Chapter Three

Characteristics of FSP and WIC Data Systems

This chapter describes some of the characteristics of the information systems (IS) used by the food stamp and WIC programs. Data are from the *Survey of Food Assistance Information Systems* conducted as part of this study. Child nutrition program information systems are discussed in Chapter Five.

The *Survey of Food Assistance Information Systems* collected information specifically related to the participant database portion of FANP information systems. The survey was designed to provide information for researchers interested in using administrative data to study participant characteristics and participation dynamics, and to investigate the potential for record linkage across programs. The survey was narrowly focused on FANP participant databases and data sharing arrangements and did not collect information about other aspects of FANP information systems. For example, FANP information systems provide many functions in addition to participant eligibility and tracking. FSP systems track Electronic Benefit Transfer (EBT) card issuance and replacement, benefit disbursement, and employment and training activities (especially for able-bodied adults without dependents (ABAWDs)). WIC systems track benefit issuance and vendor authorization; and may track health care and social service referrals and nutrition education appointments.

As described in Chapter One, the *Survey of Food Assistance Information Systems* collected information from 26 States. All 26 States have statewide information systems for the WIC program, and all States except California have statewide information systems for the FSP. In the body of this report, the FSP data for California are from the California Interim Statewide Automated Welfare System (ISAWS). At the time of the survey the California FSP was transitioning to a statewide system, with 35 of 58 counties included in the ISAWS system.[27]

Hardware and Software

Table 2 provides information about system maintenance, hardware, software, and database structure used by FSP and WIC agencies in managing participant data. Information about hardware and software systems is typically not important to researchers requesting data extracts, however, it can be indicative of the variety of record formats that exist in different systems.

System Maintenance and Hardware

The majority of FSP and WIC information systems are maintained by the State agencies administering the programs (table 2). Of the 26 states surveyed, 21 FSP agencies and 16 WIC agencies maintain their own information system; States and contractors share maintenance responsibilities in four FSP agencies and four WIC agencies; and only one FSP system and 6 WIC systems are maintained completely by contractors.

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[27]   Detailed appendix tables include information about ISAWS and the Los Angeles county food stamp information system (LEADER: Los Angeles Eligibility, Automated Determination Evaluation and Reporting).

Table 2—Hardware and software systems for maintaining participant data in FSP and WIC information systems

	Food Stamp Program[1]		WIC Program	
	Number States	Percent	Number States	Percent
Computer system is maintained by				
State	21	81%	16	62%
Contractor	1	4	6	23
Both	4	15	4	15
Type of hardware system				
Mainframe	25	96	14	54
Unix system	1	4	4	15
Midrange computer	–	–	5	19
PC server	–	–	3	12
Other	–	–	–	–
File structure of client database				
Relational database	7	27	17	65
Flat file	2	8	6	23
Hierarchical file	10	38	3	12
Other	7	27	–	–
Type of software system[2]				
Legacy system	14	54	10	38
DB2	4	15	6	23
ORACLE	1	4	5	19
SYBASE	–	–	2	8
IMS DB/DC	8	31	–	–
Adabas	2	8	2	8
Other	9	35	6	23

– Zero States in category.
1 The FSP information system in California is not fully integrated at the State level. Table includes data from the California Interim Statewide Automated Welfare System (ISAWS), operating in 35 California counties.
2 Survey respondents checked all applicable items.

Source: *Survey of Food Assistance Information Systems*, 2002.
Survey was completed by program administrators in 26 States: Alabama, Arizona, California, Colorado, Connecticut, Florida, Georgia, Illinois,Iowa, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, Washington.

Nearly all (25 of 26) FSP agencies but only half of WIC agencies surveyed maintain participant databases on mainframe computers. WIC systems are also found on UNIX or midrange computer systems.

Database Structure and Software

A majority of FSP agencies maintain hierarchical databases (table 2). Hierarchical databases are particularly suited to the FSP participant database because FSP enrolls households, and maintains information on the "case" or "household head" as well as all individuals in the household. The most common database structure for WIC is a relational database. A relational database allows for multiple linked data "tables" containing certification records, food package codes, voucher issuance records, and appointment scheduling.

It is difficult to characterize the software used by FSP and WIC agencies because information systems generally consist of multiple computer languages: operating system languages, enterprise middleware

such as database or transaction servers, and high-level languages such as Natural or COBOL (for legacy systems). Fourteen FSP agencies characterized their system as a "legacy system" (table 2). The database/transaction software used by FSP agencies includes IMS hierarchical database (IBM), DB2 relational database (IBM), and Adabas database. The database products used by WIC agencies include DB2, Oracle, Sybase, and Adabas.[28]

Local Agency Connections

The statewide information systems maintained by FSP and WIC agencies send and receive information to and from local offices. Food stamp offices are generally located within county welfare or social service departments. The 88 WIC State agencies oversee nearly 2,000 local agencies, which are generally public or private nonprofit health or human service agencies.

Figure 2 shows the number of States by type of local office connections for sending certification data to the central State facility. Most FSP agencies (22 of 26) maintain a statewide network to connect local offices in real-time; only two FSP agencies report that local offices submit files.[29] In contrast, just half of WIC agencies connect local offices via a statewide network in real-time; 12 WIC agencies report that local offices periodically submit files. The frequency of file submission varies. Both FSP agencies using file submission, and 6 of the 12 WIC agencies, report that all local offices submit files nightly. In the remaining 6 WIC agencies, some local offices submit files nightly, some weekly, and some less than weekly.

