# Welfare Reform
# Information Technology:

## A Study of Issues in Implementing Information Systems for the Temporary Assistance for Needy Families (TANF) Program

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Administration for Children and Families

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*These new requirements create significant challenges …*

Recent reforms of the nation's human services programs have dramatically changed the States' approaches to managing and administering assistance services. While providing more discretion and flexibility to individual States in determining how funds will be disbursed, the reforms also establish new eligibility limits and requirements, an emphasis on work and job placement, and new program and fiscal reporting requirements. These new requirements create significant challenges for States' information systems and information systems managers in human services organizations, as well as those in the partner organizations that deliver services.

The Administration for Children and Families (ACF), in response to Social Services Research, Senate Report 105-300 and Conference Report 105-825, initiated the Welfare Reform Information Technology (WRIT) project. Its purpose is to examine information systems issues confronting States as a result of welfare reform and to evaluate and disseminate lessons learned from various State initiatives. This report, a product of the WRIT project, identifies the major challenges facing States in terms of an overarching issue, overarching barrier, and twelve high-level issues as follows:

OVERARCHING ISSUE: The transition of the nation's human services programs from income maintenance to self-sufficiency requires a system-wide paradigm shift that affects people, culture, processes, procedures, information, and information systems.

OVERARCHING BARRIER: In general, legacy IT human services systems are old, have limited functionality and database capacity, and are not easily modified.

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In researching the information systems issues confronting States, we attempted to gather information on promising practices that States are employing to address the issues. Based on our findings, as well as information from a recent General Accounting Office (GAO) report, it appears that many States have not yet modified their information systems to meet the needs of case managers. GAO reports that, while solutions are emerging, the transition of States' information systems to support TANF is, in many cases, just beginning. State systems have "major limitations" in key areas. For example, some are not able to obtain information on TANF recipients from agencies serving them. Others do not provide sufficient information to plan service strategies for the TANF caseload.[1]

## BACKGROUND

On August 22, 1996, President Clinton signed the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), Public Law 104-193. This legislation changed the nation's human services programs by creating the Temporary Assistance for Needy Families (TANF) program, which replaced the Federal Aid to Families with Dependent Children (AFDC) entitlement program with a block grant to the States.

The new law brought not only more discretion and flexibility to individual States, but also new eligibility limits and requirements, an emphasis on work and job placement, and new program and fiscal reporting requirements. While these new requirements create significant challenges for information systems and information systems managers in human services organizations at all levels of government, the largest impact is felt in the States. ACF, in response to Social Services Research, Senate Report 105-300 and Conference Report 105-825, initiated the WRIT project to address these challenges. The Senate and Conference Reports called for a pilot study to (1) carefully examine information issues confronting States as a result of welfare reform, such as data collection and reporting requirements, case management systems, and the integration of multiple systems and (2) evaluate and disseminate lessons learned from various State initiatives.

*The Senate and Conference Reports called for a pilot study …*

## OBJECTIVE

*The objective of the WRIT project is to examine the information systems issues confronting States …*

The objective of the WRIT project is to examine the information systems issues confronting States as a result of welfare reform and to evaluate and disseminate lessons learned from various State initiatives. These issues arise in four broad areas: data collection, reporting, and systems integration; case management and service delivery; technology and resource management; and security and confidentiality. The issues and lessons learned in this report are organized under these broad headings.

## APPROACH

To develop information for this report, the WRIT team used numerous methodologies including—

- Facilitated workshops with ACF and State-level TANF program and IT representatives (see attachment for participants),
- Pre-workshop identification by participating States of top programmatic and information technology challenges, and
- Meetings (by phone and in person) with State-level TANF program and IT representatives.

In addition, the WRIT team, led by representatives of the Administration for Children and Families, included among its members a former State-level TANF program and policy expert and the former head of a State human services program's information technology organization.

## THIS REPORT IN PERSPECTIVE

*… there are some very legitimate issues that can not be solved within the construct of an information technology solution.*

The purpose of this report is to *examine the information systems issues confronting States as a result of welfare reform*. It is important to understand that there are some very legitimate issues that can not be solved within the construct of an information technology solution, due to such barriers as lack of statutory authority and lack of appropriated funds. Nonetheless, it is within the purview of this project to discuss such issues and, therefore, inform the overall process.

It is also important to understand that the degree to which a State can take action to meet the full intent of the TANF program is at times limited by State legislation and judicial precedents. For example, data sharing across programs, even at the intra-State level, may be limited by laws and lawsuits related to confidentiality and privacy. Such issues are not easily resolved. These factors and others limit the broad applicability of one State's solution across all or even most of the remaining States.

## ORGANIZATION OF REPORT

This report has an overarching issue and barrier and four broad groupings under which issues are addressed. The overarching issue is the transition of the nation's human services programs from income maintenance to self-sufficiency, which has significant program and systems implications. The overarching barrier relates to the age and limited capability of States' information systems. The issue groupings are—

- Data collection, reporting, and systems integration,
- Case management and service delivery,
- Technology and resource management, and
- Security and confidentiality.

As issues were identified from the concerns and needs expressed by State representatives, they were tested for inclusion in this report against four prioritization standards:

- Is the issue related in some way, either positively or negatively, to information technology?
- Does the issue present the possibility of identifying emerging practices or lessons learned that may be useful to States and local organizations?

- Is the scope of the issue such that inter-State, inter-agency, or inter-governmental cooperation may be required?
- Does the issue result from — or was it significantly intensified by — the establishment of the TANF program (e.g., security and data confidentiality)?

Where issues are encumbered by barriers to their resolution, they are identified. At times these barriers render the issue virtually insolvable at the State or local level. Hence, no emerging practices or lessons learned are extant. For others, emerging practices and/or lessons learned have been found, analyzed, and included below.

## Overarching Issue

*… TANF legislation re-engineered the basic purpose of the nation's human services program.*

As the WRIT team began to examine the needs and issues of State TANF program and information technology managers and staff, it became clear that there is an overarching issue from which many of the other issues spring. That is, the TANF legislation re-engineered the basic purpose of the nation's human services programs from income maintenance to self-sufficiency. This overarching issue can be expressed as follows:

**THE TRANSITION OF THE NATION'S HUMAN SERVICES PROGRAMS FROM INCOME MAINTENANCE TO SELF-SUFFICIENCY REQUIRES A SYSTEM-WIDE PARADIGM SHIFT THAT AFFECTS PEOPLE, CULTURE, PROCESSES, PROCEDURES, INFORMATION, AND INFORMATION SYSTEMS.**

The table on page 7 reflects the characteristics and differences between an income maintenance program and a self-sufficiency program.

Even though a paradigm shift is taking place, it is important to understand that the transition of the nation's human services programs from a focus on income maintenance to self-sufficiency does not diminish the importance of correct determination of eligibility for services. Programs will still need to maintain strong quality control systems in order to ensure that services are provided only to those individuals who are eligible.

The important evolution, however, is that the relative percentages of staff resources, performance measurement focus, and client interaction having to do with income maintenance versus self-sufficiency functions change dramatically. While establishing and monitoring eligibility for income maintenance services remains important, it is a much smaller "slice of the pie" under TANF than it was previously. Income maintenance is no longer the overall goal of the organization: increasing self-sufficiency is. This means that the "culture" of the organization must change to reflect the new goal.

Income maintenance will always be a part of increasing self-sufficiency because stabilizing families by providing basic resources will be a critical "first step" in creating a situation under which clients can be effectively moved toward greater independence. However, appropriate income maintenance becomes simply a means to an end, rather than an end in itself. Organizations may have near perfect eligibility systems in place, but unless they also have strong services leading to self-sufficiency, they will fail in the new mission of TANF.

*… the profound organizational changes required to shift the overall mission from income maintenance to self-sufficiency also impact all aspects of information …*

Note that the profound organizational changes required to shift the overall mission from income maintenance to self-sufficiency also impact all aspects of information in these organizations. The characteristics of information in income maintenance programs versus self-sufficiency programs are summarized in the table on page 8 and discussed more fully in the following sections.

### CHARACTERISTICS OF INFORMATION IN PREVIOUS (AFDC) INCOME MAINTENANCE SYSTEMS

- All critical information was held in the system. The eligibility process gathered all necessary information from clients (branching out to verify client information when necessary). The manipulation of data, use of data, reporting of data, and purpose of data was almost exclusively internal to the program.

- Information was gathered primarily to meet eligibility rules and requirements, and staff used the information for the express purpose of ensuring timely and accurate benefits. Consequently, there may have been little capacity built into the system for additional functionality. Further, managers and staff may have had little experience analyzing critical information needs beyond the function of issuing timely and accurate benefits. This was especially true for effectively and strategically gathering information tied to desired outcomes, such as job retention and wage progression, that were not directly related to income maintenance services.

- Primary information exchange was with Federal agencies, and most systems were mainframe-based. Modifications and improvements in the system were centrally driven.

