36 hrs. of Sr. Analyst time to assist with development of plan to phase in additional states. 80 hrs. of Research Assistant labor to confirm Task 2 contacts and identify additional contacts as needed.

States' Responsibilities

States will respond to USDA's request to identify a contact person within their organization.

Estimated time requirements. 30 hrs. of Sr. Management time to assist in the identification of contacts within each State.

Table A-1. Labor and Non-Labor Costs by Task, Web-based Data Collection System Initiative

USDA											
	Assumed Rates	Task 1: Conduct Initial and Subsequent Steering Committee Meetings		Task 2: Develop Contact Lists		Task 3: Conduct Assessment of State-level Data being Collected		Task 4: Collect Sample of Archived Data from States		Task 5: Identify and Conduct Review of Existing Databases	
		Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars
Labor Categories											
Senior Management	\$111.19	80	\$8,895.20	32	\$3,558.08	32	\$3,558.08	16	\$1,779.04	40	\$4,447.60
Sr. Analysts/Sr. Programmer	\$65.08	150	\$9,762.00	40	\$2,603.20	100	\$6,508.00	24	\$1,561.92	100	\$6,508.00
Research Assist./Jr. Programmer	\$36.75	250	\$9,187.50	60	\$2,205.00	160	\$5,880.00	40	\$1,470.00	120	\$4,410.00
TOTAL LABOR		480	\$27,844.70	132	\$8,366.28	292	\$15,946.08	80	\$4,810.96	260	\$15,365.60
Non-Labor Costs											
Travel			\$1,000.00		\$0.00		\$0.00		\$0.00		\$0.00
Misc. software/hardware			\$0.00		\$0.00		\$0.00		\$0.00		\$0.00
Server and Disk Storage			\$100.00		\$0.00		\$100.00		\$0.00		\$100.00
TOTAL NON-LABOR COSTS			\$1,100.00		\$0.00		\$100.00		\$0.00		\$100.00

States											
	Assumed Rates	Task 1: Conduct Initial and Subsequent Steering Committee Meetings		Task 2: Develop Contact Lists		Task 3: Conduct Assessment of State-level Data being Collected		Task 4: Collect Sample of Archived Data from States		Task 5: Identify and Conduct Review of Existing Databases	
		Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars
Labor Categories											
Senior Management	\$111.19	0	\$0.00	20	\$2,223.80	68	\$7,560.92	80	\$8,895.20	0	\$0.00
Sr. Analysts/Sr. Programmer	\$65.08	0	\$0.00	0	\$0.00	27	\$1,757.16	90	\$5,857.20	0	\$0.00
Research Assist./Jr. Programmer	\$36.75	0	\$0.00	0	\$0.00	0	\$0.00	36	\$1,323.00	0	\$0.00
TOTAL LABOR		0	\$0.00	20	\$2,223.80	95	\$9,318.08	206	\$16,075.40	0	\$0.00
Non-Labor Costs											
Local Travel			\$40.00		\$0.00		\$0.00		\$0.00		\$0.00
Misc. software/hardware			\$0.00		\$0.00		\$0.00		\$0.00		\$0.00
Server and Disk Storage			\$0.00		\$0.00		\$0.00		\$100.00		\$0.00
TOTAL NON-LABOR COSTS			\$40.00		\$0.00		\$0.00		\$100.00		\$0.00

NOTE: Phone, postage, and copy costs are not included.

(Continued)

Table A-1. Labor and Non-Labor Costs by Task, Web-based Data Collection System Initiative (continued)