Planned Upgrades

The majority of FSP information systems are stable, with 15 FSP agencies (of the 26 surveyed) planning no major hardware or software upgrades in the next 2 years; in contrast, only 5 of 26 WIC state agencies report no planned upgrades (figure 3). Among the 11 FSP agencies with planned upgrades, 2 agencies will upgrade hardware, 3 will upgrade software, and 6 agencies will upgrade both hardware and software. Among the 21 WIC agencies with planned upgrades, one will upgrade hardware, 5 will upgrade software, and 15 will upgrade both.

Figure 2—Local agency connections
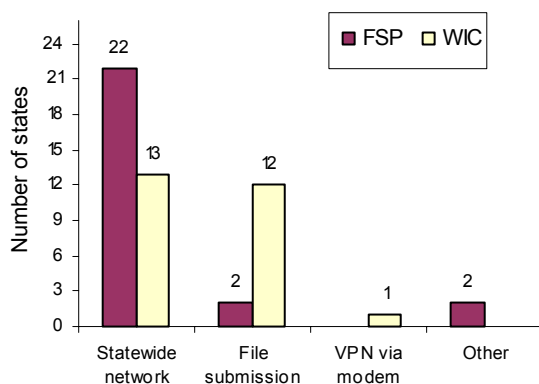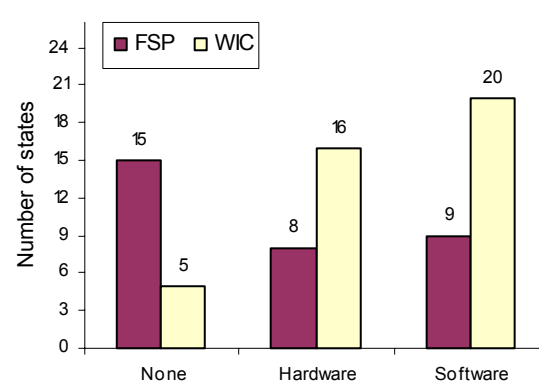
Figure 3—Planned upgrades

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[28] "Legacy" was a response category chosen by respondents. Respondents choosing "Other" and providing open-end responses of operating system software (OS/390, OS2200, VM) were categorized as having legacy systems.

[29] Two FSP agencies reported "Other method" and open-ended responses did not clearly indicate the methods used.

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Historic Data

Availability of historic data is an important consideration when using administrative records for research purposes. Studies of participation dynamics require longitudinal data files, compiled either retrospectively or prospectively. Record linkage projects, bringing together data from different programs, require data that are contemporaneous across programs. Retention and overwriting policies determine whether historical data are available to fill these research requirements.

Federal regulations govern record retention policies for FSP and WIC. FSP regulations (7 CFR 275.4) and WIC regulations (7 CFR 246.25) require all records, including certification records, be retained for a minimum of three years.

Record retention does not necessarily indicate the usefulness of historical records in compiling longitudinal case histories. Additional considerations include overwriting policies governing each data field, the ability to link historical records, and the method by which "old" information is retained. For example, an FSP participant database can be thought of as a large transaction system. The main component of the system is the list of all current and former program participants with an indicator of status. A change in program status or a name change is a transaction that updates the current record. A researcher using these data must know whether the old information is overwritten or retained, and where the "old status" information is retained — is it on the current record in an array of "old" items, or is it in a history file that must be linked to the current record?

For this study, we asked FSP and WIC administrators about four issues related to record retention: a) record archival policies, b) availability of past cross-sections of active caseloads, c) availability of participant enrollment histories, and d) overwriting policies for individual data fields. Survey responses are shown in tables 3 and 4.

Record Archival and Retention

Slightly more than half of surveyed FSP and WIC agencies indicated that they take participant records offline for archival: 14 FSP agencies and 15 WIC agencies (table 3). Most of these 14 FSP agencies indicated that the trigger for record archival is the number of months inactive (i.e., the number of months since last receipt of benefits). Most WIC agencies also archive records after a particular time period of inactivity (seven agencies use the number of months inactive as a trigger for archival and four agencies use the end date of participation as the trigger) (table 3). Four WIC agencies use other triggers for archival, including client's age and size of the data file.

Most survey respondents from the 26-state sample indicated that they retain inactive case records in their online computer system for time periods that exceed the three-year federal regulation for record retention. Of the 26 states in the survey, 21 FSP agencies retain inactive case records online for five years of longer, and 10 agencies retain inactive case records online for 10 years or longer (table 3). Two FSP agencies and four WIC agencies reported online record retention of inactive cases for less than three years. Regulations do not require that records be retained online, as opposed to offline, but online retention of inactive cases increases the likelihood that applicants with previous histories will be identified and linked to their past history by assignment of the same case ID.