- The eligibility process represented the primary or only source of contact and information sharing with most clients. It was necessary to gather and check a comprehensive amount of information to minimize errors, fraud, and abuse. Significant resources in income maintenance systems were focused on avoiding inaccurate expenditures — a logical approach given the fact that any case that was determined eligible *must* be provided benefits, and *every* open case had the potential to collect a large amount of money over time.

| CHARACTERISTICS OF AN INCOME MAINTENANCE PROGRAM | CHARACTERISTICS OF A SELF-SUFFICIENCY PROGRAM |
|---|---|
| **Primary goal** – Timely and accurate benefits. | **Primary goal** – Decreasing dependence on public assistance through work and other resources. |
| **Rule-based decisions** – Eligibility decisions are based in rules. There is a "right answer" in any given decision. Individuals are held accountable for getting the answer right. | **Principle-based decisions** – Self-sufficiency service decisions are based on principles, outcomes, and an assessment of the individual situation. There is not one "right answer." Individuals are held accountable for making decisions that reflect principles/outcomes. |
| **Process focus** – *How* things must be done is very clear in the program. | **Outcome focus** – *What* must be achieved is very clear in the program. Principles guide the *how*. |
| **Managers know the answers** – Management structure needs to minimize mistakes in the program and ensure consistency. | **Managers know how to get people to ask good questions** – Management structure needs to facilitate experimentation, keep focus on outcomes and principles, and move good decision-making to the front-line level. |
| **Error Avoidance** – Individuals are extensively trained to avoid costly errors, resulting in a focus on *what can't be done*. Individuals try to operate as much as possible in "black and white" clarity in decision-making in order to reduce problems in the program. | **Experiment** – Individuals are extensively trained to experiment with the best ways to reach outcomes, resulting in a focus on *what can be done.* Individuals operate primarily in areas of many shades of gray. New leadership and team structures result from this focus on service outcomes and experimentation. |
| **Limited expectations** – Focus is on certifying client needs and lack of resources as part of the eligibility process. Program is geared to help people by providing for their basic needs since they have demonstrated in the eligibility process that they are not doing so for themselves. | **High expectations** – Focus is on discovering client strengths and resources. There are high expectations of the client. There is a social contract in which the basic support services are provided *in exchange for* participation in actitivies leading to self-sufficiency. |
| **Services provided *for* or *to* clients** – Staff have ultimate authority and expertise to get clients benefits. | **Services provided *with* clients** – Staff can't "make" clients self-sufficient. Staff can only work with clients on process, taking part in process, not controlling it. |
| **Entitlement system** – All who are eligible must receive all benefits for which they are eligible and to which they are entitled. | **Temporary assistance** – Wide range of choices made at State, local, and worker level that influences the type of benefits provided. |

| Characteristics of Information in an Income Maintenance System | Characteristics of Information in a Self-Sufficiency System |
|---|---|
| **Self-Contained** – Information is held internally. Information needs are met almost exclusively through internal systems and processes. | **Dispersed** – Information is held both internally and externally with other service providers. Information needs are met through a complicated, changing and wide-reaching network of internal and external IT systems. |
| **Consistent User Needs** – Information required to issue timely and accurate benefits is clear and well-documented, resulting in relatively straight-forward user needs analysis and action by IT. Specific information changes over time, but overall purpose and scope of information gathering remains tied to timely and accurate benefits. | **Variable User Needs** – Information required to effectively move clients to self-sufficiency is complex and variable, resulting in complicated and difficult process for user-needs analysis and action by IT. Scope of information and specific data needed will vary from client to client, depending on intensity of services required. Overall expansion to purpose of program means much greater depth and breadth in information needs. |
| **Standardized Information** – Goal of timely and accurate benefits requires standardized information from all applicants. Application information stays the same from client to client. Eligibility data elements are universally collected and reported. | **Individualized Information** – Goal of self-sufficiency requires individualized client information to develop service plan. Information gathering will vary widely from client to client. It is difficult to determine which of these "new" data elements should be universally collected and reported in order to learn what elements are tied to what types of outcomes. |
| **Centralized** – IT modifications and improvements are generally made centrally to a self-contained system. Even in more decentralized structures, there is a single overarching agency identity. | **Decentralized** – IT modifications and improvements must be made across many systems to ensure needed data collection and reporting. There are many separate organizations involved. |
| **Client service process is data-based** – Majority of contact with client is carefully structured to collect and report standardized eligibility information in order to ensure timely and accurate benefits. | **Client service process is outcome-based** – Majority of contact with client is structured around activities designed to reach employment and training goals. Information collected varies across activities carried out in support of each client. |
| **Narrow Audience** – While overall interest in welfare dynamics may be high, the audience for information collected and reported related to timely and accurate benefits is generally narrow. There are well-defined purposes and uses for the information, many of which are federally driven. | **Expanding Audience** – As more information is available on the movement of clients to self-sufficiency, a much broader audience has interest in both reviewing and influencing the information being collected. There are multiple purposes and uses for information about program activities. |

### CHARACTERISTICS OF INFORMATION IN SELF-SUFFICIENCY SYSTEMS

*Programs must have information … to evaluate the efficiency and effectivness of … services in delivering desired outcomes.*

- In self-sufficiency systems, the focus is on information that promotes the *outcome* of moving people from welfare to self-sufficiency. Programs should have information that allows them to evaluate the efficiency and effectiveness of employment and education services in delivering desired outcomes. This requires information of broader scope and purpose than that in income maintenance systems.

- Movement from welfare to self-sufficiency will generally require that the client receives services from multiple service providers. Services may take place prior to being on a grant, while on a grant, and after the closure of a grant. Some service providers will have a contractual relationship with the TANF agency, some will have informal agreements for jointly assisting clients, and some will work together with the TANF agency at a high level of integration of services. Building information exchange processes across all these organizations and systems is critical to successful service delivery.

- A great deal of critical information related to clients moving toward self-sufficiency may not be gathered by the TANF agency or held internally. Rather, much information about client activities and progress will be developed and maintained outside the TANF agency.

- Information coming from the TANF agency to partner organizations must "make sense" from new perspectives. Measures that focus solely on caseload decline, for example, may seem helpful from a TANF perspective, but both TANF and partner agencies will want information that indicates what has happened to the people who are no longer receiving cash assistance but are not yet self-sufficient.

- While minimizing errors, fraud, and abuse is also important under self-sufficiency systems, from the perspective of safeguarding the use of public funds, the equation is very different. First of all, the level of potential benefits any eligible client may collect is dramatically reduced (compared to that in the AFDC program) by time limits and participation requirements. Second, the eligibility process is not the only or primary means of gathering information about clients and ensuring that they are eligible. Since clients under TANF are assumed to be involved in or preparing for participation in work-related activities, they are actively interacting with program staff and many "red flags" to fraud and abuse will be spotted during participation. In addition, the benefits themselves under TANF are an implied "payment" for satisfactory participation. Without action on the part of the client, the "payment" will not automatically be made.

*State and local elected officials, community and partner agencies, and related service systems will be pushing for information …*

- There are multiple purposes and audiences for information about the program and what is happening with clients. Federal reporting requirements are not necessarily the primary driver in the system. State and local elected officials, community and partner agencies, and related service systems will be pushing for information on such things as detailed caseload demographics, post-placement progress of clients, recidivism rates, and overlapping service involvement with other agencies (such as child protective services providers or employment and training providers). These other constituencies will want to have information that has not traditionally been collected.
- Information exchange operates across a wide variety of organizations and platforms. Some information needs may be met using PC-based systems, while others will involve mainframe-based systems. Modifications and improvements to data gathering and reporting may need to be coordinated across many decentralized information systems, such as locally based kindergarten to 12th grade and community college systems.

## OVERARCHING BARRIER

*… a majority of existing State systems reflect the capabilities and applications systems design approaches of previous decades.*

As the WRIT team began to examine the issues confronting State TANF information technology managers and staff and the barriers to providing automation solutions to these issues, it became clear that there is an overarching barrier affecting States. A majority of existing State systems reflect the capabilities and approaches of previous decades. This overarching barrier can be expressed as follows:

**IN GENERAL, LEGACY IT HUMAN SERVICES SYSTEMS ARE OLD, HAVE LIMITED FUNCTIONALITY AND DATABASE CAPACITY, AND ARE NOT EASILY MODIFIED.**

Survey results from November/December 1996[2] show that many States' systems first became operational in the 1970s, 1980s, and early 1990s. Since then, technology has evolved and delivered new solutions to information management, such as client server architectures and Internet-based architectures. As the General Accounting Office recently noted, "The need to update both hardware and software is especially pronounced in the welfare arena because many states are using older automated systems to manage their welfare programs."[3]

States have modified (rather than replaced) their existing systems to accommodate the *minimum* TANF requirements. Factors affecting this decision include Y2K, the timeline for developing new software, the risk of switching to new technology, and the cost of starting over. Costs not only include hardware and software, but also training, conversion of data from an old system to a new one, and modifying other technology infrastructures to operate with the new system. These factors constrain the States' ability to take advantage of technological improvements to collect and share new data requirements.

