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**OPTIONS FOR A
NATIONAL DATABASE TO
TRACK PARTICIPATION IN
FEDERAL MEANS-TESTED
PUBLIC ASSISTANCE
PROGRAMS: REPORT TO
CONGRESS**

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EXECUTIVE SUMMARY

This report responds to P.L. 105-379, which mandated the U.S. Department of Agriculture to examine options for the design, development, implementation and operation of a national database to track participation in federal means-tested public assistance programs. Such a database would:

- Identify interstate duplicate cases, that is, individuals receiving program benefits in two or more States at the same time,
- Help track the time limits required by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) across State boundaries. The time limits restrict the amount of time certain clients of the Food Stamp Program (FSP) and Temporary Assistance to Needy Families (TANF) can receive benefits.

Duplicate participation is a concern across all means-tested programs. However, because the FSP and TANF programs are the only two means-tested programs that require tracking of time limits, they pose the critical test of the feasibility of a national database. Therefore, in this report we focus on the FSP and TANF programs. If a system for FSP and TANF is feasible and cost-effective, then adding other means-tested programs (such as Medicaid) is unlikely to significantly decrease cost-effectiveness (and may increase it).

The current study builds on existing information about the feasibility of a national database, the most important of which is a study conducted by the U.S. Department of Health and Human Services (DHHS) in 1997, hereafter called the *DHHS report*. The current study also draws on several additional sources of data, including a survey conducted by the U.S. Department of Agriculture (USDA) of State FSP agency data processing capabilities in 1991, ongoing monitoring by USDA of interstate computer matching programs, in-depth interviews with officials in seven selected State FSP agencies, and interviews with representatives of four on-going national matching systems with functions similar to those of the national client database.

The major contribution of the DHHS report was to identify five alternative system architectures for a national client database. The national client database could be developed using any one of the five architectures. The functionality, feasibility, and cost-effectiveness of the national client database depend on which architecture is used. The five architectures are:

- **File Match.** At the end of each time period such as a month or a quarter, each State sends a file of current recipients, represented by their social security numbers (SSNs) and name, to the national client database. Software associated with the central database compares each case to every other case in every other State searching for duplicate cases. If a recipient is found in more than one State, the central facility sends the SSN and name of the duplicate case to both State agencies. The national client database does not accumulate historical data on program participation, nor does it send data other than SSN and name to the two State agencies.
- **Broadcast.** Each State agency periodically transmits a file containing the SSNs and names of its active cases to every other State agency. There is no centralized national client database, and the central facility provides no data to State agencies. The task of identifying duplicate cases is left to State agencies.
- **Eligibility Index.** This architecture is similar to the file match architecture, except that each State agency sends SSNs and names of new applicants and recertifications to the central facility at any time, and SSNs and names are retained in the national client database so that historical data on program participation is accumulated.
- **Eligibility Database.** This is similar to the eligibility index option, except that the State agency transmits an extract of each case record, rather than just the SSN and name, to the national client database. The central facility identifies interstate duplicate cases, and sends the case record extract from both State agencies to each of the two State agencies. The national client database accumulates historical data on program participation. Thus, the central client database sends sufficient data to State agencies for them to minimize the amount of data they need to retrieve directly from other State agencies.
- **One-Stop Database.** This is similar to the eligibility database architecture, except that the national client database also performs two other major program functions. First, it links to several other federal and State databases to allow direct verification of client-reported income, assets, and employment. Second, it performs a variety of checks and computations to determine eligibility for TANF.

Using these models developed in the DHHS as a starting point, this study assesses the feasibility and cost-effectiveness of a national client database. A secondary objective is to assess the impact of such a database on the privacy of FSP and TANF clients.

P.L. 105-379 also requires USDA to assess current State agency efforts to identify interstate duplicate benefits, as well as State agency capabilities to participate in a national client database. Both of these assessments are incorporated into the evaluation of the feasibility of such a database.

The conclusions of this report are:

1. ***A national client database is feasible if it is configured using either an eligibility database or a one-stop database architecture.***

In order to be considered feasible, the database must meet all of the following conditions:

- It must be consistent with the functional requirements for the database in helping to administer FSP and TANF.
- The technical risk of the system's not working after development should be minimal.
- The centralized component of the database needs to be developed and operated at a reasonable cost.
- The State agency component of the database must be developed and operated at a reasonable cost and must not require significant increases in agency staff.

Functional requirements for the national client database are to provide data to State FSP and TANF agencies that enables them to identify interstate duplicate cases and to enforce PRWORA time limits for both programs.

Feasibility. Both the eligibility database and one-stop database architectures meet the functional requirements for a national client database. They also provide State agencies with sufficient data that they can follow-up interstate duplicate cases and enforce PRWORA time limits without significant staff increases. The other three architectures do not directly support the enforcement of PRWORA time limits. They also require State agencies to engage in a very inefficient procedure of exchanging data files with every other State agency every month. This procedure would likely require significant State agency staff increases.

Current State Agency Activity in Detecting Interstate Duplicate Benefits. There are two types of evidence supporting the feasibility of a national client database. The first is that a number of State FSP and TANF agencies participate in programs designed to identify interstate duplicate cases. Ongoing monitoring, by FNS, of State FSP agencies indicates that the majority of States have participated at least once in the past several years in an interstate match designed to identify interstate duplicate FSP cases. Twenty-five State FSP agencies routinely conduct such matches for interstate duplicate FSP cases. The largest existing system for detecting interstate duplicate TANF cases is the PARIS system. Thirty-two States participated in PARIS for at least one match.

State Capabilities to Participate in a National Client Database. The second source of evidence for the feasibility of a national client database is in-depth interviews by USDA with officials in the FSP agencies of seven States regarding their capability to participate in a national client database. Each agency reported having the capability to participate in such a database. The officials assumed the centralized portion of the database would be developed and operated by a federal agency. They also realized they would need to develop and operate the State agency portion of the system. However, they assumed the system would be designed so that the State agency's activity would be limited to preparing and sending an extract of its case records to the central facility, receiving case record extracts from the central facility, and verifying and following-up on the matched cases. Under this assumption, the officials felt that developing and operating their portion of the national client database would not be difficult.

The seven States should not be viewed as a statistically representative sample of all States. While these conclusions cannot be generalized to all State agencies, they suggest States' capabilities. USDA is currently conducting a comprehensive survey of all State FSP agencies on their computer capabilities.

2. *If developed for both the FSP and TANF, it is likely that the use of an eligibility database architecture would be cost-effective. However, it would not be cost effective if it were developed for the FSP alone.* *An eligibility database developed by the Federal government within current funding arrangements for FSP and TANF, however, is likely to increase Federal costs*

Available data are inadequate to estimate the costs or benefits of a national client database reliably. However, calculations using the data that are available, supplemented by a number of assumptions, suggest that a national client database is cost-effective if it is configured using an eligibility database or one-stop database architecture. This conclusion holds even though in the calculations the benefit portion of the benefit-cost ratio is limited to detecting interstate duplicate FSP and TANF cases and excludes the benefit from enforcing ABAWD and TANF time limits across State boundaries.

This analysis makes no assumption about how costs or benefits are allocated among Federal or State agencies. An eligibility database developed by the Federal government within current funding arrangements for FSP and TANF, however, is likely to increase Federal costs. This would occur primarily because the savings from recovered and avoided TANF benefits would accrue only to States under the existing block grant, while the Federal government would bear most of the developmental and operational costs.

The cost-effectiveness of the file match, broadcast, and eligibility index architectures cannot be estimated. However, they cause the State agency component of the system to be substantially less efficient than under the eligibility database or one-stop database architectures. This loss of efficiency means that these three architectures would be less cost-effective than the eligibility database or one-stop database architectures.

The one-stop architecture may be less cost-effective than the eligibility index because it is more expensive to develop and operate. The extra expense of the one-stop architecture results from it providing two major programmatic functions that are not required for the functional requirements identified here for a national client database. The one-stop architecture may be viewed as a future enhancement of the national client database.

3. *Most privacy issues are addressed in straightforward ways, but the possibility of unintended uses of the data remains a significant risk.*

A national client database raises concerns about protecting the privacy of FSP and TANF clients. Privacy concerns fall into three categories. The first is that FSP and TANF data are owned by the State agencies providing benefits to the FSP or TANF case and may not be disclosed to an agency of another State or federal agency. A solution to this problem is to execute privacy agreements between State agencies and the sponsoring federal agency.

The second category of privacy concerns is unauthorized physical or electronic access to the national client database. This threat to security could be controlled by building physical, electronic, and procedural safeguards into both the centralized component and the State agency component of the database.

The third category of privacy concern is the threat of authorized but unintended uses of the data. This risk to client privacy is the most difficult to control. The wide variation among State privacy laws

suggests that this risk is minimized by construing the national client database as a federal system of records subject to the Privacy Act and the Computer Matching and Privacy Act.

NEXT STEPS

If a decision to develop a national client database is made, two considerations affect how rapidly development can start. First, adequate time must be allowed to appropriate sufficient funds to the primary federal agency managing the effort. Second, time must be allowed for the agency to either hire and organize qualified staff with appropriate expertise or to pursue the procurement processes involved in soliciting and choosing a national database contractor.

This investigation also revealed potential concerns that should be further investigated. One concern is that a federally sponsored national client database may have the appearance of altering the governance of the FSP and TANF programs, both of which are administered by State agencies. A second related concern is the potential public perception of a national database of individuals who received benefits from a means-tested program at any point in their lives. This concern is particularly acute because enforcing TANF time limits will eventually result in the database containing data on program participation throughout much of an individual's adult life, perhaps covering over forty years. The dynamics of poverty and welfare receipt imply that such a database may eventually contain data on a substantial fraction of the population of the nation.

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CHAPTER I

INTRODUCTION

Late in 1998, the U.S. Congress enacted P.L. 105-379,¹ Section 2(a) of which requires the U.S. Department of Agriculture (USDA) to:

“...conduct a study of options for the design, development, implementation, and operation of a national database to track participation in Federal means-tested public assistance programs.”

It specifies that the report address the following areas:

“(b) Administration.--In conducting the study, the Secretary shall--

- (1) analyze available data to determine—*
 - (A) whether the data have addressed the needs of the food stamp program established under the Food Stamp Act of 1977 (7 U.S.C. 2011 et seq.);*
 - (B) whether additional or unique data need to be developed to address the needs of the food stamp program; and*
 - (C) the feasibility and cost-benefit ratio of each available option for a national database;*
- (2) survey the States to determine how the States are enforcing the prohibition on recipients receiving assistance in more than one State under Federal means-tested public assistance programs;”*
- (3) determine the functional requirements of each available option for a national database; and*
- (4) ensure that all options provide safeguards to protect against the unauthorized use or disclosure of information in the national database.*

¹ “An Act to Amend the Food Stamp Act of 1977 to Require Food Stamp State Agencies to Take Certain Actions to Ensure that Food Stamp Coupons Are Not Issued to Deceased Individuals, to Require the Secretary of Agriculture to Conduct a Study of Options for the Design, Development, Implementation, and Operation of a National Database to Track Participation in Federal Means-Tested Public Assistance Programs and for Other Purposes.”

This report responds to that mandate to submit a report to Congress on the feasibility of a national client database containing information on recipients of the federal means-tested public assistance programs. Such a database would document interstate duplicate participation and track time limit requirements in the Food Stamp Program (FSP) and the Temporary Assistance to Needy Families (TANF) program. The Food and Nutrition Service (FNS) was given the task of conducting the study which builds on previous research conducted by the Department of Health and Human Service (DHHS) that assessed States' readiness for establishing a system capable of tracking recipients over time and across States.²

In particular, the report examines the functional requirements, technical feasibility and cost-effectiveness of a national client database, as well as safeguards to protect against unauthorized or unintended use of the data. The report reviews potential design issues of such an information system and highlights concerns that should be addressed before a national database could be implemented. The report focuses primarily on the FSP and secondarily on TANF.

Duplicate participation is a concern across all means-tested programs. However, because the FSP and TANF programs are the only two means-tested programs that require tracking of time limits, they pose the critical test of the feasibility of a national database. Therefore, in this report we focus on the FSP and TANF programs. If a system for FSP and TANF is feasible and cost-effective, then adding other means-tested programs (such as Medicaid) is unlikely to significantly decrease cost-effectiveness (and may increase it).

This introductory chapter describes the background and policy context of the study, current activity in cross State computer matching, information sources on which the report is based, and the organization of the remainder of the report.

BACKGROUND INFORMATION AND POLICY CONTEXT

The FSP is a federal program, with program benefits paid by the federal government and with program administrative responsibilities shared with the States and subject to the requirements of the Congress. FNS is responsible for promulgating regulations, financial planning, review and reimbursement of State agency expenditures, monitoring State agency operations, and evaluating the program. Day-to-day operations of the program, including the determination of eligibility and the food stamp benefit amount, are conducted at the state and local levels of government. As a result, most data on program clients reside at the State or, in a few States, the county levels of government.

Title I of the Personal Responsibility and Work Opportunities Reconciliation Act (PRWRORA) of 1996 (P.L. 104-193) contained a variety of legislative provisions that reflected Congress' longstanding interest in and desire to reduce fraud, waste and abuse in the FSP. These included time limits on participation for able-bodied adults without dependent children (ABAWDS), the exclusion of most legal immigrants from participation until they become citizens, new requirements for complying with child support enforcement agencies, a tighter definition of eligible household; and new sanctions resulting in more frequent and longer program disqualifications. It also created the Temporary Assistance for Needy Families (TANF) which replaced the Federal Aid to Families with Dependent Children (AFDC). The legislative provisions for TANF included very specific work requirements, a

²To assure successful completion of this effort in a timely manner, FNS contracted with Mathematica Policy Research, Inc. (MPR) to assist in data collection, analysis and the generation of the report.

prohibition on Federal TANF assistance to a family that includes an adult after 60 months, barring of convicted drug felons and fugitive felons from benefit receipt, and new program and fiscal reporting requirements.

This legislation has created significant challenges for State casefile database information systems. States now need to have the ability to track recipient households and participating individuals within those households, over time and across jurisdictions. Both active and inactive cases, including disqualified recipients or subpopulations barred from participation (i.e. convicted drug felons), need to be tracked. Such tracking capability would provide a tool that could enhance a State's ability to identify duplicate participation and administratively disqualified cases and individuals.

In order to assess State's readiness for establishing a system capable of tracking recipients over time and across States, Section 106 of PRWORA directed the Secretary of DHHS to prepare a report on the status of State automation systems to support the requirement of welfare reform and to discuss options for establishing a system capable of tracking recipients over time and across States. This report provided information on (1) the status of automated data processing systems operated by the States to assist in the administration of State programs under Part A of Title IV of the Social Security Act; and (2) the requirements to (a) establish a system capable of tracking participants in public programs over time; and (b) check case records of the States to determine whether individuals are participating in public programs in 2 or more States. Congress also directed that the report include a plan for building on the automated data processing systems of the States to establish a system with the capabilities described in item (2) above; an estimate of the amount of time required to establish such a system; and an estimate of the cost of establishing such a system.