In general, WIC agencies retain inactive case records online for shorter time periods than FSP agencies. Only 5 WIC agencies retain records for more than 10 years, 11 agencies retain records for 5 to 10 years, and 10 agencies retain records for less than 5 years. Shorter retention periods in the WIC

Table 3—Record archival, record retention, and enrollment histories in FSP and WIC information systems

	Food Stamp Program[1]		WIC Program	
	Number States	Percent	Number States	Percent
Record archival				
System archives client records offline				
Yes	14	54%	15	58%
No	12	46	11	42
Trigger for archiving client records[2]				
Number months inactive	13	50	7	27
Start date of participation	1	4	1	4
End date of participation	1	4	4	15
Other	–	–	3	12
Record retention				
Length of time records are retained online for inactive cases				
Less than 3 years	2	8	4	15
3-4 years	3	12	6	23
5-10 years	11	42	11	42
More than 10 years	10	38	5	19
Caseload histories				
System is able to recalculate past monthly caseload totals from online data				
Yes	19	73	20	77
No	7	27	6	23
Past monthly caseloads could be calculated for				
Less than 2 years	2	8	5	19
2-4 years	5	19	10	38
5 or more years	12	46	5	19
Not applicable	7	27	6	23
Client enrollment histories				
Information about enrollment prior to current certification is found				
On current record	15	58	8	31
In history file	3	12	8	31
Requires special programming	8	31	10	38

   – Zero States in category.
   1 The FSP information system in California is not fully integrated at the State level. Table includes data from the California Interim Statewide Automated Welfare System (ISAWS), operating in 35 California counties.
   2 Pennsylvania reported both 'number months inactive' and 'end date' as triggers for archival.

Source: *Survey of Food Assistance Information Systems*, 2002.
Survey was completed by program administrators in 26 States: Alabama, Arizona, California, Colorado, Connecticut, Florida, Georgia, Illinois,Iowa, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, Washington.

program reflect the fact that participation periods are limited by categorical eligibility: women participate during periods around childbirth and children participate up to 5 years of age.

Caseload Histories

Record retention does not guarantee that a snapshot of the caseload at a point in time can be reconstructed at some point in the future. To determine this capability, we asked program administrators if past monthly caseload counts could be recalculated from online data. About half (12

of 26) of FSP agencies could recalculate monthly caseload counts from online data for the past 5 years or longer (table 3) and 7 agencies could recalculate past monthly caseload counts for a period of less than 5 years. Only 5 WIC agencies could recalculate past monthly caseloads from online data going back 5 years, and 15 agencies could do it for less than 5 years. Some agencies (7 FSP agencies and 6 WIC agencies) are unable to recalculate past monthly caseload counts from online data.

Finally, program administrators were asked if individual participants' enrollment histories could be determined from their current record, from a history file, or only by special programming. If the enrollment history is on the current record, then an important indicator (past participation outside the current participation spell) is easily accessible. Fifteen of 26 FSP agencies retain participant enrollment histories on the current record (table 3); the remaining 11 agencies do not have the information on the current record and must retrieve it from a history file (3 agencies) or by special programming (8 agencies). Only 8 WIC agencies indicated that participant enrollment history is on the current enrollment record; eight WIC agencies indicated that participant enrollment histories must be retrieved from a history file; and ten WIC agencies can retrieve enrollment history only by special programming.

Overwriting Policies

Overwriting policies determine the data items that are overwritten when they change, and those that are retained. For example, a data system may contain several fields for "last name" so that a history of name changes is retained on the current record. Alternatively, the current record may contain only the current name (data are overwritten), but all changes to the current record trigger a save of the previous record in a history file so that the history of name changes is accessible (albeit with more programming). Some data systems do not retain "old" data on the current record or in a history file, but maintain it only in the archives of past "current" records.

Overwriting policies are an important consideration for record linkage projects. Over time, individuals may change their address, phone number, or name (via adoption or changes in marital status). Record linkages may not be possible if data extracts are not contemporaneous, and even then, if an individual enrolls in two programs at different points in time the data extracts (taken at a single point in time) may contain different information.

Table 4 shows the overwriting and retention policies reported by FSP and WIC agencies for name, address, phone, date of birth, and SSN. Agencies were asked to indicate whether changes in identifying information were retained in separate data fields on the current record. FSP agencies are more likely to retain old information on the current record, compared to WIC agencies. It is not known, however, whether the difference between FSP and WIC agencies is because WIC agencies do not retain old information, or because WIC agencies are more likely to retain old information in a separate file rather than on the current record (this is more feasible in the relational database structure prevalent among WIC agencies, compared to the hierarchical database structure used by FSP).

Among FSP agencies, date of birth is the most commonly overwritten data item — reflecting the fact that this item doesn't change, but it may be updated to correct previous entry errors. In contrast, a slight majority of FSP agencies retain changes to name and address in separate data fields — these items are likely to experience real changes over time.

Table 4—Overwriting policies for individual data fields in FSP and WIC information systems

	Food Stamp Program[1]		WIC Program	
	Number States	Percent	Number States	Percent
Overwrite/retention rules for changes in data items				
Name				
Overwrite	12	46%	20	77%
Retain	14	54	6	23
Address				
Overwrite	11	42	23	88
Retain	15	58	3	12
Phone number				
Overwrite	14	54	22	85
Retain	9	35	4	15
Not specified	3	12	–	–
Date of birth				
Overwrite	17	65	20	77
Retain	9	35	6	23
Social Security Number				
Overwrite	14	54	13	50
Retain	11	42	6	23
Not specified	1	4	7	27

  – Zero States in category.
  1 The FSP information system in California is not fully integrated at the State level. Table includes data from the
    California Interim Statewide Automated Welfare System (ISAWS), operating in 35 California counties.

Source: *Survey of Food Assistance Information Systems*, 2002.
      Survey was completed by program administrators in 26 States: Alabama, Arizona, California, Colorado, Connecticut, Florida,
      Georgia, Illinois,Iowa, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York,
      North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, Washington.

