NM Health Policy Commission
SFY11 INFORMATION TECHNOLOGY PLAN

IT Plan Acknowledgement Signatures

I agree that this document represents the history and planned information-technology-related activities for our agency. The elements of this plan, delivered through information technology services, support the agency strategic plan and the State IT Strategic Plan.

Agency Name: NM Health Policy Commission **Agency Code:** 669

Agency Head: __Sam Howarth_____ **Date**: ___9/1/2009__
Name

Agency Director
Title

Agency Technology Lead: __Terry Reusser_____ **Date**: __9/1/2009___
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IT Lead Manager
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Executive Summary

The New Mexico Health Policy Commission's (HPC) SFY11 Information Technology plan was developed primarily with the goal of maintaining stability and continuing improvements in IT operations and management.

The Agency Director, Sam Howarth, agrees that the HPC internalize as much IT functionality as possible while working closely with the New Mexico State Department of Information Technology (DoIT). Making progress toward accomplishing this goal will provide cost savings on IT expenditures for the HPC and the State of New Mexico and contributes to Governor Richardson's objective of reducing the cost of government operations through IT.

In SFY09, the HPC-IT made significant progress in the areas of maintaining stability and internalizing functions. Server and network resources were stabilized. A 128-bit data encryption algorithm was utilized for sensitive data. New collaboration efforts were initiated for the enterprise sharing of data. Data collection and reporting processes were automated and Documentation of business processes and project management plans were enhanced. Internal collaboration efforts were streamlined. A new industry standard backup solution was installed. HPC-IT ended reliance on expensive outside contractors. The HPC-IT put a quality checking process in place for all data analyzed and presented by the HPC.

Additionally, the HPC made significant progress in continuing IT improvements in SFY09. Last year's goals of leveraging existing database software capabilities and standardizing on a platform that best meets the database system requirements were accomplished. The HPC "Data Universe" is now contained in the SQL Server 2005 environment. The HPC also completed its goal to update and improve its website so that it can more effectively disseminate health policy information to its customers and stakeholders at large. The HPC website was also upgraded with new search and administrative capabilities. DoIT now houses the HPC website. The HPC-IT continued to develop many professional relationships with other State of New Mexico agencies, federal agencies, and community agencies.

In SFY10, the HPC intends to distribute the health information it collects more broadly in state and federal arenas and expand its collaborative efforts for data sharing. The HPC will work in SFY10 to make statutory changes that will allow for more data transparency while still maintaining strict standards of confidentiality and privacy. The SFY11 IT Plan prepares for this increased ability for information dissemination. Due to fiscal constraints on budget and personnel in SFY10, the HPC-IT will focus on recurring support, enhancing current systems and strategic planning for future needs. The HPC-IT will focus on collaborating with federal and state agencies for data sharing agreements of Hospital Inpatient Discharge Data (HIDD) and Geographic Access Data System (GADS) data. The HPC-IT will begin designing a more manageable data warehouse to migrate its inpatient data. The HPC-IT will focus on gathering meaningful data related to workforce issues. The HPC website will be updated to provide information on healthcare reform, reports and maps related to healthcare. The HPC-IT will also focus on creating and revising business process documentation and provide intra-agency collaboration tools. The HPC-IT will begin to research virtualization on its test server.
The HPC-IT will revise its Security Plan to include agency specific policies on network firewall

and intrusion prevention.

For SFY10 the HPC-IT needs to have the infrastructure and personnel in place to take on a larger role in health data collection, analysis, and dissemination. The role the HPC will play depends on what will happen regarding a centralized Health Authority in legislative sessions.

In SFY11, the HPC-IT will have completed its collaboration efforts with the Department of Health (DOH) to implement the Indicator Based Information System (IBIS) system allowing for ad-hoc, web-based hospitalization reporting. It will have migrated its HIDD into a more stable data warehouse environment, providing more reliable and efficient means of trending reports based on historical data. The HPC-IT will also provide web-based reports and maps on its website. Finally, plans to introduce a Secure File Transfer Protocol (SFTP) server will have taken place and implementation will allow data providers a secure method of uploading data files.

Agency Overview

Agency Mission

The HPC is a state agency that provides independent research, guidance and recommendations on health policy issues that impact the health status of New Mexicans.

Vision:

The HPC will assist New Mexicans by being the State's trusted advisor on health policy issues. The Commission will:

1. Be valued by peers, colleagues and consumers for its independence and expertise;
2. Provide leadership in identifying and researching critical health and health care delivery issues;
3. Provide policy research and recommendations to the legislative and executive branches of state government; and
4. Maintain a work environment that encourages individual growth and teamwork.

Goals:

The HPC's current focus is reflected in the goals articulated in its last strategic plan. The HPC will help New Mexican's improve their health as follows:

1. Develop a plan for and monitor the implementation of State Health Policy through research, analysis and development of policy recommendations;
2. Create, sponsor and participate in partnerships, open forums and taskforce activities to develop strategies that facilitate the implementation of state health policy;

3. Enhance available information for planning, policymaking and consumers to make informed healthcare decisions and facilitate an efficient, effective healthcare system through the application of information technology; and
4. Promote awareness of HPC's leadership and objective forums for discussion of complex and controversial health policy and planning issues.

Objectives:

In accordance with the HPC's responsibility for providing technical assistance and formulating recommendations for both the Executive and Legislative branches of State Government based on objective analysis of data and information, public and professional input, and staff research, its objectives include:

1. Contributing to and advancing best practices;
2. Collaborating with other state and health care agencies;
3. Promoting the agency's role as a researcher and catalyst; and
4. Enhancing the HPC's databases to serve as a source of planning for healthcare and health systems policy.

Agency Description

The HPC was established by New Mexico state statute 9.7.11 NMSA 1978 (Health Policy Commission Act) in 1991 to provide a forum for the discussion of complex and controversial health policy issues. The HPC separated from the NM Department of Health (DOH) in 1995 in order to provide independent research, guidance and recommendations on health policy issues that impact the health care and health systems of New Mexico. The HPC is an independent state agency, administratively attached to the Department of Finance and Administration (DFA). The HPC is responsible for providing technical assistance and forming recommendations for both the Executive and Legislative branches of state government based on an objective analysis of data and information, public and professional input and staff research.

In accordance with the New Mexico Health Policy Commission Act, the Commission guides the HPC's activities to meet agency vision and mission statements. Appointments are made by the Governor with the advice and consent of the Senate, and reflect the ethnic, economic, geographic and professional diversity of the state. Commissioners serve a staggered three-year term and may be reappointed at the end of their terms. Regular meetings are held in which a neutral forum is provided for the discussion of health care issues and policy. Table 1 lists the current Commissioners.

Frank Hesse M.D., Chairman	Dawn Brooks MSN, MBA-HC.
Jerry Harrison	Karen Kotch P.A.
Robert P. Romero	Vacant
Kim Maxwell	Vacant
Eric Kraska M.D.	

Table 1: Commissioners

The HPC currently employs nine (9) full time equivalents (FTE). The HPC's non-exempt/classified employees include three (3) Management Analysts, two (2) IT Database Administrators, one (1) Economist, one (1) Financial and Human Resources Specialist (Office Manager) and one (1) IT Lead Manager. During the 2009 Legislative session, House Bill 2 (The General Appropriations Act), mandated the HPC reduce its permanent employee base to 14 (down from 15 in SFY09) with a budget for personal services and employee benefits of $606,000 (a reduction of forty-two percent (42%), down from $1,048,300 in SFY09). A total agency budget of $811,000 was allocated (a reduction of thirty-seven percent (37%), down from $1,293,500 in SFY09). Due to the reduction in budget, the HPC currently has one (1) Management Analyst, one (1) IT Database Administrator, One (1) Program Manager, one (1) Special Projects Coordinator, and one (1) Administrative Services Coordinator (Receptionist) vacant. The HPC does not plan to fill these vacancies in SFY10. All employees participate in partnerships, forums, committees, workshops and task forces relevant to their positions.

Figure 1 is the HPC Organization Chart. There are two (2) exempt positions. The exempts are the Director and Special Projects Coordinator. The Director works directly for the Commission and is responsible for the operations of the agency including the budget and direction of the HPC staff to accomplish their job responsibilities. The Director also communicates with members of the Executive and Legislative branch as well as other public and private entities to gather and share information, and to develop strategies to address critical health care issues that impact New Mexicans. The Special Projects Coordinator (currently vacant) coordinates Legislative activities and assists the Director as well as the nine-member Commission with various projects. These duties are currently performed by the Economist and Office Manager. All HPC services and functions are provided from its Santa Fe office located at 2055 South Pacheco, Suite 200.

