

# **Reengineering Business Processes to Integrate the Delivery of Human Services in North Carolina**

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## **I. OVERVIEW OF SYSTEM INITIATIVE AND THE OBJECTIVES**

The federal Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) and North Carolina's welfare reform law along with new technologies have provided a unique opportunity. Now North Carolina has the chance to review the manner in which it provides information and services and delivers program benefits to eligible citizens and the automated capabilities utilized in support of those activities. The state believes the time is propitious for the redesign of the old generation of systems into a single, comprehensive statewide system that would provide the following functions:

- Support a truly integrated human services delivery approach that moves beyond the current welfare environment.
- Provide proactive case management tools that will allow local agencies to manage caseloads more effectively.
- Assist families to move to independence by providing a more inclusive level of "one-stop shopping" to North Carolina citizens.

Currently, North Carolina relies on two primary mainframe systems to support major program areas: the Eligibility Information System (EIS) and the Food Stamp Information System (FSIS). In addition to these systems, there are several smaller systems, which support other programs, including child welfare services, child support, and childcare. As part of the planning phase of this effort, North Carolina will be performing a complete breakdown analysis of each of these systems as well as reviewing their dependencies to one another.

Current processes and the supporting automated systems were initially designed and implemented during the early 1980s. In the era of entitlement-based programs and services, these processes served the state's needs very well by collecting, maintaining, and processing information relating to all persons who have applied for or been determined eligible for benefits under all of the major welfare

programs in North Carolina. Similarly, the EIS and the FSIS served the entitlement-based programs well, supporting Aid to Families With Dependent Children (now Work First, North Carolina's Temporary Assistance for Needy Families program), Medicaid, Special Assistance (State Supplemental Payment), Health Choice (North Carolina's Children's Health Insurance Program), Refugee Assistance and Food Stamp Programs.

The federal PRWORA has moved us from entitlement-based, program-specific benefit delivery to outcomes-based, program-independent delivery of coordinated services, all targeted at moving families to independence and self-sufficiency. Major program and application changes arising from amendments to federal law and regulation (notably de-linking eligibility of several major programs and requiring extensive tracking of work requirements/participation) are driving the state to redesign the processes supporting means-tested programs. The process redesign necessitates a redesign of the supporting automated information systems and infrastructure in order to provide necessary support to line workers across the state. It is clear that the EIS and FSIS systems are at the end of their life cycle and that the state must rethink its automated systems approach.

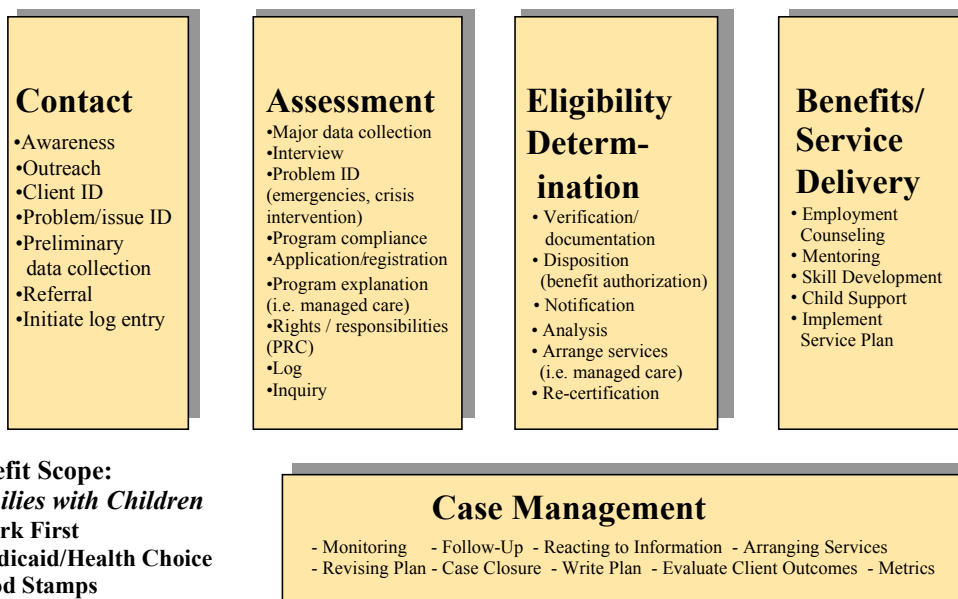
The scope of this Business Process Reengineering Project involves the system through which families access and through which benefits are delivered by each of 100 local departments of social services and supervised by the Department of Health and Human Services' Division of Social Services, Division of Medical Assistance and Division of Child Development. Program scope includes Work First, Medicaid, Health Choice, Food Stamps, childcare, child support, child welfare services, and adult services for families.

