
NEW MEXICO INFORMATION TECHNOLOGY STRATEGIC PLAN

FY2010 – FY2013



“Creating a More E-efficient New Mexico”

JULY 31, 2009



Office of Strategic Planning

505-827-0656

CONTENTS

CONTENTS2

MESSAGE FROM GOVERNOR BILL RICHARDSON.....6

MESSAGE FROM MARLIN MACKEY, SECRETARY DEPARTMENT OF INFORMATION TECHNOLOGY.....7

THE FUNCTION OF THE STATE OF NEW MEXICO IT STRATEGIC PLAN8

 INFORMATION TECHNOLOGY COMMISSION APPROVAL OF THE IT STRATEGIC PLAN8

 THE STATE OF NEW MEXICO IT STRATEGIC PLAN AND THE ENTERPRISE ARCHITECTURE8

 STATE OF NEW MEXICO IT STRATEGIC PLAN, THE ENTERPRISE ARCHITECTURE AND THE AGENCY IT ACTIVITIES
 9

EXECUTIVE SUMMARY10

 GOVERNOR RICHARDSON’S INFORMATION TECHNOLOGY STRATEGIC GOALS FOR THE STATE OF NEW MEXICO 10

STRATEGIES FOR ACHIEVING A MORE EFFICIENT NEW MEXICO.....11

 STRATEGIES FOR ACHIEVING THE GOVERNOR’S INFORMATION TECHNOLOGY GOALS11

GOAL 1: INFORMATION TECHNOLOGY MUST DRIVE EFFICIENT DELIVERY OF HIGH QUALITY GOVERNMENT
SERVICES THAT WILL BENEFIT CONSTITUENTS AND SUPPORT ECONOMIC DEVELOPMENT.15

 STRATEGIES.....15

 BACKGROUND15

 INITIATIVES17

 1. GOVERNMENT SERVICES PORTAL FOR NEW MEXICO’S CITIZENS AND BUSINESSES.....17

 2. ESTABLISH AND MAINTAIN A STATE OF NEW MEXICO GOVERNMENT AGENCY APPLICATION INFORMATION
 MAP20

 3. ESTABLISH BUSINESS DOMAIN TEAMS FOR THE DEVELOPMENT OF INTERAGENCY COLLABORATION AND
 DATA-SHARING PROGRAMS21

 4. ESTABLISH INTERAGENCY COMMON BUSINESS FUNCTION COLLABORATION23

GOAL 2: IMPROVE SUPPORT FOR ALL STATE AGENCY INFORMATION TECHNOLOGY PROGRAMS.24

 STRATEGIES.....24

 BACKGROUND24

 INITIATIVES26

Table of Contents

1. SUPPORT AGENCY IT PLANNING THROUGH THE ANNUAL AGENCY IT PLAN PROCESS26

2. INITIATE AND SUPPORT AGENCY IT SERVICE MANAGEMENT EFFORTS27

3. DEVELOP AN AGILE IT WORKFORCE TO PROMOTE ENTERPRISE IT KNOWLEDGE MANAGEMENT28

4. CREATE AND PUBLISH ANNUAL AGENCY PLAN REVIEWS.....29

5. IDENTIFY JOINT FUNDING OPPORTUNITIES.....29

6. DEVELOP A FIVE-YEAR BUSINESS PLAN FOR SERVICES AND REVENUES30

7. PROVIDE FOR A SINGLE POINT OF CONTACT FOR MAJOR AGENCY INITIATIVES.....30

GOAL 3: IMPLEMENT AND MAINTAIN A HIGH QUALITY TECHNOLOGY INFRASTRUCTURE TO SERVE RESIDENT AND GOVERNMENT CLIENTS.31

STRATEGIES.....31

BACKGROUND31

INITIATIVES31

1. UPDATE AND EXPAND CURRENT SERVICES INFRASTRUCTURE31

2. ENHANCEMENT OF DATA CENTER CAPACITY and SECURITY.....31

3. IMPLEMENT A BUSINESS CONTINUITY/DISASTER RECOVERY CENTER32

4. IMPLEMENT A STATE-WIDE BROADBAND NETWORK32

5. IMPLEMENT A PERFORMANCE MANAGEMENT PROGRAM35

6. CONTINUE BUILDING A SINGLE TRUSTED NETWORK FOR STATE OF NEW MEXICO AGENCIES36

7. ESTABLISH ENTERPRISE IDENTITY MANAGEMENT INFRASTRUCTURE37

GOAL 4: REDUCE THE COST OF GOVERNMENT OPERATIONS THROUGH EFFECTIVE DEVELOPMENT, IMPLEMENTATION AND MANAGEMENT OF IT TECHNICAL AND APPLICATION ARCHITECTURES, PROGRAMS AND SERVICES.38