USDA											
	Assumed Rates	Task 6: Analyze Data Elements, Assess Availability, and Define Core Data Set		Task 7: Explore and Potentially Develop Options for Using Automated Uploads to Retrieve Data from States or Existing Databases		Task 8: Design the Website, Including Defining Data Security and Access		Task 9: Build Computer-Assisted Data Entry Programs		Task 10: Build Tools to Query, Sort, and Export the Data	
		Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars
Labor Categories											
Senior Management	\$111.19	60	\$6,671.40	40	\$4,447.60	40	\$4,447.60	40	\$4,447.60	40	\$4,447.60
Sr. Analysts/Sr. Programmer	\$65.08	100	\$11,119.00	80	\$5,206.40	160	\$10,412.80	320	\$20,825.60	320	\$20,825.60
Research Assist./Jr. Programmer	\$36.75	80	\$2,940.00	80	\$2,940.00	80	\$2,940.00	160	\$5,880.00	80	\$2,940.00
TOTAL LABOR		240	\$20,730.40	200	\$12,594.00	280	\$17,800.40	520	\$31,153.20	440	\$28,213.20
Non-Labor Costs											
Travel			\$0.00		\$0.00		\$0.00		\$0.00		\$0.00
Misc. software/hardware			\$0.00		\$2,000.00		\$0.00		\$0.00		\$0.00
Server and Disk Storage			\$100.00		\$0.00		\$100.00		\$0.00		\$100.00
TOTAL NON-LABOR COSTS			\$100.00		\$2,000.00		\$100.00		\$0.00		\$100.00

States											
	Assumed Rates	Task 6: Analyze Data Elements, Assess Availability, and Define Core Data Set		Task 7: Explore and Potentially Develop Options for Using Automated Uploads to Retrieve Data from States or Existing Databases		Task 8: Design the Website, Including Defining Data Security and Access		Task 9: Build Computer-Assisted Data Entry Programs		Task 10: Build Tools to Query, Sort, and Export the Data	
		Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars
Labor Categories											
Senior Management	\$111.19	0	\$0.00	0	\$0.00	0	\$0.00	9	\$1,000.71	0	\$0.00
Sr. Analysts/Sr. Programmer	\$65.08	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00
Research Assist./Jr. Programmer	\$36.75	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00
TOTAL LABOR		0	\$0.00	0	\$0.00	0	\$0.00	9	\$1,000.71	0	\$0.00
Non-Labor Costs											
Local Travel			\$0.00		\$0.00		\$0.00		\$0.00		\$0.00
Misc. software/hardware			\$0.00		\$0.00		\$0.00		\$0.00		\$0.00
Server and Disk Storage			\$0.00		\$0.00		\$0.00		\$0.00		\$0.00
TOTAL NON-LABOR COSTS			\$0.00		\$0.00		\$0.00		\$0.00		\$0.00

NOTE: Phone, postage, and copy costs are not included.

(Continued)

Table A-1. Labor and Non-Labor Costs by Task, Web-based Data Collection System Initiative (concluded)

USDA											
	Assumed Rates	Task 11: Design Summary Tables, Reports, and Articles to be posted to the Web		Task 12: Implement Initial Data Collection for Nine States ¹		Task 13: Obtain OMB Clearance		Task 14: Prepare to Add Additional States		TOTAL	
		Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars
Labor Categories											
Senior Management	\$111.19	80	\$8,895.20	60	\$6,671.40	24	\$2,668.56	24	\$2,668.56	608	\$67,603.52
Sr. Analysts/Sr. Programmer	\$65.08	160	\$10,412.80	360	\$23,428.80	40	\$2,603.20	36	\$2,342.88	1,990	\$134,120.20
Research Assist./Jr. Programmer	\$36.75	160	\$5,880.00	470	\$17,272.50	40	\$1,470.00	80	\$2,940.00	1,860	\$68,355.00
TOTAL LABOR		400	\$25,188.00	890	\$47,372.70	104	\$6,741.76	140	\$7,951.44	4,458	\$270,078.72
Non-Labor Costs											
Travel			\$0.00		\$5,958.00		\$0.00		\$0.00		\$6,958.00
Misc. software/hardware			\$0.00		\$0.00		\$0.00		\$0.00		\$2,000.00
Server and Disk Storage			\$0.00		\$100.00		\$0.00		\$100.00		\$800.00
TOTAL NON-LABOR COSTS			\$0.00		\$6,058.00		\$0.00		\$100.00		\$9,758.00