At the time of information gathering (1996), States were in the planning stage for TANF automation. Since this was a time of transition, it was difficult to completely assess the status of the automated data processing systems. It was determined, however, that when available system architectures were associated with appropriate levels of functionality, there were five system architectures available that met the required parameters (File Match, Broadcast, Eligibility Index, Eligibility Database and "One-Stop" Database). These are discussed in Chapter II.

INTERSTATE DUPLICATE PARTICIPATION

Occasionally a participant is identified as receiving benefits, concurrently, in more than one location within a State, (intrastate duplicate participation); or concurrently, in more than one State or jurisdiction (interstate duplicate participation). In recent years, many States have used their Statewide client database to address the problem within the State. However, interstate duplicate participation continues to be a concern.

In August 1998, the General Accounting Office (GAO) published the results of an investigation of interstate duplicate food stamp benefits (GAO 1998). GAO matched the FSP caseloads in four large States – California, Texas, Florida, and New York – finding over twenty thousand duplicate individuals and an overpayment of nearly \$4 million. Based on this finding, GAO recommended the development of a national information system to check for such duplicate benefits, and suggested that such a system could also be used for implementing the time limits mandated by the welfare reform law. GAO's evidence that duplicate issuance is a problem is further supported by the findings of several States that have established agreements with other States to match FSP and/or TANF case records. These

arrangements, which are discussed in Chapter IV, have identified significant numbers of interstate duplicate cases in those States.

FSP AND TANF TIME LIMITS

PRWORA made important changes in both the FSP and the welfare system (now TANF) which increased the need for information about program participants to be shared among States.³ In particular, that legislation set time limits that constrain the periods over which certain groups of recipients can receive benefits under each program. Also, these legislated time limits apply to benefits received in all States.

The FSP time limit applies to able-bodied adults without dependents (ABAWD), between the ages of 18 and 50 who are able to work and do not have any children or other dependents. Those persons can receive food stamp benefits for only three months out of every 36-month period, unless they meet one of three work requirements: Work at paid employment for 20 or more hours per week; participate in a workfare program; and participate at least 20 hours per week in an allowable work activity, such as a Food Stamp Employment and Training program. ABAWDs remain eligible for food stamp benefits as long as one of these work regulations is met.

The TANF time limit applies to all adult participants. An individual may not receive benefits from the TANF program for more than five years during the client's lifetime.

³The TANF limits are set by Section 408 of PRWORA. Those for the FSP are set by Section 824.

CROSS STATE COMPUTER MATCHING ACTIVITY

IMPACT OF COMPUTER MATCHING

Prior to 1986, investigation of questionable information given by an applicant for food stamps was a labor-intensive activity that often severely taxed the capabilities of local welfare offices. Conventional methods to detect program violations, such as duplicate participation, relied on information obtained from the documents a person submitted as proof of identification. The resulting information, based on interviews with employers, landlords, friends and neighbors contacted to confirm the information provided by the applicant, was often of limited reliability.

Advances in computer technology permitted the development of strategies that increased the amount of reliable information necessary to determine benefit eligibility and made fraud more difficult to commit and easier to detect. As the technology became more available, the existing activities were expanded to detect any inconsistencies in information in ongoing cases.

Computer matching is most frequently used to verify the eligibility of new applicants (intake) or to verify the continuing eligibility of current recipients (recertification). It is a powerful management tool that has significantly increased program integrity and efficiency. For example, the Income Eligibility Verification System (IEVS), established in 1986, matches case records with six external federal databases which contain information such as wages, income taxes, unemployment insurance benefits, that can be used to verify the income or assets of a recipient or applicant household. Some additional computer matching strategies with the potential to verify information and ensure that ineligible individuals are not included as members of the recipient or applicant household include (1) the Social Security Administration's Death Master File; and (2) comparison of case records to records of inmates in State prisons.

CURRENT ACTIVITY

The Food Stamp Act as amended requires each State agency to establish a system to assure that no individual participates in the FSP more than once a month, in more than one jurisdiction, or in more than one household within the State. There is no current requirement for interstate tracking for the FSP. However, Title I of PRWORA includes a provision that States track TANF recipients across State boundaries as well as within their own jurisdiction and that they track recipients over time to ensure they do not participate beyond legislated time limits.

States have been very active incorporating systems changes to track TANF and ABAWDS. Although there is presently no systematic cross-State tracking at a national level, States often exchange information and data with other individual States. Matching is often conducted against caseload data from neighboring States (often only including border counties). Many States also conduct matches based on profiling or targeting strategies.

Participation in a cross-State match can either be Active or Passive. For example, State A requests data from States B, C, and D and conducts the match on a regular basis (monthly, quarterly or yearly). This would be considered an Active routine match for State A and a Passive

routine match for the other participating States. If the State A match results in a 'hit' on a case in State B, both States benefit from the match.

Ongoing monitoring, by FNS, of State FSP agencies indicates that the majority of States have participated at least once in the past several years in an interstate match designed to identify interstate duplicate FSP cases (See Appendix A). Twenty-five State FSP agencies routinely conduct matches for interstate duplicate FSP cases. Thirty-two States have participated in Public Assistance Reporting Information System (PARIS), a system designed to detect interstate duplicate participation and TANF time limits for at least one match.

DATA SOURCES AND LIMITATIONS

SOURCES

The information used in preparing this report is based on data from several sources. Because Congress required this report within a year of passage of P.L. 105-379, it was not possible to engage in extensive new data collection. Therefore, to the extent possible, information was obtained from available data, supplemented by telephone interviews with knowledgeable staff, such as State information systems directors, in 7 selected States, and personal communications and interviews with experts in the field.

DHHS REPORT

In response to a mandate in PRWORA, DHHS investigated the feasibility and cost of a national client database (DHHS1997). This report, which is discussed in detail in Chapter II, provided a valuable starting point for this study.

FNS RESEARCH STUDIES

Food Stamp Program Operations: Update (STOPS)

In 1991, FNS conducted a State census of selected State operations which included modules on computer matching and automated case management systems (USDA 1992). The data from that census was used to provide a basis for assessing State capabilities. Although the information in this earlier study is somewhat dated - many States have updated their computer systems significantly since that time - it has been useful in indicating a baseline estimate of the computer capabilities of the States.

NEW DATA COLLECTION

Interviews with Seven Selected States

In order to supplement the available data interviews were conducted with FSP agency officials in seven States to obtain information about their current computer matching activities and their capabilities for participating in a national client database, if one were created. As described in Appendix

B, these States were chosen by FNS to reflect a variety of state systems. While a sample of seven States does not support statistical generalizations to the remaining States, these discussions were valuable in suggesting trends in State FSP agency computer capabilities. The seven states were Arizona, Arkansas, Florida, New Jersey, New York, Pennsylvania and Utah.

FNS In-House Monitoring of Food Stamp Operations

Routine in-house surveys of the States are conducted by FNS as part of its monitoring of food stamp operations. This was the major data source for information on interstate computer matching for duplicate participation.

Discussions with Staff of Four Ongoing Matching Systems

To increase FNS' knowledge about the function, policy implications and capabilities of matching systems, selected existing client databases were reviewed. Interviews were conducted with knowledgeable staff from each agency responsible for development and/or administration of the matching systems. The interviews focused on major issues regarding the design, development and implementation of national databases. The discussions provided information about the feasibility of developing and operating a national database; implementation challenges and how they were or were not resolved; and client issues and concerns. The four matching systems were Public Assistance Reporting Information System (PARIS), coordinated by DHHS; the Criminal Justice Information System (CJIS), coordinated by the Federal Bureau of Investigation; the Federal Parent Locator Service (FPLS) operated by DHHS; and the Wage Record Interchange System (WRIS), jointly administered by the U.S. Department of Labor and the Interstate Committee of Employment Security Agencies (ICESA).

LIMITATIONS

Additional data are required to increase the reliability of the estimates derived for the costs/benefit analysis and the assessment of computer capabilities of the States as existing data cannot adequately support the development of precise estimates for either.

The cost/benefit analysis was based on relevant available data, supplemented by a number of assumptions. This being the case, the estimate presented in this report should be considered a rough approximation and used cautiously. Additional data required includes: A prototype of a technical design for a national client database; estimates of the number of interstate duplicate cases in the States (no estimates are currently available); and data on the characteristics of interstate duplicate cases, including client demographics, the number of months receiving FSP and TANF benefits, and benefit amount.

Although the information from previous research conducted by DHHS and FNS have been useful in indicating a baseline estimate of the computer capabilities of the States the conclusions are inconclusive without current corroborating data. FNS is currently conducting a detailed and systematic census of States FSP operations regarding current computer matching activities. The new study will include modules on interstate matching and automated case management systems. Results should be available before FY2001. Information will be collected from all 50 States, Puerto Rico, Guam and the Virgin Islands.

PLAN OF THE REPORT

Chapter II summarizes the results of the DHHS report. Chapter III presents the functional requirements the national client database would fulfill and assesses the feasibility of a national client database. Chapter V estimates the cost-effectiveness of such a database. Chapter VI reviews the privacy and security issues of a national client database. Chapter VII concludes the report with a summary of the key findings.

CHAPTER II

THE DHHS REPORT

In order to assess State's readiness for establishing a system capable of tracking recipients over time and across States, Section 106 of PRWORA directed the Secretary of DHHS to prepare a report on the status of State automation systems to support the requirement of welfare reform and to discuss options for establishing a system capable of tracking recipients over time and across States. This report was written to provide information on (1) the status of automated data processing systems operated by the States to assist in the administration of State programs under Part A of Title IV of the Social Security Act; and (2) the requirements to (a) establish a system capable of tracking participants in public programs over time; and (b) check case records of the States to determine whether individuals are participating in public programs in 2 or more States. Congress also directed that the report include a plan for building on the automated data processing systems of the States to establish a system with the capabilities described in item (2) above; an estimate of the amount of time required to establish such a system; and an estimate of the cost of establishing such a system.

In December 1997, DHHS responded to this mandate by submitting a report to Congress, entitled *Temporary Assistance for Needy Families (TANF) Report of Data Processing*, hereafter called the DHHS report. The DHHS report made a substantial contribution to the current investigation of a national client database, and this chapter reviews it in some detail.

STATE CAPABILITIES

The first task undertaken by the DHHS study was to assess the capabilities of State TANF agencies to implement the provisions of PWRORA. DHHS conducted a survey in 1996 of TANF agency information system managers and welfare reform coordinators in all States and U.S. territories. The key relevant findings included:

- Most State TANF agencies (81 percent) were able to identify duplicate TANF cases within the State.
- A small minority of agencies (12 percent) were able to implement the TANF time-limit within the State. The majority (66 percent) of State agencies were still in the planning stages of developing a capability to implement TANF time limits within the State.
- Virtually no State agency could identify duplicate TANF cases or implement the TANF time-limit across State boundaries.

- States reported several barriers to the implementation of TANF time limits, in the short run, including:
 - The complexity of TANF
 - The age of State agency information systems, and the rigidity of their designs
 - Development costs, in terms of agency budgets and staff availability
-

FUNCTIONAL REQUIREMENTS

A second task of the DHHS report was to specify the functional requirements of a potential national client database. Functional requirements specify the programmatic objectives of the database, but do not specify the techniques by which those objectives are achieved.⁴ DHHS specified an extensive list of functional requirements that included two that are the focus of the current report:

- Provide data to support the tracking of TANF time limits.
- Identify interstate duplicate TANF cases.

DHHS also included in its list of functional requirements the determination of eligibility and verification of client-reported information on income, assets, and employment. Since the DHHS focussed on the TANF program rather than the FSP, its list of functional requirements did not include identifying interstate duplicate FSP cases, or providing data to support the tracking of ABAWD time limits.

ALTERNATIVE SYSTEM ARCHITECTURES

A major contribution of the DHHS report was to define five alternative architectures for the centralized component of a national client database. A system architecture is a general description of how the national client database would work. Just as TANF and FSP are partnerships between federal and State agencies, so too was the national client database which the DHHS report considered. A national client database was viewed as the entire system of national and State agency automated and manual processes required to achieve the functional requirements of the system. Thus, the national client database is composed of a centralized component, assumed to be administered by a national contractor, and a set of automated and manual processes performed by State agencies. The description of each system architecture presented below includes both the centralized component of the system and the State agency component of the system. More detailed descriptions of the five architectures may be seen in Appendix C.

The alternative architectures are arranged from simple systems performing fewer functions, to more complex systems performing more functions. Simple architectures impose more burden on State agencies because those agencies must perform the functions not performed by the national client database. As shown in Chapter V, recognizing that the national client database has a State agency component is important for the assessment of cost-effectiveness. Simple architectures generally cost

⁴ Functional requirements are discussed fully in Chapter III.

less to develop and operate than more complex architectures, however simple architectures cause the State agency component to be more expensive.

The alternative architectures examined by the DHHS Report are:

- **File Match.** At the end of each time period such as a month or a quarter, each State sends a file of current recipients, represented by their social security numbers (SSNs) and name, to the national client database. Software associated with the central database compares each case to every other case in every other State searching for duplicate cases. If a recipient is found in more than one State, the central facility sends the SSN and name of the duplicate case to both State agencies. The national client database does not accumulate historical data on program participation, nor does it send data other than SSN to the two State agencies.
- **Broadcast.** Each State agency periodically transmits a file containing the SSNs and names of its active cases to every other State agency. There is no centralized national client database, and the central facility provides no data to State agencies. The task of identifying duplicate cases is left to State agencies.
- **Eligibility Index.** This architecture is similar to the file match architecture, except that each State agency sends SSNs and names of new applicants and recertifications to the central facility at any time, and SSNs and names are retained in the national client database so that historical data on program participation is accumulated.
- **Eligibility Database.** This is similar to the eligibility index option, except that the State agency transmits an extract of each case record, rather than just the SSN and name, to the national client database. The central facility identifies interstate duplicate cases, and sends the case record extract from both State agencies to each of the two State agencies. The national client database accumulates historical data on program participation. Thus, the central client database sends sufficient data to State agencies for them to minimize the amount of data they need to retrieve directly from other State agencies.
- **One-Stop Database.** This is similar to the eligibility database architecture, except that the national client database also performs two other major program functions. First, it links to several other federal and State databases to allow direct verification of client-reported income, assets, and employment. Second, it performs a variety of checks and computations to determine eligibility for TANF.

DHHS found each of the five architectures to be feasible. Although the definition of feasibility in the DHHS report is not completely clear, it appears to define feasibility narrowly to be the technological feasibility of a contractor developing and operating the central component of the national client database. The DHHS feasibility assessment did not appear to account for the different level of burden placed on State agencies by the different system architectures.

DHHS estimated the cost of a contractor developing and operating the centralized component of a national client database. The FNS review of these cost estimates indicates they are sound. The DHHS analysis did not include estimates of the costs of the State agency component of a national client database, nor did it estimate program savings resulting from the database. Without estimating the benefits side of the ledger, DHHS did not reach any conclusions regarding the cost-effectiveness of a national client database.