STRATEGIES.....38

BACKGROUND38

INITIATIVES39

1. UPDATE THE INFORMATION TECHNOLOGY ENTERPRISE ARCHITECTURE FRAMEWORK.....39

2. REVISE THE ENTERPRISE TELECOMMUNICATION ARCHITECTURE PLAN.....40

3. ESTABLISH TECHNICAL DOMAIN TEAMS41

Table of Contents

4. REVISIT AND SUPPORT THE SOCIAL SERVICES ARCHITECTURE.....41

5. SUPPORT GEOGRAPHIC INFORMATION SYSTEM ARCHITECTURE43

6. STRENGTHEN AGENCY IT PROGRAMS DELIVERING MISSION-RELEVANT APPLICATION AND SERVICES.....43

7. CONTINUE THE DEVELOPMENT OF THE ENTERPRISE SERVICE CATALOG.....43

8. BUILD ON THE ENTERPRISE IT SERVICE MANAGEMENT PLAN44

GOAL 5: IMPROVE THE VALUE OF THE IT INVESTMENT THROUGH ENTERPRISE MODELS THAT IMPROVE AND STREAMLINE THE EXECUTIVE BRANCH’S INFORMATION TECHNOLOGY SYSTEMS46

STRATEGIES.....46

BACKGROUND46

INITIATIVES46

1. IMPLEMENT AN ENTERPRISE MODEL FOR IT GOVERNANCE46

2. PROMOTE THE USE OF ITIL – THE INFORMATION TECHNOLOGY INFRASTRUCTURE LIBRARY – AN ENTERPRISE MODEL FOR OPERATIONS AND SERVICE DELIVERY.....48