States											
	Assumed Rates	Task 11: Design Summary Tables, Reports, and Articles to be posted to the Web		Task 12: Implement Initial Data Collection for Nine States		Task 13: Obtain OMB Clearance		Task 14: Prepare to Add Additional States		TOTAL	
		Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars
Labor Categories											
Senior Management	\$111.19	0	\$0.00	45	\$5,003.55	0	\$0.00	30	\$3,335.70	252	\$28,019.88
Sr. Analysts/Sr. Programmer	\$65.08	0	\$0.00	200	\$13,016.00	0	\$0.00	0	\$0.00	317	\$20,630.36
Research Assist./Jr. Programmer	\$36.75	0	\$0.00	100	\$3,675.00	0	\$0.00	0	\$0.00	136	\$4,998.00
TOTAL LABOR		0	\$0.00	345	\$21,694.55	0	\$0.00	30	\$3,335.70	705	\$53,648.24
Non-Labor Costs											
Local Travel			\$0.00		\$0.00		\$0.00		\$0.00		\$40.00
Misc. software/hardware			\$0.00		\$2,000.00		\$0.00		\$0.00		\$2,000.00
Server and Disk Storage			\$0.00		\$500.00		\$0.00		\$0.00		\$600.00
TOTAL NON-LABOR COSTS			\$0.00		\$2,500.00		\$0.00		\$0.00		\$2,600.00

NOTE: Phone, postage, and copy costs are not included.

¹ See page 19 and pages 32-33 for the breakout between “initial” and “on-going” cost estimates. Travel costs in this task are based on nine roundtrip airfares between Washington, D.C. and Kansas City, MO (i.e., a “generic” site), plus a per diem.

Table A-2. Summary of Web-based Initiative Labor and Non-labor Costs

	Task 1: Conduct Initial and Subsequent Steering Committee Meetings		Task 2: Develop Contact Lists		Task 3: Conduct Assessment of State-level Data being Collected		Task 4: Collect Sample of Archived Data from States		Task 5: Identify and Conduct Review of Existing Databases	
	Labor Costs	Non-Labor Costs	Labor Costs	Non-Labor Costs	Labor Costs	Non-Labor Costs	Labor Costs	Non-Labor Costs	Labor Costs	Non-Labor Costs
USDA	\$27,844.70	\$1,100	\$8,366.28	\$0	\$15,946.08	\$100	\$4,810.96	\$0	\$15,365.60	\$100
States	\$0.00	\$40	\$2,223.80	\$0	\$9,318.08	\$0	\$16,075.40	\$100	\$0.00	\$0
TOTAL LABOR	\$27,844.70		\$10,590.08		\$25,264.16		\$20,886.36		\$15,365.60	
TOTAL NON-LABOR	\$1,140		\$0		\$100		\$100		\$100	
GRAND TOTAL	\$28,984.70		\$10,590.08		\$25,364.16		\$20,986.36		\$15,465.60	

	Task 6: Analyze Data Elements, Assess Availability, and Define Core Data Set		Task 7: Explore Options for Using Automated Uploads to Retrieve Data from States or Existing Databases		Task 8: Design the Website, Including Defining Data Security and Access		Task 9: Build Computer-Assisted Data Entry Programs		Task 10: Build Tools to Query, Sort, and Export the Data	
	Labor Costs	Non-Labor Costs	Labor Costs	Non-Labor Costs	Labor Costs	Non-Labor Costs	Labor Costs	Non-Labor Costs	Labor Costs	Non-Labor Costs
USDA	\$20,730.40	\$100	\$12,594.00	\$2,000	\$17,800.40	\$100	\$31,153.20	\$0	\$28,213.20	\$100
States	\$0.00	\$0	\$0.00	\$0	\$0.00	\$0	\$1,000.71	\$0	\$0.00	\$0
TOTAL LABOR	\$20,730.40		\$12,594.00		\$17,800.40		\$32,153.91		\$28,213.20	
TOTAL NON-LABOR	\$100		\$2,000		\$100		\$0		\$100	
GRAND TOTAL	\$20,830.40		\$14,594.00		\$17,900.40		\$32,153.91		\$28,313.20	