It is imperative that our automated systems provide more comprehensive support, including on-line, seamless interfaces with other human services systems. Systems must also operate more efficiently to meet emergent needs of clients and react expeditiously to the myriad of changes required by welfare reform

mandates, legislation, and policies and by related procedural changes on the state and federal levels. If the state does not improve the processes involved and the automated support, it will not be able to provide a system that is flexible enough to meet the challenges brought about by welfare reform on a long-term basis and will not be able to support local operations adequately.

The processes to be reengineered include the following:

**Social Services Access Process**



Currently, local departments use widely differing network hardware, software, desktops, and local support. Many current users are shifting to personal computers and browser-based applications, increasing the demand for on-line access to systems outside of normal business hours. Legacy systems are unable to keep up with changes in policy and reporting requirements. North Carolina is currently restricted by the inability to create interfaces between several mainframe systems. The level of “workarounds” and pain experienced by and

required of county and state staff is unacceptable. This project will enhance the Social Services Access Process and resolve issues such as those noted earlier.

The current maintenance costs for EIS, the Employment Programs Information System (EPIS), and FSIS are over \$3.7 million annually. In addition, the current business processes are riddled with deficiencies, including:

- Too many administrative (nonvalue added) activities
- An excessively paper-based process
- Redundant data collection/processes
- Limited access to data
- Inability to meet reporting requirements
- Little “on-demand” or real time information
- Minimal communication among systems, programs, agencies, and partners
- Limited access options
- Access limited to business hours
- Physically have to go to office
- Limited availability of program information
- Lack of self-determination opportunities for families
- Does not support agencies wishing to implement single worker concept

As a result of the needs described above, an initiative was undertaken by staff representing the Department of Health and Human Services (DHHS) and local county departments of social service. A contractor with re-engineering expertise was selected to guide and consult with staff to redesign the social services access/service delivery process. Within 3 months, this team of professionals, hereafter called the Business Process Team, worked to describe in detail the “as-is” process for client access and service delivery at the local level. That effort became the starting point for the redesign and thus launched us into the process of redesigning the current system. To support the redesign, the team researched and collected information from a variety of sources.