Participant Information in FSP and WIC Databases

FSP and WIC information systems contain data for all enrolled individuals. Individuals are uniquely identified within each information system by a primary identifier. Individual and/or case records also contain contact information and demographic characteristics.

Primary Identifiers

Primary identifiers are generally numeric or alphanumeric and are used in program operations to uniquely identify individuals and cases. The FSP enrolls households and assigns primary identifiers to households (or cases), as well as to each individual in the household. (The ID of the household head is sometimes used as the case ID.) WIC programs enroll individuals and assign primary identifiers to individuals, although some WIC programs also assign "family IDs" to associate multiple participants who are related.

We asked FSP and WIC directors to characterize their primary identifier as: SSN, system-generated ID, or shared ID. A shared ID is shared with other public assistance programs—for example, states with integrated information systems for FSP, TANF, and Medicaid may use the same primary identifier to identify individual participants across the three programs.

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Table 5—Primary identifiers for FSP and WIC program cases

	Food Stamp Program[1]		WIC Program	
	Number States	Percent	Number States	Percent
Primary identifier for cases				
Social Security Number	2	8%	3	12%
System generated ID	7	27	20	77
ID shared with other programs	16	62	2	8
Other	1	4	1	4
Continuity of primary identifier				
Does client ID follow through multiple participation spells?				
Yes	26	100	18	69
Yes, if enrolled through same local agency	–	–	5	19
Yes, if enrollment is continuous	–	–	3	12
Search for past records				
At application, is system searched for current or past record of client?				
Yes	26	100	24	92
No	–	–	2	8
Information used to search for current or past participation[2]				
Name	26	100	23	96
Social Security Number	26	100	13	54
Program ID	19	73	16	67
Date of birth	19	73	17	71
Other	7	27	9	38
Time period searched for past participation				
All available data	25	96	19	73
4 months	–	–	1	4
18 months	–	–	1	4
3 years	–	–	1	4
6 years	–	–	1	4
Not specified	1	4	1	4
Not applicable	–	–	2	8

– Zero States in category.
1 The FSP information system in California is not fully integrated at the State level. Table includes data from the California Interim Statewide Automated Welfare System (ISAWS), operating in 35 California counties.
2 Survey respondents checked all applicable items.

Source: *Survey of Food Assistance Information Systems*, 2002.
Survey was completed by program administrators in 26 States: Alabama, Arizona, California, Colorado, Connecticut, Florida, Georgia, Illinois,Iowa, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, Washington.

SSNs are not commonly used as primary identifiers for FSP and WIC (table 5). Only 2 FSP agencies and 3 WIC agencies use the SSN as a primary ID.[30] Sixteen FSP agencies report use of a "shared ID" and 7 agencies report use of a system-generated (but not shared) primary ID. Two WIC programs

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30 One FSP agency indicated that a shared ID is used if the SSN is not provided at certification. All three WIC agencies indicated that a system-generated ID is used if the SSN is not provided at certification.

report use of a shared ID (Illinois and Tennessee), but most WIC agencies (20 of 26) report use of a system-generated ID unique to their agency. [31]

While SSNs are not used as primary identifiers by most FSP and WIC agencies, all FSP agencies and some WIC agencies collect SSNs. Federal law requires individuals to provide their SSN to receive FSP benefits and authorizes State FSP agencies to use SSNs to verify eligibility, prevent duplicate participation, and determine the accuracy and/or reliability of information given by households (7CFR273.6). This requirement does not exist for WIC.

There are limits, however, on the use of SSNs by government agencies.[32] The Social Security Act declares that SSNs obtained or maintained by authorized individuals are confidential and prohibits their disclosure. This limit may explain why SSNs are not widely used as primary identifiers by FSP and WIC. Use of system-generated IDs that are unique to each FANP, however, limits the ability to easily link individuals across FANPs for research and reporting.

All FSP agencies, but only some WIC agencies, indicate that primary identifiers follow participants through multiple spells of participation. In five WIC agencies, IDs follow participants through multiple certifications only when they re-enroll through the same local agency. In three WIC agencies, IDs may be reassigned when participation is not continuous.

In order for a primary ID to reliably follow a participant through multiple spells of participation, the data system must be searched for past records of participation at each application. As shown in table 5, all FSP agencies use name and SSN to search their system for past records of participation, and thereby assign a continuous ID. The continuity of primary identifiers in the WIC program is less reliable because, as shown in table 5, only half of WIC agencies use SSN to search for past records.

Personal Information

In addition to primary identifiers, FSP and WIC data systems maintain three types of personal information for enrolled individuals: identifiers (name, SSN); contact information (name, address, phone); and demographics (date of birth, gender, race/ethnicity, primary language). Because FSP and WIC (and other FANPs) do not use a common primary identifier, a record linkage project must rely on the availability of other personal information to link participants across programs.

To ascertain the types of personal identifying information contained in FSP and WIC information systems, we asked program administrators to indicate the data fields present in their data system and the data fields required to be filled (fields not permitted to be blank). Table 6 presents survey responses.

Data fields for first and last name, SSN, date of birth, gender, and race/ethnicity are present in all FSP and WIC participant databases. A very small number of agencies reported that data fields for address (3 FSP and 2 WIC agencies) and phone (3 FSP agencies) are not available.