	Task 11: Design Summary Tables, Reports, and Articles to be posted to the Web		Task 12: Implement Initial Data Collection for Nine States		Task 13: Obtain OMB Clearance		Task 14: Prepare to Add Additional States		TOTAL	
	Labor Costs	Non-Labor Costs	Labor Costs	Non-Labor Costs	Labor Costs	Non-Labor Costs	Labor Costs	Non-Labor Costs	Labor Costs	Non-Labor Costs
USDA	\$25,188.00	\$0	\$47,372.70	\$6,058	\$6,741.76	\$0	\$7,951.44	\$100	\$270,078.72	\$9,758
States	\$0.00	\$0	\$21,694.55	\$2,500	\$0.00	\$0	\$3,335.70	\$0	\$53,648.24	\$2,600
TOTAL LABOR	\$25,188.00		\$69,067.25		\$6,741.76		\$11,287.14		\$323,726.96	
TOTAL NON-LABOR	\$0		\$8,558		\$0		\$100		\$12,358	
GRAND TOTAL	\$25,188.00		\$77,625.25		\$6,741.76		\$11,387.14		\$336,084.96	

X. APPENDIX B: DETAILED COST ASSUMPTIONS FOR SPECIFIC TASK ALTERNATIVES AND SUMMARY OF SNPIIS PIGGY-BACK INITIATIVE ALTERNATIVE

In this section, we describe the distribution of labor and activities within each task across the key actors **for those tasks with identified alternatives**. We also present a summary of the SNPIIS Piggy-back Initiative Alternative discussed in *Section VII*. Task Alternatives are presented first: *Table B-1* shows the labor and non-labor detail associated with each task alternative, and *Table B-2* presents a summary of these costs by task. These tables are presented immediately following the Task Alternatives discussion. Finally, we present a table (*Table B-3*) showing which tasks remain and which are expected to be eliminated under the SNPIIS Piggy-back Initiative Alternative and the initiative alternative cost.

Task Alternatives

Task 2 Alternative: Solicit Contact Information and Participation from the States (vs. Develop Contact Lists)

USDA Responsibilities

USDA would send an email or letter to States asking if they would like to participate in this initiative and to identify the appropriate contact if so.

Estimated time requirements. 16 hrs. of Sr. Management time to plan, lead, and guide these efforts. 32 hrs. of Sr. Analyst time to take the lead in developing an email to send soliciting State participants and contact names. 40 hrs. of Research Assistant labor to develop an initial email address and name to send above email to, using existing lists.

States' Responsibilities

States would respond to the solicitation only if interested. Minimal labor required to respond to the solicitation and identify a contact person.

Estimated time requirements. 25 hrs. of Sr. Management time to identify a contact person.

Task 7 Alternative: Eliminate Use of Automatic Uploads from States (vs. Explore and Potentially Develop Options for Using Automated Uploads to Retrieve Data from States or Existing Databases)

USDA Responsibilities

As with the base initiative Task 7, USDA will still conduct a review of existing databases to determine whether there is an automated process that can be developed to

retrieve data currently available electronically. However, this activity will not be done with respect to the States' electronic data.

Estimated time requirements. 24 hrs. of Sr. Management time to plan, lead, and guide these efforts. 40 hrs. of Sr. Programmer time to take the lead in investigating the formats used in existing databases and whether there are software packages that are commonly used. Also includes time for the Sr. Programmer to develop necessary applications to "retrieve" relevant data. 60 hrs. of Jr. Programmer labor to assist with analysis of available data and development of automated processes to retrieve selected data elements from existing databases.

States' Responsibilities

None.

Table B-1. Cost of Task Alternatives for Web-based Initiative

USDA							
	Assumed Rates	Task 2 Alternative: Solicit Contact Information and Participation from the States		Task 7 Alternative: Eliminate Use of Automatic Uploads from States		TOTAL	
		Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars
Labor Categories							
Senior Management	\$111.19	16	\$1,779.04	24	\$2,668.56	40	\$4,447.60
Sr. Analysts/Sr. Programmer	\$65.08	32	\$2,082.56	40	\$2,603.20	72	\$4,685.76
Research Assist./Jr. Programmer	\$36.75	40	\$1,470.00	60	\$2,205.00	100	\$3,675.00
TOTAL LABOR		88	\$5,331.60	124	\$7,476.76	212	\$12,808.36
Non-Labor Costs							
Local Travel			\$0.00		\$0.00		\$0.00
Misc. software/hardware			\$0.00		\$0.00		\$0.00
Server and Disk Storage			\$0.00		\$0.00		\$0.00
TOTAL NON-LABOR COSTS			\$0.00		\$0.00		\$0.00