OTHER ISSUES CONSIDERED BY DHHS

DHHS also discussed several additional issues pertaining to the development of a national client database, including privacy, funding, developmental responsibility, and operational responsibility. Key points are:

- Since the national data system involves the sharing of confidential data among different jurisdictions, the privacy of recipients must be protected. DHHS does not propose specific safeguards.
 - DHHS does not definitively place the responsibility for the centralized portion of the national client database with the federal government, nor does it propose an allocation of funding between federal and State governments.
-

DEVELOPMENTS SINCE THE DHHS REPORT

In August 1998, the General Accounting Office (GAO) published a report on interstate duplicate FSP cases (GAO 1998). The report recommended the development of a national client database to check for such duplicate benefits, and suggested that such a system could also be used for implementing TANF and ABAWD time limits. The GAO report was one of the factors leading Congress to enact the P.L. 105-379, which requires the Secretary of the U.S. Department of Agriculture (USDA) to submit a report to Congress on the feasibility and desirability of developing a national client database to track participation in federal means-tested programs. As noted in Chapter I, this law led to the current study.

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CHAPTER III

FUNCTIONAL REQUIREMENTS AND TECHNICAL FEASIBILITY

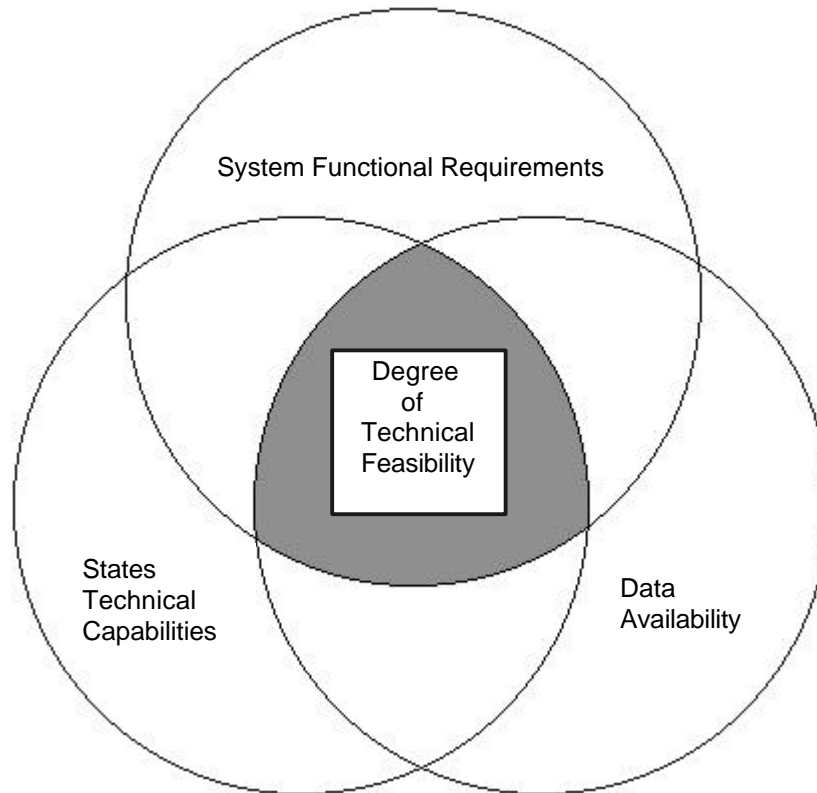
This chapter discusses the technical requirements and assesses the feasibility of developing and operating a national client database. It begins by proposing a conceptual framework for a national client database; and describes how a client tracking system would work. Also discussed are the system functional requirements, the feasibility of developing a central processing component, the States' technical capabilities, the feasibility of States' being able to effectively interact with a national database, and data availability. The DHHS report suggested five alternative system architectures for the national client database. The chapter concludes by assessing the technical feasibility, within the context of the structure developed earlier in the chapter, for each of the five alternative systems architectures suggested by DHHS.

CONCEPTUAL FRAMEWORK FOR A NATIONAL DATABASE

A model was developed to assess the technical feasibility of a national database. There are three major components of the model: system requirements, States' technical capabilities, and data availability. Identifying the functional requirements of a national client tracking system provides a structure that can be used to assess technical feasibility.

Given a set of functional requirements of the system, the technical feasibility of such a system is determined by the degree to which the States have the technical capability to interact with it and the degree to which data is available for its effective use. The technical risk of the system not working after development would need to be minimal. Therefore, the greater the overlap of the States capabilities and data availability with the system functional requirements, the lower the expected technical risk associated with the design, development, and operation of a national database. Figure III.1 illustrates this relationship.

Figure III.1. Relationship Between Functional Requirements and Technical Feasibility



A database is constructed on the basis of participation data supplied by State agencies and housed at a central processing facility.

State FSP and TANF agencies send an extract of its active case records or new applicants to the central national client database facility.

The central facility matches the extract with similar data from other participating States.

The match would produce a list of suspected duplicate cases and data on ABAWD and TANF participation in other States.

For each potential duplicate case, the central facility sends the case record extract from the other States back to the State agency.

For matched cases, the State agency verifies that the cases in the two States are the same individuals and takes appropriate action.

HOW A NATIONAL CLIENT DATABASE WOULD WORK

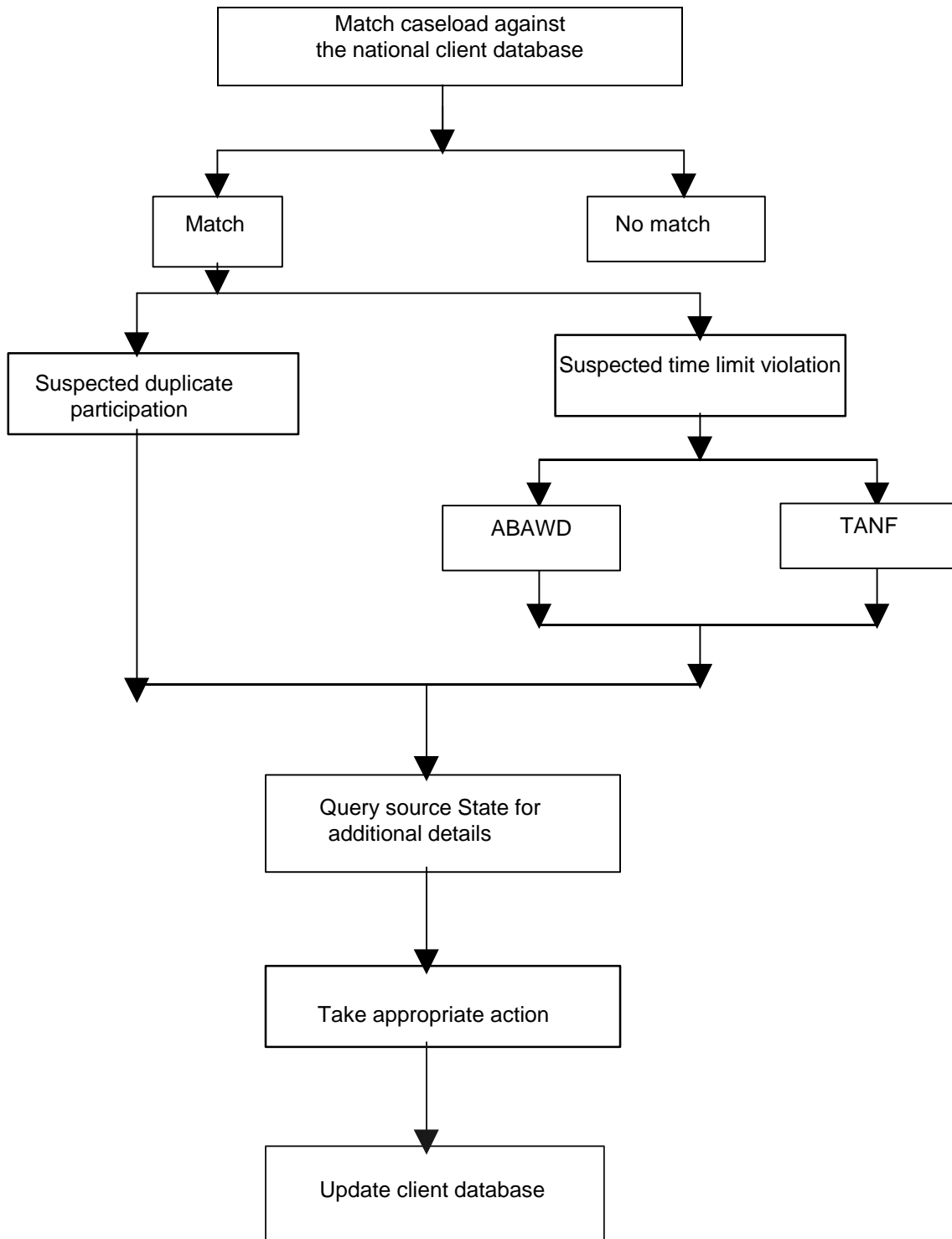
Initial development of a national client database would involve a central processing facility containing data on all current FSP and TANF participants in the nation, as well as month-by-month data on past participation in those programs since the implementation of PRWORA. These data would be supplied by the States from their automated case management systems.

States would upload a file containing

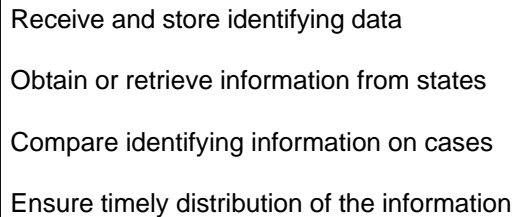
identifying data either on new applicants or on the State's full caseload in a recent month. The central processing facility would then process this new information by comparing it to the cross-state database, matching on the person-level identifying information. During this data processing, the central facility would identify cases that were apparently certified to receive food stamps in more than one State. It would also list past receipt of program benefits in other States by the persons on the newly supplied file, thus generating information that could be used to determine whether time limits had been reached. When States received this match information, they would examine the data and identify cases that seemed to be receiving benefits incorrectly. It is likely that, at least in the initial phases of system operation, the States would manually verify much of this information, both by examining their files and by contacting program staff in the relevant other States. Once States had identified persons that were receiving benefits incorrectly, they would then discontinue issuances to those cases and initiate attempts to recover past overpayments, as appropriate.

The above process would then continue on a regular basis, with States sending requests for information on new applicants at least every few days. Also, States would routinely supply updates to the central database on program participation at regular intervals—probably once a month, reflecting the monthly issuance cycle used in both the FSP and TANF. The steps are illustrated in Figure III.2.

Figure III.2. Activities in the National Client Database



CENTRAL FACILITY



- Receive and store identifying data
- Obtain or retrieve information from states
- Compare identifying information on cases
- Ensure timely distribution of the information

The central facility would need the capability to receive and store data extracted from FSP and TANF files provided by States. The data would include:

- Whether the case is currently active in the State in each program (interstate duplicate participation)
- The start and stop dates of spells of employment since the State PRWORA program was implemented. (ABAWD time limits)
- Exemptions from ABAWD time limits
- The number of months each individual in the case participated in the program since the State PRWORA program was implemented, regardless of the number of the number of spells of participation (TANF time limits)
- Exemption from TANF time limits

Only *current* information would be necessary if the objective were limited to detecting current duplicate issuances. However, the objective of assessing whether time limits have been exhausted requires month-by-month data on benefit receipt in each program, together with information on whether recipients were subject to the time limit rules in those earlier months—whether they were working or had exemptions.

The central facility must have the ability to scan newly submitted identifiers against this basic database and retrieve the relevant information.

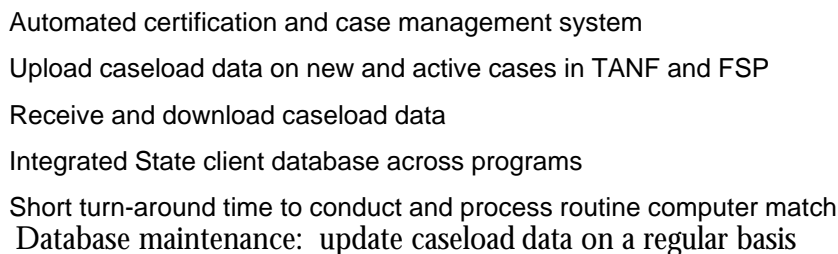
Finally, it must have the capacity to transmit information on matches back to the relevant states in a timely manner. The receipt, matching, and distribution process should be completed within a few days.

To assess whether such a system would be technically feasible, FNS interviewed staff and reviewed documentation of four current matching systems: Federal Parent Locator System (FPLS); Criminal Justice Information System (CJIS); Public Assistance Reporting Information System (PARIS); and Wage Record Interchange System (WRIS). (A description of each system is provided in Appendix

D). Each of these four matching systems currently performs many of the same functions as a national client database would. Each collects data from every State and matches State records to a central database. The matches are designed to identify the following variables: earnings in another State (FPLS and WRIS), committed a crime in another State (CJIS), and receipt of TANF or Food Stamp benefits in more than one State (PARIS). The FPLS system, and for some States the CJIS system, represent successful implementations of centralized databases that store detailed information provided by States and are updated frequently. The PARIS system is a successful implementation of a system that collects case record extract data from participating States and matches them to data from other States agencies in order to detect interstate duplicate participation as well as TANF and ABAWD time limits.

The WRIS system, and for some States the CJIS system, involve a slightly different approach in which the central database is limited to identification data. This index database is embedded in software that automatically queries a State agency database every time a pair of duplicate records is identified. The query retrieves the required data from the database of the two State agencies involved, assembles a case extract record and then sends the newly assembled extract record to each of the involved State agencies. This approach avoids the necessity of storing large amounts of confidential data at a central location.

STATES TECHNICAL CAPABILITIES



- Automated certification and case management system
- Upload caseload data on new and active cases in TANF and FSP
- Receive and download caseload data
- Integrated State client database across programs
- Short turn-around time to conduct and process routine computer match
- Database maintenance: update caseload data on a regular basis

To interact effectively with a national client database, State agencies must be able to:

- Prepare a case record extract containing ID data and the data listed in the previous section for FSP and TANF for all active cases as well as new applicants
- Transmit the resulting data file to the central national client database facility
- Receive the data from matching records in other States
- Verify that apparently duplicate cases are actually duplicate cases
- Process duplicate cases as other overpayment situations are handled
- Compute whether each individual in a matching case has exceeded the relevant PRWORA time limit

States have performed many of these functions for many years. FNS conducted a State Census of FSP operations in 1991, which included detailed questions about computer matching activities and automated case management systems. Data from the census show States agencies were capable of providing SSNs of applicants to external databases and following up on matches. Every State FSP agency performed some type of computer matching using SSNs as identifiers to match against external databases.

A Statewide automated case management system is critical if a national client database is to be effective. Only three State agencies—Montana, Minnesota and California—did not have such a system in 1992. All three had plans to implement at that time. In addition it is highly recommended that the State client database be integrated with other assistance programs, especially TANF. Currently, only five States do not have an integrated database—Arkansas (planned in near future), Massachusetts (planned), Missouri, Nevada, and the Virgin Island. In addition they must be able to effectively process the match data that are returned to them.