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[31]   States were asked whether their ID is a shared ID, but were not asked to identify the program with which they share IDs. The programs integrated with WIC in States with a shared ID are: Child Protective Services, CHIP, and Medicaid in Illinois; Commodity Supplemental Food Program (CSFP) and Medicaid in Tennessee.

[32]   SSNs are widely used by government and the private sector to uniquely identify individuals. SSNs were created to track workers' earnings and eligibility for Social Security benefits; SSNs also serve as taxpayer identification numbers (GAO, 2000).

Table 6—Client identifying information maintained in FSP and WIC information systems[1]

	Food Stamp Program[2]		WIC Program	
	Number States	Percent	Number States	Percent
First name				
Required field	24	92%	26	100%
Available, not required	2	8	–	–
Not available	–	–	–	–
Last name				
Required field	26	100	26	100
Available, not required	–	–	–	–
Not available	–	–	–	–
Social Security number				
Required field	16	62	5	19
Available, not required	10	38	15	58
Not available	–	–	6	23
Date of birth				
Required field	26	100	26	100
Available, not required	–	–	–	–
Not available	–	–	–	–
Address				
Required field	19	73	20	77
Available, not required	4	15	4	15
Not available	3	12	2	8
Mailing address				
Required field	14	54	10	38
Available, not required	12	46	10	38
Not available	–	–	6	23
Phone number				
Required field	3	12	8	31
Available, not required	20	77	18	69
Not available	3	12	–	–
County				
Required field	22	85	16	62
Available, not required	2	8	4	15
Not available	2	8	6	23
Gender				
Required field	23	88	23	88
Available, not required	3	12	3	12
Not available	–	–	–	–
Race/ethnicity				
Required field	23	88	26	100
Available, not required	3	12	–	–
Not available	–	–	–	–
Primary language				
Required field	13	50	11	42
Available, not required	4	15	5	19
Not available	9	35	10	38

– Zero States in category.

1 Table indicates information maintained by FSP systems for household heads, and by WIC for women. See Appendix tables for detail on FSP other family members and WIC infants/children.

2 The FSP information system in California is not fully integrated at the State level. Table includes data from the California Interim Statewide Automated Welfare System (ISAWS), operating in 35 California counties.

Source: *Survey of Food Assistance Information Systems*, 2002.
Survey was completed by program administrators in 26 States: Alabama, Arizona, California, Colorado, Connecticut, Florida, Georgia, Illinois,Iowa, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, Washington.

Table 6—Client identifying information maintained in FSP and WIC information systems[1]
— Continued

	Food Stamp Program[2]		WIC Program	
	Number States	Percent	Number States	Percent
First certification date				
Required field	16	62	21	81
Available, not required	3	12	2	8
Not available	7	27	3	12
Start and end dates of each certification period				
Required field	18	69	17	65
Available, not required	5	19	4	15
Not available	3	12	5	19
Monthly indicators of participation				
Required field	14	54	11	42
Available, not required	3	12	3	12
Not available	9	35	12	46

1 Table indicates information maintained by FSP systems for household heads, and by WIC for women. See Appendix tables for detail on FSP other family members and WIC infants/children.

2 The FSP information system in California is not fully integrated at the State level. Table includes data from the California Interim Statewide Automated Welfare System (ISAWS), operating in 35 California counties.

Source: *Survey of Food Assistance Information Systems*, 2002.
Survey was completed by program administrators in 26 States: Alabama, Arizona, California, Colorado, Connecticut, Florida, Georgia, Illinois,Iowa, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, Washington.

Data fields that are required to be filled in FSP and WIC participant databases are shown in table 6. Last name and date of birth are the only fields required in all 26 FSP and WIC agencies. First name is required by all WIC agencies and all but 2 FSP agencies. Address information is required by most FSP and WIC agencies (19 and 20 respectively), but phone numbers are rarely required (3 FSP and 8 WIC agencies).[33]

Data fields for gender and race/ethnicity are required by most FSP and WIC agencies. These data are needed for reporting of participant characteristics by age, sex, and race/ethnicity. However, 3 FSP and 3 WIC agencies indicated that gender is not a required field, and 3 FSP agencies indicated that race/ethnicity is not a required field. Primary language is required by only half of the surveyed FSP agencies and 11 of the 26 surveyed WIC agencies.

While SSNs are not commonly used as primary identifiers, SSNs are maintained in participant databases. All FSP agencies and 20 of 26 WIC agencies indicated that their participant database contains a field for SSN. The SSN is reported to be a required field in 16 FSP agencies and 5 WIC agencies.[34]

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33 Address information has become less important to FSP program operations since EBT has replaced mailings of paper food stamp coupons as the method of benefit disbursement.

34 Applicants to the FSP are required by law to report an SSN for all household members. However, the data field may not be considered a required field because some individuals do not have SSNs prior to application and the data field is left blank until an SSN is acquired.

Participation Indicators

Participant databases for FSP and WIC contain one record for each participant and an indicator of current status — for example, active, inactive, terminated, waitlist. Systems differ in the ways they store information about past participation. Most (21 of 26) WIC agencies and 16 of 26 FSP agencies indicated that the participant database contains a field for "first certification date" (table 6).[35] Start and end dates of participation spells are maintained in the participant database of 18 FSP and 17 WIC agencies; and monthly participation indicators (which indicate breaks in receipt of benefits mid-spell) are maintained in the databases of 14 FSP and 11 WIC agencies.