States							
	Assumed Rates	Task 2 Alternative: Solicit Contact Information and Participation from the States		Task 7 Alternative: Eliminate Use of Automatic Uploads from States		TOTAL	
		Total Hours	Total Dollars	Total Hours	Total Dollars	Total Hours	Total Dollars
Labor Categories							
Senior Management	\$111.19	25	\$2,779.75	0	\$0.00	25	\$2,779.75
Sr. Analysts/Sr. Programmer	\$65.08	0	\$0.00	0	\$0.00	0	\$0.00
Research Assist./Jr. Programmer	\$36.75	0	\$0.00	0	\$0.00	0	\$0.00
TOTAL LABOR		25	\$2,779.75	0	\$0.00	25	\$2,779.75
Non-Labor Costs							
Local Travel			\$0.00		\$0.00		\$0.00
Misc. software/hardware			\$0.00		\$0.00		\$0.00
Server and Disk Storage			\$0.00		\$0.00		\$0.00
TOTAL NON-LABOR COSTS			\$0.00		\$0.00		\$0.00

Table B-2. Summary of Web-based Initiative Alternative Task Costs

	Task 2 Alternative: Solicit Contact Information and Participation from the States		Task 7 Alternative: Eliminate Use of Automatic Uploads from States		TOTAL	
	Labor Costs	Non-Labor Costs	Labor Costs	Non-Labor Costs	Labor Costs	Non-Labor Costs
USDA	\$5,331.60	\$0	\$7,476.76	\$0	\$12,808.36	\$0
States	\$2,779.75	\$0	\$0	\$0	\$ 2,779.75	\$0
TOTAL LABOR	\$8,111.35		\$7,476.76		\$15,588.11	
TOTAL NON-LABOR	\$0		\$0		\$0	
GRAND TOTAL	\$8,111.35		\$7,476.76		\$15,588.11	

SNPIIS Piggy-back Initiative Alternative

Detailed labor and non-labor estimates are provided in *Appendix A. Table B-3* on the next page illustrates which tasks are expected to remain or be eliminated under this initiative alternative and the estimated total cost. Key differences are noted as footnotes to the table.

Table B-3. SNPIIS Piggy-back Initiative Alternative: Tasks Retained/Eliminated

Task	Retained	Eliminated	Cost of Alternative
<u>Task 1</u> Conduct Initial and Subsequent Steering Committee Meetings ¹	X		\$28,985
<u>Task 2</u> Develop Contact Lists		X	
<u>Task 3</u> Conduct Assessment of State-level Data		X	
<u>Task 4</u> Collect Sample of Archived Data from States		X	
<u>Task 5</u> Identify and Conduct Review of Existing Databases ²	X		\$15,466
<u>Task 6</u> Analyze Data Elements, Assess Availability, and Define Core Data Set	X		\$20,830
<u>Task 7</u> Explore and Potentially Develop Options for Using Automated Uploads to Retrieve Data	X		\$14,594
<u>Task 8</u> Design the Website, including Data Security and Data Access	X		\$17,900
<u>Task 9</u> Build Computer-assisted Data Entry Programs		X	
<u>Task 10</u> Build Tools to Query, Sort and Export the Data	X		\$28,313
<u>Task 11</u> Design Summary Tables, Reports, and Articles to be posted to the Web	X		\$25,188
<u>Task 12</u> Implement Initial Data Collection for Nine States ³	X		\$18,259
<u>Task 13</u> Obtain OMB Clearance		X	
<u>Task 14</u> Prepare to Add Additional States		X	
Total Cost			\$169,535

¹ FNS/SNPIIS representatives should be included in the initial meetings, along with all stakeholders suggested in the original task description.