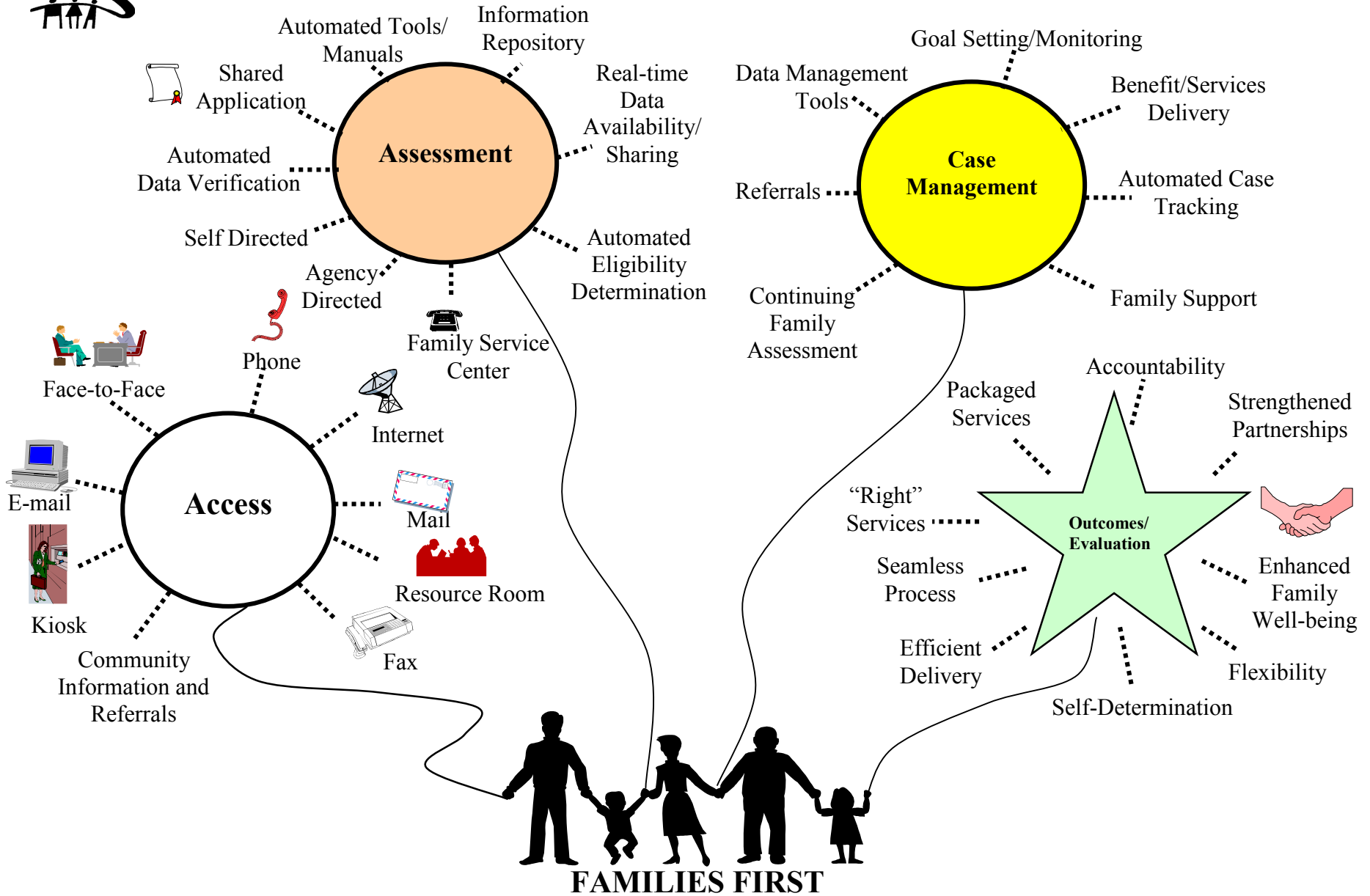
Best practices have been incorporated as appropriate. The team entertained presentations and visited sites to study proven and innovative opportunities for service access and service delivery. The team discovered beneficial practices represented in both government and private organizations and thus drew upon those experiences throughout the process.

The team utilized every avenue available to disseminate information and receive feedback about the proposed model. This included interviews and meetings with county directors of social services, county workers, state leaders, various committees, workgroups, meetings, advocacy groups, and other stakeholders. Correspondences, newsletters, a dedicated project web site, and a hotline all served to enhance feedback and communication into the process.

After weeks of ongoing work, and many revisions, the new business model was presented to North Carolina's Executive Steering Committee for final approval. The model was validated and approved by the North Carolina Association of County Directors of Social Services and received the unanimous support of the Executive Steering Committee. The model redesign is shown below.