This overarching barrier has significant implications. For example, in the TANF environment, it is not enough for the systems to deliver fixed, batch-processing style reports. Managers need not just ad hoc reporting, but also the ability to interface with the data directly and to manipulate it. The same is true of the providers of services. Whereas their actions pre-TANF tended to rely on a relatively limited scope of information, the same is not true in TANF. Users need to be much more "IT proficient" and able to manipulate their way through the system and its information (to the extent possible). Furthermore, tending to TANF needs — both in "feeding" the system and extracting information from it — takes more of caseworkers' time and shifts the nature of the work that they perform.

*Users need to be much more "IT proficient"…*

The problem is that caseworkers need to operate in an environment of more sophisticated technology and information availability that supports decision-making, rather than rule-driven eligibility. Caseworkers need information tools for decision support. This requires more sophisticated technology not generally available in current State systems.

In the sections that follow, the specific information and technology-related issues that spring from the overarching issue and barrier are addressed. As described previously, these issues are grouped in four broad areas: data collection, reporting, and systems integration; case management and service delivery; technology and resource management; and security and confidentiality.

## DATA COLLECTION, REPORTING, AND SYSTEMS INTEGRATION

To facilitate moving individuals into self-sufficiency, it is necessary that information be obtained and shared among a wide variety of organizations. Some of these organizations, such as employment security and community colleges, have worked with public assistance organizations in the past, but their roles and responsibilities may have expanded dramatically under TANF. Others, such as school districts and community-based organizations, may have had only limited contact prior to the TANF changes. Since these other organizations are independently managed and funded, agreements must be made with them in such areas as sharing their information and service delivery systems, the priorities of these activities versus their traditional priorities, and so forth. This section describes the issues associated with data collection, reporting, and systems integration.

### ISSUE 1: THE TANF PROGRAM REQUIRES NEW INFORMATION NOT PREVIOUSLY COLLECTED, USED, OR REPORTED BY HUMAN SERVICES PROGRAMS.

**CONSIDERATIONS AND BARRIERS:**

*A methodical examination of newly required information has often not been made.*

- One consequence of changing the program purpose under TANF is that the information and systems needed to support the new program must change also. In many cases, often due to Y2K and conflicting priorities, this has not fully occurred, and much the same information is being collected. A methodical analysis of newly required information has often not been made by the State human services program.

- The rules-driven AFDC program required only a fairly narrow range of information to assure that timely and accurate benefits were made and that AFDC goals were met. In the TANF system, managers and staff need to identify, collect, analyze, and act upon a much wider range of information. This includes—

    - Collecting information needed to identify resources such as service providers who can assist in moving the client to self-sufficiency.

    - Collecting new non-financial information related to, for example, compliance with immigration requirements, fleeing felon status, domestic violence/mental health, dependents' school attendance, probation status, and substance abuse.

    - Collecting information important in determining whether appropriate progress is being made by individual clients and staff.

    - Collecting information important in terms of assessing outcomes within the TANF agency.

- With regard to the latter point above, management information systems and quality control systems need to gather new information in order to assess the performance of staff and managers in managing cases and delivering services. While staff and office error rates were key drivers for personnel action and training under AFDC, a much broader range of information is needed to assess effectiveness in reaching TANF goals. Included may be such measures as—

- Percentage of caseload participating;
- Percentage of caseload satisfactorily completing activities;
- Percentage of caseload referred to activities;
- Percentage of caseload placed in jobs;
- Average wage at placement;
- Percentage of closed cases still working at periodic tracking times;
- Percentage of caseload increasing wages after one, four, six, or eight quarters of employment; and
- Percentage of caseload receiving transitional benefits or the Earned Income Tax Credit.

- A majority of existing State systems are written in and operate on older technologies that have been modified to accommodate the minimum TANF requirements. This limits the States' ability to use the newer technologies to collect and share new data.

**EMERGING PRACTICES:**

*… the need to analyze performance and outcomes has resulted in development of a new reporting capability.*

➨ In **OREGON**, the need to analyze performance and outcomes has resulted in development of a new reporting capability. This involves examining both the characteristics of the clients on the remaining caseload in order to determine what services "match" the existing caseload, as well as the need to look at case manager activities to determine whether a case manager's actions are reflected in client outcomes. The report provides both a profile of the caseload and a profile of individual case manager activities.

This report is used at the field level in order to provide coaching and support to case managers who are not reaching expected outcomes; to analyze the effectiveness of service components; to monitor support service expenditures and appropriateness; and to establish reasonable expectations across groups of staff.

This report, adapted from information in the State system developed for federal reporting under the JOBS program, looks at such aspects as the percentage of clients in each countable activity; the percentage of clients in other components; the amount of support service expenditures per case manager; the placement activities per case manager; and the average wage at placement for each case manager.[4]

*In Utah, management information systems are gathering new information to assess the performance of staff and give continuous feedback to the management teams.*

➨ In **UTAH**, management information systems are gathering new information to assess the performance of staff and give continuous feedback to the management teams. This required the identification of key business processes, determination of outcome indicators of performance that affect the key business processes, and development of initial measures as indicators of performance. For example, one of the 15 performance indicators is the percentage of TANF households subject to work participation requirements and Utah time limits that have earned income.

Utah uses two management information systems to collect and report data on TANF households.

First, the State continues to use a legacy system called PACMIS (Public Assistance Case Management Information System) for eligibility determination and issuance. It is an older system that keeps track of household composition, income, assets, and other data used to determine initial and continued eligibility for several programs, including TANF, Food Stamps, and Medicaid. PACMIS is a mainframe system with a central database, and it is accessed from more than 1200 PCs (that serve as terminals) at 43 one-stop employment centers throughout the State. Two innovations involving PACMIS will make collecting, using, and reporting data easier:

- First, during the next two years, there are plans to web-enable PACMIS to provide greater flexibility to case managers to enter and retrieve data.

- Second, flat files of raw data will be extracted from PACMIS and loaded into a data warehouse where information can be cross-tabulated and queried with data from other systems.

Second, Utah is developing UWORKS (Utah's Workforce System). This web-enabled system is a case management and employment exchange system accessed from more than 1200 PCs (the same ones used for PACMIS) in all 43 one-stop centers throughout the State. In addition to basic case data (characteristics and demographics), UWORKS will track information on households (all members) related to their barriers to employment and self-sufficiency, risk factors, work/training participation activities and employment/career planning. The first phase of UWORKS was deployed on July 5, 2000. Future phases of UWORKS are planned for September 2000 and early 2001. Eventually, UWORKS will have the functionality of a complete labor exchange (job matching) and case management system to administer services to workforce customers funded by TANF, the Workforce Investment Act (WIA), Wagner-Peyser, and Food Stamps Employment and Training. Data from UWORKS will be extracted and loaded into a data warehouse where information can be coupled with PACMIS and other MIS systems for query.

*… the agency will web-enable the data warehouse so case managers and supervisors can query data on customers as needed …*

The data warehouse will combine data from multiple MIS systems including PACMIS, UWORKS, the Unemployment Insurance System (GUIDE), Quarterly Earnings (Wage) File, New Hire Registry, and the UI Tax Contributions System (CATS). The first phase of the data warehouse will contain only data from PACMIS and UWORKS. It will be operational in September 2000. Next year, the agency will web-enable the data warehouse so case managers and supervisors can query data on customers as needed to determine eligibility and assist them in becoming self-sufficient. Eventually, all Federal reports will come from the data warehouse.[5]

### ISSUE 2: THE TANF PROGRAM REQUIRES THAT INFORMATION BE OBTAINED FROM AND SHARED WITH NEW SOURCES.

### CONSIDERATIONS AND BARRIERS:

- TANF introduced new requirements for information that must be obtained from local and community-based entities, such as schools and employment organizations. This requires both the development of new relationships and the development of the means of information exchange.
- There is a lack of standards related to data exchange.
- There are no common definitions for data elements.
- There may not be an information technology architecture sufficient to fully support TANF information collection requirements.
- Other entities may not be equally motivated or empowered to provide or share the required TANF information.

*Sometimes the information that is needed from the new sources is simply not available.*

- Sometimes the information that is needed from the new sources is simply not available. For example, TANF organizations need specific information about the hours clients participate in activities. Many community colleges do not ordinarily track daily student attendance in classes. However, this level of information is necessary in order for community colleges and TANF organizations to deliver services together. How such information is collected, verified, and reported has significant implications for staff time and training.

- It is necessary to obtain information and services from a wide variety of sources that have never been accessed by the legacy human services delivery systems. This implies new interfaces between systems in order to give the case workers all the information they need, from a wide variety of sources, to manage a case, ideally providing the impression to the client that these systems are all integrated into a single service delivery system.