To supplement the available data, FNS conducted interviews with seven State FSP agencies in the Summer of 1999. The seven State agencies were Arizona, Arkansas, Florida, New Jersey, New York, Pennsylvania, and Utah.⁵ The interviews focused on (1) changes in their capabilities since the 1991 study and since the passage of PRWORA in 1996 and (2) whether they could perform the functions required to participate in a national client database.

None of the seven States agencies raised serious concerns about their ability to interact with a national client database. Each also reported being able to extract and transmit case record data to an external database, and receive data files through electronic means. Some States, however, did not have the client data necessary to track ABAWDs time limits.

⁵The method by which these seven States were selected is presented in Appendix B.

DATA AVAILABILITY

Identifier should include, at a minimum, the SSN, name and date of birth

Individual is the unit of analysis of data stored in database

Historical data for each individual in the household, including: start and end dates of each participation 'spell' for each program, and penalties applied, as follows:

TANF:

Number of months participated
Number of payments actually made
Exemptions granted

ABAWDS:

Work history
Exemptions granted

A national client database would require that State agencies maintain specific types of data in their case records. First, case records would include identification variables, including SSN, name, and date of birth. This data should be maintained for each adult in the household in a format that would allow individual adult members of the household to be tracked when household composition changes.

The second major data requirement would be historical data on program participation and employment. Program participation history should include start and stop dates for each spell of participation, number of months participated, number of payments made, exemptions granted, and penalties applied. Employment history should include start and stop dates for each spell of employment, as well as exemptions granted. A 'period of

employment' is defined as the number of months each adult satisfied a work requirement or, for food stamps, was waived from the work requirement.

Data from a census of States conducted by FNS in 1991 indicate that historical data are maintained as part of the automated case management system in all but six State agencies. Of the six, four archived historical case data in such a way that they may be retrieved. Three States—Montana, Minnesota, and California—reported that historical data was not maintained statewide. All State agencies use SSN, name, address and date of birth of the head of household as an identifier. All but one State agency—Florida—store SSN, name, and date of birth for individuals in the household. In all but six State agencies, such individuals include the head of household, spouse, other adults, and children.

FEASIBILITY OF EACH ARCHITECTURE

Table III.1 presents an assessment of the feasibility and practicality of each of the five system architectures proposed by the DHHS report. For each architecture, a review of how the architecture works is presented, followed by whether the architecture meets each of the three

TABLE III.1. ASSESSMENT OF FEASIBILITY OF ALTERNATIVE ARCHITECTURES

| | Assessment Criteria | | |
|---|---|--|---|
| How the Architecture Works | Consistency with Functional Requirements | Centralized System Component | State Agency System Component |
| File Match | | | |
| At the end of each quarter, each State sends a list of recipients, represented by their Social Security numbers (SSNs), to a central facility, which searches for matches in other States. If a recipient is found in more than one State, the facility notifies both States. No data are retained at the central facility. | This architecture cannot support the enforcement of ABAWD or TANF time limits for two reasons. First, the database does not accumulate historical data on participation or employment. Second, the system provides only ID information to the State agency. None of the other types of data listed in the functional requirements is provided. | This architecture involves minimal development risk, and could be developed within a year or two at a reasonable cost. | Since the State agency receives only the ID of the matching case, it would have to request the necessary case record data for each matched case from the FSP agency in the other State. Since this retrieval process is not performed by the automated system, under this architecture, the procedure is likely to be manual. Such a manual procedure would require additional State agency staff. Thus, this architecture does not fulfill this set of functional requirements. |
| Broadcast | | | |
| Each State periodically transmits a list of its recipients to every other State. | This architecture does not even provide the State agency with a list of matching cases. It also cannot support the enforcement of ABAWD or TANF time limits because the only information provided by the system to the State agency is the matching case's ID information. None of the other types of data listed in the functional requirements is provided. | There is no centralized component. | State agencies would receive over 50 databases each month, and would have to match each one to its own case records. Thus, State agencies as a group would perform over 2,600 separate database matches each month for each program. This does not meet the reasonable cost requirements. Further, since the matches contain only the IDs of the matching cases, the agencies would have to request the necessary case record data for each matched case from the FSP agency in the other State. Since this retrieval process is not performed by the automated system, under this architecture, the procedure is likely to be manual. Such a manual procedure would require additional State agency staff. Thus, this architecture does not fulfill this set of functional requirements. |

TABLE III.1 (continued)

| How the Architecture Works | Assessment Criteria | | |
|---|---|--|--|
| | Consistency with Functional Requirements | Centralized System Component | State Agency System Component |
| Eligibility Index | | | |
| This is similar to the File Match option, except that the SSNs of new applicants and recertifications are transmitted to the central facility at any time, and data are retained by the facility. | This architecture cannot support the enforcement of ABAWD or TANF time limits because the only information provided by the system to the State agency is the matching case's ID information. None of the other types of data listed in the functional requirements is provided. | This architecture involves minimal development risk, and could be developed within a year or two at a reasonable cost. | Since the State agency receives only the ID of the matching case, it would have to request the necessary case record data for each matched case from the FSP agency in the other State. Since this retrieval process is not performed by the automated system, under this architecture, the procedure is likely to be manual. Such a manual procedure would require additional State agency staff. Thus, this architecture does not fulfill this set of functional requirements. |
| Eligibility Database | | | |
| This is similar to the Eligibility Index option, except that the State agencies transmit the extract of the case records, rather than just the SSN. The system delivers the case record extract data for matching cases to the State agency. The database accumulates historical data. | Since the system sends the required data to the State agency, and since historical data are accumulated, all the functional requirements in this category are fulfilled. | This architecture involves minimal development risk, and could be developed within a year or two at a reasonable rate. | Since the system provides the necessary data to the State agency, it can perform its steps in the process of identifying duplicate cases and enforcing ABAWD and TANF time limits without adding staff. |
| One-Stop Database | | | |
| This is similar to the Eligibility Database option, except it performs two additional functions. The first function is income and asset verification currently performed by the Income and Eligibility Verification System (IEVS). The second function is determining eligibility for FSP and TANF. | This architecture exceeds the functional requirements. Performing some functions currently performed by IEVS and State eligibility determination systems is not required for the national client database. | This architecture involves minimal development risk, and could be developed within a year or two at a reasonable cost. | Since the system provides the necessary data to the State agency, it can perform its steps in the process of identifying duplicate cases and enforcing ABAWD and TANF time limits without adding staff. |

sets of criteria listed above. All five system architectures meet the functional requirements for the central facility of the national client database. Three of the five architectures—file match, broadcast, and eligibility index—provide less than the minimum functionality. One of the five—one-stop database—provides more than the required functionality, raising a concern about its cost-effectiveness. The only architecture that meets, but does not exceed, the requirements is the eligibility database.

While it is feasible to develop and operate the central component of a national client database using any one of the five system architectures proposed by DHHS, only one of them—the eligibility database architecture—is consistent with the functional requirements for a national client database and is feasible and practical from the State agency’s perspective. It (1) provides the State agency with all the data from agencies in other States necessary to investigate potential interstate duplicate cases and track PRWORA time limits and (2) does not incur the cost of unnecessary functionality. The next chapter on the cost-effectiveness of a national client database focuses on this architecture.

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CHAPTER IV

COST-EFFECTIVENESS

This chapter presents the cost/benefit analysis for a national client database. Existing data cannot adequately support the development of precise estimates for either costs or benefits. Therefore, the estimate is based on relevant available data, supplemented by a number of assumptions. This being the case, the estimate presented here should be considered a rough approximation to be used cautiously.

The chapter begins by describing the scope and broad assumptions underlying the cost and benefit estimates. This discussion continues with a simplified cost-benefit calculation followed by the detailed assumptions and cost-benefit results. Also covered is the impact of alternative system architectures on the cost-benefit calculations. This is followed by a discussion of the sensitivity of the cost-benefit findings to variations in the key assumptions, and the key assumptions for which more data are needed. This chapter concludes with an overview of the findings.

SCOPE AND BASIC ASSUMPTIONS

The cost-effectiveness calculations assume the use of a database architecture based on the 'eligibility database' option proposed by DHHS. The rationale for this assumption is that it is the only one of the five architectures proposed by DHHS that meets, but does not exceed, the functional requirements stated in Chapter III.

Consistent with the functional requirements for the national client database, costs and benefits are estimated for the food stamps and TANF programs, excluding other federal means-tested programs such as Medicaid and subsidized housing programs.

The centralized portion of the system is assumed to be developed and operated by a single organization. There is no assumption about how costs or benefits are allocated among federal or State agencies. More specifically, there is no assumption on whether the centralized component of the database is funded and operated by a federal agency or a consortium of State agencies.

The database is assumed to be developed in one year, FY 2000. This involves developing the centralized portion of the system, as well as each State developing its interface system, within one year. Further, we assume a system life cycle of five years, that is, the system would operate for five years, FY 2001 through FY 2005, and then is replaced with a new system.

Costs include the direct budgetary costs to the federal government and State governments. Costs to recipients and costs to other entities are not considered. The FNS review of DHHS's estimates of development and operational costs of the centralized component of the system concluded that the estimates are sound. These estimates are used in this analysis after adjusting them for inflation between 1997 and the relevant fiscal year.

Estimated benefits are limited to identifying interstate duplicate benefits. Benefits from enforcing ABAWD and TANF time limits across States are excluded. There are two reasons for this exclusion. First, given data limitations, estimates of such benefits would be more speculative than those presented here. Second, we find that the benefits accruing from interstate duplicate benefits alone are sufficient to demonstrate that the system is cost-effective. Adding the benefits from enforcing PRWORA time limits would only demonstrate that the system is even more cost effective than is shown here.

A second important concept underlying the estimates of benefits is that benefits are assumed to include *recovered* program benefits that have already been disbursed, *avoided* future program benefits, and avoided future administrative costs.

Since the national client database is assumed to use SSN for identifying duplicate cases, the cost-effectiveness analysis assumes that the entity whose interstate duplicate participation is detected is the individual member of the FSP and TANF filing unit, as opposed to the entire filing unit. Once detected, the duplicate benefit for the individual is assumed to be terminated, leaving the filing unit with a reduced benefit.

As shown in Chapter III and in Appendix A, a number of State FSP and TANF agencies currently participate in systems, such as PARIS, designed to detect interstate duplicate cases. The new national client database is assumed to replace those existing systems.

Ideally, the cost-effectiveness analysis would estimate the costs and benefits of existing systems, and subtract those figures from estimates of a new national client database, yielding net costs and benefits from replacing the existing systems with a new national client database. Unfortunately, available data do not support estimates of the costs and benefits of existing systems. Thus, the cost and benefits presented in this chapter are computed without subtracting any costs and benefits of existing systems. This omission is unlikely to alter the conclusions of the cost-effectiveness evaluation. Taking existing systems into account would reduce both the numerator and the denominator of the benefit-cost ratio of the new national client database. If existing systems are assumed to have a benefit-cost ratio of 1, then the same number would be subtracted from both the numerator and the denominator of the benefit-cost ratio of the national client database. If the gross benefits of a national client database exceed gross costs, then such an adjustment cannot reverse the conclusion that the national

client database is cost-effective. The sensitivity of the gross benefit-cost ratio to this omission is discussed later in the chapter.

ANALYSIS

Table IV.2 presents the detailed assumptions and data supporting the figures in Table IV.1. Table IV.2 also lists the source of each figure. Each section of Table IV.2 presents the derivation of one line of Table IV.1. The line numbers in Table IV.2 refer to line numbers in Table V.1.

Each type of cost and benefit is presented in Table IV.1. It is divided into three panels (from top to bottom): costs, benefits, and the difference between benefits and costs, labeled net benefits. The cost panel presents development and operating costs. The bottom of the cost panel presents the cost over the system life cycle. Costs in FY 2000 include only development costs; costs in subsequent years include only operational costs. System maintenance costs are included in operational costs. Operational costs are inflated by 4.5 percent each year. The result is a total life-cycle cost of \$39 million. A detailed explanation of the cost assumptions is presented in Appendix E.

The benefits panel of Table IV.1 includes recovered benefits and avoided benefits. The bottom of the benefit panel presents a projection of the benefits over the system life cycle. No benefits are assumed during the year of system development. All the recovered benefits are assumed to accrue in the first year of the system lifecycle. Recovered benefits result from detecting cases that remained undetected in the past. We assume that when the national client database begins operation it will review each State agency's entire caseload, looking for previously undetected duplicate benefits. Each State agency then processes these retrospective duplicate cases, recovering some of the past overpayments.

Table IV.1. Projected Costs and Benefits of a Tracking System

| Costs | | | | | | | |
|--|-------------------------------|----------------|----------------|----------------|----------------|----------------|--------------|
| Development | (millions of FY 2000 dollars) | | | | | | |
| 1. Central facility | \$8.7 | | | | | | |
| 2. Federal management, monitoring, and oversight | \$0.8 | | | | | | |
| 3. State system development ¹ | \$6.7 | | | | | | |
| 4. Total development | \$16.2 | | | | | | |
| Operations | (millions of FY 2001 dollars) | | | | | | |
| 5. Central facility | \$2.0 | | | | | | |
| 6. Federal management, monitoring, and oversight | \$0.4 | | | | | | |
| 7. State operations ¹ | \$1.7 | | | | | | |
| 8. Total operations | \$4.2 | | | | | | |
| 5-Year Life Cycle Cost | FY 2000 | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | TOTAL |
| 7. Development cost | \$16.2 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$16.2 |
| 8. Annual operating cost | \$0.0 | \$4.2 | \$4.4 | \$4.5 | \$4.8 | \$5.0 | \$22.8 |
| 9. Total | \$16.2 | \$4.2 | \$4.4 | \$4.5 | \$4.8 | \$5.0 | \$39.0 |
| Benefits | | | | | | | |
| Recovered Benefits | (millions of FY 2001 dollars) | | | | | | |
| 10. Food Stamps | \$4.4 | | | | | | |
| 11. TANF | \$28.8 | | | | | | |
| 12. Total recovered benefits | \$33.2 | | | | | | |
| Avoided Benefits | (millions of FY 2001 dollars) | | | | | | |
| 13. Food Stamps | \$1.9 | | | | | | |
| 14. TANF | \$5.7 | | | | | | |
| 15. Total avoided benefits | \$7.6 | | | | | | |
| 5-Year Life Cycle Benefits | FY 2000 | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | TOTAL |
| 16. Recovered benefits | \$0.0 | \$33.2 | \$0.0 | \$0.0 | \$0.0 | \$0.0 | \$33.2 |
| 17. Avoided benefits | \$0.0 | \$7.6 | \$7.6 | \$7.7 | \$7.7 | \$7.8 | \$38.4 |
| 18. Total | \$0.0 | \$40.8 | \$7.6 | \$7.7 | \$7.7 | \$7.8 | \$71.6 |
| Net Benefits | | | | | | | |
| | FY 2000 | FY 2001 | FY 2002 | FY 2003 | FY 2004 | FY 2005 | TOTAL |
| 5-Year Life Cycle Net Benefits | -\$16.2 | \$36.6 | \$3.3 | \$3.1 | \$3.0 | \$2.8 | \$32.6 |

¹Includes all costs incurred by the State, and does not take into account the fact that 50 percent of the operations and maintenance costs of FSP systems are reimbursed by FNS.