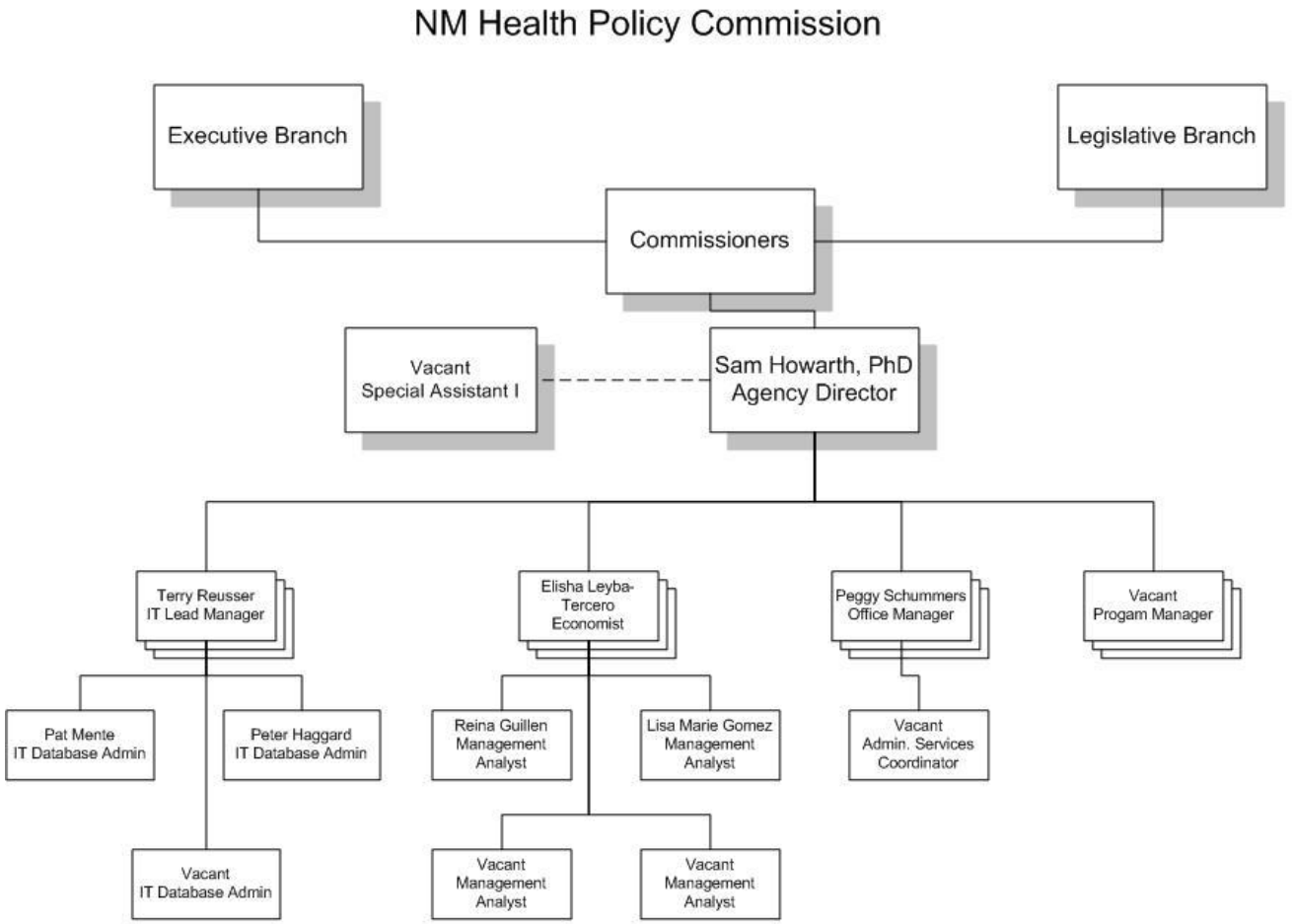

Figure 1. NM Health Policy Commission Organization Chart

Changes in Federal Mandates or State of New Mexico Legislation with IT Impact

House Bill 293 (2009) amended the Health Information Systems (HIS) Act, (Section 24-14A NMSA 1978), to provide for the use, disclosure and protection of record-level (nonaggregated) health information data to particular data users, and limits disclosure to other data users.

Section 1 amends the definition of "data source" to include "data providers" and adds to definitions the phrase "record-level data" to mean a medical record that contains data that can be related to a single identifiable individual, provider or hospital.

Section 2 allows HPC to share record-level data containing identifiable individual, provider or hospital information with DOH. This section also allows HPC to share record-level data with a federal agency authorized to collect, analyze or disseminate health information but must remove any identifiable individual, provider or hospital information prior to disclosure. It furthermore stipulates that, "In providing hospital information under an agreement or arrangement with a federal agency, the commission shall ensure that any identifiable hospital information disclosed is necessary for the agency's authorized use and that its disclosure meets with state and federal privacy and confidentiality laws, rules and regulations."

Section 3 makes record-level data, provided to DOH by HPC, confidential and to be disclosed only in aggregate form.

The HIS Act in statute provides that the HIDD be administered by HPC. The HIS Act previously prevented the HPC from providing record-level data to DOH or the Federal government. Without the record-level data, DOH could not provide the kind of analyses required to meet its directives for tracking diseases and health conditions.

The Healthcare Cost and Utilization Project (HCUP) is a federal-state-industry partnership sponsored by the Federal agency for Healthcare Research and Quality (AHRQ) that provides hospital inpatient databases from 40 states for research in the areas of health care utilization and quality. HCUP utilizes a memorandum of agreement between AHRQ and HCUP partners including a data security plan to protect privacy and confidentiality.

The HPC is currently undergoing efforts, with assistance from the Attorney General's (AG) office, to create data use agreements for the sharing of data with DOH and HCUP. The HPC Information Technology Section (HPC-IT) is also concerned about confidentiality, security and privacy of confidential information and will be working with the AG to finalize its regulations regarding the sharing of data.

The HPC is interested in further defining this legislation to allow for data sharing agreements with other federal agencies (e.g. Indian Health Services (IHS) and the Veteran's Association (VA)), as well as with surrounding states, to better track hospitalizations of New Mexicans in these areas and facilities.

Finally, since the HPC is the clearinghouse for personal medical records, and houses the only "production" system, these data reside on the HPC's SQL Server database, which only HPC-IT has access, the HPC has concerns regarding the possible move of the database server into the DoIT data center. This is in part for security and ownership reasons, in part due to budget cuts and no appropriations for the move or service rates and in part, because the state has not clearly defined what a "production" server is.

Agency IT Organization

Agency IT Description of Services

HPC-IT Mission

The HPC-IT section is responsible to collect, store, organize, analyze, and disseminate (manage) the health information data that the HPC uses to provide its health research, guidance, and recommendation services.

HPC-IT Motto

SUPPORTING THE DEVELOPMENT OF POLICY FOR A HEALTHIER NEW MEXICO

HPC-IT Philosophy

HPC-IT is committed to serving the public's health care policy maker's needs. HPC-IT will maintain public and government agency trust through best practices, maintaining a dedicated staff, and adhering to the highest standards of performance. HPC-IT strives to manage the healthcare data in a way that maintains confidentiality, integrity, availability, accountability, and assurance.

In following the DoIT strategies, HPC-IT will strive to help reduce the cost of government through the use of IT, reduce the cost of IT through the use of an enterprise model, enhance the delivery of service to constituents, and support economic development. HPC-IT will maintain a strategy to provide best practices in securing confidential information, providing data integrity, and standardizing reporting practices. The HPC-IT will also promote data sharing agreements with others in the healthcare industry. This will allow HPC to have greater data availability and provide data more efficiently. The following reflect the significant collaborations and services for which the HPC-IT section is responsible.

1. Collaboration Efforts

HPC-IT assists the commission, legislature and other agencies and organizations in the state's efforts to collect, analyze and disseminate health information. To this end, HPC-IT collaborates with the following agencies (reference Table 2).

HPC-IT Collaborative Efforts
NM Department of Health /Epidemiologists
NM Department of Health /Vital Records and Health Statistics
NM Department of Health /Public Health
NM Telehealth Commission
NM Telehealth Alliance

HPC-IT Collaborative Efforts
Agency for Healthcare Research and Quality (HCUP)
Thompson-Reuters Healthcare (data clearinghouse)
New Mexico Hospital Association
NM Regulation and Licensing Department
NM Board of Nursing
NM Board of Medical Examiners
NM Emergency Medical Services Board, DOH
NM Division of Policy and Performance, DOH
Texas Department of State Health Services
NM Indian Health Services
U.S. Department of Veterans Affairs
University of New Mexico (UNM)
New Mexico State University (NMSU)

Table 2: HPC-IT Collaborative Efforts

2. Hospital Inpatient Discharge Data (HIDD)

The HIDD data collection and reporting is the most significant and sensitive responsibility of the HPC-IT. Data collection and reporting standards are used that allow New Mexico HPC HIDD and Quick Facts reports to be compared with national hospitalization discharge data. The HPC-IT imports the data into the database, performs quality assurance and control, and provides that data in the form of aggregate reports to the HPC Program section, healthcare providers, other state agencies and the public. The HPC-IT collaborates with DOH Epidemiologists on reporting standards and ways to produce data so that the annual HIDD report becomes more informative and can be compared to national data.

3. Geospatial Data and Reporting (GADS)

The HPC-IT utilizes ESRI's ArcGIS product (geographic information system (GIS)) for mapping healthcare availability, accessibility and workforce data. These data and maps are requested both internally by the HPC Program Analysts and by external customers conducting research. This service is instrumental in providing data and maps for the HPC's annual "Geographic Access Data System (GADS)" report.

The HPC-IT uses the latest version of the ArcGIS suite software, which allows for more sophisticated maps and documentation than the HPC-IT has been able to provide in the past. It also allows role-based security for access to and filtering of map details. The maps and data files associated with this are also stored in the SQL Server database. HPC is able to offer a wide range of mapping services to customers.

It is also the intention of HPC to use this product to advertise its services and build stronger relations with entities throughout New Mexico who are in need of mapping services.

The HPC-IT currently collects data from the DOH, the Regulation and Licensing Department (RLD), the Board of Nursing (BON), the Board of Midwives, the Public Education Department (PED), the Emergency Medical Services (EMS) Bureau of DOH and the Board of Medical Examiners (BME).

4. Healthcare Effectiveness Data and Information Set (HEDIS)

HPC-IT collects health plan information related to health care measures and consumer satisfaction for the annual New Mexico Consumer Guide to Managed Care (referred to as the Managed Care report) publication and various other reports that help to make up the HPC Quick Facts publication. The data is currently collected in spreadsheet format for each of the major Managed Care Organizations and stored, securely, on CD.