**EMERGING PRACTICES:**

*A core of 14 performance measures … was cooperatively developed …*

➨ In **OREGON,** the Shared Information System was designed to provide new information to new audiences and to gather this information from all the primary partners in the workforce/ welfare reform system. This system was also developed to provide policy makers with the information necessary to make appropriate choices under newly flexible and consolidated programs. A core of 14 performance measures that relate to all the key education, employment, and public assistance systems involved in workforce development was cooperatively developed through interagency efforts. Information on all of these measures will be reported to the respective individual systems as it is gathered. Currently, information on placement, wages, and upward mobility in wages over time is reported to the welfare system. This information could not be accessed without a Shared Information System.

The Shared Information System will also provide a much clearer picture of participant activities across multiple systems, something self-contained agency systems were never able to do. Because all systems are using the same client identifier, it will be possible to analyze the proportion of participants who access services from several organizations, how the pattern of service usage changes or does not change over time, and what level of services or other factors are associated with sustained employment.[6]

**LESSONS LEARNED:**

Staff in Oregon offered these lessons learned:

- Designing and implementing a system that gathers key information across many dissimilar organizations is a long-term undertaking. Development of the Shared Information System began in 1993. Numerous legal, technical, political, and operational issues have affected the design and implementation of the system. Strong legislative and interagency commitment, in terms of both policy and resources, has been necessary for success.

- Exhaustive "up front" work on the system was necessary in order to clarify overall goals, project parameters, project tasks, etc. In Oregon, this process was tightly structured and facilitated, and included extensive outreach to eventual users.

➨ **NORTH CAROLINA** recognized that information technology could enable the restructuring of government operations and service delivery, and that to do so, it would be necessary to share information/data across the many programs currently automated in the State. However, they also recognized that "*the state's present technical infrastructure constrains its ability to improve the way it does business.*" That present technical architecture largely reflects the capabilities and applications systems design approaches of the 1970s and early 1980s.

*North Carolina … developed, published, and is implementing a statewide architecture, that enables the sharing and management of data on a statewide basis.*

As a result, the Office of Information Management developed, published, and is implementing a statewide architecture that enables the sharing and management of data on a statewide basis. The North Carolina architecture can be viewed at http://irm.state.nc.us/techarch/archfrm.htm.[7]

**LESSONS LEARNED:**

North Carolina offers the following lessons learned in implementing a statewide architecture:

- Know that it can be done.
- Do not implement or attempt to implement a technical architecture for technical reasons: implement for business reasons.
- Ensure leadership from the top and collaboration among the stakeholders.
- Make compliance with the architecture relevant to people's lives and careers.

➨ The **OHIO** Department of Human Services (ODHS) has embarked on a project called the Integrated Client Management System (ICMS). The primary objectives of ICMS are to:

- Provide a common front end to ODHS' client information databases,

- Automate case management and referrals for each county, and
- Track participants both within and on exit from public assistance caseloads.

The sharing of data will be performed transparently to the user. Relevant data will be automatically passed from ICMS to each affected legacy system and vice versa.

ICMS is currently a pilot program and county participation is voluntary. Twelve counties are involved. The programs currently included in ICMS are:

- Eligibility,
- Medicaid (partial),
- Food Stamps,
- Child Welfare, and
- Child Support Enforcement.[8]

*Wisconsin's one-stop strategy … has the objective of making all of the different agencies and service providers invisible to the client.*

➨ **WISCONSIN'**s one-stop strategy, which incorporates the State's TANF program into the local one-stop delivery models, has the objective of making all of the different agencies and service providers invisible to the client. For example, in Kenosha County, the one-stop strategy brings together multiple agencies by forming Integrated Service Teams that have the mission to assist participants in achieving long-term self-sufficiency. Integrated Service Teams jointly perform the functions of the Financial and Employment Planner under the Wisconsin Works Program. These Integrated Service Teams manage the activities of participants as they progress through the various levels of economic support and Welfare-To-Work program activities. The system encompasses economic support eligibility determination and case maintenance, Welfare-To-Work program case management, and support services.[9]

**ISSUE 3: AS A PRACTICAL REQUIREMENT, TANF IMPLIES SIGNIFICANT SHARING OF DATA BETWEEN STATES, ESPECIALLY RELATED TO THE TIME LIMIT.**

**CONSIDERATIONS AND BARRIERS:**

- Title I of the Personal Responsibility and Work Opportunity Reconciliation Act contains provisions that require States to track TANF recipients. The establishment of a time limit on benefits, whether provided in one or multiple States, and concerns about duplicate participation, imply the need for States to access information from other States. Although States have some experience with exchanging information, *Although States have some experience with exchanging information, the legislation implies new exchanges of information between States.*

the legislation implies new exchanges of information between States.

- There is a lack of standards related to data exchange.
- There are no common definitions for data elements.
- No inter-state architecture has been defined or agreed upon to support this level of data sharing across State boundaries.
- No entity has been given the statutory authority to solve this problem.
- No entity has been funded to solve data sharing across State boundaries.

**EMERGING PRACTICES:**

➨ Among others, **NEW YORK**, **NEW JERSEY**, and **FLORIDA** are using the Public Assistance Reporting Information System (PARIS) to compare records. PARIS is an information exchange system that provides participating State public assistance agencies with information from Federal and State benefit payment systems. This information can then be used by State agencies to verify client-reported circumstances and identify possible interstate duplicate public assistance payments.

Between 1993 and 1997, the Administration for Children and Families (ACF) provided 29 State public assistance agencies with VA compensation and benefit information for their use in verifying public assistance client circumstances when determining public assistance eligibility and benefits. As a result, the **DISTRICT OF COLUMBIA**, **KANSAS**, **NEW YORK**, **NORTH CAROLINA**, and **TENNESSEE** reported actual and projected savings in various programs: AFDC, Medicaid, Food Stamps, SSI, and other Federal and State public assistance programs. While the remaining 24 States did not provide written reports, they did indicate generally that the information proved useful when verifying client circumstances.

*… program savings of more than $1.5 million were realized through this interstate exchange of information.*

In September 1997, ACF also provided information to 16 States regarding possible duplicate interstate public assistance payments in the same programs mentioned above. States participating in this initiative signed State-to-State agreements for the interstate exchange of information. The State of **PENNSYLVANIA** reported to ACF that program savings of more than $1.5 million were realized through this interstate exchange of information.

PARIS is facilitated by ACF. PARIS development and operation are supported by the Defense Manpower Data Center (DMDC) and telecommunications are provided by the Social Security Administration (SSA).

The PARIS system is currently run quarterly at the DMDC site in Monterey, California. State participation in PARIS is optional and States may choose to participate in any, all, or none of the PARIS quarterly runs. The PARIS User Group has both State and Federal members. However, all issues — such as State input and output record layouts, frequency and timing of runs, and data filtering — are determined by the participating States. There are no charges to States for participating in the PARIS quarterly runs or for membership in the PARIS User Group.[10]

### ISSUE 4: THE TANF PROGRAM REQUIRES THAT INFORMATION BE COLLECTED AND MAINTAINED OVER A LONGER TERM LIFE CYCLE OF SUPPORT.

**CONSIDERATIONS AND BARRIERS:**

- Under AFDC, the traditional "start point" and "end point" of case manager involvement with a client has been the opening and closure of the cash grant. TANF legislation moves both the "start point" (through increased options to use resources to divert clients from opening a grant) and the "end point" (through increased options to support movement from initial employment to better employment).

*Information (generally not available) is needed over the long term about "what works"…*

- Information (generally not available) is needed *over the long term* about "what works" to support better case management and service delivery. For example—
    - Information on diversion activities and expenditures becomes important with the expanded life cycle of services. It is not just people who receive cash grants who must be considered "clients." Those who come for assistance but never open a grant are also important to understand in this new system.
    - Information on post-placement activities and upward mobility of clients becomes important with the expanded life cycle of services. Clients who are no longer receiving cash assistance may still be receiving transitional benefits — such as medical assistance or child care subsidies — for an extended period. Even clients who are not receiving transitional benefits may still be at risk of returning to the caseload. Information that leads to an understanding of how and when clients move toward self-sufficiency, what services are critical

to this journey, and what happens to those who go off the caseload is necessary in the new TANF environment.

- The five year life-time limit affects record retention, the purging and archiving of information in the data bases, and ultimately the size of the data base. In the design of these new requirements, it must be recognized that *the life of this data is now the life of the individual*, not just the life of the current case in the TANF system.

## CASE MANAGEMENT AND SERVICE DELIVERY

Case management and service delivery involve the tasks necessary to ensure that the client is participating in activities that will lead from welfare to self-sufficiency. Case management is the process of assessing, initiating, implementing, coordinating, planning, monitoring, and evaluating needed services. Service delivery involves all the tools, processes, and procedures necessary to ensure that client services are available, appropriate, and monitored for efficiency and effectiveness.

*Due to expanded services and goals under TANF, case management and service delivery are more complex …*

Due to expanded services and goals under TANF, case management and service delivery are more complex than under AFDC. This factor is reflected in the technical, programmatic, and information-related challenges in the issues that follow.

