December 19, 2005

Debbie Armstrong, Cabinet Secretary
NM Aging and Long-Term Services Department
Toney Anaya Building
2550 Cerrillos Road
Santa Fe, NM 87505

Subject: NM Aging and Long-Term Services Department IT Systems Assessment Report

Dear Ms. Armstrong:

Enclosed is an Information Technology (IT) Assessment Report prepared by the Office of the Chief Information Officer (OCIO) with support from a technical team on the information systems maintained and supported by the Aging and Long-Term Services Department (ALTSD). The assessment was conducted during December of 2005 with the team and the support of the IT staff at ALTSD.

The purpose for the assessment was to assess the scope and complexity of the IT systems, to determine the kinds of IT systems the agency operates, identify how the systems are maintained, and determine if there is an adequate disaster recovery plan in place. The assessment was a high level review of ALTSD’s environment.

ALTSD should review and give consideration to the recommendations identified in the attached report. Key areas requiring your attention include:

- Establish an Executive Level Chief Information Officer to coordinate IT throughout the programs,
- Integrate all ALTSD IT growth with statewide Social Services IT Architecture efforts,
- Integrate all intradepartmental data and applications to achieve single entry point or one-stop shop for all ALTSD services, and
- Integrate IT with Quality Management program framework.

Sincerely,

Roy Soto
State Chief Information Officer

cc: Michael Spanier, Deputy Secretary
ALTS IT Assessment
Aging and Long Term Services Department Information Technology Assessment

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ALTSD IT Assessment

Aging and Long Term Services Department Information Technology Assessment

Executive Summary

Aging and disability are significant and growing public policy issues that will place increasing demands on New Mexico's long-term services system. The challenges facing the state include the rapidly growing aging population, the increased prevalence of disability, the rising costs of long-term services and health care, and budget management.

During the 2004 session, the New Mexico Legislature passed the Aging and Long-Term Services Department Act (HB34, Ch.23). The purpose was to create a single, unified department to administer all laws and exercise all functions formerly administered by the State Agency on Aging (SAoA), Human Services Department (HSD), Department of Health (DOH), and the Children, Youth and Families Department (CYFD) that relate to aging, adults with disabilities or long-term care services: Aging and Long-Term Services Department (ALTSD).

The new and expanded scope of vision placed on Information Technology at ALTSD was immediately presented problems ranging from the consolidated administration, thirty additional field offices, 164 additional FTE's, additional and enhanced programs, the legacy and ill-fit FACTS system (a system designed for Child Protective Services, yet used for adults), disparate IT systems, multiple custom built and COTS applications.

The IT staff consists of four FTE's. Three are tasked with help desk support for approximately 300 FTE – including 164 APS field workers, 18 databases and their associated applications, support of the call center, infrastructure, security including BCDR, and associated tasks.

Additionally the agency is a key figure in Enterprise Consolidation, the Social Services Architecture, development of Social Services Resource Directory, and development of Social Services Eligibility Determination System. The agency has already been tapped by the Department of Health and the United Way of Santa Fe for consolidated support of Social Services Directory needs.

The existing IT structure is spread too thin and struggling to keep up with immediate needs. The ALTSD is positioned to be a key player in consolidation efforts regarding Social Services. Finally, as the State's aging population literally booms, and the services provided by the agency likewise continue to boom, the Department is in need of visionary IT leadership. The key finding of this IT assessment is the immediate need for an executive level Chief Information Officer at the ALTSD.

Overall agency and/or specific program needs

ALTSD consists of five key divisions: Long-Term Care Division, Consumer and Elder Rights Division, Aging Network Division, Adult Protective Services (APS) Division, and Administrative Services Division (ASD). Although each division has its own needs and mission, there were several overarching IT issues. The following recommendations are
provided to serve as points of departure for future growth and development of Agency and Enterprise IT functions.

**Recommendations**  
Transformation of Information Technology to Support Systems Change

- Establish an Executive Level Chief Information Officer to coordinate IT throughout the programs.

- Integrate all ALTSD IT growth with statewide Social Services IT Architecture efforts.
  - Support development of Social Services Eligibility Determination System.
  - Participate actively in all planning activities.