Table IV.2. Projected Costs and Benefits of a Tracking System

| | | Source |
|---|--------------|----------------------------|
| Line 1 | | |
| 1997 estimate | \$7.6 | DHHS, p. 70 |
| Inflation rate - 4.5% per year | 1.14 | Assumption |
| Line 2 | | |
| Federal FTEs | 6 | Assumption |
| Annual salary | \$70,000 | Assumption |
| Overhead rate | 100% | Assumption |
| Total federal dev. cost | \$840,000 | Calculation |
| Line 3 | | |
| Per State development cost | \$78,641 | DHHS, p 74 |
| Per State management cost | \$50,000 | Calculation |
| State FTEs | 0.5 | Assumption |
| Annual salary | \$50,000 | Assumption |
| Overhead rate | 100% | Assumption |
| Total State development cost - all States | \$6,689,345 | Calculation |
| Line 5 | | |
| 1997 estimate | \$1.7 | DHHS, p. 70 |
| Inflation | 1.19 | Assumption |
| LINE 6 | | |
| Federal FTEs | 3 | Assumption |
| Annual salary | \$70,000 | Assumption |
| Overhead rate | 100% | Assumption |
| Total federal dev. cost | \$420,000 | Calculation |
| Line 7 | | |
| State management cost | \$10,000 | Calculation |
| State FTEs | 0.1 | Assumption |
| Annual salary | \$50,000 | Assumption |
| Overhead rate | 100% | Assumption |
| State follow-up, claims, and data processing costs | \$23,052 | Calculation |
| Num. hits 12 States per month | 554 | FNS table of PARIS results |
| Num. hits 12 States per year | 6,648 | Calculation |
| Num. hits US per year | 27,700 | Calculation |
| Cost per follow-up - verif., claims, and data proc. | \$42 | MPR IEVS, p. 185 |
| Total op. cost per State | \$33,052 | Calculation |
| Total op. cost all States | \$1,718,720 | Calculation |
| Line 10 | | |
| Duplicate benefits 4 States (FY96) | \$3,935,000 | GAO/RCED-98-228, p. 5 |
| Projection to 50 States | \$11,070,990 | Calculation |

| | | Source |
|--|------------------|------------------------------|
| Total FSP bens. In 4 States (FY95) | \$8,091,836,777 | GAO/RCED-97-54, p. 16 |
| Total FSP bens. US (FY95) | \$22,766,109,338 | GAO/RCED-97-54, p. 16 |
| Percent recovered, cash plus recoupment | 40% | MPR IEVS, p.72 |
| Recovered duplicate benefits | \$4,428,396 | Calculation |
| Line 11 | | |
| Duplicate benefits 4 States (96) | \$3,256,481 | DHHS, p. 75 |
| Projected to 50 States | \$42,334,253 | Calculation |
| Percent recovered | 68% | MPR IEVS, p.72 |
| Recovered duplicate benefits | \$28,787,292 | Calculation |
| Line 13 | | |
| Projected avoided benefits | \$1,472,658 | Calculation |
| FSP ind. den. or rem. 12 States per month | 48 | Unpublished table from DHHS |
| FSP ind. denied or removed 12 States per year | 576 | Calculation |
| FSP ind. denied or removed US per year | 1,992 | Cody and Castner, p.127 |
| Ave. monthly benefit per HH member (FY01) | \$82 | GAO/RCED-98-53, p. 3 |
| Median length of completed FSP spell (months) | 9 | MPR caseload dynamics report |
| Projected avoided State administrative costs | \$378,439 | Calculation |
| State admin costs per case month | \$21 | MPR IEVS, p. 67 |
| Total avoided costs | \$1,851,097 | Calculation |
| Line 14 | | |
| Projected avoided benefits | \$4,291,280 | Calculation |
| TANF ind. den. or rem. 12 States per month | 32 | Unpublished table from DHHS |
| TANF ind. denied or removed 12 States per year | 384 | Calculation |
| TANF ind. denied or removed US per year | 1,328 | Calculation |
| Ave. monthly benefit per HH member (FY97) | \$129 | DHHS/ACF |
| Median length of completed AFDC spell (months) | 25 | Bane and Ellwood, p. 32 |
| Projected avoided State administrative costs | \$1,422,630 | Calculation |
| State admin costs per case month | \$43 | MPR IEVS, p.67 |
| Total avoided costs | \$5,713,910 | Calculation |

In subsequent years, however, the legacy of undetected duplicate cases will have been cleaned up, and the national client database is assumed to detect only those cases that have newly become duplicates. New duplicate cases are assumed to have no past overpayments to recover, that is, there are no recovered benefits in FY 2002 through the end of the system life cycle. Avoided benefits are assumed to accrue in each year of the system lifecycle. FSP benefits are inflated at three percent per year, and TANF benefits remain at their current nominal levels throughout the system life cycle. The detailed assumptions underlying the benefit assumptions are presented in Appendix E.

The bottom panel of Table IV.1 presents net benefits--that is, benefits minus costs--for each year in the system life cycle. In FY 2000, the net benefit is negative because the system is being developed, and there are no recovered or avoided benefits in that year. The net benefit in FY 2001 is extraordinarily large because benefits in that year include both recovered and avoided benefits. The net benefits in FY 2002 through 2005 contain only avoided program benefits. Over its life cycle, the cost-benefit scenario yields a net benefit of \$33 million, suggesting that the national data system is cost-effective. Table IV.1 also indicates that a national client database would not be cost-effective if it were developed for the FSP alone. The cost-effectiveness analysis presented here assumes the database is developed for both programs, consistent with the functional requirements presented in Chapter III.

This analysis makes no assumption about how costs or benefits are allocated among Federal or State agencies. An eligibility database developed by the Federal government within current funding arrangements for FSP and TANF, however, is likely to increase Federal costs. This would occur primarily because the savings from recovered and avoided TANF benefits would accrue only to States under the existing block grant while the Federal government would bear most of the developmental and operational costs.

As shown in Appendix E, the assumptions underlying these figures are numerous and complex. The conclusion that a national client database is likely to be cost-effective may be seen more intuitively by reviewing the key assumptions underlying the benefits side of the ledger. The benefit figures in Table IV.1 are largely driven by the assumed number of interstate duplicate cases detected by the national client database, the number of months those detected duplicate cases would have received benefits had they not been detected, and the dollar amount of program benefits received by the duplicate cases per month. The first figure is estimated from the number of duplicates found by the PARIS system. The second and third figures are estimated based on FSP and TANF administrative data.

The product of the number of duplicated cases, the expected duration of those cases, and the benefits avoided per case per month is the amount of avoided program benefits. To this figure we add estimated administrative cost savings due to the detected individuals no longer being on the caseload, based on monthly case maintenance costs. The calculation suggests that avoided program expenditures per year would be on the order of \$7.6 million. Since annual operating costs are estimated to be on the order of \$4.2 million, the national client database is seen to be cost-effective from the perspective of its ongoing operation.

SYSTEM ARCHITECTURE

The cost-benefit analysis is based on the eligibility database architecture for a national client database. Chapter III showed that this system architecture fulfilled, and did not exceed, the functional requirements for the national client database. Another possible system architecture is the one-stop database, whose only disadvantage is that it provides several program functions that are not required for the national client database.

The cost-effectiveness of the one-stop database architecture is tested by substituting the cost of development and operations, estimated by DHHS, into the calculations described above for the eligibility database. This approach assumes that the one-stop architecture is equally effective at detecting duplicate cases as is the eligibility database architecture. It also assumes there is no benefit to the performance of income and asset verification and eligibility-related functions performed by the one-stop architecture, since these functions are not required for the national client database.⁶ This test indicates that the one-stop database architecture yields life-cycle savings of \$27 million, which is the difference between benefits of \$72 million and costs of \$45 million. The one-stop database architecture is shown to be cost-effective, but less cost-effective than the eligibility architecture.

Similar tests are not performed for the file match, broadcast, and eligibility index architectures for two reasons. First, Chapter III shows that none of these architectures provides the minimum set of functional requirements. This means that their cost-effectiveness is irrelevant to the decision of whether or not to develop the national client database. Second, Chapter III also shows that the only datum each of these architectures provides State agencies is the SSN of duplicate cases. This means State agencies would have to prepare as many as fifty separate case record extract requests for other State agencies, which in turn would have to respond to such requests from all State agencies by preparing fifty separate case record extract files. The requesting State agency would then merge as many as fifty separate case record extract files. This process would be repeated each month.

Although the costs to State agencies of such an arrangement are likely to be great, available data do not support the estimation of such State agency costs. Without estimates of these costs, estimating the cost-effectiveness of these three architectures is not possible. However, requiring each State agency to produce, exchange, and interpret several data files with every other State agency every month is so inefficient on its face that we can conclude they are substantially less cost-effective than either the eligibility database or one-stop database architectures.

SENSITIVITY OF THE RESULTS TO KEY ASSUMPTIONS

⁶ If the national client database is expanded in the future to include IEVS and support for eligibility determination, the benefits from these functions would be included in the cost-effectiveness assessment.

Since the above estimates depend on several unverified assumptions, it is important to estimate how sensitive the estimates are to those assumptions. Specifically, this section presents the sensitivity of the cost-benefit results to two key assumptions:

- The duration of the duplicate spell of FSP and TANF participation avoided by being detected by the national client database system
- The monthly duplicate FSP and TANF benefit amount avoided by being detected by the national client database system

DURATION OF DUPLICATE SPELL

The method of testing the sensitivity to the assumed length of the avoided duplicate spells of participation is to reduce the assumed FSP and TANF spell lengths until the benefits are reduced to equal costs. As shown in Table IV.2, the length of avoided FSP spells is assumed to be 9 months and the length of avoided TANF spells is assumed to be 25 months. For the sensitivity test, these figures are reduced by the same proportion, for example, by dividing each figure by 2, until life-cycle benefits are reduced to equal costs.

The result of the test is that the length of avoided FSP spells must be reduced to 1.35 months, and avoided TANF spells to 3.75 months, before life-cycle benefits are reduced to equal costs.

MONTHLY DUPLICATE BENEFIT AMOUNT

A similar approach is taken to testing the sensitivity of the cost-benefit results to the assumed amount of the avoided monthly FSP and TANF benefits. Table IV.2 indicates that average per person monthly food stamp payments of \$82 and TANF payments of \$129 are avoided when duplicate benefits are detected. The sensitivity test consists of reducing these two figures by the same proportion until life-cycle benefits are reduced to equal costs.

The sensitivity test shows that avoided monthly benefit amounts could be reduced to zero without reducing benefits to equal costs. This is because the combination of *recovered* benefits and avoided administrative costs exceeds the cost of the client database. In this test, administrative costs remain constant, because the length of the avoided spell is assumed to be unaffected by reductions in the avoided monthly benefit amount.

FINDINGS

- If developed for both the FSP and TANF, it is likely that the use of an eligibility database architecture would be cost-effective. However, it would not be cost-effective if it were developed for the FSP alone. If a national client database for the FSP and TANF programs is configured using the DHHS 'eligibility database' system architecture, the estimates suggest

that it would be cost-effective, yielding a net five-year life-cycle benefit of \$33 million. This net figure is the difference between gross benefits (\$72 million) and costs (\$39 million) for the assumed five years (FY 2001 through FY 2005) of the system life cycle.

- The 'one-stop database' is also cost-effective, with an estimated life-cycle net savings of \$27 million. The cost-effectiveness of the other three architectures cannot be estimated due to the paucity of appropriate data.
- The cost-effectiveness results were tested for their sensitivity to two key assumptions– the length of avoided spells of participation and the avoided monthly benefit amount. The first showed that the duration of avoided food stamp spells could be reduced to 1.35 months, and that avoided TANF spells could be reduced to 3.75 months before the national client database ceased to be cost-effective. The second assumption showed that the amount of the avoided monthly benefit could be reduced to zero without making costs exceed benefits.

The following additional data is required in order to increase the reliability of estimating the costs and benefits of a national client database.

- A technical design of the national client database
- Estimates of the number of interstate duplicate cases in the States for which no estimates are currently available.
- Data on the characteristics of interstate duplicate cases, including demographics, the number of months receiving FSP and TANF benefits, and the size of their benefit amount.

CHAPTER V

SAFEGUARDS TO PROTECT AGAINST UNAUTHORIZED DISCLOSURE OR UNINTENDED USE OF A NATIONAL DATABASE

A national client database must contain safeguards to the privacy of the data. A national client database would include confidential information on FSP and TANF recipients. Three of the five system architectures – file match, broadcast, and eligibility index – would include the SSN of recipients. The eligibility database architecture would include SSN, current and past program participation, and current and past employment. The one-stop database architecture would include all the data in the eligibility database plus income, assets, and other data items used in determining eligibility for program benefits.

This chapter discusses available disclosure safeguards and the potential risk to privacy of a national client database.

One threat to data security is the risk of the *unauthorized disclosure* of information. This could take the form of a caseworker inadvertently releasing the data on one beneficiary to another beneficiary; or data obtained by a hacker who accesses the database surreptitiously. It could also be more systematic, such as a State agency making information available to marketing firms or collection agencies.

A second threat to data security is *unintended use* of the data. Disclosure of confidential data can also be indirect, such as using the data for a programmatic purpose other than that for which for it was provided. For example, law enforcement agencies or the Internal Revenue Service (IRS) might want to use the national client database for purposes outside of administering the FSP or TANF programs. Using the data in this way often involves matching the original database with another database owned or sponsored by the other agency.

Safeguards to protect against the risk of unauthorized disclosure or unintended uses must take into account the ownership of the data. The owner of the data is legally responsible for safeguarding the privacy of individuals represented in the data. State agencies administer the FSP and TANF programs, and therefore own the data for a specific beneficiary. A national client database would involve sharing confidential data with public agencies in other States and, under most scenarios, one or more federal agencies.

To secure the data strategies must be included when developing the database that can effectively reduce privacy risk. Three types of safeguards (contractual, security and legal) are appropriate for a national client database.

Contractual Safeguards. These safeguards can include agreements between and among State and federal agencies using the national client database in which each agency agrees to maintain the confidentiality of data it receives through the national client database from other State agencies. Such contractual agreements require the receiving agencies to implement specific security safeguards to protect those data from both unauthorized disclosure and unintended uses. Certification by the agency receiving the data would fulfill the privacy law of the State providing the data. Implementing such safeguards may require each State and federal agency to have such an agreement with every other State agency.

A variety of other public programs involve disclosing confidential data owned by one State agency to other federal and State agencies. The experience of these programs indicates that bilateral contractual agreements among participating agencies are effective at extending the legal responsibility for safeguarding the data to the receiving agency. FNS is not aware of any instances in which receiving State agencies have released or disclosed data in violation of such agreements. The cumbersome process of negotiating bilateral agreements among over fifty agencies may be facilitated by a federal agency publishing a model agreement to all State FSP and TANF agencies.