### ISSUE 5: ADDITIONAL FUNCTIONALITY IN IT SYSTEMS IS REQUIRED TO MEET EXPANDED AND CHANGING SERVICES AND GOALS UNDER TANF.

**CONSIDERATIONS AND BARRIERS:**

- IT systems designed primarily to meet federal reporting requirements and to issue benefits need to be enhanced to provide functions necessary to support expanded service delivery, performance measurement, and program evaluation.

- IT solutions to information needs and issues must be carried out in an environment of ongoing change in TANF program services and caseload dynamics. IT solutions must not assume that new information needs and new sources of information addressed this year will be the same as those that are critical next year. While eligibility requirements also changed over time, both the speed and the magnitude of such changes were significantly less.

*IT and program leaders will need to constantly analyze, project, and make decisions regarding the most critical information needs.*

- IT and program leaders will need to constantly analyze, project, and make decisions regarding the most critical information needs. The rapid rate of change may require both short- and long-term strategies. It may be that the most comprehensive "fix" may not be the most productive or effective solution.

**ISSUE 6: NEW ROLES AND RESPONSIBILITIES IN CASE MANAGEMENT AND SERVICE DELIVERY REQUIRE NEW PROCESSES, PROCEDURES, AND USES OF INFORMATION.**

**CONSIDERATIONS AND BARRIERS:**

- While most decisions related to eligibility are clearly mandated by law or policy, many decisions under TANF require *using information in new ways* to make good choices related to case management and service delivery. Such decisions include the following:

  - What services are available and appropriate for this client, prior to opening a cash grant and/or during receipt of a cash grant, and following closure of the cash grant?

  - What services, from within and outside the TANF organization, need to be included in the client's plan to move to self-sufficiency?

  - What is the best way to monitor and evaluate this client's progress based on the information available? What "new" information is needed that is not now available?

  - What is the best way to monitor and evaluate the effectiveness of the services this client is receiving?

  - How can information from other organizations best be used to facilitate and coordinate the delivery of multiple services to this client?

  - Which clients who have gone to work will be most in need of job retention services? Which clients will benefit from wage progression services? Will client information be used proactively to determine who will be served in post-placement services (for instance, by client characteristic or category)? Will post-placement services be provided based on which clients request such services, or come back to TANF with additional needs?

- What policy guidance exists for the use of new information? What factors will be considered in using information to make decisions where there is no clear cut "right" answer?

*Under TANF, determining what constitutes "success" is much more complex …*

- Under TANF, determining what constitutes "success" is much more complex, requiring new uses of information, analytical skills, processes, and procedures. Case workers and managers must consider—
  - How, when, and in what form do case managers and line managers need to have information delivered in order to use it effectively in client and service delivery decisions?
  - What procedures, processes, or training help ensure that case managers and line managers understand the connections between various types of information, service decisions, and program outcomes? In other words, what information should be used for what types of decisions in order to create what type of program outcome?
  - What case management approaches result in the best client outcomes (in addition to timely and accurate benefits)? What case management approaches impact caseload declines, job retention, wage progression, effective service referral and usage, and other performance indicators?
  - In addition to error rates and traditional measures of staff efficiency and effectiveness under AFDC, what additional information will be used to evaluate how well staff and managers are carrying out their new roles and responsibilities under TANF?
- Under TANF, the population served is much more dynamic, requiring dynamic adaptation in processes, procedures, and uses of information. The caseload is a constantly changing configuration of "easy to serve" and "harder to serve" clients. In service delivery decisions, what information is necessary, when it is necessary, where it comes from, and how it is used will all be influenced by the "type" of client being served.

*New information technology solutions are required for these new roles and responsibilities …*

- New information technology solutions are required for these new roles and responsibilities in case management in order to effect client-specific decision making. In many cases, these new solutions will displace traditional functions and relationships and necessitate major redesign or abandonment of legacy systems. The IT requirements include, but are not limited to the following:

- More coordination between programmatic and information technology staff in order to construct and understand rapidly changing user requirements.

- The need to access and map data on employers, child care, school attendance, etc., that has not historically been shared between programs and providers.

- New decision-support capabilities to help guide caseworkers and decision makers in the generation of client-specific plans for self-sufficiency. Decision-support functionality requires sophisticated technology and information tools.

- Ad-hoc reporting capabilities against new data in order to develop better management information for case plans and service delivery systems.

- More IT proficiency by case workers to manipulate their way through the system.

- More complex database management capability.

**EMERGING PRACTICES:**

➨ The **STATE OF WASHINGTON** has initiated WPLEX, a centralized, follow-up effort to ensure that TANF clients who have gone to work at least 20 hours per week are contacted after placement in order to explore additional needed services for upward mobility and family stability. These could include educational services, job upgrade services, transitional benefits, help with the Earned Income Tax Credit, or reconnection with TANF case managers for needed resources or services. Employment Security staff work from a call center, reaching out to clients across the State.

*This effort required IT coordination of information …*

This effort required IT coordination of information from the Employment Security System (related to available jobs), the community college system (related to training opportunities and available resources), and the TANF system (related to client status and contact information). Call center staff have direct access to both the Employment Security JobNet system and the Department of Health and Social Services JAS system. (JAS is the acronym for JOBS Automated System, a State system designed to meet federal reporting requirements under the JOBS program.) Codes were designed to report back to TANF caseworkers what was happening with the clients WPLEX staff were charged with contacting.[11]

*The State of Washington is using an internal website to assist caseworkers with new data collection and reporting requirements.*

➨ The **STATE OF WASHINGTON** is using an internal website to assist caseworkers with new data collection and reporting requirements. This website not only keeps caseworkers current on quickly changing aspects of data collection and reporting requirements, but offers clever incentives for caseworkers to "test their knowledge" through awarding prizes and promotional items.[12]

**LESSONS LEARNED:**

Staff in Washington offered this lesson learned: An overly ambitious schedule was not helpful. A more realistic schedule would have been better.

➨ In **OREGON**, 23 counties are in the early implementation stages of a new case management data system that is expected to greatly increase functionality. The system is intended for use in programs that include many service providers, and is designed to track client information across multiple providers. Client data can be manipulated to generate a variety of both standard and ad hoc reports. In addition, the data can be "rolled-up" by geographic area for more comprehensive reports. Case management functions such as program planning, referral, monitoring and documentation are supported by the system.[13]

*UWORKS will provide State employees the ability to track services in a seamless manner to the customer, while capturing required program and funding source information.*

➨ **UTAH** is currently developing Utah's Workforce System (UWORKS), a computer system to facilitate service delivery through its one-stop centers and the Internet. The overall goal of UWORKS is to support customers through services and information needed to obtain employment and provide for their families. The system can be accessed through self-service or with staff assistance. The first phase of this system was implemented July 5, 2000.

UWORKS will consolidate current mainframe case management computer systems used to track Federal and State program and funding requirements (TANF, WIA, FS E&T, Wagner Peyser, etc.). UWORKS will provide State employees the ability to track services in a seamless manner to the customer, while capturing required program and funding source information. UWORKS will assist State employees in managing caseloads, scheduling resources, and providing accountability and outcomes for the customers served.

UWORKS tracks customers through such phases as:

- Registration/Intake
- Assessment
- Employment Planning
- Labor Market Information
- Job Search Services
- Education and Training Provider Information
- Progress Tracking/Case Management
- Eligibility
- Monitoring/Activity Tracking
- Evaluation/Placement Outcome
- Counselor Notes
- Interface with legacy computer systems[14]

### ISSUE 7: TANF SERVICE DELIVERY REQUIRES INTERACTION WITH OTHER ORGANIZATIONS AND INFRASTRUCTURES THAT SERVE PURPOSES OTHER THAN TANF ADMINISTRATION.

#### CONSIDERATIONS AND BARRIERS:

*It is not only the technical aspects of TANF information systems that make integrated service delivery so difficult.*

It is not only the technical aspects of TANF information systems that make integrated service delivery so difficult. Many organizations are involved and those organizations have different "cultures." Missions, goals, organizational values, operational norms, personnel systems, and legislative mandates all complicate cooperation and case management across these organizations. In order to build information systems that meet the needs of the new TANF system, it is first necessary to reach programmatic and policy agreement on "common ground" related to information needs across partner organizations.

- Education, employment and training, human services, and community-based organizations often have information systems that serve very different functions and reflect very different organizational values. For example, human services organizations' legacy information systems were designed to address eligibility determination and fraud/abuse issues. Education organizations have built information systems directed toward service delivery and individual student grading. Employment and training organizations focus on specific service outcomes, such as job placement, wage at placement, and job retention, and have built information systems to report on these outcomes.

- Organizational values related to data collection and reporting can make interagency approaches difficult. For example, in organizations such as community colleges in which self-reporting of information is the norm, verification of information may seem an unnecessary and intrusive step. In systems such as TANF in which independent verification is the norm, acceptance of self-reported information may seem

*Building effective interagency information systems or information agreements involves not only technical alignment of information technology but alignment of these "cultural" elements, as well.*

inappropriate and bring into question the accuracy of the information. These are "cultural" judgments that relate to unspoken but strongly held beliefs about the individuals being served, the information necessary to serve them, and the proper use of that information. Building effective interagency information systems or information agreements involves not only technical alignment of information technology but alignment of these "cultural" elements, as well.