- Integrate all intradepartmental data and applications to achieve single entry point or one-stop shop for all ALTSD services.
  - Purchase SAMS2000-compatible modules from Synergy Software Technologies, to include but not be limited to OmbudsManager, Beacon I&R, Beacon/Web, Omnia Screening and Assessment Library.
  - Coordinate data integration with DOH, and other agencies, as appropriate.
  - Increase availability of integrated data to all Aging Network/Alliance/AAA sites.
  - Develop outreach plan for data availability to other state agencies and departments, as well as appropriate not-for-profits providing services to adult disabled and elderly residents of New Mexico.
  - Create new service delivery methods, to include care coordination/case management and screening/assessment for adult abuse allegations.

- Hire additional IT staff or contractors to support implementation of needed program activities, as outlined above.

- Integrate IT with Quality Management program framework.

**IT Staff and Personnel**

**Findings**  
The ALTSD IT staff consists of four FTEs, however, one is a dedicated position whose classification is generally agreed to be outside of the IT structure, data quality control for the SAMS2000 project. The IT Lead is responsible for all the database programming and database updates and the majority of software installs and troubleshooting. The IT Lead also backs up the Infrastructure person when he is unavailable. There is one staff
member that supports the West Capital Bldg, ABQ office, and LC office on Network issues for Hardware and minor software issues. There is an MOU with CYFD for limited support of the APS workers.

<table>
<thead>
<tr>
<th>Employee</th>
<th>Position</th>
<th>Type</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bertrand, John H</td>
<td>Staff Manager</td>
<td>Permanent</td>
<td>IT Lead for the Department</td>
</tr>
<tr>
<td>Mohney, Marty</td>
<td>Staff Manager</td>
<td>Permanent</td>
<td>Infrastructure Support</td>
</tr>
<tr>
<td>Byrne, Richard</td>
<td>Database Admin-A</td>
<td>Term</td>
<td>Programmer and Database Admin</td>
</tr>
<tr>
<td>Bunkley, Adolphus</td>
<td>Data Manager</td>
<td>Permanent</td>
<td>Data Manager for the SAMS2000 Project</td>
</tr>
</tbody>
</table>

The ALTSD is currently a hybrid environment between Novell and Windows, however implementation of a full Windows environment is planned. The Infrastructure support position is trained in Novell.

The APS workers were formally attached to CYFD. Documentation on the sophistication of the workers IT peripherals is limited. The APS case workers are currently utilizing the FACTS system for client reporting. The FACTS system is near its end-of-life and is an ill-fit system originally designed for CPS workers.

**Recommendations**

- The key recommendation of this IT assessment is the immediate establishment of an executive level Chief Information Officer at the ALTSD. The existing IT structure is spread too thin and struggling to keep up with immediate needs. The ALTSD is positioned to be a key player in consolidation efforts regarding Social Services. Finally, as the State's aging population literally booms, and the services provided by the agency likewise continue to boom, the Department is in need of visionary IT leadership.

- The assessment recommends leveraging funds to train staff in modern Windows networking.

- The assessment also recommends investigating the purchase of a COTS solution such as Beacon/WEB and BeaconIR, Synergy’s comprehensive solution for information and referral call center automation.

- The assessment team also recommends a thorough audit of APS computers. Furthermore, the team recommends leveraging funds to provide modern laptops for APS case workers.

**Network infrastructure and security**

The Aging and Long Term Care Department is in a state of flux. The purpose for the IT assessment is to support the objectives associated with the addition of 164 FTE to be
absorbed from the Adult Protective Services organization and the addition of up to 30 remote facilities.

The scope and complexity of this assessment includes determination of IT systems the agency operates, identification of how the systems are maintained, and determination of adequate business continuity and disaster recovery plans in place.

The assessment team has conducted a high level review of the New Mexico Ageing and Long Term Care Department environment to include Security, Servers, Networks, and Applications.

Security Administration Network Access to Applications and Data
- The Security Administration is supported by both the agency and GSD (General Service Department.) The network infrastructure and firewall is secured by GSD. Desktop, server and application security is handled by the two system administrators.

Servers Review
- ALTSD IT staff needs to check Servers for unnecessary services that are enabled. Although the firewall protects some of these vulnerabilities having unnecessary open service ports enables internal threats.

- Voice servers that support IP telephony are only accessible from the Internet by encrypted sessions.

Desktop Review and Recommendations
- Workstations should be checked for accounts that no longer need access. There may be some user education issues since the agency makes use of volunteer help. This would only apply if the elderly volunteers are granted access to agency files.