5. Consumer Assessment of Healthcare Providers and Systems (CAHPS)

HPC-IT works with the health plans to store data and report on data from surveys conducted by the health plans concerning patient's health plan experiences. This data is also used in the Managed Care report.

6. County Financing of Health Care (CIF)

Each year, the HPC-IT collects data from New Mexico county offices related to county health financing expenditures to produce its County Financing of Healthcare report (referenced as the County Indigent Fund or CIF report). The data is collected via survey and stored, securely, on CD in Excel spreadsheet format. Additionally, the HPC-IT supports the HPC Program section by assisting in developing surveys.

7. Web Site Support

The HPC Web Site is currently hosted by DoIT. The HPC-IT develops, maintains and upgrades the web site. Development updates are completed via an SFTP transfer of files to the DoIT web server.

8. Business Process Documentation

HPC-IT supports the documentation of business cases/processes. This includes using Unified Modeling Language (UML) theory. HPC-IT recognizes that a thorough business process documentation policy increases understanding and reduces the amount of effort in the IT requirements gathering phase of projects. Documentation standardizes HPC business, as well as IT processes. This allows HPC-IT to synchronize its processes with the HPC's business processes and provide more efficient support services for the agency. These documents will also be maintained centrally within the SQL Server database, utilizing Microsoft SharePoint server technology.

9. Project Management and Intra-agency Collaboration Support

The HPC-IT supports project management and intra-agency collaboration through use of project management, Internet Explorer–based collaboration, process management, shared drive search and document management platforms. Project management and collaboration is essential to the HPC due to many deadlines for publication of materials throughout the year. In providing software and training to agency employees, the HPC-IT is better equipped to meet deadlines, build stronger communications and document sharing plans between teams and provide better estimation and control for future projects. HPC-IT currently has nine (9) licenses for Microsoft Project 2007 Professional edition, one (1) server license for Microsoft Office SharePoint Server (MOSS) and nine (9) end-user licenses for SharePoint client stations. Training and administrative support are provided on these systems by HPC-IT.

10. Data Encryption and Security

HPC-IT is the clearinghouse for all state licensed HIDD. It houses sensitive and confidential personal health care information at an identifiable nonaggregate level for analysis and reporting at the aggregate (non-identifiable) level. The SQL Server database is currently equipped with encryption algorithms for securing the data within the database. HPC also disseminates aggregate level data to its customers. As such, HPC-IT realizes a responsibility in securing access to its information by use of best practices and mandated statutes. The HPC-IT will continue to follow the NM DoIT Architectural Configuration requirements, using S-STD-001-002, for symmetric and asymmetric cryptography, implementing the latest standards (i.e. the Federal Information Processing Standards (FIPS 140-2)), to ensure the proper security at the highest level for both data stored within the database and external data to be released. HPC-IT uses a 128-bit encryption algorithm to encrypt personal identifiable information within the database.

The HPC-IT is currently drafting an updated security plan and policy. This plan will be submitted by hand delivery to the DoIT security desk in accordance with Appendix D.

11. Systems and Database Administration:

The HPC-IT currently manages and administers two servers. Both servers are Proliant DL 380 G4 Raid configured servers. One server is used as a domain controller and shared drive (file storage) server. This server currently has 432 GB of hard disk storage space and has a Windows Server 2003 operating system. The other server contains a SQL Server 2005 database and has 192 GB of hard disk space. A third server is currently being configured for backup and testing purposes in a virtual environment.

The HPC-IT has two switches with a firewall in between for its network. An external (outbound) switch is a Cisco Catalyst 2900 and an internal (inbound) Cisco Catalyst 3750. The firewall is a SonicWall TZ 210 equipped for a Virtual Private Network (VPN) for remote access. All systems are managed and maintained by HPC-IT staff.

12. Intranet Application and Reporting Support

The HPC maintains and supports an HPC intranet suite of web-based applications. Applications currently utilized are only used by HPC-IT. This provides an enterprise approach to internal data gathering and reporting requirements.

A Data Information Request Tracking System (DIRTS) is used to enter information about data requests from HPC-IT. It also automates messaging and reporting to the Program section and HPC Management for performance measures.

A HIDD application allows for tracking of the data that is collected and to generate reports used in the annual HIDD publication.

HPC-IT currently has skilled staff to create web-based applications and reports using the SQL Server as a back end database. HPC-IT currently uses Microsoft's Visual Studio 2005 and 2008 to develop ASP.net applications.

HPC-IT also has skilled staff to manage SharePoint Reporting Services to administer routine internal reports.

13. Other major data sets collected

HPC-IT also collects data, and reports in the Quick Facts publication, the Physician's Survey, reporting on physician occupational data, and New Mexico Telehealth data reporting on extended health care coverage in rural areas of New Mexico.

The HPC's contact for the IT Strategic Plan is:

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Agency IT Budget Performance and staff counts

FY 2010		BUDGET ($000)				ACTUAL ($000) thru Current Quarter
Code	Agency	Category 520/521 P + E	Category 535 Cont Svcs	Category 542-549 Other	TOTAL BUDGET	
669	HPC	250.5	0.0	52.1	**302.6**	**N/A**

Table 3: HPC-IT Budget and FTE Report

Agency Accomplishments and Planning Goals

Agency Major IT Accomplishments of Previous SFY09 IT Plan

1. Collaboration Efforts

Collaboration efforts began in SFY09 with HCUP to investigate the possibility of New Mexico becoming a partner with forty (40) other states in providing HIDD data at the national level. By becoming a partner, HPC will also have access to the many databases that HCUP offers. This will allow the HPC-IT to better compare NM with other states and nationally.

The HPC-IT also began collaboration efforts with the DOH Environmental Health Epidemiology Bureau (EHEB) to share HIDD data for the IBIS web-site project. This will give researchers and the public a place to generate ad-hoc aggregate reports on New Mexico health care information.

2. Hospital Inpatient Discharge Data (HIDD)

In SFY09, the HPC-IT had great success improving the HIDD data gathering and reporting process. Prior to SFY09, the HIDD data was manually imported into the database as each data file came in. In SFY09, programming procedures were created to produce more quality checks, filter duplicate and unusable information and to automate the loading of data into the database. This reduced the amount of time it took to load the data substantially. Where it used to take two weeks to a month, it now only takes minutes.

Prior to SFY09, all reports (charts, graphs, and tables) were created manually by building SQL Queries as needed. In SFY09, reporting is now automated and ad-hoc. These reports can be run from an HPC-IT intranet application by choosing parameters for the desired level of reporting. Again, this reduced the time to prepare the HPC HIDD report substantially. In SFY09, the report took three months to produce. This year it took one month.

3. Geospatial Data and Reporting (GADS)

A new employee in SFY09 was assigned ownership of GIS data and requests. There was a learning curve but now the GIS capabilities are very strong. The HPC-IT upgraded to the latest version of ESRI's ArcGIS and was able to provide many more quality maps for healthcare researchers than in previous years. Maps were produced with much finer detail than previously.

Data collection for the maps was re-architected into the SQL Server database. The HPC-IT now has the capability to show historical data for trending purposes.

In SFY09, more detailed data and added data elements collected now allow the HPC-IT to extract more sub-categories of healthcare professionals to allow for more detailed workforce issues/analysis.

Finally, the HPC-IT participated, and continues to participate in the task force created by House Joint Memorial 81 of the 2009 Legislative Session to make recommendations for a New Mexico State Geospatial Strategic Plan.

4. Healthcare Effectiveness Data and Information Set (HEDIS)

Prior to SFY09, all HEDIS data was collected as spreadsheets and manually tabulated to produce the HPC Managed Care Report. In SFY09, planning sessions for importing the data to the database have prepared the HPC-IT to create the report from the database this year.

5. Consumer Assessment of Healthcare Providers and Systems (CAHPS)

Prior to SFY09, all CAHPS data was collected as spreadsheets and manually tabulated to produce the HPC Managed Care Report. In SFY09, planning sessions for importing the data to the database have prepared the HPC-IT to create the report from the database this year.

6. County Financing of Health Care (CIF)

In SFY09, the CIF survey information was uploaded into the database and the application was built, allowing for data entry into the database and reporting of the data.

7. Web Site Support

In SFY09, the HPC website was updated with new content allowing visitors to see what current initiatives the HPC is working on. It was also updated with a new search tool. The HPC-IT implemented the use of a website dashboard tool to monitor the activity of the website.

8. Business Process Documentation

In SFY09, the HPC-IT began documenting the HPC business and IT processes and systems. Using tools such as Microsoft Visio 2007 (using UML technology) and standard documentation forms for Charters, Functional Design, and data dictionaries, the HPC-IT completed documenting the Data Information Request process and has begun to document the HIDD data collection through reporting process. Prior to SFY09, there was no recorded history of these processes. This now provides standards that can be referenced by current and new employees for conducting business, thus decreasing the learning curve and providing more efficiency.

9. Project Management and Intra-agency Collaboration Support

The HPC-IT installed Microsoft Project 2007 in SFY09. An IT lead manager with project management experience and a master's degree in Information Systems Management implemented new standards for managing projects. Prior to SFY09 documentation of IT projects was almost non-existent. In SFY09, standard project management planning and documenting was enforced. The HPC now has the tools needed to document functional and technical requirements, provide work breakdown structures and resource allocation measures, develop communication plans, provide risk assessments, develop training plans, conduct lessons learned wrap-ups and utilize agile project management techniques. This will allow for the HPC management to project timelines and resources needed for future projects and recurring projects years out.