Security Safeguards. Any national client database would have physical, electronic, and procedural barriers to unauthorized access. Physical security includes guards at the doors to the facility and locks on the rooms in which data are stored. Electronic safeguards might include the use of passwords to log onto the information system, and using electronic firewalls to segregate the database from other components of the local area network. Procedural safeguards include logging the chain of custody of printouts and electronic media containing confidential data.

Security safeguards, such as the use of passwords, electronic firewalls, locked rooms and cabinets, security procedures, and security training of personnel, can be effective in preventing unauthorized physical or electronic access to the database. With respect to unauthorized disclosure, the national client database can essentially be as secure as the sponsoring agency is willing to pay for. As indicated by Circular A-130 of the Office of Management and Budget, a comprehensive risk assessment is an essential step in the design and development of a national client database. Based on such an assessment and the estimated cost of various level of security safeguards, the sponsoring agency would specify the security requirements for the national client database. The database developer, as well as participating State agencies, would be required to implement the required security safeguards.

Legal Safeguards. These are State and federal laws that impose penalties for the unauthorized disclosure or use of confidential data, and that specify procedural safeguards against unintended uses of the data. The main federal laws are the Privacy Act of 1974,⁷ and the Computer Matching and Privacy Protection Amendments of 1988.⁸ Nearly all States also have some sort of privacy laws, but their provisions vary widely. Legal safeguards address both the unauthorized disclosure and unintended use problems. Through appropriate security safeguards, the risk of unauthorized disclosure can be reduced to any desired level. (See Appendix F for an overview of the privacy laws).

If a national client database is configured as a federal system of records, federal privacy laws would prevail, otherwise safeguarding the security of the data would be the responsibility of the agency maintaining the system of records. Comparing federal privacy laws to State privacy laws suggests that federal laws would safeguard the privacy of individuals represented in a national client database more effectively than would State laws. The federal Privacy Act requires stronger protections than do the privacy laws in many States, and the uniformity and consistency of a single federal standard would avoid interstate disputes and unequal treatment of recipients. Thus, risks to privacy are minimized if the national client database is a federal system of records.

The Privacy Act applies to federal agencies that maintain personal information in a system of records. The national client database is a system of records because it contains personal information retrieved by an individual identifier.⁹ The national client database would be a federal system of records if it is developed and operated by a federal agency, or if it is sponsored and funded by a federal agency through a contract to a private organization of a State agency.

CONCLUSIONS

Privacy safeguards could be developed and put in place that would be adequate for the development and operation of a national client database.

Contractual agreements between States can solve the problem of disclosing confidential data owned by one State to an agency of another State. Physical, electronic, and procedural security safeguards can protect the national client database from unauthorized physical and electronic access.

The unevenness of State privacy laws suggests that the privacy of the data in the national client database should be protected by federal privacy laws. This implies that a national client database should be construed as a federal system of records, and that the development and operation of the database be funded by a federal agency.

The protection provided by the Privacy Act against the risk of unintended uses could be maximized in the following ways:

- The responsible federal agency could define the routine uses of the national client database so they were tailored to the program's needs.

⁷ 5 U.S.C. 552a (1994).

⁸ Public Law 100-503, 102 Stat. 2507.

⁹ Id. at (a)(5).

- The data-use agreements and matching agreements between and among State agencies could define acceptable uses of data derived from the national system for the specific purposes intended.
- The federal agency responsible could establish a data integrity board for the national client database, the majority of whose membership should consist of independent outside experts. The board should be charged with the responsibility of vigorously monitoring the risk of unintended uses of the data.

CHAPTER VI

CONCLUSIONS

This report responds to the requirements of Section 2(a) of P.L. 105-379. In particular, it investigates the functional requirements, feasibility, and cost-effectiveness of a national client database, as well as the privacy issues associated with such a database. The report extends a previous investigation of a national client database by DHHS by adding the requirements of the FSP to those of TANF, and by offering a more comprehensive cost-effectiveness assessment. This chapter presents the key findings from this investigation and potential future directions of this inquiry.

KEY FINDINGS

CURRENT STATE ACTIVITY IN DETECTING INTERSTATE DUPLICATE BENEFITS

A USDA survey in 1999 of State FSP agencies indicates that the large majority of States (38) have participated at least once in the past several years in an interstate match designed to identify interstate duplicate FSP cases. Twenty-five State FSP agencies routinely conduct such matches for interstate duplicate FSP cases. The largest existing system for detecting interstate duplicate TANF cases is the PARIS system. Twenty-two State TANF agencies at one time or another in the past several years participated in PARIS, and 13 State agencies participate currently.

STATE CAPABILITIES TO PARTICIPATE IN A NATIONAL CLIENT DATABASE

USDA conducted in-depth interviews with officials in the FSP agencies of seven States regarding their capability to participate in a national client database. Each agency reported having the capability to participate in such a database. The officials assumed the centralized portion of the database would be developed and operated by a federal agency. They also realized they would need to develop and operate the State agency portion of the system. However, they assumed the system would be designed so that the State agency's activity would be limited to preparing and sending an extract of its case records to the central facility, receiving case record extracts from the central facility, and verifying and following up on the matched cases. Under this assumption,

the officials felt that developing and operating their portion of the national client database would not be difficult.

These conclusions are based on interviews with FSP administrators from seven States. The seven States should not be viewed as a statistically representative sample of all States, and thus these conclusions cannot be generalized to all State agencies. However, the data suggest States' capabilities.

USDA is currently conducting a comprehensive survey of all State FSP agencies on their computer capabilities.

FUNCTIONAL REQUIREMENTS

The functional requirements of the national client database are to provide data to State FSP and TANF agencies sufficient to detect interstate duplicate FSP and TANF benefits and to enforce the ABAWD and TANF time limits.

FEASIBILITY

A national client database is feasible if it is configured using an eligibility database or a one-stop database architecture. Feasibility is defined as follows: the system is consistent with the functional requirements; the centralized component of the database can be developed and operated with minimal technical risk and at reasonable cost; and the State agency component of the database can be developed and operated at a reasonable cost and without requiring large increases in staffing.

The DHHS report proposed five alternative system architectures for the national client database. Of these five, the file match, broadcast, and eligibility index architectures do not provide the minimum functional requirements for the national client database. In particular, they do not provide State agencies with the data necessary to enforce ABAWD or TANF time limits. In addition, they require State agencies to exchange case record extracts bilaterally with every other State agency, potentially requiring State agencies to increase their current staff size. The fourth alternative, the eligibility database, meets all of the functional requirements. The one-stop database architecture exceeds the functional requirements by verifying client-reported income and asset information and by performing some eligibility functions. Thus, both the eligibility database and the one-stop database architectures meet the feasibility criteria.

COST-EFFECTIVENESS

Available data are inadequate to estimate the costs or benefits of a national client database reliably. However, calculations using the data that are available, supplemented by a number of assumptions, suggest that a national client database is cost-effective if it is developed for both the FSP and TANF program and configured using an eligibility database or one-stop database architecture. It would not be cost effective if it were developed for the FSP alone. This conclusion holds even though in the calculations the benefit portion of the benefit-cost ratio is limited to detecting interstate duplicate FSP

and TANF cases and excludes the benefit from enforcing ABAWD and TANF time limits across State boundaries.

This analysis makes no assumption about how costs or benefits are allocated among Federal or State agencies. An eligibility database developed by the Federal government within current funding arrangements for FSP and TANF, however, is likely to increase Federal costs. This would occur primarily because the savings from recovered and avoided TANF benefits would accrue only to States under the existing block grant while the Federal government would bear most of the developmental and operational costs.

The cost-effectiveness of the file match, broadcast, and eligibility index architectures cannot be estimated. However, they cause the State agency component of the system to be substantially less efficient than under the eligibility database or one-stop database architectures. This loss of efficiency means that these three architectures would be less cost-effective than the eligibility database or one-stop database architectures.

The one-stop architecture may be less cost-effective than the eligibility index because it is more expensive to develop and operate. The extra expense of the one-stop architecture results from its providing two major programmatic functions that are not required for the functional requirements for a national client database.

PRIVACY

A national client database raises concerns about protecting the privacy of FSP and TANF clients. Privacy concerns fall into three categories. The first is that FSP and TANF data are owned by the State agencies providing benefits to the FSP or TANF case, and may not be disclosed to an agency of another State or federal agency. The solution to this problem is to execute privacy agreements between every pair of State agencies and the sponsoring federal agency.

The second category of privacy concerns is unauthorized physical or electronic access to the national client database. This threat to security could be controlled by building physical, electronic, and procedural safeguards into both the centralized component and the State agency component of the database.

The third category of privacy concern is the threat of authorized but unintended uses of the data. This risk to client privacy is the most difficult to control. The wide variation among State privacy laws suggests that this risk is minimized by construing the national client database as a federal system of records and therefore subject to the Privacy Act and the Computer Matching and Privacy Act.

FUTURE DIRECTIONS

This investigation revealed potential concerns that should be further investigated. If a decision to develop a national client database is made, two considerations affect how rapidly development can start. First, adequate time must be allowed to appropriate sufficient funds to the primary federal agency managing the effort. Second, time must be allowed for the agency to either hire and organize qualified

staff with appropriate expertise and/or pursue the procurement processes involved in soliciting and choosing a national database contractor.

PROGRAM GOVERNANCE ISSUES

Consistent with the fact that both the food stamps and TANF programs are administered by State agencies, the federal government has never maintained a national client database of individual welfare clients. With few exceptions, when a federal agency needs access to client data, it must request the permission of the relevant State agency. Throughout the history of these programs, State agencies have borne the entire responsibility for maintaining databases of client records.

The development of a national client database may raise questions about whether the federal government is becoming more directly involved in the administration of these two programs. Assuming that a national client database is not intended to alter the governance of the food stamps and TANF programs, the sponsoring agency should consider developing regulations limiting the federal government's use of the centralized component of the database to the detection of duplicate cases and the enforcement of PRWORA time limits.

A related concern is the public perception of the federal government having direct access to personal data heretofore maintained by State agencies. With a federally sponsored national client database, the federal government would for the first time maintain a national database of individuals who received benefits from a means-tested program at any point in their lives. for administrative, as opposed to research, purposes. This concern may be exacerbated by the need to store data for the enforcement of TANF time limits. The TANF time limit is defined in terms of the lifetime of the recipient. The national client database will have to accumulate data on TANF participation throughout the recipient's adult lifetime, perhaps over forty years. This means that the database may eventually contain a record for each individual who ever had a spell of TANF receipt during their lives. The rates of mobility into and out of poverty and welfare receipt that have been observed over the past few decades imply that the national client database may eventually contain records on a substantial fraction of the adult population of the U.S.

This concern suggests that the concept of a national client database be explored with State governments, particularly FSP and TANF agencies, as well as public interest associations. The concern may be at least partially addressed by drafting regulations that limit the ability of the federal government to use the national client database for unintended purposes. It may also be addressed by adopting an index and retrieval architecture such that case record data are never stored in the central component of the database.

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REFERENCES

Bane, Mary Jo, and David T. Ellwood. *Welfare Realities: From Rhetoric to Reform*. Cambridge, MA: Harvard University Press, 1994.

Cody, Scott, and Laura Castner. "Characteristics of Food Stamp Households, Fiscal Year 1997." Washington, DC: Mathematica Policy Research, Inc., February 1999.

Fasciano, Nancy, and Sheena McConnell. "The Cost Effectiveness of the Income and Eligibility Verification System in Arizona and Michigan." Washington, DC: Mathematica Policy Research, Inc., April 1, 1995.

Gleason, Philip, Peter Schochet, and Robert Moffitt. "The Dynamics of Food Stamp Program Participation Program Participation in the Early 1990s." Washington, DC: Mathematica Policy Research, Inc., April 1998.

U.S. Department of Health and Human Services. *Temporary Assistance for Needy Families: Report on Data Processing*. Washington, DC, December 1997.

_____. *Temporary Assistance for Needy Families (TANF) Program: First Annual Report to Congress*. Washington, DC, August 1998.

U.S. General Accounting Office. *Food Stamp: Substantial Overpayments Result from Prisoners Counted as Household Members*. GAO/RCED-97-54. Washington, DC, March 1997.

_____. *Food Stamp Overpayments: Thousands of Deceased Individuals Are Being Counted as Household Members*. GAO/RCED-98-53. Washington, DC, February 1998.

_____. *Food Stamp Overpayments: Households in Different States Collect Benefits for the Same Individuals*. GAO/RCED-98-228. Washington, DC, August 1998.

APPENDIX A

**CURRENT INTERSTATE MATCHING FOR
DUPLICATE PARTICIPATION**

Table A.1. Current Interstate Matchng For Duplicate Participation

| State | Conducts Routine Interstate Matching of Food Stamp Records | Frequency | PARIS Participant |
|----------------------|--|-----------------------|--------------------------|
| Alabama | No | | |
| Alaska | No | | |
| Arizona | California Nevada | Quarterly Annually | Yes ¹ |
| Arkansas | Informal match with Texas Planned matches with Oklahoma, Louisiana Mississippi, Texas | | |
| California | Border counties in Nevada (El Dorado, Alpine, Nevada) | Unknown | Yes |
| Colorado | Unknown | Unknown | Yes |
| Connecticut | Massachusetts | Quarterly | Yes |
| Delaware | Pennsylvania New Jersey Maryland | Unknown | |
| District of Columbia | Maryland | Unknown | Yes |
| Florida | New York New Jersey Georgia | Annually | Yes |
| Georgia | (Florida conducting the match) | Unknown | Yes |
| Guam | No | | Yes |
| Hawaii | No | | |
| Idaho | No | | |
| Illinois | Testing match with Wisconsin Pennsylvania | | Yes |

¹ Has either participated in PARIS for at least one match or is a participant in the August 2, 1999 match.