Only one FSP agency and 2 WIC agencies have none of the three indicators of participation listed in table 6 (first date of certification, start and end dates of each certification period, and monthly indicators of participation).

Links Between Family Members

The FSP enrolls households and all household members are linked in the participant database by a case ID. The WIC program, however, enrolls individuals. Basic information about families receiving WIC benefits is available within a State only if the participant database assigns a family ID to each individual participant.

As shown in figure 4, 10 WIC agencies report that family IDs assigned by their system provide a reliable link between all family members who ever participated in WIC. In 4 States, WIC family IDs reliably link all currently participating family members; while in another 4 States, WIC family IDs reliably link only some currently participating family members. In 8 of the 26 States, WIC family IDs are not assigned or not reliable.

Figure 4—Assignment of family IDs in WIC participant databases
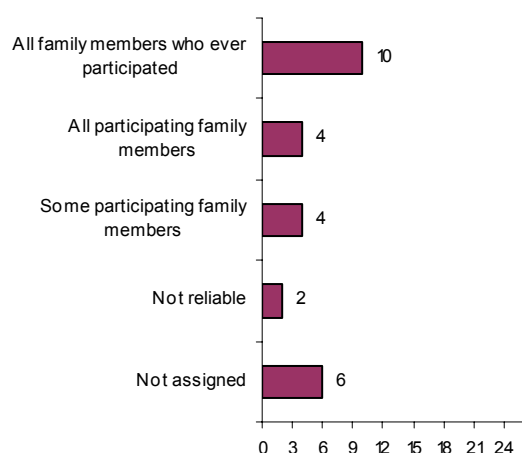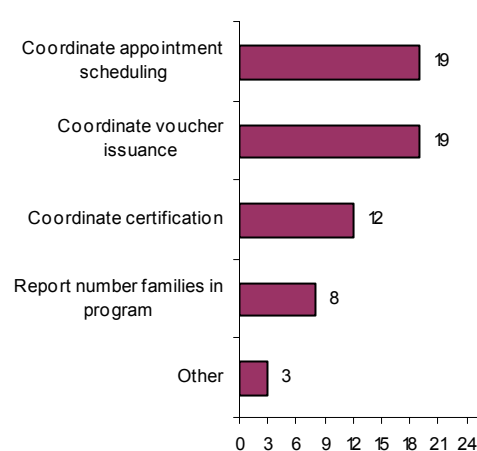
Figure 5—Reported uses of WIC family IDs

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[35]   The WIC Participant and Program Characteristics Study collects "date of first certification" as a supplemental data item; in 2002, 57 of 88 WIC state agencies included this item in their data submission.

Among the 19 WIC agencies reporting assignment of family IDs, all reported that WIC family IDs are used to coordinate appointment scheduling for families, and most report coordination of voucher issuance for families (figure 5). Only 8 WIC agencies use family IDs to report the number of families participating in the program.

Data Verification

FSP and WIC administrators were asked about data verification and standardization. Data verification refers to methods of verifying the accuracy of data supplied by households, using external data sources. Data standardization refers to methods of imposing standard formats and/or standard spellings, usually at data entry, to ensure that identical information appears consistently within the data system.

FSP regulations require verification of SSNs (7CFR273.2). SSNs are verified through queries to databases maintained by the Social Security Administration (SSA). SSA provides two interfaces for online queries of individual SSNs: the State Verification Exchange System (SVES) and the State Online Query System (SOLQ). SVES is an electronic overnight query process (SSA, 2001a), whereas SOLQ is a real-time query system that allows caseworkers to key a request and get an immediate response from the SSA.[36] In addition, SSNs may be verified via batch methods whereby large numbers of records are periodically matched to SSA databases.

Methods of verification are shown in table 7. For this survey, respondents were asked to characterize verification methods as "computer lookup," "SVES interface," "batch search of SSN database," or "other". Ten FSP agencies reported multiple methods of SSN verification, including both online queries ("computer lookup," "SVES interface") and batch search methods. The "other" methods reported by three States were edit checks for validity, and were done in addition to SSA matches. Three States did not provide information about verification methods, but data were obtained for two States from another source (USDA/FNS, 2002); California did not provide information about verification methods and is not reflected in the table.

WIC agencies are not required to verify SSNs and only one WIC agency reported SSN verification (table 7). WIC regulations do, however, require verification of adjunctive income eligibility. The burden of documentation of adjunct income eligibility, however, is on WIC applicants; regulations specify that local WIC agencies must require adjunctively income eligible applicants to "document their eligibility for the program that makes them income-eligible" for WIC. Nonetheless, our survey asked WIC agencies about methods to verify adjunctive income eligibility at certification, to ascertain whether WIC agencies use computer matching strategies. Most WIC agencies reported that documentation is required from applicants; no WIC agencies reported use of batch computer matching methods; 2 WIC agencies reported use of a real-time computer link to verify FSP and TANF adjunctive income eligibility; and 6 WIC agencies reported use of a real-time computer link to verify Medicaid adjunctive income eligibility. Six agencies also report that Medicaid eligibility can be verified via a phone link to the Medicaid program (2 of these use both phone and computer links).

Address information (street, city, ZIP Code) is sometimes standardized upon data entry. For example, city names may be entered via a master list of cities to ensure a consistent spelling on all records; or

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[36] SOLQ was being piloted in five States in FY2001 (SSA, 2001b).