² This includes a review of SNPIIS data.

³ A misnomer, this task would include the extraction of required data from SNPIIS and any other external data sources rather than a data collection from States. The cost shown reflects 30 hrs. of Sr. Management time to plan, lead and guide these efforts. 120 hrs. of Sr. Programmer time to build a program to allow for importing data from SNPIIS and other databases to the initiative database 40 hrs. of Sr. Programming time (from a SNPIIS programmer) to help prepare the data for transfer. 120 hrs. of Jr. Programmer labor to implement the transfer of data from SNPIIS (and other databases) to the initiative database.

Suggested Bibliography

Web-based Data Collection Methodologies

- Bowker, Dennis and Don A. Dillman. 2000. "An Experimental Evaluation of Left and Right Oriented Screens for Web Questionnaires." (see <http://survey.sesrc.wsu.edu/dillman/papers.htm>)
- Carbonaro, Mike and Joyce Bainbridge. 2000. "Design and Development of a Process for Web-based Survey Research. The Alberta Journal of Educational Research Vol XLVI, No. 4, Winter 2000, 392-394.
- Clayton, Richard L. and George S. Werking. 1998. "Business Surveys of the Future: The World Wide Web as a Data Collection Methodology." In *Computer Assisted Survey Information Collection*. eds. Mick Couper et al. John Wiley and Sons, Inc. New York, NY.
- Couper, Mick P. 2000. "Web Surveys: A Review of Issues and Approaches." *Public Opinion Quarterly* 64: 464-494.
- Couper, Mick P., Michael Traugott, and Mark J. Lamias. 2001. "Web Survey Design and Administration." *Public Opinion Quarterly* 65: 230-253.
- Dillman, Don. 1999. *Mail and Internet Surveys: The Tailored Design Method*. 2nd edition, John Wiley and Sons.
- Dillman, Don, Glenn Phelps, Robert Tortora, Karen Swift, Julie Kohrell, and Jodi Berck. 2001. *Response Rate and Measurement Differences in Mixed Mode Surveys Using Mail, Telephone, Interactive Voice Response and the Internet*. Draft Paper. (see <http://survey.sesrc.wsu.edu/dillman/papers.htm>)
- Dillman, Don A. and Dennis K. Bowker. 2000. *The Web Questionnaire Challenge to Survey Methodologists*. (see <http://survey.sesrc.wsu.edu/dillman/papers.htm>)
- Dillman, Don A., Robert D. Tortora, and Dennis Bowker. 1998. *Principles for Constructing Web Surveys*. SESRC Technical Report 98-50, Pullman, Washington (see <http://survey.sesrc.wsu.edu/dillman/papers.htm>)
- Fisher, B., D. Resnick, M. Margolis, and G. Bishop. 1995. "Survey Research in Cyberspace: Breaking Ground on the Virtual Frontier." *Proceedings of the American Association of Public Opinion Research*, pp. 178-183.
- Harrell Jr., L.J., R.L. Clayton, and G.S. Werking. 1996. "TDE and Beyond: Data Collection on the World Wide Web." *Proceedings of the Section of Survey Research Methods, American Statistical Association*, pp. 768-773.

Hoffman, D.L., W.D. Kalsbeek, and T. Novak. 1996. "Internet Use in the United States: 1995 Baseline Estimates and Preliminary Market Segments." *Project 2000 Working Paper, Owen Graduate School of Management, Vanderbilt University*.

Sweet, E. and C. Russell. 1996. "A Discussion of Data Collection via the Internet." *Proceedings of the section on survey research methods, American Statistical Association*, pp. 774-779.

Shneiderman, B. 1997. *Designing the User Interface: Strategies for Effective Human-Computer Interaction*. 3rd edition, Addison-Wesley, Reading, MA.

Werking, G.S. 1994. "Establishment Surveys: Designing the Survey Operations of the Future." *Proceedings of the Section of Survey Research Methods, American Statistical Association*, pp. 163-169.

Notable Web Sites

Web Survey Methodology
<http://www.websm.org/>

Don Dillman
<http://survey.sesrc.wsu.edu/dillman/>