10. Intranet Application and Reporting Support

As mentioned above, the DIRTS and the HIDD application was developed in SFY09. Prior to SFY09, tracking data and information requests was a tedious process of entering into a spreadsheet with lots of potential for error. The DIRTS application streamlines the process making essential data mandatory, storing the data into the database, and automating reporting for survey and billing information.

The HIDD application also provides better quality tracking capabilities for the sensitive HIDD data that the HPC-IT collects. Prior to SFY09, there had not been a complete set of HIDD data collected by all hospitals for the entire years. In SFY09, through the use of automated processes and the HIDD application the HPC-IT was able to track and collect 100% of all required data.

In SFY09, the County Indigent Fund (CIF) application was designed in a development instance for use in data input and reporting for county survey information. It was used to test for improvements in data gathering and reporting. This greatly improved the timeliness of the reports. The developer that created the application has since left the HPC and a new direction has spawned from the application. While the HPC-IT still plans to enhance and use

the application, it will now utilize an internet survey service to collect the data from surveys and HPC-IT will directly load the data into the database.

11. Data Encryption and Security

The HPC-IT implemented new security standards for HIDD data by using the guidelines provided by the NM DoIT Architectural Configuration requirements, using S-STD-001-002 for symmetric and asymmetric cryptography and implementing the latest federal standards (i.e. the Federal Information Processing Standards (FIPS 140-2)), to ensure the proper security at the highest level for both data stored within the database and external data to be released. HPC-IT, using a 128 bit encryption algorithm, was able to encrypt all personal identifiable information within the database.

12. Systems and Database Administration:

In SFY09, the HPC-IT upgraded its hard disk storage on its domain controller server from 192 GB to 432 GB. This server also functions as a file sharing server through the use of a shared drive mounted on all client workstations. The added storage is expected to be sufficient for at least three (3) years. The HPC-IT staff also cleaned up the shared drive and archived old unused folders to provide more room.

The HPC-IT upgraded its firewall from SonicWall TZ170 to a TZ210. This will allow VPN connectivity in the future.

Finally, in SFY09, the HPC-IT replaced its Cisco Catalyst 2900 switch with a new Cisco Catalyst 3750 switch.

13. Other major data sets collected

In SFY09, the HPC began collaboration with the BME to design an application and database for Physicians to take a survey for licensing purposes. This is continuing in the planning phase.

14. Other Progress

The HPC-IT made the following progress on its goals of stabilization and improvement in operations:

A. Realized cost effectiveness and efficiency by ending reliance on outside contractors to produce Hospital Inpatient Discharge Data processing and analysis;

B. Secured and standardized the HPC internal network, for example: the latest version of McAfee virus protection was installed on all workstations and servers; workstation configurations were standardized and ghosted; Active Directory was cleaned up and rights were reviewed and established; servers were maintained and memory was added; the firewall was reconfigured for greater security; encryption was implemented for Protected Health Information, etc. HPC-IT followed the NM DoIT Architectural Configuration Requirements using N-Guide-001, S-STD-003, S-STD-004 and S-STD-005;

C. Implemented an industry standard backup solution using HP StorageWorks and Symantec Backup Exec 12 for Servers. Followed NM DoIT Architectural Configuration Requirements using S-STD-010. Implemented a "grandfather" backup rotation methodology for offsite storage of backup tapes;

D. Enhanced a data quality checking assurance process;

E. Completed an HPC "Data Universe" of statutory responsibilities;

F. Implemented new helpdesk procedures and a new helpdesk tracking system with knowledge base;

G. Engaged in a multi-agency process with the DOH regarding HIDD data;

H. Created a stronger relationship with the New Mexico Hospital Association;

I. Modernized the HIDD data reporting rule (7.1.4 NMAC Data Reporting Requirements for Health Care Facilities) to collect more data elements from the hospitals; and

J. Re-established relationships with Federal data collection entities such as the Agency for Healthcare Research and Quality (AHRQ) and the Center for Disease Control (CDC).

SFY09 IT Expenditures

HPC SFY09 IT related expenditures were $351,023. IT expenditures are based on actual costs for travel and training and pro-rated at 22% of general agency costs for things like ISD, phones and rent. The three (3) IT positions represent 22% of the agency's available 14 FTE. Table 4 shows the costs by category.

Line Items	Allocated	Actual
Salary & Benefits	$311,742	$261,782
Professional Services	$7,263	$4,120
IT Services	$5,000	$0
I/S Mileage & Fares; Meals & Lodging	$2,637	$650
IT Maintenance	$540	$2,798
IT Inventory Exempt	$8,218	$42,513
ISD Services	$3,725	$2,716
Communications	$9,882	$7,141
Rent/Land & Building	$34,399	$34,050
Rent/Equipment	$2,430	$2,270
Employee Training & Ed	$270	$2,983
O/S Mileage & Fares	$100	$0
O/S Meals & Lodging	$0	$0
IT Equipment	$0	$0
TOTAL	**$386,242**	**$351,023**

Table 4: SSFY08 IT Expenditures by category.

Agency Major IT Issues/Concerns within the Agency

The largest concern of the last few fiscal years is now resolved. The HPC's mission critical HIDD, GADS and County Indigent Fund (CIF) data is now standardized on the SQL Server 2005 platform. This affords the HPC confidentiality, integrity, availability, accountability, and assurance. Additionally, HPC ended its dependence on outside contractors. HPC currently has in-house experience with SQL Server 2005 and will be able to find affordable replacement SQL Server staff should the need arise.

The second concern of the last few fiscal years is also being addressed. The statutory change (mentioned above) to the (Health Information System Act (24-14A) now allows the HPC to share individual (unaggregated) data with DOH, forming a means of collaborating to bring health care data to the public via an IBIS on the web co-owned by HPC and DOH. It also provides data sharing with Federal agencies such as the Agency for Healthcare Research and Quality (AHRQ). However, in order to provide more thorough data for research and decision making, the HPC is concerned that it should be collecting data from national health care facilities in New Mexico and facilities in surrounding states. This may take more legislation to revise the HIS Act further.

Another major issue that the HPC now faces is uncertainty about a statewide "Healthcare Authority". This disposition, composition, and direction of a "Healthcare Authority" and the role HPC will play, is yet to be determined.

Staffing levels are of major concern to HPC-IT due to a thirty-seven percent (37%) decrease, as noted above, in budget and a forty percent (40%) decrease in staff. A "flat" budget does not take into consideration inflation levels or the rising cost of employee benefits, or the rising cost of living adjustments. Of concern is the inability to expand IT personnel with growing needs for new projects and technologies. The fact that current experienced employees are decidedly leaving state government and non-government candidates are opting to seek private sector employment compromises the ability of the HPC-IT to move forward with trained, full-time staff.

As new technologies arise and become best practices, opportunities for professional staff development are taken away due to a decrease in funding. Annual funding to train the IT staff is a large factor in efficiency and ensuring employee retention.

As the HPC-IT implements more databases for the collection of more data from the many submitting entities, data storage needs will continue to increase. The HPC-IT has only begun to capture a small portion of data into its database. As the HPC moves more toward enterprise and web applications development, server storage and memory will need to be increased.

A major effort to be undertaken is that of providing healthcare provider related maps from our GADS data to multiple requesters. A decrease in budget causes concern that the HPC-IT may not be able to keep up with demands for maintaining and supplying the plotter to increase the amount of mapping services that the HPC anticipates.

HPC is committed to increasing its service and quality of that service. It is anticipated that the HPC-IT project workload will increase substantially. Project management will need to become better equipped to estimate, manage, and control project attributes.

Due to the sensitive nature of health related data, security is a continual concern. HPC-IT will continually need the ability to utilize current technology for data security, encryption, and authentication/credentialing.

As new projects evolve and new requirements are established for data collection, there is a concern regarding how HPC-IT will collect and disseminate the data. There is also concern about the ability of the HPC-IT to have the time and resources for requirements gathering of the data in a manner that meets state and federal guidelines.

HPC-IT has new staff members who will need to learn the business processes of the HPC. The business process learning curve is directly related to the amount of documentation that exists. HPC-IT will need to work at documenting and diagramming current processes and new business rules as they are created.

HPC-IT is committed to the use of best practices in all aspects of its duties and responsibilities. The processes currently in place will need to be modified or replaced to keep up with new best practice theories. This takes time and effort to implement.

Customers that enlist the services of HPC are, generally, not allowed to install third-party software onto their workstations. Therefore, it is difficult to provide encrypted sensitive data that requires a program to be installed on their end to decrypt the data. It is essential that HPC maintain encryption in a manner that does not impact the customer, and thus, essential that HPC-IT have the tools for an advanced method of security and encryption for outgoing data.

Due to the budget cuts, the HPC is concerned about the costs of DoIT services now and in the future. For example, the previously approved DoIT midyear rate adjustments for SFY 2009-2010 may cause considerable hardship on HPC-IT, as the current budget during this period was based on old rates, not accounting for the adjustments.

The HPC may be required to provide an additional budget adjustment to reflect a three percent (3%) decrease for the SFY10 appropriations. The HPC anticipates this will go into effect following a special legislative session in October of 2009, further complicating budgeting for the SFY10 planning.

Finally, the HPC-IT has concerns about moving any servers into the DoIT data center because of security and ownership issues. In addition, it is not clear if the HPC actually has a typical situation where it has a “production” server. The only server that may be considered a “production” server is the server for the database. This server is only accessed by HPC IT staff for collecting data and generating reports for requestors. It is not used for data input or reporting by end users other than IT staff. Finally, due to budget cuts, the FY10 budget for the HPC does not include costs for the migration project or subsequent server storage service costs. The HPC does not anticipated that a request for special SFY10 appropriations for these costs would be approved, given current economic conditions.

