Chapter II

Summary of the Selected Data Initiatives

The proposed initiatives either create new or improve existing information resources by doing the following:

- *Addressing Inadequacies of Current Data Resources*: These three initiatives include the production of new data, or the enhancement of existing data systems, to improve situations in which current data resources are inadequate to support research on important food assistance and nutrition issues;

- *Using New Data Technologies to Improve the Quality, or Lower the Cost, of Data Resources:* These three initiatives include possible applications of new technologies that have been used successfully in other fields of research to create data on the food assistance and nutrition programs;

- *Expanding One-time Projects to Provide Ongoing or National Data Resources:* **This initiative i**ncludes modifying data resources that have been used in one-time research projects, nationally or in a specific locality, and identifying initiatives that would implement the same approach on an ongoing basis or at the national level; and/or

- *Creating New Data Resources by Linking Existing Data:* These three initiatives include combining two or more existing data resources whose linkage would produce new or improved information for researching food assistance and nutrition programs (table 1).

Table 1—Summary of the 10 data initiatives

Addressing inadequacies of current data resources:	
1. Micro-level database of Food Stamp Program participation records	This initiative proposes to develop a national micro-level FSP database from local and/or State administrative records, similar to that of WIC program and its Participant Characteristics (WIC-PC) database.
2. Building aggregated administrative statistics from local agency records on the National School Lunch Program	This initiative proposes to build an aggregated database from existing tabulations and summaries of local agency records, as well as potentially expanding the set of aggregate counts produced to strengthen the dataset.
3. Matching State WIC program administrative data with point-of-sale grocery store transaction data	This initiative would build upon an earlier USDA-sponsored study to examine the food purchasing patterns of WIC Program participants using scanning systems at the point of sale.
Using new data technologies to improve the quality, or lower the cost, of data resources	
4. Using the Internet to collect program data from State and/or local Agencies)	This initiative proposes to use surveys administered from a central website location to collect program data from State and/or local agencies.
5. Using a probability-based Web-enabled panel to collect data from low-income families through the Internet	This initiative proposes to use Web-based surveys, implemented through Web-enabled television, to collect data from low-income families.
6. GIS Internet Map Server (IMS) applications for project management and data analysis	This initiative proposes to highlight a number of potential IMS applications for food assistance programs and requirements for their implementation, including map-based eligibility determinations for nutrition assistance program participants and locational analysis for the siting of new services.

Table 1 (continued) — Summary of the 10 data initiatives

Expanding one-time projects to provide ongoing or national data resources:	
7. Extension of State projects linking administrative data across programs and over time to food and nutrition topics	This initiative would assess whether the micro-level information in existing linked State administrative files (e.g., Temporary Assistance to Needy Families) could be used in their current form, or, with slight modification, to address issues related to food assistance and nutrition programs.
Creating new data resources by linking existing data:	
8. Micro-matching of SIPP and CPS records to food stamp administrative records	This initiative proposes to link food stamp administrative records from various States (or from a national database—see No. 7) to Census records from the Survey of Income and Program Participation (SIPP) and Current Population Survey (CPS).
9. Matching WIC administrative records with Medicaid and vital records data	This initiative proposes to link WIC, Medicaid, and vital records data at the micro level. Merged datasets of this sort would enable States to do a much better job of monitoring outcomes for WIC clients.
10. Linking data on students' school performance with administrative records on NSLP participation	This initiative proposes to link either micro-level or aggregated (e.g., at the school level) information on student educational outcomes (e.g., student test data, attendance data, incidence rates for disciplinary actions, retention and graduation rates) with similarly structured administrative data on National School Lunch Program/School Breakfast Program participation.

We evaluate the initiatives based on nine criteria outlined by ERS in the original scope of work. These criteria include the following:

- importance of research on the Food Stamp, WIC, and/or National School Lunch and School Breakfast programs (criterion 1)

- value of program administration and/or research to constituencies at FNS, ERS, State and local agencies and the research community (criterion 2)

- importance of research on program outcomes and client well-being (criterion 3)

- importance of research on program participation dynamics (criterion 4)

- potential for supporting research that is national in scope (criterion 5)

- potential for supporting a stream of continuing research (criterion 6)

- feasibility (criterion 7)

- potential cost-effectiveness (criterion 8

- protection of client privacy and confidentiality (criterion 9).

The first criterion provides information on ***program area*** (i.e., which food assistance and nutrition programs are covered by the initiative?). The second criterion provides information on the ***value*** of the initiative to researchers and/or administrators (i.e., who will use the initiative?). The next four criteria highlight the type and scope of ***information*** included in each initiative (i.e., what information will the initiative include, will it be nationally representative, and how often will it be updated?). The final three criteria summarize potential ***implementation challenges*** (i.e., can it be implemented, what will it cost, and will there be confidentiality issues?)

Table 2 summarizes each of the initiatives in terms of the nine criteria. For the first six criteria, we identify whether an initiative includes at least some information or value in the indicated area. If an initiative does satisfy one of these criteria, we denote this relationship with an "X." In some cases, the initiative does not address an area, but can be extended to do so. For example, in our *Extension of State Projects Linking Administrative Data* initiative (Initiative 7), it is possible that information from all food assistance and nutrition programs could be included, though the focus is on FSP. In cases of this type, the letter "P" is used to signify "potential."