- Even within the same organizational culture, there may be disagreements about the information that must be shared to provide services and ensure program success. Not surprisingly, these disagreements are magnified when trying to determine what is appropriate across organizations. Considerations include:

  - Type of information: What kinds of things do we need to know?
  - Amount of information: How much do we need to know?
  - Use of information: How do we use what we know?
  - Sensitivity of information: What are the implications (including the "downside") of having the information?
  - Level of verification of information: What can we use self-reporting for? What information do we need verified? How extensive must the verification be?
  - Appropriate level of sharing of information with other agencies: Who should have access to what information and under what circumstances?
  - Appropriate security measures: How do we agree to safeguard the information?

**EMERGING PRACTICES:**

➨ Recognizing that moving individuals to self-sufficiency could not be done solely with government resources, **KENTUCKY** used the Internet to connect numerous community-based organizations to assist individuals seeking services, in a system called **"**KYCARES."

KYCARES is an Internet guide to thousands of health, human, and employment service providers throughout Kentucky. It is easy to use, accessible from any computer with Internet access, free, and available to everyone 24 hours a day, seven days a week. A person with little or no Internet experience can easily navigate the site. Point-and-click selections make the system easy to use and understand. Individuals perform key word searches to find providers of services they are seeking. They may also answer a series of questions about their individual situation, and the answers to these questions will lead the individual to the appropriate service provider and provide general eligibility information. Users of the system remain anonymous in their search for services. To keep the information current, service providers are responsible for updates to their information.[15]

## TECHNOLOGY AND RESOURCE MANAGEMENT

*The level of automation necessary to satisfy the new TANF environment requires information technology staff and skills that are in short supply …*

The level of automation necessary to satisfy the new TANF environment requires information technology staff and skills that are in short supply in many States. The ability of States to staff and manage this level and scope of project and technology is being put to the test. This section identifies the major issues this has presented to the States in terms of technology and resource management.

### ISSUE 8: THE INABILITY OF STATES TO RECRUIT AND RETAIN SUFFICIENT QUALIFIED INFORMATION SYSTEMS STAFF AFFECTS THEIR ABILITY TO IMPLEMENT INFORMATION TECHNOLOGY SOLUTIONS NECESSARY TO REALIZE THE NEW GOALS AND DIRECTIONS OF TANF.

**CONSIDERATIONS AND BARRIERS:**

- Nationwide, there is an acute shortage of qualified information technology professionals, and State governments represent just one more competitor for these scarce resources.
- Typically, State compensation plans do not compete very well with those of the private sector, making it more difficult for States to hire and retain qualified staff.
- Existing State information technology staff, who have been maintaining the older technology legacy systems, and/or doing Year 2000 remediation for the last few years, have not been trained in the new technologies necessary to support the more complex systems necessitated by TANF.

**EMERGING PRACTICES:**

*Missouri initiated a project to focus on developing a local information technology workforce.*

➨ Like most other government entities with salaries that have not kept pace with the private sector, **MISSOURI** faced the problem of how to recruit and retain qualified information technology staff. Analyzing the problem, they found the stability of their workforce came from those who were born, raised, and had family ties to the area, whereas those recruited from "outside" tended to stay several years then move away to higher paying private-sector jobs. So Missouri initiated a project to focus on developing a local information technology workforce.

Tapping local Chambers of Commerce, industry, and colleges and universities, Missouri formed a coalition that focused on two target groups of potential information technology professionals: the working adult and middle and high school students. For the working adults — those underemployed and/or seeking a career change — the coalition hosted job fairs and produced public service announcements. For the second targeted group, the coalition formed a speakers' bureau that works with local schools to regularly address assemblies and classes. In addition, a local television station produced a five-minute video, targeted to the age group, showing the benefits and opportunities of an information technology career.

*Results have been impressive.*

Results have been impressive. Local colleges and universities have had to add evening information technology classes, and one university added an evening information technology degree program.[16]

**LESSONS LEARNED:**

Staff in Missouri offered these lessons learned:

- Understand that the need to recruit and retain quality people is not unique to your organization. There are other organizations in your region who need information technology staff and are experiencing the same difficulties. While a normal reaction would be to view them as competitors for limited resources, be willing to collaborate with them to solve the common problem. You will learn that they are eager to participate with you.

- Be bold in pursuit of your vision. This coalition established themselves as a non-profit. As such, they have been able to take positions on some local school bond measures, which were intended to improve technology in the local schools. The coalition believed that improving the schools' technology capacity was consistent with their goal of increasing the pool of qualified technology individuals.

- Recognize that the educational community really wants to turn out employable graduates, but doesn't always know what is needed. Including them in the coalition with the local employers provides the employers a new opportunity to influence curricula. Several employees of the coalition partners have become adjunct professors at the universities and, as such, can even further influence the curricula towards satisfying the needs of the local labor market.

*It's amazing what can be done "on a shoestring" with dedicated individuals working toward a common goal.*

- It's amazing what can be done "on a shoestring" with dedicated individuals working toward a common goal. Funding comes from annual fees of $500 per employer and $250 per school. This funding has been used to develop Public Service Announcements, outreach brochures, etc.

- Make it neutral. The coalition included the local Chamber of Commerce, economic development unit, in its coalition. The coalition always meets at the Chamber facility as opposed to another member facility. There was a concern that, if they always met at one of the employer or educational facilities, it would appear that the program was sponsored by that interest.

➨ **IDAHO** had also experienced a significant workforce loss from information technology staff leaving State government positions. This exodus was putting at risk Idaho's significant investment in information technology as well as their ability to maintain normal business operations. Exit interviews revealed that "lack of training" was often cited as a major reason for departure.

In response, Idaho's Information Technology Resource Management Council (ITRMC), with seed money from the Idaho Department of Labor, established the "Information Technology Training Program" (ITTP).

The ITTP provides statewide professional development training for information technology professionals, in both classroom-based and Web-based formats. Further, there is a uniform curriculum that assists in the establishment of statewide standard methodologies and practices. Examples of classes include NT or Novell System Administration, programming, Project Management, Oracle database, and so forth.

*[There were] estimated savings in excess of $500,000 when compared to comparable training available from retail sources.*

In addition to meeting employees' needs, the ITTP has saved money, estimated to range from a 20 to 35 percent reduction in the cost of training per class, depending on the subject matter. Between January 1998 and March 1999, Idaho trained 736 professional IT staff and 4,727 other staff on desktop applications, with an estimated savings in excess of $500,000 when compared to comparable training available from retail sources.[17]

**LESSONS LEARNED:**

Staff in Idaho offered these lessons learned:

- Remember: Competition is key. Capitalism works. The State does not establish large single contracts for all training; rather for each subject or product, they obtain competitive bids from a variety of vendor and educational institutions. This has resulted in better classes and very competitive prices.
- Use dynamic curriculums that stay current with industry-standard and State-standard software products and methodologies.
- Recognize that individuals learn in different ways, so offer training in a variety of modalities: face-to-face, web-based and computer-based training, and video.
- Have training facilities geographically dispersed around the State to accommodate remote training. Idaho uses classrooms in six regional technical colleges.
- Come together for a common good. This is one area where various State agencies can cooperate and get better solutions at better prices than going it on their own.

➨ In recent years, **KANSAS** State government has experienced extremely high turnover among IT staff, a situation complicated by a dwindling pool of highly skilled IT workers.

In response to the problem, computer technology and human resource experts from across Kansas government met to study, discuss, and seek resolution to employment issues in the IT job field. As a result, Kansas initiated a recruitment and retention program that includes "bonusing" with repayment provisions, functional user IT aptitude assessments, advanced training, employee contracting, and home telecommuting.  Two of these strategies merit further discussion in this report:  bonuses and aptitude testing and training.

The bonuses are targeted.  That is, they do not cover all IT jobs, but instead target predefined skills.  All bonuses are linked to an approved list of mission-critical, market-sensitive skills and contain payback provisions to discourage employees from leaving their jobs.

Functional users with an aptitude for information technology receive ten weeks of basic skills training from Kansas Vocational Training Schools.  In return for the training, the employee is committed by contract to stay with the State for three years or incur an obligation under payback provisions.

*The program … has reduced the IT staff turnover rate to under 7 percent per year …*

The program, funded from internal resources, has reduced the IT staff turnover rate to under 7 percent per year, compared to turnover rates that formerly exceeded 33 percent per year in some agencies.  Projects are now on schedule and recruiting is manageable.  The program did not change or affect Kansas' classification system or pay plan.[18]

➨ **UTAH'S** Department of Workforce Services recognized an untapped resource:  current departmental staff who were interested in pursuing an IT position, but were missing one or more required qualifications to be considered a candidate for the job.  The department decided to offer four career mobility positions in the IT Division.