Furthermore, the HPC database houses sensitive and protected personal health medical records. By federal law (The Health Insurance Portability and Accountability Act (HIPAA 1996) this data is to be secured so that only authorized HPC personnel have physical access to the system. If the

server were to be stored in a shared rack and cage, other state personnel would have access to the physical location of the system.

Agency Major IT Goals for Current Fiscal Year SFY10

Due to the above mentioned constraints on budget and personnel, there will be limited projects undertaken which require extensive costs during SFY10. Projects requiring substantial funding will be considered only in collaboration with other agencies. Given this situation, the HPC-IT will primarily focus on recurring support efforts, upgrading systems, strategic planning and enhancing current processes and systems for future initiatives. The HPC-IT will focus on the following areas:

1. Collaboration Efforts

In SFY10, the HPC-IT will continue to move forward with HCUP to investigate the possibility of New Mexico becoming a partner with forty (40) other states in providing HIDD data at the national level. By utilizing the services of the A.G., the HPC-IT will be able to decide if it can become a partner. If it is possible, the HPC will begin the formal process to do so.

The HPC-IT will continue its efforts with the DOH Epidemiologists to share HIDD data for the IBIS web-site project and begin to design and develop the website. This will give researchers and the public a place to generate ad-hoc aggregate reports on New Mexico health care information.

The HPC-IT is generally interested in collecting and sharing healthcare data with entities not currently providing their data. In SFY10, the HPC will investigate collaboration with IHS, the VA and surrounding state data collectors for data sharing agreements.

The HPC-IT will also focus on communications and collaborations with other state agencies to gather more detailed data for GIS mapping of healthcare workforce issues. For example, the BON has recently migrated nurse licensure data from a mainframe to a relational database. The HPC has begun to collaborate with the BON in an effort to improve consistency and efficiency in reporting nurse work force data.

The HPC will begin discussions with the New Mexico Hospital Association and executives of state licensed hospitals to define a more efficient way of submitting quality data to the HPC.

2. Hospital Inpatient Discharge Data (HIDD)

In SFY10, the HPC-IT will begin re-designing efforts of the HIDD database into a more manageable and enterprising data warehouse, which will become the starting point for all databases to integrate. The HPC-IT will update its HIDD data dictionary to match the new data elements that will be collected in SFY10 and will enhance its data collection process to collect data more readily. The HPC-IT will work towards further defining its regulations in this area.

3. Geospatial Data and Reporting (GADS)

In SFY10, the HPC-IT will focus on gathering more data from collaborations with other agencies and begin development of more detailed mapping efforts to provide more reliable information concerning the healthcare workforce in New Mexico. This detailed information will be instrumental in producing a more informative GADS report.

The HPC-IT will also research the capabilities and feasibilities of providing interactive mapping on its website.

The HPC-IT will begin to use its GIS product to advertise its services and build stronger relations with entities throughout New Mexico who are in need of mapping services.

Finally, in SFY10 the HPC-IT will continue to participate in and support the state efforts to develop a New Mexico State Geospatial Strategic Plan.

4. Healthcare Effectiveness Data and Information Set (HEDIS)

In SFY10, the HPC-IT will import HEDIS data into the database and create automated reports based on that data to produce the SFY10 Managed Care Report.

5. Consumer Assessment of Healthcare Providers and Systems (CAHPS)

In SFY10, the HPC-IT will import CAHPS data into the database and create automated reports to produce the SFY10 Managed Care Report and to be used in the Quick Facts report.

6. County Financing of Health Care (CIF)

In SFY10, the HPC-IT will use the internet survey service (Survey Monkey) to re-design the CIF survey. It will then import the results from the service into the database for reporting. The current CIF application will be enhanced to provide more detailed reports.

7. Web Site Support

The HPC is currently forming a website design team and submitting content to be added to the HPC website. In SFY10, the website will be updated with new information on the Healthcare Reform issues, healthcare workforce, job-seeking information and links for healthcare professionals and other content as determined by the team.

Another effort will be to research the technology in producing reports and interactive maps onto the HPC website.

8. Business Process Documentation

In SFY10, the HPC-IT will continue to build documentation and diagrams for all HPC business and IT processes.

9. Project Management and Intra-agency Collaboration Support

In SFY10, the HPC-IT will continue its efforts to develop best practices project plans, to include communications, risk and training plans for all projects it will undertake. It will then work to devise two, three, and five year plans from the initial base plans developed.

The HPC-IT has one (1) server license for Microsoft Office SharePoint Server (MOSS) 2007 Enterprise and nine (9) end-user licenses for SharePoint client stations.

While the HPC-IT is still in the testing phase of utilizing the SharePoint Server 2003 standard edition, it will upgrade to the MOSS 2008 Enterprise edition. Following the upgrade and implementation, HPC-IT will support the integration of Microsoft Office products with SharePoint and the SQL Server database. This will create a repository to store project information and documentation. All project information will be accessible to HPC management for status updates and reporting throughout HPC from a centralized area. All project related documentation is also centrally stored in the database to allow easy access and reduces redundancy by creating a version control system for HPC documentation. This will provide better teamwork and communication throughout the different disciplines within HPC. All of HPC staff will have access to and utilize the SharePoint portal for collaboration in a role-based environment.

10. Intranet Application and Reporting Support

In SFY10, the HPC-IT will continue to enhance the HIDD and CIF applications to provide new reporting capabilities.

The HPC-IT will research and test a business intelligence tool (Microstrategy) for designing data warehouses, reporting from the data warehouse and deploying secure reports to the web.

The HPC-IT will begin planning and development work on three new applications in SFY10. It will migrate its Microsoft Access database application to track the legislative session efforts and duties by the HPC to the SQL Server. It will re-design a contacts database that is used for the HPC mailing list. It will then design and develop a database application to track document retention that has been transferred to the New Mexico Commission of Public Records (state records and archives) to be stored or destroyed.

11. Data Encryption and Security

In SFY10, the HPC-IT will finalize a more extensive updated security plan and policy.

The HPC-IT will investigate the use of a secure FTP site for facilities submitting data and the possibility of using a commercial off-the-shelf (COTS) encryption software product to secure files and folders on the server and to encrypt outgoing files to customers. PGP is a widely used COTS product that insures up-to-date standards in encryption for both internal and external data files without requiring external agencies to install third-party software on their end to decrypt the data.

12. Systems and Database Administration:

The HPC-IT has a license for VMWare VShpere 4 for virtualizing its server. In SFY10 the HPC-IT will begin testing a virtual environment with a Windows Server 2008 Operating System, a SQL Server 2008 database and the MOSS 2008.

The HPC-IT will use the SQL Server to test the design and development of data warehouses for use in migrating current databases in the future.

The HPC-IT will migrate from using a Network Address Translation (NAT) for remote connections to the more secure VPN configuration.

The HPC-IT will also research the feasibility of implementing a SFTP server environment for transferring data files.

13. Other major data sets collected

In SFY10, the HPC-IT, in collaboration with the BME and RLD, will begin planning/designing sessions to develop a web-based application and database for physicians to take a survey for licensing purposes.

14. Records Retention Plan

The HPC currently uses the NM Commission of Public Records – State Records Center and Archives administrative code (Title 1, Chapter 18, Part 669) as the rulebook for records retention. As a repository of confidential personal medical data the HPC recognizes the absolute necessity of maintaining strict adherence to the relevant administrative code. The HPC plans to develop agency specific policies and procedures for records retention and expects to implement it by the end of SFY10. The policies will address the following areas as recommended by DoIT (Reference IT Records Retention Plans below):

1. Written retention policy directives for the use and management of email;
2. Standard operating procedures for the capture, storage, and disposition of web-content that meets the definition of a public record;
3. Standard operating procedures for storage, retrieval, access, security, and disposition of electronic data residing in systems that meets the definition of a public record (regardless of whether it is exempt from public disclosure);
4. Procedures or guidelines for implementing records retention periods identified in general and executive records retention and disposition schedules;
5. Procedures for securing electronic records from tampering or deletion if warranted by litigation, audit, etc;
6. Policies and procedures for identifying and protecting records deemed essential for continuity of mission-critical business operations; and
7. Compliance assessment initiatives to monitor, audit, and enforce records management policies and procedures.

The HPC continues to adhere to state IT consolidation guidelines.

The HPC continues to incorporate Governor Richardson's health care policy initiatives into its IT planning and day to day operations. Tables 4 and 5 elaborate on the HPC's alignment with the Governor's policy initiatives and the State IT Strategic Plan initiatives.