- A complete IT inventory of the APS should be completed by ALTSD staff to determine assets, assess security and feasibility, and to begin planning replacement cycles and other needs.

Data Center (Computer Room) Review
- The space that servers are located in is secured by a lock on the door but has none of the environmental advantages of a data center such as cooling, humidity control or fire suppression.

- The infrastructure is not accessible from the Internet. Voice switching, data switching and routing equipment is behind a firewall and can only be accessed by the Enterprise provider.

Recommendations
- The enterprise provider will administer the firewall

- Servers will attach to clients over MPLS tunnels once the Santa Fe MAN is completed.

- This evaluation will guide modifications to be made as the agency absorbs the personnel from Adult Protective Services.
Applications
ALTSD has just acquired the Adult Protective Services Agency (APS) to be incorporated into the ALTSD as a Division. This will add approximately 164 plus users to their Applications, Network, Hardware and Software responsibilities. ALTSD currently has four IT Staff. The IT Department is significantly stretched. The overall ALTSD staff now sits at approximately 300 users with varying IT needs.

Operating environment
ALTSD is currently under review from ISD/GSD for migration of all applications, networking and other miscellaneous ITO needs to ISD/GSD. They currently support Novell 5.0 operating system which has been in place for approximately 8yrs. ALTSD also is using Windows 2000 server to support the MS SQL server 2000 databases. The Novell server provides the following services:

a. 30 day ageing of user passwords

b. Authentication and restricting user accessibility to shares and folders and information housed on the servers.

c. ALTSD IT Manager stated all PC’s on their existing network are currently running Windows XP with SP2 on them. This excludes the newly acquired APS’s equipment.

Recommendations:

a. Augment ALTSD IT Staff to support the APS staff’s unique IT needs for application, hardware and overall IT support. This may be achieved by outsourcing professional services, through an MOU with sister agencies, by hiring additional staff, or some combination of these three.

b. Have ISD/GSD update there overall scope of migration of services to include the applications, networking and other IT services to include the APS requirements

c. Create new NT Active directory policies for staff to grant and limit access to appropriate data services for ALTSD and APS staff.

d. Priority to successfully test disaster recovery procedures before and after migration of services to GSD/ISD.

e. Ensure that backup software is current and support is in place and backups are done regularly.

Application: Findings
ALTSD has eight core database applications housed on MS SQL Server 2000 and MS Windows 2000 servers. They currently support another seven or eight databases for testing, statistical, reporting and other various needs. Production MS SQL databases are as follows:
a. Disabled and Elderly Registration (DNS) – ALTSD Developed – MS .NET C# and ASP IIS 5.0 and MS Access and MS VB 6

b. Employment Services Plan – ALTSD Developed

c. Call Center – COTS System – MS .NET C# and ASP IIS 5.0

d. Second Freedom of Choice – COTS System – MS .NET C# and ASP IIS 5.0

e. SAMS 2000 – COTS System – MS .NET C# and ASP IIS 5.0

f. Elder Services Program – COTS System – MS ACCESS and MS Visual Basic

g. ALTSD has 75 concurrent client licenses for MS SQL Server 2000 and 75 Concurrent Terminal Services licenses for user accessibility.

h. ALTSD uses Terminal Services to host applications to alleviate poor response time to staff and clients

i. ALTSD uses PC Anywhere for computer management and remote access

Recommendations:

a. ISD/GSD needs to perform accessibility and reliability testing and times for production applications prior to migration.

b. Thoroughly test the Terminal Services aspects to their staff and clients prior to migration.

c. Get a 5 incident support pack from Microsoft to cover any issues when migration occurs.

d. Confer with COTS support on any possible issues that may occur with applications residing at ISD/GSD such as security, firewall issues, port requirements, service packs and updates to software.

e. Consider having ISD/GSD have a 2 or 3 server web farm to support all ALTSD and future APS web based applications for reliability, accessibility and redundancy as this agency is continually expanding

Legacy Systems

a. AFRAS accounting system using MS Access and MS VB 6.0 this may be a problem when applications are migrated to ISD/GSD, this applications does not run well over wide area network typically.

b. Elder Services Program: MS Access, MS VB stand alone application

Recommendations:

a. Test AFRAS and Elder Services applications on ISD/GSD environment prior to implementation to avoid any performance issues for these production systems.
Adult Protective Services

APS currently shares the resources applications, networking and other IT support from CYFD. ALTSD will be acquiring all the workstations from CYFD and are currently evaluating the ability to share or get a separate version of the FACT's applications for APS's needs. This is their primary production system and requires a significant evaluation by ALTSD and Office of the Chief Information Office to its viability and ability to continue supporting APS staff and department needs in the immediate and future due to the types of services is provides to staff and overall constituency of New Mexico.