| State | Conducts Routine Interstate Matching of Food Stamp Records | Frequency | PARIS Participant |
|---------------|---|---|--------------------------|
| Indiana | No? | | |
| Iowa | Missouri | Unknown | Yes |
| Kansas | Missouri | Unknown | Yes |
| Kentucky | No | | Yes |
| Louisiana | Texas | Monthly | Yes |
| Maine | Massachusetts | Quarterly | |
| Maryland | District of Columbia Pennsylvania Delaware Virginia West Virginia | Unknown Quarterly Unknown Unknown Unknown | Yes |
| Massachusetts | Connecticut Maine New York Rhode Island New Jersey Florida Puerto Rico New Hampshire | Quarterly Monthly | Yes |
| Michigan | No | | Yes |
| Minnesota | No | | |
| Mississippi | Planned match with Arkansas | | |
| Missouri | Kansas Iowa | Unknown | Yes |
| Montana | Unknown | | |
| Nebraska | Unknown | | Yes |
| Nevada | Arizona Border counties with California | | |
| New Hampshire | Massachusetts | Monthly | |

| State | Conducts Routine Interstate Matching of Food Stamp Records | Frequency | PARIS Participant |
|----------------|---|---|--------------------------|
| New Jersey | Pennsylvania Delaware New York Massachusetts Maryland | Quarterly Unknown | Yes |
| New Mexico | Texas (border counties) (has access to Texas automated client database. Dona Ana and Southern Dona Ana offices have direct access to information on active cases in Texas. Plans are to add Curry, Eddy, Roosevelt and Lea offices). Also matches active FS clients with active expedited service clients in Utah. | Quarterly | Yes |
| New York | Massachusetts Pennsylvania Virginia Florida Puerto Rico New Jersey Connecticut Maryland North Carolina Vermont Ohio (planned) | Quarterly Semi-annually | Yes |
| North Carolina | New York | | Yes |
| North Dakota | Unknown | | |
| Ohio | New York (planned) | | Yes |
| Oklahoma | Texas Arkansas | | Yes |
| Oregon | No | | |
| Pennsylvania | Delaware Maryland New Jersey New York Florida Illinois | Once in 1996 Quarterly Semi-annually Quarterly Semi-annually Monthly | Yes |

| State | Conducts Routine Interstate Matching of Food Stamp Records | Frequency | PARIS Participant |
|-----------------|---|------------------|--------------------------|
| Puerto Rico | Massachusetts New York | | |
| Rhode Island | Massachusetts | | |
| South Carolina. | No | | Yes |
| South Dakota | Unknown | | Yes |
| Tennessee | No | | Yes |
| Texas | Louisiana Oklahoma New Mexico | | Yes |
| Utah | Matches active FS clients with active expedited service clients in New Mexico | | Yes |
| Vermont | New York | | |
| Virgin Islands | No | | |
| Virginia | Maryland | Unknown | Yes |
| Washington | No | | Yes |
| West Virginia | Maryland | Unknown | |
| Wisconsin | Testing match with Illinois and Iowa | | |
| Wyoming | Unknown | | |

APPENDIX B

SELECTION OF STATES FOR INTERVIEWS ABOUT STATE CAPABILITIES

The client database study required obtaining information on States' capabilities to establish and effectively use a national database system capable of tracking participants in means tested assistance programs. Information was obtained from available sources and supplemented by telephone interviews with knowledgeable staff in seven selected States: Arizona, Arkansas, Florida, New Jersey, New York, Pennsylvania, and Utah.

FNS staff selected seven States to be interviewed. This appendix describes the methods used in the selection process. The selection was a sequential process.

The first step was to identify basic capabilities that States should have in order to effectively access and use a national client tracking database. Next, general characteristics of the States and their operations that would form the basis for selection were defined. A Master list of States that met most of the basic requirements for inclusion in the sample was then created. The master list was developed by staff from the Office of Analysis, Nutrition and Evaluation; the Food Stamp Program, Program Accountability Division (PAD); and Financial Management. The Food Stamp Regional offices were asked to comment on the list, make additions, suggest deletions; and identify preferences if any.

States were over-sampled to control for those on the list that were unable to participate in the study. All States on the master list were good candidates for the study.

STEP 1: BASIC STATE CAPABILITIES

The subsections below highlight the State capabilities used to consider which states to place on the master list. Data used was from the 1991 State census of selected program operations (STOPS).

- ***State Has an Automated Certification and Case Management System.*** Only three States, Montana, Minnesota and California, did not have an automated certification and case management (ACS) system at the time the STOPS data were collected. All three had plans to implement at that time.

- **Maintain Historical Data.** Based on the STOPS data, historical data were maintained as part of the case management operation in all but 6 States. Of those six, four archived case data. Three States - Montana, Minnesota and California--reported that historical data were not maintained statewide.
- **Content of the Data Stored (1) Include at a Minimum the client's SSN, Name and Date of Birth; and (2) The Individual as the Unit of Analysis of Data Stored in Database.** In all the States the Social Security Number (SSN), name, address and birthdate of the head of household is either stored in the database or used as an identifier. In all but one State, individual information stored in the database included SSN, name and date of birth. Individuals identified in the database included the head of household, spouse, other adults and children in all but six States. In Alabama and the Virgin Islands only the head of household was identified. There was no information on the three States that did not have a State automated systems at the time of the census. In Colorado, Oregon and Texas there was no spouse identified.
- **Database Integrated With Other Assistance Programs Especially TANF.** In 1991 only 11 States did not have an integrated database.

STEP 2: KEY FACTORS CONSIDERED IN DEVELOPING THE MASTER LIST FOR STATE SELECTION

The following operational issues were considered in developing the master list:

- **Administration of the Program.** At a minimum, it was desired that one State be included that was State administered and one State that was county-supervised.
- **Error Rate Based on 1998 FNS Data.** The average error rate for all States was 9.75. The range was 3.04 to 14.55. States on the master list have error rates between 5 and 13.
- **Caseload Size is a Factor in Case Management Effectiveness.** States with larger caseloads tend to include at least one large urban project area. States designated as large and small are both included in the master list.
- **Whether a State is Currently Engaging in Some Form of Interstate Matching.** It was believed to be important to include states with interstate matching experience and whether a State had participated in PARIS.

OTHER FACTORS THAT WERE CONSIDERED

The following other factors were considered:

- ***Willingness to Participate.*** Because of time constraints of the study several States that have participated in similar operations studies and appeared to meet most of the criteria for selection were included in the master list.
- ***Usefulness as a Model for Other States.*** The master list included States that appear to have the capability to engage in interstate matching for duplicate participation.
- ***Representative Distribution of States Across Regions.*** To the extent possible the States on the master list include at least one State from each of the Regions.

MASTER LIST

| State² | FNS Regional Office |
|--------------------------|---------------------------------------|
| Georgia | SERO, Southeast Regional Office |
| Pennsylvania | MARO, Mid-Atlantic Regional Office |
| New York | NERO, Northeast Regional Office |
| Florida | SERO, Southeast Regional Office |
| Ohio | MWRO, Midwest Regional Office |
| New Jersey | MARO, Mid-Atlantic Regional Office |
| Massachusetts | NERO, Northeast Regional Office |
| Utah | MPRO, Mountain Plains Regional Office |
| Tennessee | SERO, Southeast Regional Office |
| Arizona | WRO, West Regional Office |
| Alabama | SERO, Southeast Regional Office |
| Missouri | MPRO, Mountain Plains Regional Office |
| Nebraska | MPRO, Mountain Plains Regional Office |
| Arkansas | SWRO, Southwest Regional Office |
| Rhode Island | NERO, Northeast Regional Office |

Arizona is in WRO; it was a participant in both the IEVS targeting study and the Claims threshold study.

Arkansas is in SWRO, and was selected because it had a low error rate and the database system was not integrated.

Utah is in MPRO, and was selected because it has a fairly low error rate, is a small State, does not conduct interstate matching.

New York is in NERO, and was selected because it does extensive interstate matching, is county administered, is a large State and its error rate is relatively high. New York also participated in the Finger Imaging study.

New Jersey is in MARO; and was selected because it does extensive interstate matching, is county administered; has a large urban project area and it participated in the Claims study.

Florida is in SERO; and was selected because it does some interstate matching, is planning on being part of PARIS.

Pennsylvania is in MARO; and was selected because it does interstate matching, is a large State with urban project areas, is State administered and has participated in several of FNS' operations studies.

² California and Minnesota were originally proposed but dropped from the list since they do not have a statewide automated certification and case management system.

APPENDIX C

NATIONAL CLIENT DATABASE ARCHITECTURES PROPOSED IN THE DHHS REPORT

FILE MATCH

Under this alternative, State agencies would send files with minimal information about each TANF recipient to a central location on a quarterly basis. Each record in the file would be between 40 to 50 bytes in size and would contain a recipient's social security number (SSN), the recipient's name, and a two character originating jurisdiction code. The system would combine all of the SSNs and names from all States into a single file and sort them by SSN. In this way the system could easily detect SSN/name matches that appeared in more than one State. The system would inform each affected State agency that a match existed with one or more other States. The State agency would be responsible for contacting every other affected agency to determine if duplicate participation, time limits or other issues warranting investigation existed. Once the files were matched and the duplicate SSNs were found and reported, the system would erase the data file and start over with new State files in the next quarter. Thus, there would be no standing repository of information on program participants.

It would require each State agency to create a file of all new applicants, as well as active and past recipients. DHHS estimated that the total size of the file to be matched in the tenth year would be about 1.5 gigabytes.

This alternative would also require State agencies to validate all SSN/name combinations through the use of the Federal Social Security Administration's (SSA) State Verification and Exchange System (SVES) and other services. State files would be transmitted using Connect:Direct at a prescheduled time once each quarter to a central location that would house the FACTS computer and data. The matches would be identified and transmitted within a week of the receipt of all State welfare agency TANF applicant/recipient records. The system itself would consist of a commercial relational database management system (RDBMS) to merge the TANF applicant/recipient files from all jurisdictions.

States would be responsible for using whatever means they chose to exchange detailed case record information among themselves, including electronic file transmission, magnetic tape shipment, FAX, or U.S. Postal Service delivery.

BROADCAST

In this approach, there would be no centralized client database. The only function of the central Federal agency or other entity would be to facilitate interstate communication through the establishment of standard message formats and communication protocols. The central entity would provide each State agency the instructions for how to transmit names and SSNs to every other State agency. The information would be sent to other State agencies for each new applicant or recertified recipient. Responses from other State agencies to the query could be routed back through the same communications protocol or through contact by other means, such as telephone or fax. As with the file match alternative, the broadcast alternative would require States to validate all SSN/name combinations through SVES and other services. The information broadcast -- name, SSN and State Code -- would also be identical to that used in the file match alternative.

State agencies could determine the frequency that they broadcast information to other agencies. This approach assumes that agencies receiving a file from another agency would be required to review the lists and respond by transmitting the relevant information back to the originating agency within five days.

State agencies would be responsible for using whatever means they chose to exchange detailed case record information among themselves, including electronic file transmission, magnetic tape shipment, FAX, or U.S. Postal Service delivery.

ELIGIBILITY INDEX

Under this alternative, State agencies would transmit a minimum set of information on each participant to a central database. The information would be identical to that shared under the file match and broadcast alternatives -- SSN, name, and State code. Unlike the file match alternative, however, the system would maintain a permanent data file of participants. After initially sending in the identifying information on their entire historical caseload, agencies would submit only the identity of a new applicant or recertified recipient. The system would match the SSN against the existing national data file to determine if a match existed.

As with the file match and broadcast alternatives, the eligibility index alternative would require State agencies to validate all SSN/name combinations through SVES and other services. Also as in the file match and broadcast alternatives, the State welfare agencies would communicate among themselves by other means and exchange required information to implement the TANF tracking requirements.

The only functional distinctions between this alternative and the file match alternative are that the eligibility index alternative would:

- Maintain a permanent file of the identification of benefits recipients.
 - Only require State agencies to transmit identifying information on new applicants and recertified cases, rather than the entire caseload after the initial loading of the index file.
 - Provide more timely information to State agencies because, rather than waiting for a quarterly national match to take place, the system could respond to inquiries with matching information within a few days.
-

ELIGIBILITY DATABASE

Under this alternative, State agencies would transmit detailed case information to a central data base. In contrast to the index file which, would only contain SSN, name, and State code, the eligibility database would also contain benefit begin and end dates whether benefits were paid and exemptions granted. This alternative would also notify any State agency when an eligibility check is performed by another State agency. This notification could avoid, as opposed to detect, duplicative payments. This alternative would also add the ability to generate program management reports.

As with the three alternatives discussed previously, the eligibility index alternative would require State agencies to validate all SSN/name combinations through the use of the SSA's SVES and other services.

As with the eligibility index alternative, State agencies would initially populate the database with their historical caseload data, except that they would transfer more detailed records on each case in this alternative. Agencies would then provide records on a daily or weekly basis for cases with newly granted program benefits, terminated benefits, or other changes in benefit eligibility status. The system would have the capability to transfer these update records to other State agencies where an SSN match occurs. The system would retain data for several decades from date of receipt.

State agency follow-up burden would be significantly reduced under this alternative, because agencies would be able to determine if a high probability of an eligibility denial issue existed prior to requesting information from other States. Agencies would still be required to confirm the validity of any data used to deny benefits by contacting other States. States would exchange any additional information needed to confirm duplicate payments or deny eligibility through such means as electronic file transmission, magnetic tape shipment, FAX, or U.S. Postal Service delivery.

ONE-STOP DATABASE

Under this alternative, the system would not only enable State agencies to access detailed case records from other States, but also eligibility verification data from other federal systems. The system

would store additional data elements such as alien, fugitive felon, drug felon, parole violation, and probation violation status. The alternative would include the capability of:

- Validating SSN/name, income, and assets
- Providing a variety of data pertaining to determining eligibility for the food stamps and TANF programs
- Providing data available in the database to State agencies in real-time

State agencies would provide the same information to create the central database initially as in the eligibility database alternative. Agencies would also provide updated case records on a daily basis. The system would then contact federal databases to append the missing eligibility data to the records submitted by a State agency, and would inform the submitting agency of any disqualifying information uncovered from the federally furnished information. Data would be retained for several decades.

The system would use a commercial RDBMS to search the multi-state data to identify entries with matching SSN's and names. It would then transmit data from matches to State agencies within a few seconds of a request for a match. After responding to the State agency, the system would check for salient data in other Federal computing systems containing additional eligibility data. The system would transmit the Federal data to the State agency for transmission to the caseworker during the on-line session or later via file transfer or e-mail upon receipt.

APPENDIX D

OTHER NATIONAL DATABASES

PUBLIC ASSISTANCE REPORTING INFORMATION SYSTEM (PARIS)

The Public Assistance Reporting Information System (PARIS) is sponsored by the Office of State Systems, Administration for Children and Families (ACF), DHHS. The functionality of the PARIS system is almost identical to the proposed functionality of the national client database, in that it compares caseload data from multiple States to detect duplicate interstate participation. The major differences between PARIS and a national client database are that PARIS is voluntary for States.

PARIS began on a small scale as the VA match in 1993 when three States requested access to Veterans Administration data, which ACF facilitated. In 1995, four additional States sent their caseloads to be matched, and in 1996, 28 States participated in the match. The matching was performed by HHS staff on the HHS mainframe.

Also in 1996, HHS tested the idea of matching the State files against each other to detect duplicate participation. This match detected significant numbers of duplicate participants.

The Defense Manpower Data Center (DMDC) agreed to provide their facilities and staff to conduct the match in 1997. DMDC also offered to match welfare records to their records on active duty military personnel. DHHS sponsored two national meetings in the past year to plan the first match to be conducted using DMDC data. The PARIS managers hope to evolve the system from data transfer using magnetic tape to using a communications network operated by the Social Security Administration. They expect between 18 and 21 States to participate.

PARIS detects interstate duplication by sorting all participant records by SSN. The States that have duplicates receive data from the other State(s) for each duplicate recipients. The States then verify and follow up on the duplicates. The PARIS interstate match looks not only at the SSN, but also checks to see if the start and end of benefit dates overlap, although not all States include start and end dates in their input records. States have different TANF time-length requirements, which complicates the use of date matching.