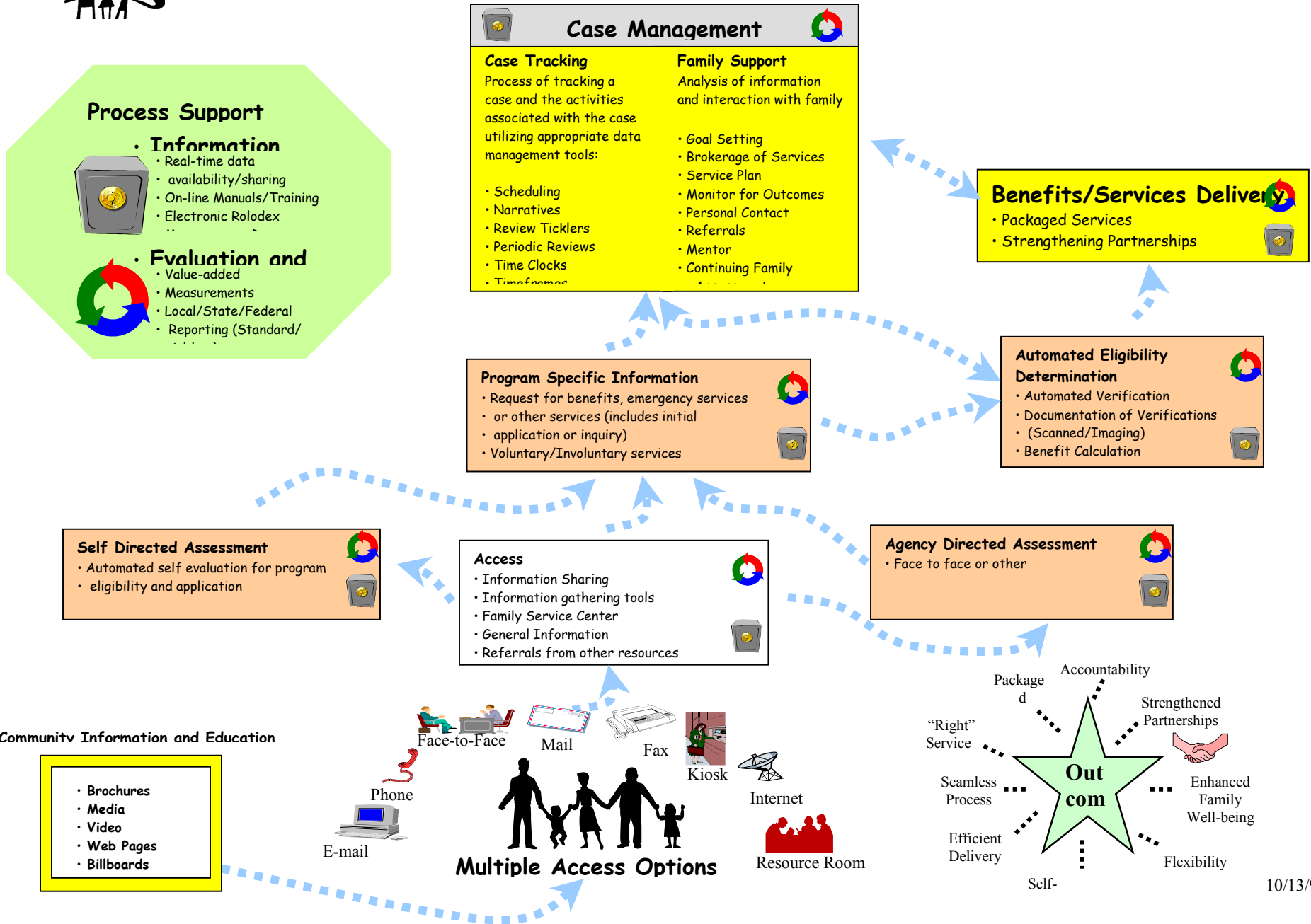
# Reengineered Social Services Concept



“Provide family centered services by means of an efficient, seamless service delivery process that provides flexibility for the counties and accountability throughout the system”



# Level I Reengineered Social Services Process





The Reengineered Social Services Concept Model is a high-level representation of the concepts for the Reengineered Social Services Process. The model shows the elements of the process that will dramatically improve performance to meet redesign expectations and provide greater flexibility to move the organization forward for many years.

The families of North Carolina and the vision are the foundation for the model. The Access, Assessment, Case Management, and Outcomes/Evaluation ‘bubbles’ are connected to the family, representing fluidity rather than a linear flow between each bubble.

The ‘spokes’ around each bubble identify the major elements that will dramatically improve performance. Each spoke is not intended to be all-inclusive, but rather provides options for the family and flexibility for the county where appropriate. Together, they represent a robust view of the elements associated with each bubble.

Below is a definition of each of the design concepts for the model.

**Access** – The Reengineered Social Services Process will provide multiple access options ranging from face-to-face contact through a county office or “virtually” through a remote office to Internet access. Access also includes access to everything the process offers and the family may need, whether it is general information, information regarding benefits and services, or the ability to apply for benefits, services, jobs, etc.

**Assessment** – The idea behind the assessment portion of the concept model is to provide the tools and automation that support an efficient and effective assessment. Some of the tools include a shared application, data verification,

real-time data availability, information repository, and eligibility determination. The family may choose to complete an automated, self-directed assessment or they may request assistance from the agency.

***Case management*** – The vision for case management is to provide the worker with automated tools and data to support case tracking and other associated activities that will minimize administrative activities and focus effort on family support. Family support will then focus on goal setting, developing service plans, monitoring outcomes, and all of the other activities that make their role so crucial to the effective brokerage of services.