Table 7—Data verification and standardization in FSP and WIC information systems

	Food Stamp Program[1]		WIC Program	
	Number States	Percent	Number States	Percent
Data verification				
Social Security numbers are verified				
Yes	26	100%	1	4%
No	na	na	13	50
Methods of verifiying Social Security numbers[2,3]				
Computer look-up	6	26	–	–
SVES interface	13	57	na	na
Batch search of SSN database	16	70	–	–
Other	3	13	1	100
Data standardization and validation				
Address fields standardized during data entry[2]				
Street address	9	35	4	15
City	13	50	12	46
County	14	54	11	42
ZIP code	15	58	11	42
None	6	23	9	35
Phone number validation				
Validate area code and local exchange	1	4	–	–
Validate area code only	3	12	4	15
Do not validate phone numbers	22	85	22	85

– Zero States in category.
na Not applicable.
1 The FSP information system in California is not fully integrated at the State level. Table includes data from the California Interim Statewide Automated Welfare System (ISAWS), operating in 35 California counties.
2 Survey respondents checked all applicable items.
3 California did not provide information about methods of SSN verification.

Source: *Survey of Food Assistance Information Systems*, 2002.
Survey was completed by program administrators in 26 States: Alabama, Arizona, California, Colorado, Connecticut, Florida, Georgia, Illinois,Iowa, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, Washington.

ZIP Codes may be entered via a master list to ensure their validity.[37] FSP and WIC agencies are about equally likely to do some address standardization: 15 FSP agencies and 14 WIC agencies standardize one of more fields. Table 7 shows the number of agencies standardizing each address field. Street address is least likely to be standardized.

As noted above, only a small number of FSP and WIC agencies require phone numbers in their participant databases (3 FSP agencies and 8 WIC agencies). Similarly, only a small number of agencies validate area codes (4 FSP agencies and 4 WIC agencies) and only one validates local telephone exchanges. Curiously, there is little overlap between agencies requiring phone numbers and those validating phone number information; of the 11 agencies requiring phone numbers, only one agency validates the data.

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[37]   Alternatively, city names may be standardized by linking ZIP Codes to a list of city names.

Integration with Other Programs

The FSP has historically been integrated with AFDC/TANF and Medicaid through the development of statewide integrated data systems (as discussed in Chapter Two). This type of system integration implies that programs share the same computer system and possibly share primary identifiers (participant ID). A master list of participants from an integrated data system provides an unduplicated list of participants in one or more programs.

For this survey, we defined system integration to mean that one program shares the same computer system with another program, or has real-time access to the records of the other program. Real-time access allows one program to obtain information from another program for verification purposes.

Among the 26 surveyed States, 23 have FSP data systems that are integrated with other public assistance programs (Alabama, Colorado, and North Carolina do not have integrated data systems). All integrated systems include TANF, and 20 include Medicaid.[38] Many FSP data systems are integrated with additional programs, as shown in table 8; the most common are Foster Care and Refugee Assistance.

Only 7 of 26 WIC agencies report system integration. The most common integration is with Medicaid (5 WIC agencies), but one or two WIC agencies also reported integration with Child Protective Services, CHIP, TANF, FSP, or CSFP. All five States that have WIC/Medicaid integrated systems, also have FSP/TANF/Medicaid integrated systems; the WIC agencies in two of these States reported that integration with Medicaid allows WIC to verify participation (i.e., adjunctive income eligibility) in all three adjunct programs.

Indicators of Participation in Other Programs

FSP and WIC data systems in some States contain indicators of participation in other public assistance programs. The reliability of these indicators is greatest when they result from integrated data systems. But even when systems are not integrated, indicators of participation in other programs may be maintained if referrals are made to those programs, or if information about participation in other programs is used during the income-eligibility determination process.[39]

All WIC data systems contain indicators of participation in FSP, TANF, and Medicaid because adjunctive income eligibility in the WIC program is determined by participation in those programs.[40] Adjunctive income eligibility must, by law, be documented by applicants to the WIC program. As shown in figure 6, few WIC agencies have data fields in their participant database for FSP and TANF case numbers, indicating that adjunctive income eligibility is not verified by computer matching. Half of the 26 States surveyed indicated that WIC participant databases have data fields for Medicaid case numbers, but the data are required in only 2 States (data not shown).

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[38] USDA/FNS (2002) found that, among all States, FSP is integrated with TANF in 35 States, Medicaid in 29 States, the Child Support System in 19 States, and General Assistance (GA) in 9 States.

[39] Income from other programs may be countable income for purposes of determining income eligibility. In addition, income-eligibility for WIC is deemed by participation in TANF, FSP and Medicaid.

[40] Documentation of adjunct eligibility was required by the William F. Goodling Child Nutrition Reauthorization Act of 1998 (PL 105-336).