Departmental staff interested in the IT Trainee Program submitted resumes and took the Computer Programmer Aptitude Battery test, copyrighted by National Computer Systems.  This test was administered and scored by a certified tester.  All applicants were asked to sign an Employment Agreement which included special terms and conditions:

- If selected, the employee may not refuse to participate in required training.
- If employment is terminated prior to 12 months from the conclusion of training, the employee is responsible to reimburse the department the cost associated with the training course.
- The Department agrees to inform the employee in advance of all associated training costs.
- Costs associated with typical employee training (customer service, employee orientation, etc.) will not require reimbursement.

- If employee remains employed for 48 months or more, the terms of agreement will not apply.

*… three out of four still work for the State and are exceptional employees.*

With regard to results, after six months, three out of four staff were promoted to permanent status, and one had career mobility extended for an additional six months. At the end of an additional six months, this person was also promoted to permanent status. With regard to retention, three out of four still work for the State and are exceptional employees. The fourth left State employment for private sector employment in the technology field.[19]

**ISSUE 9: THE SKILLS NECESSARY TO MANAGE LARGE-SCALE INFORMATION TECHNOLOGY PROJECTS ARE NOT READILY AVAILABLE WITHIN MANY STATES.**

**CONSIDERATIONS AND BARRIERS:**

- As a result of the shortages of qualified State technology staff, States often contract out the development of new technology systems, requiring more experienced procurement/project management staff at the State level.
- There is a nationwide shortage of qualified project and contract managers.
- Typically, State compensation plans do not compete very well with those of the private sector, making it more difficult for States to hire qualified staff.
- The dynamic nature of the human services programs causes changes in scope of work before final solutions can be implemented, adding to the complexity of the systems being developed and deployed and making project management more difficult.

**EMERGING PRACTICES:**

➨ As **CALIFORNIA** began the task of automating welfare reform, the legislature recognized, based on past experience, that the State and county IT staff — who would be responsible for the day-to-day management of these new, very large IT projects — did not have the skill sets necessary to manage these efforts successfully. As a result, California required (through the budget process) the development of a project management curriculum to be taught to all mid-level-and-above managers associated with these automation projects.

The course curriculum (now in place) is designed to qualify individuals to obtain the Project Management Professional

*… having all the managers on a project trained in the same process is improving the management of the projects.*

(PMP) certification from the Project Management Institute. Private-sector instructors, experienced in project management, teach the course. To date, California has trained over 36 managers associated with the automation of welfare reform, both at the State and county level. Early indications are that having all the managers on a project trained in the same process is improving the management of the projects.[20]

**ISSUE 10: FUNDING DYNAMICS FOR AUTOMATION OF HUMAN SERVICES SYSTEMS HAVE CHANGED SIGNIFICANTLY.**

**CONSIDERATIONS AND BARRIERS:**

*Instead of funding an information technology project, would the money be better spent on child care or some other direct service?*

- Pre-TANF, when States initiated information technology projects and were justifying and obtaining funding for the proposed project, the funding was available specifically for information technology on an administrative matching basis, sometimes at enhanced Federal participation rates. In this environment, the only competition was for State matching funds.

  Today, when requesting funding for information technology projects, the merits of the project are compared against other *programmatic* uses of the money. This means that State decision makers consider this question: *Instead of funding an information technology project, would the money be better spent on child care or some other direct service?* This dynamic makes it more difficult for information technology projects to obtain funding.

- Historically, when welfare systems have been automated, the costs associated with that automation have been allocated to traditionally participating programs (such as AFDC, Food Stamps, and HCFA) in accordance with approved cost allocation formulas. In the TANF world, additional programs and partners, like employment security and education, are being included in the new automated solutions. Establishing the proper cost allocation formulas between and among these new partners takes analysis and time.

## SECURITY AND CONFIDENTIALITY

As stated earlier in the report, implementing TANF necessitates the sharing of data between various programs and organizations. Each of these programs and organizations has its own laws, regulations, policies, procedures, and case law concerning the

*… the guidance under which one program operates can be in conflict with others …*

security and confidentiality of information collected and used for their systems. Furthermore, the guidance under which one program operates can be in conflict with others to the extent that it either prevents the sharing of data — or that, once shared, the data has a lower security level in the new system than it had in the old system.

### ISSUE 11: BECAUSE TANF REQUIRES A SIGNIFICANT AMOUNT OF DATA SHARING AMONG A WIDE VARIETY OF DIFFERENT STATE AND FEDERAL PROGRAMS, SECURITY OF THIS SHARED INFORMATION IS A SIGNIFICANT ISSUE.

**CONSIDERATIONS AND BARRIERS:**

- As data are now moved around the network, shared with systems and individuals never before envisioned using the information, there are a significant number of technical, operational, cultural and leadership issues involved in making certain that an equivalent level of security can be maintained.

**EMERGING PRACTICES:**

*In Wisconsin … each major system has a Data Steward.*

➨ In **WISCONSIN,** in order to insure the confidentiality of information, each major system has a Data Steward. The Data Steward, appointed specifically for the task, is responsible for the development and administration of data exchange agreements with other systems as well as with other outside organizations. Data exchange agreements are confidentiality agreements between the associated entities, enumerating the business purposes for the exchange of data. These agreements form a chain of accountability that holds the parties in the agreement to strict confidentiality requirements. If security requirements are violated and confidential client information is compromised to unauthorized parties, the agreement spells out corrective actions that are to be taken, including the denial of system access. In addition, individuals who compromise the confidentiality of client information are subject to Wisconsin State Statutes on computer crime.[21]

### ISSUE 12: TANF REQUIREMENTS FOR SHARING DATA ACROSS PROGRAMS AND ORGANIZATIONS RAISE ISSUES ON CONFIDENTIALITY.

**CONSIDERATIONS AND BARRIERS:**

- There are barriers to the achievement of TANF implementation in laws and regulations designed to protect the privacy of individuals. One example is that TANF requires school attendance information as a condition of continued eligibility. In some States, school districts are restricted from releasing that information to anyone other than the parent or guardian. Another example is that in some organizations, as a matter of policy, staff refrain from using client names in e-mail correspondence. Other organizations they now must interface with believe this inhibits their ability to work effectively together. Therefore, TANF requirements for sharing of data are at times in conflict with State privacy and confidentiality laws and partner organizations' practices.

**EMERGING PRACTICES:**

- ➨ The **OHIO** Family and Children First (OFCF) Cabinet Council entered into an agreement that permits and encourages local political subdivisions and their contractual providers to share information. Clients are asked by each system involved to complete a release of information form.[22]

## CONCLUSION

Recent reforms to the nation's human services programs have created significant challenges for States' information systems and information systems managers in human services organizations, as well as those in the partner organizations that deliver services. Those challenges relate to the sweeping changes in the collection, use, and reporting of information; in the ways that systems and people interact; in the manner in which cases are managed and services delivered; in the skills and abilities of the people supporting TANF; and in the funding dynamics of information technology projects.

This study identified issues and challenges facing State IT executives as a result of welfare reform, surveyed the States' potential solutions to those problems, and evaluated and disseminated lessons learned from the various State initiatives. As part of this study, we met with experts from States in TANF and IT, creating an exchange of information among and within States. We conducted a workshop, which included ACF and fourteen State IT and TANF program leaders, to identify major challenges among the States. Twelve major issues were identified.

*… States have achieved notable success in moving people from welfare to self-sufficiency.*

While solutions for these issues and challenges are emerging and some may have applicability beyond the borders of a single State, the results of this study suggest that the transition of States' information systems to support TANF is still in its early stages.

Nonetheless, States have achieved notable success in moving people from welfare to self-sufficiency. For example, in 1998, more than 1.3 million parents went to work. The earnings of families that remained

*To take success to the next level, States need to continue to improve their use of information and information systems.*

employed two quarters later increased by 23 percent. Welfare caseloads have decreased in historic numbers. There were half as many families on welfare in 1999 as there were in 1993. Further, all States are meeting the 1996 welfare reform law's requirement for a minimum percentage of all families working or participating in work activities. Nationally, 35 percent of all welfare recipients were working or in work-related activities in 1998, nearly quadruple the percentage from 1992.[23] To take success to the next level, States need to continue to improve their use of information and information systems. ✧

Attachments:
Matrix of Emerging Practices
Focus Group and Stakeholders
Endnotes

## MATRIX OF EMERGING PRACTICES

| Issue Area | Issue # | State | Description of Emerging Practice | Page # | For Further Information |
|---|---|---|---|---|---|
| Data Collection, Reporting, and Systems Integration | 1 | OR | Performance Reporting | 13 | Debbie McCollough at (503) 373-1993 ext. 285 |
| | 1 | UT | Utah's management information systems, contact | 14 | Rick Little at (801) 526-9719 |
| | 2 | OR | Shared Information Systems | 16 | John Glen at (503) 947-1234 |
| | 2 | NC | Establishment of a statewide architecture that permits sharing and management of data | 17 | Rick Webb, State CIO, at (919) 981-2680 or Rick.Webb@NCMail.net.<br><br>http://irm.state.nc.us/techarch/archfrm.htm |
| | 2 | OH | Development of the Integrated Client Management System (ICMS) | 17 | Phil Harrell at (614) 564-1409<br><br>Gwen Harris at harrisg@odhs.state.oh.us |
| | 2 | WI | Services planned and delivered by Integrated Service Teams | 18 | Christine Williams at (608) 267-7269<br><br>http://www.dwd.state.wi.us/desw2/ResourceGuide/ |