Table 2—Summary of individual initiatives by evaluation criteria

Initiative Title	FSP	WIC	School Lunch	Program Administration	Research	Program Outcomes	Participation dynamics	National scope	Continuing research	Feasibility issues	Cost issues	Client privacy issues
Criteria	Program area			Value		Information				Implementation challenges*		
	1			2		3	4	5	6	7	8	9
1. Micro-level database of Food Stamp Program (FSP) participation records	X			X	X	X	X	X	X	Moderate	Substantial	Moderate
2. Building aggregated administrative statistics from local agency records on the National School Lunch Program			X	X	X	X		P	X	Moderate	Moderate/ Substantial	None
3. Matching State WIC program administrative data with point-of-sale grocery store transaction data		X		X	X	X	P	P	X	Moderate	Substantial	Moderate
4. Using the Internet to collect program data from State and/or local agencies	X	X	X	X	X	X	P	X	X	Low	Moderate	Moderate
5. Using a probability-based Web-enabled panel to collect data from low-income families through the Internet	X	P	P	X	X	X	X	X	X	Moderate	Moderate	None
6. GIS internet map server (IMS) applications for project management and data analysis	X	X	X	X	X	X	P	P	P	Low	Moderate	Moderate
7. Extension of State projects linking administrative data across programs and over time to food and nutrition topics	X	P	P	X	X	X	X		X	Moderate	Moderate	Moderate
8. Micro-matching of SIPP and CPS records to Food Stamp administrative records	X			X	X	X	X	P	X	Moderate	Substantial	Moderate
9. Matching WIC administrative records with Medicaid and vital records data		X		X	X	X	X	P	X	Moderate/ Substantial	Substantial	Moderate
10. Linking data on students' school performance with administrative records on NSLP participation			X	X	X	X		P	X	Low	Low	None

X – Provides information in the designated area

P – Has the potential to provide information in the designated area.

*Implementation challenges that are "substantial" represent major potential problems for the data initiatives. By contrast, "low" challenges indicate that the initiative should be relatively easy to implement.

The final three criteria are more difficult to categorize because they cover a broad range of implementation challenges. For these criteria, we categorize each initiative according to whether low, moderate, or substantial operational and/or cost challenges are likely to arise during implementation. In such a ranking system, we do not attempt to make precise comparisons of the relative magnitudes of the differences across initiatives. At this point, it is difficult to make such comparisons because we do not have full information on the potential costs involved. Many of the initiatives are likely to have the same categorization for any given criterion.

Program Area

There is a balanced distribution of the initiatives across program areas. Four initiatives (Initiatives Nos. 4, 5, 6, and 7) address or could potentially address overlaps across all food assistance and nutrition programs considered. Two initiatives each cover information in FSP only (Nos. 1 and 8), WIC only (Nos. 3 and 9) and NSLP only (Nos. 2 and 10).

Value to Researchers and Administrators

All of the initiatives have potential value for use by researchers and at least indirect value for administrators by providing research information that would be valuable in administering the program. Two of the technology initiatives (Nos. 4 and 6) would help in the administration of food assistance and nutrition programs. Two remaining initiatives (Nos. 1 and 3) could be extended to do so, but at a substantial cost.

Type and Scope of Information

All of the initiatives provide information on program outcomes, and most include information on participation dynamics, are national in scope, and can be used in ongoing research by adding successive waves of data. The initiatives all include information on program outcomes, but at significantly varying levels (see chapter III). Six of the initiatives (Nos. 1, 3, 5, 7, 8, and 9) include multi-period micro-level information to examine program dynamics, and two of the technology initiatives (Nos. 4 and 6) could be extended to include this information. Only three of the initiatives (Nos. 1, 4, and 5) could be immediately implemented to provide information at a national level. Several other initiatives (Nos. 1, 2, 3, 4, 6, 8, 9, and 10) could be expanded to the national level as technology and reporting requirements improve for collecting administrative data. Eight initiatives (Nos. 1, 2, 3, 5, 7, 8, 9, and 10) would support continuing research and the two remaining technology initiatives (Nos. 4 and 6) could be designed to support this type of research for a specific project.

Implementation Challenges

The implementation challenges vary significantly across initiatives. Initiative 10, a linked aggregated data initiative, is the most feasible and lowest-cost option and does not raise privacy concerns. The initiatives that rely on creating or linking administrative data

across States and/or systems (Nos. 1, 3, 8, and 9) generally would y more expensive to implement than the other initiatives. Initiative 7 would hold down costs by building on linked files already compiled by State agencies and/or their contractors. Initiatives 1, 3, 8, and 9 would be expensive to implement because working with administrative data tends to be very labor-intensive and extensive legal negotiations might be required to allow access, use, and monitoring of extracts on an ongoing basis. Those initiatives may be less expensive in the long run, however, because administrative data are relatively less expensive to update. The three technology initiatives (Nos. 4, 5, 6) each raise issues of feasibility and cost related to providing technology to either State agencies and/or sample participants. Initiative 2 may face moderate to substantial implementation challenges in identifying, coordinating, and manipulating information across agencies that administer the NSLP. None of the initiatives raises major feasibility or client privacy issues.

Summary

Table 2 provides a useful reference point for comparing the initiatives, but ERS should be cautious about using it as a primary source of information to select the final initiatives. The initiatives' goals different significantly, making it difficult to provide a complete picture of all relative costs and benefits in one table. For example, it is very difficult to uniformly compare the three technology initiatives (Nos. 4, 5, 6) with the other initiatives, because the goals of those three initiatives have different research and administrative purposes. Even when there seems to be a basis for comparison among the initiatives, table 2 does not capture the full spectrum of costs and benefits. For example, the micro-level administrative data systems initiatives (Nos. 1, 3, 7, 8, and 9) are more costly than the aggregate data initiatives (Nos. 2 and 10), but they provide significantly more information that could be used for a greater variety of research purposes.

A more complete picture of the costs and benefits of each initiative are presented in the next section. ERS will need to weigh these costs and benefits when selecting three initiatives for further development in phase II of the project.