***Outcomes/evaluation*** – The outcomes and evaluation “star” represents the projected process outcomes. They include providing the right services for the family every time, automated tools supporting accountability within and for the process, the ability to evaluate both the process and the outcomes of the process and to ensure the process is adding value for the family.

Another aspect of the outcomes is to foster partnerships from across all boundaries, which will support an efficient and flexible social services process.

The new process is critical to North Carolina’s success. The benefits are tremendous for all:

**Families**

- Increased access options/time.
- Easy access to benefits/services.
- Expanded access to better information.
- More value-added time with agency.
- Self-determination opportunities.
- More involvement in the process.

### **State**

- System facilitates responsiveness and accountability for reporting.
- Enhanced partnerships.
- Real-time access to data.
- Reduced maintenance costs of legacy systems.
- More responsive to requests for information.

### **Counties**

- Less time spent on administrative activities.
- More time to focus on outcome-oriented activities.
- Real-time access to data.
- Increased capacity to work with families without additional funding.
- Enhanced ability to share information.
- Leverage resources.
- Ability to evaluate services.

### **Community**

- Expanded resources and information.
- Enhanced partnerships.
- Community outreach.
- Responsiveness to the public.

For more information on this initiative, please refer to North Carolina's Business Process Reengineering website ([www.dhhs.state.nc.us/familiesfirst](http://www.dhhs.state.nc.us/familiesfirst)).

## II. OBSTACLES ENCOUNTERED AND RESPONSES TO THESE OBSTACLES

### A. Statewideness

The Administration for Children and Families (ACF) under the U.S. Department of Health and Human Services denied North Carolina the right to claim enhanced funding for its Statewide Automated Child Welfare Information System (SACWIS). The denial was based upon ACF's assertion that North Carolina's system does not meet the federal definition of "statewideness." ACF's interpretation of the regulation addressing statewideness is, **"A statewide system must operate uniformly as a single system (including the application software) throughout the State and must encompass all political subdivisions..."**<sup>1</sup>

Although it was the SACWIS funding that brought the issue of statewideness to North Carolina's immediate attention, the issue has broad implications for the future development of automation systems for which the state may seek funding from the U.S. Department of Health and Human Services.

The federal definition is predicated upon interpretations of regulations applied to Public Welfare, Child Welfare, and Medicaid systems in 1988. When these policies were developed, many of the technology options available today were unknown.

North Carolina contends the policies should no longer be applied in today's technological environment, as it will prevent the efficient and effective operations of systems to support human services programs.

In North Carolina, counties under the supervision of the state administer social services programs. The North Carolina DHHS and the counties of North Carolina, through partnership via the Human Services Automation Policy and Planning

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<sup>1</sup> See SACWIS Action Transmittal ACF-OISM-001 issued February 24, 1995.

Council, have adopted the following definition of statewideness and are planning systems development accordingly.

**“Application of the term ‘statewideness’ shall focus on the information system’s ability to respond to client needs: alternative hardware and software configurations that perform the same functional tasks... will be deemed to meet the statewideness criteria.”<sup>2</sup>**

The state operates computer systems that generate benefits and produce reports to support these programs. Several counties have developed computer systems to support their local operations, including functions such as case management and encounter tracking. These systems efficiently collect data and exchange it as needed with state systems to support program operations and to meet federal reporting requirements.

The state of North Carolina has a statewide technical architecture in place to ensure infrastructure connectivity, data compatibility, and systems adaptability. North Carolina’s technical architecture is in response to a state law that requires all state agencies to use an open, vendor-neutral systems approach for building technology infrastructure. The technical architecture provides a framework of principles, recommended best practices and state standards that directs the design, construction, deployment, and management of distributed, client/server information systems.

North Carolina’s technical architecture for systems development, enhancement, and modification maximizes existing investments – county and state – by enabling the sharing of information between systems. Recognizing the need to maximize legacy systems while enabling modular development, the technical architecture enables disparate systems to communicate seamlessly through the use of an interface engine. Use of such a tool enables a county government to deploy

systems applications that best fit client needs and allows service integration across multiple human service agencies without jeopardizing statewideness. Data stream standards enable state systems to receive county information that has the same look and feel as worker-keyed data, regardless of what system is operating globally. Because of the design, the interface engine can be reused and modification kept to a minimum. It offers substantial cost savings to the state and therefore to the federal government. State and federal receipt of, and access to, critical program data is ensured, while enabling the most cost-effective solution locally to meet program needs.