Governor Initiatives

Governor's Healthcare Policy Initiatives	*HPC Alignment*
Comprehensive Health Care Plan • Improve Access • Workforce Development • Financing	• *Collect and Report Provider Data by Key Demographics via GADS.* • *Collect and Report Charity Care and County Financing of Health Care (CFHC) Data.*
Access to Health Care • Reduce Uninsured Rate • Reduce Health Care Costs	• *Collect and Report Hospital Discharge Data to Monitor Disease and Injury Rates by Diagnosis (HIDD).* • *Collect and Report Charity Care and County Financing of Health Care (CFHC) Data.*
Immunizations • Increase Immunization Rates	• *Collects and Report Hospital Discharge Data to Monitor Disease and Injury Rates by Diagnosis (HIDD).* • *Collect and Report Managed Care Health Plan Quality Measures includes Immunization Rates (HEDIS).*
Medicaid • Control Costs • Protect Services and Eligibility	• *Collect and Report Hospital Discharge Data for geographic variation of specific category of illness (HIDD).* • *Collect and Report Medicaid Health Plan Quality Measures includes Immunization Rates (HEDIS).*

Table 5: Governor Initiatives

State IT Strategic Plan Initiatives

SFY09IT Goal	*Goal Status*
Customer Relationships • Improve collaboration on projects with key customers. • Closer collaboration with DOH on special projects and on-going health surveillance activities.	• *HPC has collaborated with DOH, BME, BON, RLD, HCUP, and is initiating collaborations with IHS, the VA and the state of Texas for data sharing agreements.* • *HPC is currently collaborating with DOH to share data for the IBIS system*

• Improve awareness of current HPC information services and systems.	• *HPC produced annual **2009 Quick Facts** report covering topics such as Health Care Coverage, Health Care Access and Supply, Hospital Utilization, Health Care Quality, Women's Health, and Children and Teen Health. Quick Facts was made available via HPC's website. All state agencies and state legislators were notified of its availability via e-mail.*
Policy & Process • Establish health data standards for health care cost data. • Expand Health Information System (HIS) statute to allow collection of additional data elements, collection from additional health care settings, and to allow controlled reporting of lower level data elements.	• *HPC's Economist, whose responsibilities include establishing health data standards for health care cost data, is insuring validity and reliability.* • *HPC has modified the HIS act to allow for sharing of data between HPC and Federal agencies.*
Technology & Systems • Make health information easily accessible to the general public via the Internet. • Improve capability to provide accurate and timely data on many aspects of health care services provided in New Mexico. • Identify options for sharing record level HIDD data in compliance with privacy requirements to allow linkage with external data sets.	• *HPC and HPC-IT participate, with 40 other states in the Healthcare Cost and Utilization Project (HCUP) to share software tools and data to bring together multiple resources of data throughout the nation.* • *HPC produced the annual **2008 Quick Facts** report covering topics such as Health Care Coverage, Health Care Access and Supply, Hospital Utilization, Health Care Quality, Women's Health, and Children and Teen Health. Quick Facts was made available via HPC's website. All state agencies and state legislators were notified of its availability via e-mail.* • *HPC produced the **2007 Geographic Access Data System (GADS)** report detailing the availability of qualified healthcare professionals in New Mexico. The report was made available in hardcopy format as well as electronically via the HPC website.* • *HPC produced the **2008 County Financing of Healthcare** report detailing the financing of healthcare in 30 New Mexico counties. The report was made available in hardcopy format as well as electronically via the HPC website.* • *Options for sharing record level HIDD data continue to be limited due to HIS Act Disclosure of Records (24-14-27) prohibition.*
Personnel	

• Maintain key IT positions: one (1) lead manager and two (2) database administrators.	• *HPC has hired an IT Generalist II who has also been designated as IT Lead.* • *HPC IT Lead Manager will attend all CIO council meetings.* • *Allow for growth and training of IT staff.* • *Empower the IT staff with ownership in the HPC mission to provide a more encouraging atmosphere aiming toward higher performance.*
Work Environment • Improved communications with OCIO and GSD-ISD on how State IT Consolidation can benefit HPC.	• *HPC IT Lead now regularly attends IT Commission meetings and regularly reviews DoIT and the OCIO online inventory websites to ensure HPC compliance with DoIT State IT Consolidation requirements.*

Table 6: State IT Strategic Plan Initiatives

Agency Major IT direction and Major IT Goals for Next Fiscal Year SFY11

In addition to the continuing support of the statutory efforts for reporting on an annual basis (as listed for SFY10), the following is planned for SFY11:

1. Collaboration Efforts

In SFY11, if allowed, the HPC-IT will join the 40 partnered states and become partners with HCUP.

The HPC-IT will continue its efforts with the DOH Epidemiologists to share HIDD data for the IBIS web-site project to develop and maintain the website.

The HPC-IT will continue collaboration with IHS, the VA and surrounding state data collectors to possibly begin data sharing.

The HPC-IT will continue collaborating with NMHA to enhance, relations, policy and practices between HPC and state licensed hospitals.

2. Hospital Inpatient Discharge Data (HIDD)

In SFY11, the HPC-IT will fully migrate the HIDD database into a data warehouse on an upgraded SQL Server 2008 Enterprise platform.

3. Geospatial Data and Reporting (GADS)

In SFY11, plans to include geospatial reporting and interactive mapping will move into the development and testing stages to become automated and produced on the HPC intranet and internet websites.

4. Web Site Support

In SFY11, the HPC-IT will begin to deploy reports and maps onto the website.

5. Business Process Documentation

In SFY11, the HPC-IT will build documentation and diagrams for all of the HPC business processes and continue to document new processes as necessary.

6. Project Management and Intra-agency Collaboration Support

In SFY11, the HPC-IT will have solid project plans for all HPC projects and create two, three, and five year plans based on the initial base plans developed in SFY10.

The HPC-IT will have a full implementation of MOSS 2007, integrated with Microsoft Office 2007 applications to provide a fully functional and integrated HPC intranet suite of collaboration tools and knowledge base.

7. Intranet Application and Reporting Support

In SFY11, the HPC-IT will implement legislative tracking application, an archival records tracking application and a business contacts application.

8. Data Encryption and Security

In SFY11, the HPC-IT plans to create a secure FTP site for data providers to use for submitting their data. It will also continue to upgrade its security, disaster recovery and business continuity plans as needed.

If needed, the HPC-IT will be equipped to allow external access to intranet applications through VPN.

In SFY11, HPC-IT intends to upgrade SonicWall services to include the more robust Application Firewall Policy Service and the Intrusion Prevention Service (IPS).

9. Systems and Database Administration:

In SFY11, the HPC-IT will complete a fully virtualized environment with all databases migrated into the SQL Server 2008 database and a development instance of a data warehouse platform.

10. Other major data sets collected

In SFY11, the HPC-IT, in collaboration with the BME and RLD, will design and develop the physician's survey for a licensing web-based application and database.

Agency IT Environment and Infrastructure

Currently the HPC-IT utilizes two HP Proliant DL380 G4 servers running Microsoft Windows Server 2003. One server has 4 GB of RAM 432 GB hard disk storage and functions as the domain controller, shared drive file storage and print server. The other server has 4 GB of RAM and 192 GB of hard disk storage and is used for the SQL Server 2005 database and test application server.

A third server is owned by DoIT and housed at the DoIT Data Center. It is used for the HPC website.

The HPC-IT will use a fourth server (HP Proliant DL 380 G6), in the future, for testing a virtual environment and data warehousing. This server has not been configured to date, but will be utilized in SFY10.

The HPC-IT is unique in that it does not have applications or database servers that are accessed by external end users. All access to the database server is only from within IT and therefore is not actually recognized by HPC-IT as a full production server. The database server also functions as a server to distributed, test, and development application servers.

The HPC-IT has met with the DoIT migration management team (Mary Jo Vigil and other engineers) on-site at HPC to identify and discuss the migration of servers. It was not determined at that point that the HPC qualifies for migration of its servers.

Agency Server Environment and Migration Plan (Appendix A)

Detailed specifications are included on a CD with the network diagram that will be hand delivered to the DoIt Security desk. See Appendix A.

Agency Technical Inventory – On-Line

The HPC's hardware, software, and application inventory data has been updated on the OCIO Online Inventory System.

Core IT Services (Appendix B)

Reference Appendix B for matrix.

Data Storage (Appendix B)

Reference Appendix B for matrix.

Equipment and Software Refreshment Cycles and Policy (Appendix B)

The current strategy is to automatically patch all workstations using Microsoft update. The servers are patched by hand usually waiting several months while bugs in the MS patches are ironed out. Other software patches are treated in the same way. Software is upgraded when missing functionality is required. Workstations are replaced approximately every 3 years. Printers are replaced when they fail. The servers are replaced when a resource analysis of the server components (memory, hard disk space, CPU, network utilization) show that the server will become maximized in the next six months to one year.

Network (Appendix C)

A detailed diagram is provided on the CD to the DoIT Security Desk as per instructions in appendix C.

Cyber Security (Appendix D)

The HPC's security program is based on the HPC's IT Policies and Procedures, which also cover agency Internet and Email policies. Upon employment, HPC staff is required to sign acceptable usage and confidentiality agreements. The penalty for non-compliance is termination. All HPC staff is required to adhere to the following policies:

- HPC staff agrees to adhere to New Mexico state regulations as defined in NMAC 1.12.10 for Internet, Intranet, Email and Digital Network usage and NMAC 1.12.11 for Enterprise Architecture.

- With regard to audits and inspections the Director or the IT Lead as well as any other state authority, may audit, inspect, or record any and all files on HPC equipment at any time.

- HPC staff agrees not to install any software or executable program that has not been authorized by IT Lead or Director.

- HPC staff will sign a confidentiality agreement to protect any private health information or confidential data collected by the agency upon employment. Violation of confidentiality will result in termination.

- HPC staff user passwords will adhere to the strong password standard as outlined in the NMAC 1.12.11 Enterprise Architecture Rule. The password must be alphanumeric, contain a special character and be eight (8) characters long. Passwords will be changed every 90 days. The HPC server is configured to uphold password security and 90-day password changes.

- HPC staff visitors will sign in and be escorted at all times unless the HPC Director gives

approval for visitors who are providing specific services.

- IT Equipment and software will be secured in the IT Office. An inventory will be kept current by the IT Lead. All software will be locked in the IT office. Laptops and projectors must be reserved in advance and signed for at time of checkout.

- When out of the office during the day for more than 30 minutes HPC staff will log off or lock computer.

- HPC network users will shut down their computer at the end of their workday.

- HPC staff are required to save all work related documents and collected data (excludes HIDD) to the 'My Documents' folder on their assigned computers. This enables local computer data to be included in the daily backup of HPCserver1 and restored as necessary.

As per instructions in Appendix D, the current draft of the HPC Security Policies will be hand delivered on CD to the DoIT security office.