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Table 8—Integration of FSP and WIC with other public assistance programs

	Food Stamp Program[1]		WIC Program	
	Number States	Percent	Number States	Percent
Client database is integrated with other public assistance programs				
Yes	23	88%	7	27%
No	3	12	19	73
System is integrated with				
Child Abuse System	1	4	–	–
Child Support Enforcement	3	13	–	–
Child Protective Services	2	9	1	14
Child Welfare	3	13	–	–
Children's Health Insurance (CHIP)	7	30	2	29
Employment Security Commission wage records	–	–	–	–
Foster Care	10	43	–	–
Head Start	–	–	–	–
JOBS	7	30	–	–
Low Income Home Energy Assistance (LIHEAP)	4	17	–	–
Medicaid eligibility	20	87	5	71
Medicare	4	17	–	–
Refugee assistance program	15	65	–	–
TANF	23	100	2	29
Other	8	35	1	14
Nutrition assistance programs				
Commodity Supplemental Food Program (CSFP)	–	–	2	29
Food Assistance Program on Indian Reservations (FDPIR)	na	na	–	–
Food Stamp Program	na	na	1	14
WIC	–	–	na	na

– Zero States in category.
na Not applicable.
1 The FSP information system in California is not fully integrated at the State level. Table includes data from the California Interim Statewide Automated Welfare System (ISAWS), operating in 35 California counties.
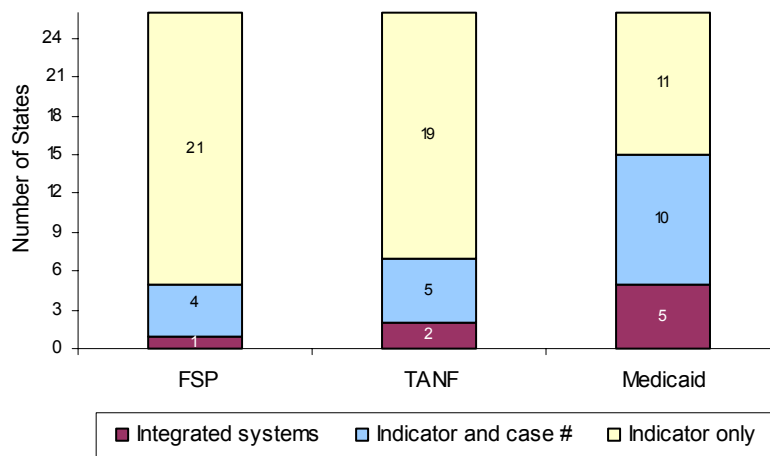
Source: *Survey of Food Assistance Information Systems*, 2002.
Survey was completed by program administrators in 26 States: Alabama, Arizona, California, Colorado, Connecticut, Florida, Georgia, Illinois,Iowa, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Nebraska, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, Washington.
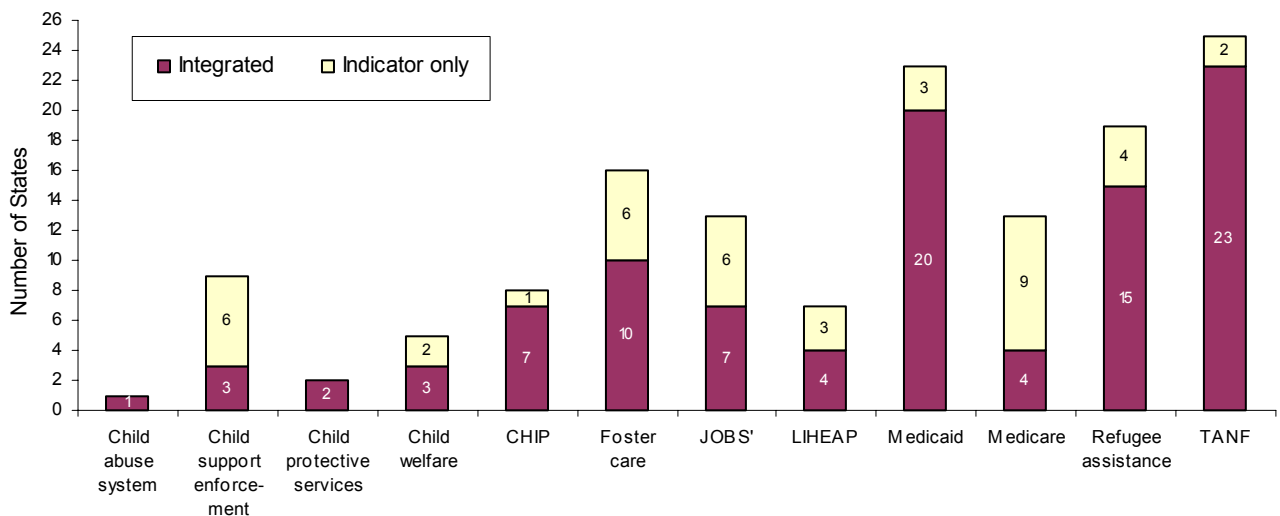
Many FSP data systems contain indicators of participation in other programs even when the data systems are not integrated. Figure 7 shows the number of FSP data systems that are integrated with other programs (same as table 8) and the additional number of data systems that include indicators of participation, in the absence of system integration.

Figure 6—WIC system integration and indicators of participation in adjunct programs

Notes: "Integrated systems" means that the program shares the same computer system with WIC or that WIC has real-time access to the records of the other program. "Indicator and case #" means that the WIC participant database contains data fields for an indicator of participation in the other program and for the case number in the other program.

Figure 7—FSP integration with other programs and indicators of participation in the absence of system integration

Notes: CHIP = Children's Health Insurance; LIHEAP = Low Income Home Energy Assistance; Medicaid = Medicaid eligibility records.

None of the 26 surveyed FSP agencies are integrated with CSFP (Commodity Supplemental Food Program), Head Start, or WIC. One State FSP database has indicators of participation in CSFP and Head Start; two States have indicators of participation in WIC.