A major advantage of the state's architecture plan is that it eliminates the building of "silo systems" and promotes data exchange between systems. This is a major cost saving since duplicate data entry can be eliminated. Counties that choose to automate human services locally at their expense do so in expectation of saving administrative dollars. Not only does the federal government benefit from this prudent investment in automation by having to reimburse for fewer workers, automation provided at county expense means automation not having to be done by the state at federal expense.

## **B. Cost Allocation Issues**

### **1. Inflexible Cost Allocation Methodologies**

Operating under the benefiting program concept, North Carolina has found itself limited in the use of statistical data. The vast majority of the projects are allocated based upon program caseloads. Caseload statistics do not always represent the true time and effort involved in administering programs or for measuring system usage. The Temporary Assistance for Needy Families (TANF) program, for example, has experienced fewer and fewer cases over the past 3

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<sup>2</sup> North Carolina Human Services Automation Policy and Planning Council Guiding Principles dated June 26, 1992.

years. TANF cases reflect only cash assistance payments and ignore other TANF areas such as education and employment services. Consequently, the TANF share of expenditures has decreased. Nonetheless, the TANF component in systems requirements as well as worker time has a much greater impact on operations. This high TANF involvement is not reflected by the caseloads used to allocate costs.

North Carolina addressed this issue by proposing a different methodology based upon county worker time for two projects -- SACWIS and Business Process Reengineering. Again, ACF indicated that the preferred method is caseloads and it has reservations about using a different method. Other federal agencies -- namely HCFA and USDA -- had no comments to the change in methods.

North Carolina would like to explore more viable allocation methods with the federal agencies.

## 2. Selection Of Benefiting Programs

The selection of benefiting programs for cost allocation models for new initiatives is often difficult due to the complex nature of projects. For example, Development Phase I may only benefit a particular program. Development Phase II benefits several programs, but is built upon Phase I. Should all benefiting programs and resulting cost models be identified in the initial planning phase in order for all programs to share in Phase I cost even though all benefiting programs are not clearly identified? Due to federal reviews of Advance Planning Documents (APD)<sup>3</sup> and subsequent reviews of actual cost allocation for the entire project, states need to study, in conjunction with the federal agencies, methods that can accurately determine fair participation of programs throughout all phases of a project. This would provide states with a better sense of security that the funding agencies agree with the total process.

### **C. Funding And Methods**

Being a state-supervised, county-administered state presents specific problems for North Carolina. North Carolina has 100 counties, some rural and poor, some urban and wealthy. There are no laws that require that local agencies contribute to the costs of statewide IT initiatives. Some counties are willing and able to contribute, while others are not. Some of the wealthier counties are developing local systems that involve multiple human service agencies and that provide functionality that the state legacy systems do not provide. North Carolina does not participate in the funding of these initiatives. These local systems usually result in administrative costs savings for the county and the federal government.

### **D. Approval Processes For APDs, RFPs, and Contracts**

The federal approval structure was designed from a system model: a single development project with a single starting point and a single ending point, using traditional System Development Life Cycle methodology (planning, development, implementation, and operation phases.) North Carolina is taking an enterprise approach and utilizing an iterative development model to transform the service delivery system. This model uses short, narrowly focused projects to deliver pieces of functionality. The overall effort is a series of projects, so that the state is continually and simultaneously planning and implementing.

These two models contrast sharply in methodology. The approval process for the first model is not workable for the second model. The result is unfair/disproportionate share borne by initial programs, and a need to re-assess allocations as new/additional programs are added.

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<sup>3</sup> Under the federal Advance Planning Document (APD) process, states must provide detailed



There is an effort underway to reform the APD process. North Carolina is grateful to have had the opportunity to participate in this process, applauds this effort, and encourages the federal agencies to use the ideas and comments provided by their state partners to complete this initiative.