In SFY11, HPC intends to upgrade SonicWall services to include the more robust Application Firewall Policy Service and the Intrusion Prevention Service (IPS). Drafts for these policies are included on delivered CD.

IT Records Retention Plans

The HPC currently uses the NM Commission of Public Records – State Records Center and Archives administrative code (Title 1, Chapter 18, Part 669) as the rulebook for records retention. As a repository of confidential personal medical data the HPC recognizes the absolute necessity of maintaining strict adherence to the relevant administrative code. The HPC plans to develop agency specific policies and procedures for records retention and expects to implement it by the end of SSFY10. The policies will address the following areas as recommended by DoIT:

- Written retention policy directives for the use and management of email;
- Standard operating procedures for the capture, storage, and disposition of web-content that meets the definition of a public record;
- Standard operating procedures for storage, retrieval, access, security, and disposition of electronic data residing in systems that meets the definition of a public record (regardless of whether it is exempt from public disclosure);
- Procedures or guidelines for implementing records retention periods identified in general and executive records retention and disposition schedules;
- Procedures for securing electronic records from tampering or deletion if warranted by litigation, audit, etc;
- Policies and procedures for identifying and protecting records deemed essential for continuity of mission-critical business operations; and

- Compliance assessment initiatives to monitor, audit, and enforce records management policies and procedures.

Data Ownership and Sharing (Appendix E)

The HPC website (http://www.hpc.state.nm.us) is now co-housed at DoIT. The website co-house is an ideal application of the consolidation directive.

HPC received an industry standard tape backup solution from the NM Department of Health (DOH). The DOH and the HPC are actively involved in collaboration related to the Hospital Inpatient Discharge Data.

The HPC-IT is currently collaborating with BME and RLD on sharing data for the physician's survey.

All efforts for data sharing are base on an initial review by the Attorney General's office.

Reference Appendix E for matrix.

Agency IT Staff Training Plans (Appendix E)

The HPC IT will undergo a cost effective ad hoc training schedule for SFY11. Due to current economic conditions and budget cuts, the staff will attend one "Bootcamp" training on VMWare VShpere 4 administration, conducted in Albuquerque by Abba Technologies. All other training will be as provided by free web seminars or other free forms of training. See Appendix E for desired training opportunities.

Business Continuity (Appendix F)

The HPC Business and Continuity plan procedures are modeled after S-STD-003. Additionally, the plan is centered on backup procedures because the HPC does not need to provide 24X7 access. In the risk mitigation and analysis process, HPC management indicated a simple backup solution to be cost effective at this time. The only resource deemed "critical" was the HPC website and this was moved to DoIT for Business Continuity. Regular backups, performed with off-site data storage, will in the event of a catastrophic failure (i.e. fire, natural disaster, theft, etc.), enable the HPC to restore its data in a reasonable amount of time.

Compliance Spreadsheet (Appendix G)

Since the HPC does not have projects exceeding $100,000, the compliance spreadsheet is not applicable.

C1 Form (Appendix I)

See Appendix I.

Projected IT Projects: Capital, Special, Supplemental Form (Appendix I)

The HPC is currently located in leased facilities and will not have capital, special, or

supplemental requirements.

Capital Improvement Project Funding

Not applicable.

Special Funding

Not applicable.

Supplemental Funding

Not Applicable.

Request for Reauthorization of General Appropriations Act (Appendix J)

Not Applicable.

Appendices for the IT Plan

- **A.** Agency Server Environment
  Agency Applications
- **B.** Core IT Services
  Data Storage
  Equipment
- **C.** Network
- **D.** Cyber Security
- **E.** Data Ownership and Sharing
  Agency IT Staff Training
- **F.** Executive Business Continuity Plan (BCP) Scorecard
- ~~**G.** IT Funding Request Flowchart~~
- **H**. C1 Form
  ~~Compliance Spreadsheet (current projects)~~
- **I.** ~~Projected IT Projects: Capital, Special, Supplemental Form~~
- **J.** ~~Reauthorization Form~~

Appendix A

Agency Server Environment

Below is a supplemental form separate from the Technical Online Inventory program that clearly represents the agency's environment.

Server Name & Environment (Prod, Test, Dev, QA)	Server type: (database, app, Web, etc)	Server Information: Blade or Other	Host Location	Power Requirements (two power supple + voltage)	Select from the following: License, Warrantees, or/and End of lifecycle.	SAN Backup
HPCSERVER1 Prod	Domain Controller	HP Proliant DL 380 G4	HPC 2055 S. Pacheco St	110 V 575 Watt	1 yr Post Warranty 4HR 24x7	Tape
HPCSERVERSQL Prod	Database	HP Proliant DL 380 G4	HPC 2055 S. Pacheco St	110 V 575 Watt	1 yr Post Warranty 4HR 24x7	Tape
VMHPCSERVERSQL Dev, Test	Database	Virtual On HP Proliant DL 380 G6	HPC 2055 S. Pacheco St	110 V 750 Watt	3 yr 4H 24x7	Tape
VMMSTR Dev, Test	Application	Virtual On HP Proliant DL 380 G6	HPC 2055 S. Pacheco St	110 V 750 Watt	3 yr 4H 24x7	Tape

Note that the VMHPCSERVERSQL and the VMMSTR reside on the same Machine.

Agency Applications

Supplemental information aside from the Technical Online Inventory Program
Include production applications that are Software as a Service (SaaS), Hosting location, data base type and size.

Application Name	Describe the function & purpose of the application	SaaS	Hosting Location	Required San Storage	Remote access needed from satellite offices?	Type and current size of db
N/A						

Note that the HPC does not have Saas systems.

Appendix B

Core IT Services provided by the Agency and its divisions and bureaus

List the core IT services (i.e. core function that is supported by IT) unique to the agency; supporting the business mission and performance measures of the agency, describe how does the IT function address the specific activities of the agency?

Core IT Service (agency's critical systems)	Delivered to which Division(s) or Bureau(s)	Delivered by which section of the agency IT unit
Hospital Inpatient Discharge Data Collection and Reporting	Program Section	IT
Geographic Access Database Collection and Reporting	Program Section	IT
Managed Care Data Collection and Reporting	Program Section	IT
County Indigent Fund Data Collection and Reporting	Program Section	IT
Internal Reporting	Program Section	IT
Help Desk Support	Agency	IT

Data Storage

List terabytes of data stored at **agency's** locations (disk, tape, and optical storage).

Type of Storage	Gigabytes/Terabytes stored at agency
Tier 1 Disk – faster and more expensive disk drives for quicker access of regularly used data or transactions.	912 GB
Tier 2 Disk - slower, more economical disk drives used for less regularly accessed data, or less often changed data.	None
Optical Disk - used for archiving function where data must be kept on-hand.	20 GB (Estimated)
Tape - used for back-up and recovery functions, including offsite storage.	11.2 TB (7x1.6 TB tapes)

Equipment and Software Refreshment Cycles and Policy

Each agency has equipment and software refresh policies specific to the agency. Due to budgetary constraints, agencies have been forced to increase such refresh cycles. Please include the agency's current refresh cycle policy.

Type of IT Asset	Refreshment Cycle Policy, practice or goal
Desktop	4 years or as needed
Servers	As Needed
Storage	When at 60% Capacity
Network	As Needed

The HPC has not created a formal document for its refresh cycle policy. A draft is being created at this time.

Application. The IT Section of the New Mexico Health Policy Commission provides support for all sections of the agency. All technology repair and replacement (refresh) activities are coordinated through the IT Section. Additional information concerning technology purchases by state agencies can be found at the New Mexico State Purchasing Department's website located at http://www.generalservices.state.nm.us/spd/.

Equipment Repairs. Requests for equipment repairs are submitted to the Help Desk via the Online Helpdesk, email (patl.mente@state.nm.us), or the phone (7-6236).

Equipment Refresh. Requests for equipment refresh are submitted to the Help Desk via the Online Helpdesk, email (patl.mente@state.nm.us), or the phone (7-6236).

Appendix C

Network

Each agency shall maintain an agency network/systems diagram, supported by detailed diagrams identifying the underlying structures of its computer/systems network. At a minimum, the information below should be included within the agency's network/system diagram. **Due to the sensitive information contained within the agency's network, please submit this data on a CD or flash drive, and hand deliver to the Simms building 715 Alta Vista. Security will hand deliver it to the Office of Cyber Security where it will be stored in a safe.**

Agency/Department IT Contact Person(s)	
Name:	Terry Reusser
Desk Number:	223
Cell Number:	505-795-4003
Email address:	terry.reusser@state.nm.us
Agency/Department after hours support Y/N	**If yes, IT Contact Person(s)**
On what devices: All	Name: Terry Reusser
Networks: HPC Internal Network	Desk Number: 223
Systems: Servers, workstations, backup devices	Cell Number: 505-795-4003
	Email address: terry.reusser@state.nm.us
Topology Map (all layers) for agency including Security:	
DOIT/Agency Dmarc	Provided in diagram
IP Subnets (Public and Private)	Provided in diagram
Default gateway/s	Provided in diagram
Locations of routers and firewalls	Provided in diagram

The HPC agency Network diagram will be submitted, in person, on a CD to the security officer at the Simms building.