Recommendation:

a. As agreed to in the Joint Powers Agreement between ALTSD and CYFD, develop screening and assessment system for alleged adult abuse, neglect and exploitation to replace the Statewide Centralized Intake (SCI) used by CYFD for Child Protective Services, utilizing Synergy Software Technologies product fully compatible with other Resource Center and ALTSD care coordination software programs.

b. Also as agreed to in the JPA, develop APS-specific database for all client and resource reporting to replace CYFD FACTS system, using Synergy product fully compatible with SAMS 2000 and other ALTSD databases.

c. Integrate both the SCI and FACTS replacement systems into Resource Center business operations, according to the terms of the System Transformation Grant project.

Servers

All of the server related information below was gathered by interviewing John Bertrand, the IT Lead for the Aging and Long Term Services Division.

Servers and Environment: Findings

Network
- GSD manages the network. This includes all routers, switches, and firewalls.
- Staff from ALTSD does not have access to these devices.
- T1 connections to remote offices (Alb., Las Cruces) circuits terminate at GSD.
- There is a Firewall in each office to create the network security.

Novell Network V5
- Used for User Authentication for all offices
- File Server Services for all offices
- Print Services in the Santa Fe office only
- Remote offices have local shared printers.

Users
- Approximately 80 Users in the Santa Fe office.
- Approximately 80 users between the Albuquerque and Las Cruces Offices.
• There was legislation passed that will increase the size of the agency by 164 employees. This will happen by moving the Adult Protective Services division from the Children Youth and Families agency (CYFD) to the ALTSD.

• This increase will take ALTSD to about 324 users.

File Server
• Win2k SP4
• All home directories are on the fileserver in Santa Fe.
• All user files are in the home directories. This includes the users in Albuquerque and Las Cruces.
• There is ~20GB of data on this server

IP Addressing
• All static IP addresses
• No DHCP

Anti Virus Servers
• One in each location
• Not server class hardware
• Win2k Server SP4 installed on Workstation Class machines.
• Remotely managed using PC Anywhere

Terminal Services
• 2 servers
• Used for remote users to access database applications

IIS Servers
• 5 applications hosted via web.
• Win 2k sp4
• 3 IIS servers

Consolidation Efforts
• ALTSD is in the planning stage with GSD for this effort.
• GSD is planning to move the office when the MPLS project at GSD is in place which will allow them to create a virtual network thus creating a secure environment for ALTSD.
• GSD is also planning to move the office when the Gig radio to GSD is in place which will support high speed connections to them.

Recommendations
a. With the move to GSD implement DHCP to get rid of static IP addresses.
b. Move the servers to GSD allowing current staff to focus on application efforts in the agency.
c. Use MPLS to create virtual network for ALTSD
d. Plan the secure network design for the APS staff in remote offices to join the ALTSD secure network after it is built at GSD.

e. After the servers have been moved to GSD see what efforts are required to manage the ALTSD applications. Assess the environment at that time to determine if an additional staff/support is required to oversee the whole Information Services Bureau including the contract with GSD.
Appendix A: Assessment Team

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<thead>
<tr>
<th>External Assessment Team Members</th>
<th>ALTSD</th>
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<tbody>
<tr>
<td>Mike Baca – OCIO</td>
<td>Michael Spanier, Deputy Secretary</td>
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<tr>
<td>Vin Kelly – GSD</td>
<td>Bill Belzner, Division Director</td>
</tr>
<tr>
<td>Damien Padilla – GSD</td>
<td>Consumer &amp; Elder Rights</td>
</tr>
<tr>
<td>Larry Pacheco – CD</td>
<td>Bob Lujan, ASD Director</td>
</tr>
<tr>
<td>Ralph Casados – CD</td>
<td>John Bertrand, IT Lead</td>
</tr>
<tr>
<td>Marcy Ojinaga - SPO</td>
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