CRIMINAL JUSTICE INFORMATION SYSTEM (CJIS)

The Criminal Justice Information Systems (CJIS) Division of the Federal Bureau of Investigation (FBI) maintains two databases which are used to inform States of activities that occurred in other States: The National Crime Information Center (NCIC) and the National Instant Criminal Background Check System (NICS). The NCIC is a database of information on criminals collected from federal, State, and local law enforcement entities. The NICS is a temporary database of people trying to purchase guns. The FBI matches NICS data with the NCIC and other sources to determine if they can be prohibited from purchasing a gun under the provisions of the Brady Act.

The NICS system is a hybrid where detailed data records are stored for about half the States by the FBI in a central database, while detailed records are maintained by the State in the other half. When the State keeps the detail record, the FBI maintains a pointer to the State to enable it to retrieve the record and provide it to other States. The hybrid system evolved because some States wanted to keep the detailed records within the State, while others preferred that the FBI handle the record and thus reduce their burden. The FBI staff feels that, from a technical standpoint, the pointer approach was not optimal but that it does address State privacy concerns. Complex messaging systems are required when the FBI central file points a requesting State to another State's data file. This eliminates the simplicity and efficiency of one-stop shopping.

The FBI is often asked to share its data with other agencies for purposes which the Privacy Act refers to as non-routine uses. For example, the Department of Housing and Urban Development requested information on sexual offenders in response to the issues involving Megan's Law. Other government agencies have sought data on daycare providers, teachers, and Boy Scout leaders. The FBI maintains an advisory policy board (APB) to approve any new access to the data.

Another challenge for the FBI is that each State has different laws, regulations, data definitions, system architectures and technical competencies. Some States invest heavily in quality information, while others have poor data. Variations in State law have a direct impact on system functionality. For example, domestic violence offenders are precluded from having weapons, but this charge is a only a misdemeanor in some States; cases in these States will not appear in the NCIC. Attempts to standardize State public assistance eligibility data would likely face similar problems.

THE FEDERAL PARENT LOCATOR SERVICE (FPLS)

The FPLS is administered by the Office of Child Support Enforcement (OCSE), within ACF, DHHS. The FPLS provides a means for HHS to notify State Child Support Agencies that a non-custodial parent in arrears on child support payments is obtaining income from a source that is not readily available to the State agency. This income includes earnings from employers in other States and the federal government, as well as unearned income.

PRWORA mandated an expansion of the establishment of a National Directory of New Hires (NDNH). This database contains 140 million quarterly wage records, 60 million annual new hire records, 22 million Unemployment Insurance Benefits Records and Federal Employees new hire and wage data. The FPLS also accesses databases maintained outside the FPLS at the Social Security Administration, the Department of Defense Office of Personnel Management, the Internal Revenue Service, and the Veterans Administration. Also included is the Federal Case Registry (FCR) of child support cases. This database contains the name, SSN, date of birth, sex, and several other identifiers of noncustodial parents.

The development of the system was completed in one year. One reason the system was developed so rapidly was that HHS was able to access an array of vendors directly through a contract vehicle established by the Vice President's procurement reform initiative. Under this arrangement, vendors are prequalified to receive funding through a bidding process, and agencies may select from the list. Proposal-preparation time was a single week, and proposals were limited to five pages plus an oral presentation. The rapid implementation of the enhanced FPLS may represent a model for using innovative procurement methods to cut development time.

FPLS officials believe that an important key to the success of the project was to convince the Social Security Administration to house the database in its National Computer Center in Baltimore. This facility is technically advanced and secure. SSA also provided the CONNECT: Direct network that already links SSA to the States. The development of a national client database could similarly be expedited if a major federal computer facility and communications network were used.

Using the SSA facility has enhanced security at the federal level, but the security of sensitive information has also been a concern at the State level. HHS has engaged in significant outreach to States to provide aggressive on-site technical assistance to facilitate data extracts and transfers and to promote secure handling of sensitive data by State staff. HHS developed its own video to train State staff on security procedures.

The FPLS receives requests for non-routine uses of the data of the type that may occur if a national client database were established. The law establishing the NDNH stated that the data could not be used for other purposes. Because this database contains such valuable and comprehensive data (the income of almost all workers), it is attractive to many other federal agencies. There is currently some controversy about requests for access to the FPLS data, which has led to the scheduling of Congressional Hearings. The FPLS staff, with support from OMB, has been successful thus far in resisting additional access to the NDNH. A national client database may face similar controversy regarding access.

THE WAGE RECORD INTERCHANGE SYSTEM (WRIS)

The Wage Record Interchange System (WRIS) is being developed in response to the Workforce Investment Act of 1998, which requires States to use wage records to assess the performance outcomes of job training programs and training and educational institutions. Because graduates of such programs and institutions may gain employment outside the State, where the programs are conducted, it is necessary for the State to retrieve the wage records from other States to adequately assess performance.

A feature of the WRIS that may be advantageous to the national client database is that it has no central database with sensitive details about program participation. Only an identification index is kept centrally. This approach greatly reduces the volume of data transferred and stored, while increasing the number of data transfers by adding cycles of retrieving and forwarding records.

US DOL has piloted the WRIS and is entering the implementation stage. The system is jointly administered by the Department of Labor and the Interstate Committee of Employment Security Agencies (ICESA). Founded to represent the States in the administration of the federalized unemployment insurance service, ICESA will be responsible for obtaining and maintaining all legal agreements with the States to allow for data sharing.

APPENDIX E

DETAILED ASSUMPTIONS FOR THE COST AND BENEFIT ESTIMATES OF A NATIONAL CLIENT DATABASE

DETAILED COST ASSUMPTIONS

- The cost to develop and operate the centralized portion of the system are the DHHS report estimates, inflated at a 4.5 percent annual rate to the relevant fiscal year (DHHS 1997).
- Public agency management and oversight of the contractor is assumed to be six full-time equivalent (FTE) staff during the year of development, and three FTEs during each year of operation. These managers are assumed to be federal employees at an annual salary of \$70,000. The total overhead rate--including fringe, burden, general and administrative activities--for both State and federal employees is assumed to be 100 percent of salaries.
- The development costs of each State are taken to be the arithmetic average of the four State agency development estimates reported by DHHS (1997).
- State agency management and oversight are assumed to require one-half an FTE per State during the year of system development, and 0.1 FTE in each year of operation, with an annual salary of \$50,000.

The projected number of duplicate cases is based on an unpublished tabulation by DHHS of the number of duplicate TANF cases in one month in the States participating in the PARIS system. This figure is projected to an annual number of duplicate cases in 52 States. This figure is multiplied by an estimate of the average cost of verification and claim collection per followed-up case (Fasciano and McConnell 1995). This product is the estimate of State agency costs of follow-up, verification, and claims collection.

DETAILED BENEFIT ASSUMPTIONS

- *Recovered* past FSP benefits, as opposed to *avoided* future benefits, are based on the estimate of the number of interstate duplicate benefits in four States estimated by GAO (1998). We project this figure to the nation, based on the ratio of FSP benefits in these four States, to that of the nation as a whole (GAO 1997). We multiply the national amount of duplicate benefits by the percentage of those benefits projected to be recovered. For this figure, we use the percentage of FSP overpayments due to client error detected by the IEVS system that are recovered in a two-year period, either in the form of cash or benefit recoupment (Fasciano and McConnell 1995). This product is the amount of duplicate FSP benefits recovered. This procedure implicitly assumes that all the duplicate cases detected by GAO would prove to be actual duplicate cases upon follow-up investigation by the State agency. Sensitivity testing of this assumption indicates that the national client database would be cost-effective even if none of the duplicate cases detected by GAO proved to be actual duplicate cases.
- We follow a similar procedure for the amount of recovered duplicate TANF benefits. The figure is based on the DHHS estimate of the number of interstate duplicate AFDC benefits (DHHS 1997). We project this figure to a national total, and multiply the national figure by the proportion of TANF overpayments due to client error detected by the IEVS system that are recovered in a two-year period (Fasciano and McConnell 1995).
- *Avoided* future FSP benefits, as opposed to *recovered* past FSP benefits, are based on the number of recipients denied or removed in a month in 12 States as a result of the PARIS system, estimated by FNS in an unpublished table of PARIS results. Each PARIS hit represents an individual in the case, rather than the entire case. We project this figure to an annual figure for the entire nation.
- We convert the number of recipients denied or removed into avoided benefits by multiplying the number of cases by the average monthly benefit and by the number of months each case would have received benefits had it not been detected by the system. The number of months until the case would have closed in the absence of detection is a key parameter of the cost-benefit model. We assume that such FSP cases close in nine months, the median length of spell of food stamps receipt.
- We use a similar procedure to project TANF benefits avoided. We assume the recipients denied or removed resulting from the PARIS system in 12 States involve the avoidance of both FSP and TANF benefits. We use an estimate of the average monthly benefit published by DHHS (1998). As with the FSP, we assume that such TANF cases would close in the absence of detection in 25 months, the median length of AFDC spells (Bane and Ellwood 1994). We use an AFDC figure because TANF has not operated long enough to support an estimate of the length of a completed spell of participation in that program.

APPENDIX F

STATE AND FEDERAL PRIVACY LAWS

The salient features of the Privacy Act of 1974 are:

- **Openness.** The Privacy Act requires adequate public notice of record systems and record-keeping practices. Each system of records must be fully described in a notice published in the *Federal Register*,¹ and individuals must receive information about an agency's information practices when they are asked to supply personal information.²
- **Individual Participation.** The Privacy Act gives individuals the right to see their own records³ and to propose corrections.⁴
- **Collection Limitation.** The Privacy Act directs agencies to collect information directly from the individual when practicable,⁵ and to maintain only information that is relevant and necessary to accomplish an agency's purpose.⁶
- **Data Quality.** The Privacy Act directs agencies to maintain all records used to make individual determinations with such accuracy, relevance, timeliness, and completeness as is reasonably necessary to ensure fairness to the individual.⁷
- **Finality.** The fair information principle of finality states that there should be limits to how personal information is to be used and disclosed. Information should be used only for purposes disclosed at the time of collection, and not used otherwise without consent or other legal authority. The Act requires a set of procedures that agencies must follow to use a system of confidential data.
- **Security.** The Privacy Act requires agencies to establish rules of conduct for employees,⁸ as well as appropriate administrative, technical, and physical safeguards to ensure security and confidentiality.⁹

¹ 5 U.S.C. 552a(e)(4) (1994).

² Id. at (e)(3).

³ Id. at (d)(1).

⁴ Id. at (d)(2).

⁵ Id. at (e)(2).

⁶ Id. at (e)(1).

⁷ Id. at (e)(5).

⁸ Id. at (e)(9).

⁹ Id. at (e)(10).

- **Accountability.** The Privacy Act includes several enforcement mechanisms, including civil remedies¹⁰ and criminal penalties.¹¹

The greatest concern about the adequacy of Privacy Act protections is that of finality--that is, protections against unintended uses. This concern bears directly on whether legal safeguards are sufficient to support the development of the national client database. The Act gives agencies considerable discretion in defining permissible disclosures through the regulatory process. Each agency can define disclosures, called *routine uses*, for each system of records. The statute requires that a routine use be compatible with the purpose for which the record was collected.¹² Agencies establish routine uses when they define a system of records. They can change the routine uses anytime by publishing a notice in the *Federal Register* and accepting public comment.

The routine use provision and its implementation by agencies have been criticized for failing to serve as a barrier to new uses and disclosures.¹³ There are two main problems. First, some agencies have defined routine uses broadly. Second, subsequent laws sometimes impose new disclosure requirements on existing systems. For example, when Congress enhanced child support enforcement, it directed all agencies to disclose information about newly hired employees to the Office of Child Support Enforcement. This law required a new routine use for many federal systems of records.

THE COMPUTER MATCHING AND PRIVACY ACT OF 1988

The Computer Matching and Privacy Protection Act imposed a series of new, mostly procedural, requirements on federal agencies involved in matching activities. The 1988 amendments require federal agencies (1) to execute written matching agreements between the source and recipient agencies before matching with another database; (2) to provide notice of matching activities to Congress, OMB, and the public; and (3) to establish data integrity boards to oversee and approve matching agreements. Importantly, the Act also requires that any party to a matching program verify the findings of a match and provide any individual affected the opportunity for a due process hearing before taking action based on the results of a match, especially if the matched information leads to an adverse action against an individual.¹⁴ If a national client database were a federal system, over fifty matching agreements would be required, and would have to be renewed every 18 months.

¹⁰ Id. at (g).

¹¹ Id. at (1).

¹² Id. at (a)(7).

¹³ See, e.g., Paul Schwartz and Joel Reidenberg, *Data Privacy Law* 5-2 (a)(1996).

¹⁴ Id. at (p).

State Privacy Laws

State privacy laws vary substantially. About a quarter of the States have generally fair information practice laws roughly comparable to the federal Privacy Act of 1974.¹⁵ In California, for example, a general privacy law applicable to all State records¹⁶ is accompanied by a more specific law governing the confidentiality and disclosure of food stamp and other social service records.¹⁷

A few States have laws that specifically address computer matching. In Wisconsin, the Personal Information Practices Act prohibits a State authority from using personally identifiable information for computer matching unless the authority specifies in writing the purpose and legal authority for the matching, the justification for the program and anticipated results, and a description of the information that will be matched.¹⁸

Several types of State laws might complicate the operation of a national client database. Some State laws require that individuals receive notice of how their information will be disclosed and used.¹⁹ In those States, the forms used to collect information from food stamp applicants would have to be changed to reflect the flow of information into a national client database. Informing existing recipients of new disclosure practices might require a separate notice.

Some State laws give individuals the right to see and correct records about themselves maintained by the State. State laws may also give individuals the right to enforce their privacy rights through the courts. When records about residents of one State are shared with an agency in another State that has a general-purpose privacy law, the transfer may result in the creation of privacy rights in the recipient State that do not exist in the disclosing State.

In theory, an individual could ask one State agency to correct a record that originated in another State agency. This might result in complex disputes and even litigation involving two or more States. One possible result is that a record about an individual maintained in one State could reflect a different set of facts than the same record in another State. Any system architecture that involves the sharing or maintenance of information by different States may need a mechanism to address the possibility of discrepancies and disputes among State record keepers. Differences might have to be resolved at the national level or between two or more States.

¹⁵ Paul Schwartz and Joel Reidenberg, *Data Privacy Law* 6-2, at note 4(1996), found laws in these 13 States: Alaska, California, Connecticut, Hawaii, Indiana, Massachusetts, Minnesota, New Hampshire, New York, Ohio, Utah, Virginia, and Wisconsin.

¹⁶ Information Practices Act of 1977, Cal. Civ. Code 1798 (West 1998).

¹⁷ Cal. Welf. & Inst. Code 10850 (West 1991).

¹⁸ Wis. Stat. Ann. 19.69 (1996).

¹⁹ Cal. Civ. Code 1798.17 (West 1998); Minn.Stat. Ann. 13.04(2) (West 1997).