Appendix D

Cyber Security

Because most state agencies manage their own security equipment, DoIT Office of Security would like to replicate agency security measures at the ISP level and take a layered approach to cyber security. Information maintained by each agency shall include areas within the state network that help security services. At a minimum, the information below should be included within the agency's Cyber Security policy. **Due to the sensitive information contained within the agency's network, please submit this data on a CD or flash drive, and hand deliver to the Simms building 715 Alta Vista. Security will hand deliver it to the Office of Cyber Security where it will be stored in a safe.**

	Security Required Documentation to be submitted to DoIT Agency Name:
1	Agency security policy: Draft included on CD
2	Edged firewall configuration/policy: HPC is not on the Edge. Policy draft plans included on CD
3	**Firewall between DOIT and agency Y/N Y**
4	Firewall type/model: SonicWall TZ210
5	Owned by (DOIT/agency/other?): Agency
6	Intrusion detection/prevention configuration/policy – Policy Draft Plans included on CD
	Questions
1	Has agency conducted a full security posture assessment (not sampling)? If yes submit results. NO
2	Has agency conducted an application and web security assessment? If yes, submit results. NO
3	Has agency made lists of the traffic destination and kinds of traffic, both inbound and outbound, that it wants to allow through its firewall? YES
4	Are intrusion detection and/or prevention systems used on the network? If yes, make and model. SonicWall TZ 210 firewall.
5	Does agency have central log server or syslog server to collect logs/events from all security devices? If yes, make and model. HP Proliant DL 380 G4
6	Is the network regularly monitored to establish normal usage patterns? Yes
7	Are configuration modifications to all critical servers logged? Yes
8	Are configuration modifications to all routers and switches logged? Yes
9	Are configuration modifications to all firewalls and intrusion detection systems logged? Yes

10	Does agency have wireless network access? If yes, make and model. Linksys Wireless-G WRT54G
11	If wireless technology is used, are the shared encryption keys rotated regularly? No
12	Is a wireless analyzer periodically run to identify any unauthorized wireless devices that may have been connected to the network? No
13	Does agency use any type of VPN/remote access? If yes, please describe. Firewall 1-1 NAT
14	Does agency use a secondary Internet connection? If yes, please describe. No
15	Is all security equipment required to meet minimum security standards before it is connected to the network? Yes.
16	Are web filters used to restrict access inappropriate websites? Yes
17	Are web filters used to restrict confidential information from being uploaded to web-based email applications? Yes
18	Are all employees given periodic training on security policies? Yes

The HPC IT section is currently drafting a new version of its security and information resource policy, standards, and guidelines. It is included on the delivered CD along with all network diagram, refresh, firewall and internet intrusion policy plans.

In SFY11, HPC intends to upgrade SonicWall services to include the more robust Application Firewall Policy Service and the Intrusion Prevention Service (IPS).

Appendix E

Data Ownership and Sharing

Each agency has an obligation to:
1. Develop and implement procedures to standardize data elements.
2. Determine data ownership and ensure data sharing within the agency.
3. Collaborate with agencies of the same business domain or overlapping service recipients.

Please provide initiatives agency's has taken or is planning to take to develop data sharing with other agencies.

Sharing Initiative	Collaborating Agencies	Accomplishments
HPC/DOH Indicator Based Information System for Public Health (IBIS) system.	DOH	Determined standard data definitions. Moving forward in requirements gathering to share unidentifiable hospital inpatient data to produce an interactive healthcare research web site (IBIS).
Physicians Workforce Survey	BME, RLD	Collaborate with BME and RLD in providing web based Physician's Workforce Survey with shared data access. Planning stage.

Agency IT Staff Training Plans

In an effort to assist agencies with their training requirement, DoIT is requesting agencies to define specific IT training needs by completing the following table.

IT Training Area	Typical IT Training Provider	Number of Staff to be Trained	Typical Individual Cost of Training
Windows Internet Information Server (IIS)	New Horizons Training Center (ABQ)	2	$2,500 per person
Virtualization (VMWare)	Abba	2	$1,500 per person
Windows SharePoint Services	New Horizons Training Center (ABQ)	2	$2,000 per person
Cisco (CCNA)	?	2	?
Business Intelligence	?	2	?

Appendix F

Business Continuity Program

You may have answered similar questions in a Business Continuity/Disaster Recovery questionnaire in May 2009. **If you answered the questionnaire and no changes have occurred since then, please answer questions 21 and 22 only.**

	Business Continuity Program Scorecard **Agency Name :**	**Yes**	**No**	**Unknown**
1	Does your agency currently have a Business Continuity (BC) Program?			
2	Does your agency currently have a BC Plan in place?			
3	If item 2 is YES, has your agency reviewed and updated the BC Plan within the last year?			
4	If item 2 is NO, is your agency currently in the process of developing a BC Plan?			
5	Has your agency conducted a Threat and Risk Assessment?			
6	Has your agency conducted a Business Impact Analysis (BIA)?			
7	Does your agency have a BC/DR Management policy?			
8	If item 2 is YES, Does your agency BC Plan include a *Continuity of Operations Plan (COOP)*?			
9	If item 2 is YES, Does your agency BC Plan include a *Disaster Recovery (DR) Plan*?			
11	If item 9 is YES, has your agency reviewed and updated the DR Plan within the last year?			
12	If item 9 is YES, has your agency completed a structured walk-through (table top) DR test?			
13	If item 9 is YES, has your agency completed a checklist DR test?			
14	If item 9 is YES, has your agency completed a simulation DR test?			
15	If item 9 is YES, has your agency completed a parallel DR test?			
16	If item 9 is YES, has your agency completed a full interruption DR test?			
17	If item 2 is YES, does your agency BC Plan include a *Communication Plan*?			
18	If item 2 is YES, does your agency BC Plan include a *Risk Management Plan*?			
19	If item 2 is YES, does your agency BC Plan include a *Resumption of Service Plan*?			

20	If item 2 is YES, does your agency BC Plan include a *Return to Normal Operations Plan*?			
21	Is your agency BC Plan dependent on DoIT?	√		
22	If so what is DoIT's role in your plan? HPC Website housed at DoIT, External Switch to DoIT			

Appendix H

C1 Form

Information Technology Base Operating Budget Informational Purposes Only					
Agency Name:	Health Policy Commission			Agency Code:	669
Appropriation Funding Type:	Base Request Operational Support of IT *Please check one of the options below:* Flat Budget ☒ or Expansion from previous year ☐				
Revenue IT Base Budget (dollars in thousands)					
	SFY08 & Prior	**SFY09 Actual**	**SFY10 OpBud**	**SFY011 Request**	**SFY12 Estimate**
General Fund	348.6	379.0	301.6	302.6	333.8
Other State Funds					
ISF/IAT					
Federal Funds					
Total	**348.6**	**379.0**	**301.6**	**302.6**	**333.8**
Expenditure Categories (dollars in thousands)					
Category or Account Description	**SFY08 & Prior Actual**	**SFY09 Actual**	**SFY10 OpBud**	**SFY11 Request**	**SFY12 Estimate**
Personal Services & Employee Benefits	227.9	261.8	250.5	250.5	275.5
Contractual & Professional Services	7.0	4.1	2.1	2.1	2.3
IT Other Services	0	.6	5.8	5.8	7.4
Other Financing Uses	113.7	84.5	43.2	44.2	48.6
Other Financing Uses					
Total	**348.6**	**351.0**	**301.6**	**302.6**	**333.8**

	Agency Cabinet Secretary/Director (mandatory)	**CIO or IT Lead (mandatory)**	**Budget Director (mandatory)**
Print Name	Sam Howarth Ph.D.	Terry Reusser MBA-I.S. Mgt.	Peggy Schummers
Signature			
Phone	**827-6265**	**827-6214**	**827-6209**
Date			
Email address	Sam.Howarth@state.nm.us	Terry.Reusser@state.nm.us	PeggyA.Schummers@state.nm.us

IT Plan and Funding Request Checklist

September 1, 2009 Deadline

1. ☒ Final IT Plans
   - ☒ Executive Summary
   - ☒ Agency Overview
   - ☒ Agency IT Organization
   - ☒ Agency Accomplishments and Planning Goals
   - ☒ Agency IT Environment and Infrastructure (including Appendices)
     - ☒ Complete Technical Online Inventories
     - ☒ Completed list of (C1) Base Budget IT project form
     - ☐ ~~Current Project(s) Compliance Spreadsheet~~
     - ☐ ~~Completed Capital, Special, Supplemental Form (I) (if any)~~
     - ☐ ~~Completed Reauthorization (J) (if any)~~
   - ☐ ~~Signature form~~

2. ☐ ~~C2 Funding Request (if any)~~
   - ☐ ~~Completed Form(s) C2 (if any)~~
   - ☐ ~~Proposed Project(s) Compliance Spreadsheet~~
   - ☐ ~~Completed and Full Business Case(s) (if any)~~
     - ☐ ~~Executive Summary~~
     - ☐ ~~Business Problems and Opportunity~~
     - ☐ ~~Proposed Project Objectives/Performance Metrics~~
     - ☐ ~~Business Risks~~
     - ☐ ~~Alternative Solution~~
     - ☐ ~~Cost Benefit Analysis~~
     - ☐ ~~Recommendation~~

3. ☒ Assemble all required documents into a single electronic file and email to DoIT and the agency DFA and LFC budget analysts. When e-mailing DoIT, use the following e-mail address: doit.itplans@state.nm.us. When e-mailing LFC, use the following e-mail address: lfc.itplans@nmlegis.gov. When e-mailing DFA, use the following e-mail address: MarilynA.McKnight@state.nm.us
4. ☒ Prepare 5 hard copies of the assembled document with two going to DoIT, two to DFA and one to LFC.

Due to the sensitive information contained within the agency's network, and security please submit data on a CD or flash drive, and hand deliver to the Simms building 715 Alta Vista. Security will hand deliver to the Office of Cyber Security where it will be stored in a safe.

Final IT Plans and Funding Requests must be submitted by September 1, 2009. Late submissions will not be accepted and no additional information will be requested. If the information is not contained in the final document, the request will be deemed insufficient for funding considerations.