## MATRIX OF EMERGING PRACTICES

| Issue Area | Issue # | State | Description of Emerging Practice | Page # | For Further Information |
|---|---|---|---|---|---|
| | 3 | NY, NJ, FL | PARIS information exchange system | 19 | Bill Davis (ACF) at (202) 401-6404 |
| Case Management and Service Delivery | 6 | WA | WPLEX follow-up call center | 24 | Cindy Mund, (360) 413-3206<br>Glynnis Ashley, (360) 438-4063 |
| | 6 | WA | Website | 25 | Sydney Doré<br>doresm@dshs.wa.gov |
| | 6 | OR | Case management | 25 | Jeff Dickason at (541) 928-0241 ext. 227<br>jeffd@tocowa.org |
| | 6 | UT | Utah's Workforce System (UWORKS) | 25 | Marie Christman at (801)526-4377 |
| | 7 | KY | KYCARES: Internet guide to health, human, and employment services in Kentucky | 27 | Patrice Carroll at (502) 564-1856 X227<br>www.kycares.org |
| Technology and Resource Management | 8 | MO | Coalition to develop local IT workforce | 29 | Jan Grecian at (573) 526-7743<br>grecij@mail.oit.state.mo.us |

## MATRIX OF EMERGING PRACTICES

| Issue Area | Issue # | State | Description of Emerging Practice | Page # | For Further Information |
|---|---|---|---|---|---|
| | 8 | ID | Establishment of Information Technology Training Program | 30 | Cliff Green at (208) 334-3216<br><br>ITTP@adm.state.id.us |
| | 8 | KS | Kansas initiated a recruitment and retention program | 31 | Don Heiman at (785) 296-2731<br><br>donh@dadisc1.wpo.state.ks.us<br><br>www.nasire.org/scoring/files/kansas5.doc |
| | 8 | UT | IT Trainee Program | 32 | Marie Christman at (801)526-4377 |
| | 9 | CA | Project Management Professional certification | 33 | Del Luttges at (916) 739-7500 |
| Security and Confidentiality | 11 | WI | Data Steward | 35 | Tim Hineline at (608) 266-2721<br><br>hinelti@dwd.state.wi.us |
| | 12 | OH | Development of an agreement for information sharing | 36 | Marlene Preston-Rombach at (513) 852-3280) |

## AUGUST 23,1999 TANF FOCUS GROUP ATTENDEE LIST

| Name | State or Agency represented |
|---|---|
| Jeffrey Borkman | IT, District of Columbia |
| Arlene Conover | Director TANF Policy, District of Columbia |
| Vashiti Savage | IT Manager, Maryland |
| Joseph Costa | ACF |
| Bill Davis | ACF |
| Russ Bohart | TANF Consultant to SITC |
| Tom Davies | TANF Consultant to SITC |
| Ernest Hodge | SITC |
| George Loulis | SITC |
| Jim Marple | SITC |

## TANF WORKSHOP ATTENDEE LIST

| State | Name | Title | Policy or IT |
|---|---|---|---|
| Alabama | Jeff Barnes | BP Reengineering Analyst | IT |
| | Tom Sellers | Assistant Director CIS | IT |
| | Debbie Wood | Director, Office of Program Operations | Policy |
| Colorado | Maureen Dove-Yuhas | Program Specialist | Policy |
| | Orlando Dunn | Programmer/Analyst | IT |
| Delaware | Nina Licht | Social Service Administrator | Policy |
| | Jim Salb | IT Architect | IT |

| State | Name | Title | Policy or IT |
|---|---|---|---|
| District of Columbia | Arlene Conover | Director | Policy |
| Florida | Mr. Kim Brock | Chief - Tech & Sys Development | Policy |
| | William Hudgens | Database Administrator | IT |
| Georgia | Linda Russell | IT Manager | IT |
| | Lynn Sims | Application Manager | IT |
| Indiana | Charles Jackson | Project Manager | IT |
| | Carol McMichen | Deputy Project Manager | IT |
| Kansas | Roger Lewis | Systems Administrator | Policy |
| Kentucky | Trish Greathouse | Resource Mgmt Analyst | IT |
| | Kelly Jackson | Internal Policy Analyst | Policy |
| Michigan | Bev Hedin | Director Program Coordination | Policy |
| Minnesota | Kate Wulf | Director, MAXIS Division | Policy |
| New Jersey | Rich Ambrass | Manager, Office of IT | IT |
| | Beth Connolly | Special Projects Coordinator | Policy |
| Washington | Scott Reese | Manager Special Projects | Policy |
| Wisconsin | Tim Hineline | IT Supervisor | IT |
| | Christine Williams | IT Supervisor | IT |
| Consultants | Russ Bohart | | |
| ACF | Joe Costa | | |
| | Bill Davis | | |
| SITC | Ernie Hodge | | |
| | George Loulis | | |
| | Jim Marple | | |

[1] *Welfare Reform: Improving State Automated Systems Requires Coordinated Federal Effort,* General Accounting Office, GAO/HEHS-00-48, April 2000.

[2] *Report to Congress on Data Processing*, State Survey Results, Temporary Assistance for Needy Families (TANF), Appendix B, December 1997, U.S. Department of Health and Human Services, Administration for Children and Families.

[3] *Welfare Reform: Improving State Automated Systems Requires Coordinated Federal Effort*, op. cit., page 57.

[4] For further information on the Oregon performance and outcomes reporting, contact Michael Buckley at (503) 945-6127.

[5] For further information on Utah's management information systems, contact Rick Little at (801) 526-9719.

[6] For further information on Oregon's Shared Information System, contact John Glen, Employment Department, at (503) 947-1234 or john.l.glen@state.or.us. The URL for additional information is http://findit.emp.state.or.us/sis/.

[7] For further information on the North Carolina architecture project, contact Rick Webb, State CIO, at (919) 981-2680 or Rick.Webb@NCMail.net.

[8] For further information on Ohio ICMS, contact Phil Harrell at (614) 564-1409.

[9] For further information on Wisconsin's one-stop strategy, contact Christine Williams at (608) 267-7269 and/or see http://www.dwd.state.wi.us/desw2/ResourceGuide/.

[10] For further information on PARIS, contact Bill Davis of the Administration for Children and Families at (202) 401-6404.

[11] For further information on the State of Washington WPLEX project, contact Cindy Mund, Workfirst DSHS, at (360) 413-3206 or Glynnis Ashley, Employment Security, at (360) 438-4063.

[12] For further information about the State of Washington website, contact Sydney Doré, Communications and Policy Assurance Manager, State of Washington Department of Social and Health Services, doresm@dshs.wa.gov

[13] For further information about Oregon case management, contact Jeff Dickason, Director of Development, The Oregon Consortium and Oregon Workforce Alliance, (541) 928-0241 Ext. 227, jeffd@tocowa.org.

[14] For further information about Utah's Workforce System (UWORKS), contact Marie Christman, Director Service Delivery Support, at (801)526-4377.

[15] For further information about KYCARES, contact Patrice Carroll at (502) 564-1856 X227 or Pcarroll2@mail.state.ky.us. The URL for additional information is www.kycares.org.

[16] For further information about Missouri's workforce initiatives, contact Jan Grecian at (573) 526-7743 or grecij@mail.oit.state.mo.us. See also www.jcitc.org.

[17] For further information on Idaho's Information Technology Training Program, contact Cliff Green at (208) 334-3216 or ITTP@adm.state.id.us.

[18] For further information on Kansas' workforce program, see www.nasire.org/scoring/files/kansas5.doc or contact Don Heiman, Chief Information Officer, State of Kansas, 900 SW Jackson, Suite 751, Topeka, KS 66012, (785) 296-2731, donh@dadisc1.wpo.state.ks.us.

[19] For further information about Utah's IT Trainee Program, contact Marie Christman, Director Service Delivery Support, at (801)526-4377.

[20] For further information on California's project management training, contact Del Luttges at (916) 739-7500 or Dluttges@HWDC.state.ca.us.

[21] For further information on Wisconsin's Data Steward, contact Tim Hineline at (608) 266-2721 or hinelti@dwd.state.wi.us.

[22] For further information about the Ohio agreement, contact Marlene Preston-Rombach at (513) 852-3280) and Scott Johnson at (614) 466-6511.

[23] *Welfare Reform: Improving State Automated Systems Requires Coordinated Federal Effort*, op. cit., page 72, comments of the Department of Health and Human Services.