### **III. ACTIONS THAT COULD FACILITATE STATE AND LOCAL EFFORTS TO MODERNIZE SYSTEMS**

#### **A. Eliminate the federal statewideness requirement.**

The principle of statewideness, not documented in regulations but entrenched in practice nationally, should be eliminated. Particularly in welfare reform, with the significant regional variations and the degree of flexibility that must be exercised to provide services that promote self-sufficiency, it is neither practical nor cost effective to require a single set of software operated uniformly across the state. It **is** reasonable for federally funded programs to require equal access to services for all citizens. Any requirement developed must be principle-based, and must focus on the higher level objective and purpose, while ensuring state flexibility in how the requirement is satisfied.

In North Carolina, the impact of the federal statewideness requirement is that several counties have moved ahead in spite of state efforts. These particular counties have corralled resources, developed network and support infrastructures, and developed applications to support in whole or in part the programs operated within each county. These actions partially solve the problem of service integration for the individual county but erode the concept of statewideness and create co-existence issues. Practically, there are support, integration, and security issues between state and local systems. The market is ripe for vendor activity, with a common practice of a vendor selling the same base

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documentation to federal agencies in order to secure approval for use of federal funds for systems.

application package to multiple counties -- not an efficient operation within the state.

## **B. Oversight**

**North Carolina recommends that the federal oversight function move from the project level to the strategic level, focusing on objectives. Within their specified strategy, each state must retain flexibility for the strategies, tactics, and methods used to meet the objectives.**

**Furthermore, North Carolina recommends that if states have internal oversight mechanisms in place, those mechanisms replace the existing federal review and approval requirements.**

Currently, federal oversight is required at the individual project level. Within the IT industry, practice has evolved into a more dynamic model of small, tactical projects and clear devolution into the components of a “system.” Separate projects, developed in concert, enable transitions rather than big-bang implementations. The newer model requires that organizations operate within a comprehensive strategy. Similarly, the accountability for meeting the established objectives falls not to the project or individual program, but to the overall outcomes across the state.

The North Carolina legislature created the Information Resource Management Commission (IRMC) in 1991 to ensure the effective use of technology in state government. The Commission’s work now includes the development and implementation of the Statewide Technical Architecture, project certification process, and quality assurance (QA) monitoring of IT projects. With a comprehensive oversight mechanism in place, DHHS projects must meet rigorous certification and QA requirements, exceeding those established within federal

agencies. Project certification is tied to the budget process. A project must receive IRMC certification to release funding. Project monitoring includes a QA schedule, and third-party QA reviews as appropriate. With this level of internal oversight, North Carolina does not benefit from additional federal project monitoring.

### **C. Approval processes**

**Use a business justification model for projects within the context of an overall strategy.**

As public servants, state staff have a responsibility to employ the most effective means of meeting our most critical objectives. North Carolina supports the principle of accountability behind the federal cost benefit requirements. The cost-benefit analysis requirements for systems projects of the past required states to isolate and document a measurable impact directly attributable to the products of a systems development project. Projects were rather limited in the range of participating programs, but were comprehensive automation efforts, deploying the platform, application, and support functions in one long-term project plan.

The successes of welfare reform efforts to date are largely attributable to new business models, with a remarkable shift in objectives, and new partner relationships evolving in human service agencies.

The federal cost-benefit model does not effectively capture the return on investment of today's projects supporting the welfare reform initiative. Projects are smaller, faster, with targeted components and n-tiered applications in an integrated program environment. The component-based approach uses many short, targeted projects, resulting in scalable products and expanding into additional programs over time.

Just as observed in program shifts during the initial phases of welfare reform, systems projects are interrelated and dynamic to the extent that a direct causal relationship of one change cannot be effectively tracked over time. Therefore, the justification must shift to a **business justification**, taking into account the need, alternatives, and overall context of a project. IT initiatives must be well-founded and risks must be identified and mitigated.

#### **D. Funding**

##### **Develop flexible funding models that facilitate reengineering.**

Reengineering IT and program administration requires significant initial investment to realize the desired savings down the road. These “bubble costs” are problematic. Current practice in cost allocation requires specificity in benefiting programs. In welfare reform evolution, the participating programs in a particular project may expand over time. Integration requires aligning resources among participating programs. We need an equitable and manageable mechanism for distributing costs that covers the pioneers and the later adopters.

Cost allocation is a barrier to integration between programs. States are concerned with function and seek to apply the same application component to similar functions within the enterprise.

It is a federal concern that cost allocation be accurate, sometimes to the point that squeezing the data to justify the allocation of costs is more effort than accomplishing the overall objective.