3. PROMOTE AN ENTERPRISE MODEL FOR MANAGING IT PROJECTS.....49

4. PROMOTE THE USE OF AN ENTERPRISE MODEL FOR A SYSTEM DEVELOPMENT LIFE CYCLE.....49

5. PROMOTE THE USE OF AN ENTERPRISE MODEL FOR INDEPENDENT VERIFICATION AND VALIDATION50

6. IDENTIFY OPPORTUNITIES FOR DATA AND RESOURCE SHARING, COMMON ARCHITECTURES, AND CUSTOMER CENTRIC SERVICES.....51

GOAL 6: EFFECTIVELY MANAGE IT INVESTMENTS AND EFFICIENTLY CONTROL IT ASSETS, UTILIZATION AND COSTS.52

STRATEGIES.....52

BACKGROUND52

INITIATIVES53

1. MAINTAIN IT PLANNING, APPROPRIATION REQUEST, PROJECT CERTIFICATION AND PROCUREMENT PROCESSES.....53

2. MAINTAIN PROJECT CERTIFICATION AND MODIFY INDEPENDENT VERIFICATION AND VALIDATION PROCESS FOR HIGH RISK PROJECTS54

3. ENHANCE IT CONTRACT MANAGEMENT PROCESSES.....55

4. IMPROVE VENDOR OR SUPPLIER MANAGEMENT56

Table of Contents

5. EVALUATE ENTERPRISE LICENSING AND IMPLEMENT AS APPROPRIATE57

6. IMPLEMENT IT ASSET MANAGEMENT57

7. IMPLEMENT A LIFE CYCLE MANAGEMENT PROCESS.....57

GOAL 7: EFFECTIVELY SECURE IT ASSETS, DATA, AND SYSTEMS AND MITIGATE SYSTEMIC INFRASTRUCTURE RISKS.
.....58

STRATEGIES.....58

BACKGROUND58

INITIATIVES58

1. INITIATE AND SUPPORT INTER AGENCY DATA SHARING.....58

2. PROMULGATE AND ENFORCE STATE OF NEW MEXICO CYBER SECURITY STANDARDS59

3. PROMULGATE AND SUPPORT AGENCY BUSINESS CONTINUITY AND DISASTER RECOVERY PLANNING AND
IMPLEMENTATION.....60

GOAL 8: CONSOLIDATE ENTERPRISE INFORMATION TECHNOLOGY SERVICES TO MITIGATE AND ELIMINATE
DUPLICATION.....61

STRATEGIES.....61

BACKGROUND61

INITIATIVES62

1. DATA CENTER CONSOLIDATION WITH PRODUCTION SERVERS AT THE DATA CENTER62

2. REVISE AND UPDATE IT CONSOLIDATION PLAN64

GOAL 9: IDENTIFY AND PROVIDE ADDITIONAL INFORMATION TECHNOLOGY SERVICES AND FUNCTIONALITY TO
SUPPORT STATE OF NEW MEXICO PUBLIC ENTITIES.67

STRATEGIES.....67

BACKGROUND67

INITIATIVES67

1. MONITOR TECHNOLOGY TRENDS.....67

2. IDENTIFY UNADDRESSED AGENCY TECHNOLOGY NEEDS68

3. PARTNER WITH AND AMONG AGENCIES ON EMERGING TECHNOLOGY PROJECTS.....68

APPENDIX 1 – EXAMPLES FROM AN “AGENCY APPLICATIONS INFORMATION MAP”69

MESSAGE FROM GOVERNOR BILL RICHARDSON



Our executive agencies and the Judicial and legislative branches have all adopted technology to automate processes in the service of our residents. With the establishment of the Department of Information Technology, the State of New Mexico is now in a position to move beyond the “automate” stage of computer technology.

As I stated in our 2003 New Mexico Performance Review, *Moving New Mexico Forward*: “The State should consolidate information technology organizations and services to coordinate efforts, eliminate duplication, and save tax dollars through common planning across state government.”

Through the Department of Information Technology Act and my Executive Order 2008-11, Cabinet Secretary Marlin Mackey and the Department of Information Technology have been enabled to take the state through the “consolidate” stage of our use of computer technology.

The next stage of information technology for our executive agencies will be to “integrate” the data collected through the use of computer-driven agency programs. Through the collaboration of state agencies, and the secure sharing of data as a State of New Mexico Enterprise asset, we can vastly improve our effective management of state government and its decision-making processes.

With an effective consolidation effort, our executive agencies, their cabinet secretaries and staff, and the agency chief information officers and IT leads and their staff will be able to turn their attention to providing the Governor’s Office and the State of New Mexico Legislators with integrated, timely and innovative uses of our technology to provide new insights into the needs of our citizens and solutions that will improve their lives, improve education and our state’s economy.

This State of New Mexico Information Technology Strategic Plan points us to these “consolidate” and “integrate” stages.

MESSAGE FROM MARLIN MACKEY, SECRETARY DEPARTMENT OF INFORMATION TECHNOLOGY



With the Department of Information Technology Act and the Governor's Executive Order 2008-11, the foundation for the State of New Mexico information technology strategy has been established by the State of New Mexico Legislature and Governor Bill Richardson.

This State of New Mexico IT Strategic Plan FY10-FY13 is submitted to the Information Technology Commission and state agencies in fulfillment of the Department of Information Technology ACT and 2009 Revision:

"The Secretary, as chief information officer, shall prepare a state information technology strategic plan for the executive branch, and update it at least once every three years, which plan shall be available to agencies by July 31 of each year."

The plan shall comply with the provisions of the Department of Information Technology Act and provide for the:

1. Interchange of information related to information technology among executive agencies;
2. Coordination among executive agencies in the development and maintenance of information technology systems; and
3. Protection of the privacy and the security of individual information as well as of individuals using the state's information technology systems.

Incorporating the Department of Information Technology Act, this State of New Mexico IT Strategic Plan FY10-FY13 builds upon the Governor's Executive Order 2008-11, and its language sets forth strategies for the state's Information Technology structure and usage by state agencies on behalf of the state's residents.

The vision of this document has a robust scope but it is reflective of the challenges and opportunities for all of the state workers engaged in information technology, and for those who will benefit from our efforts.

Some items are but ideas and others have more detail, but all are pieces of the processes whereby we can mature the state's information technology and its processes to better deliver end-user services for which the Legislature and agencies have budgeted vital economic resources.

THE FUNCTION OF THE STATE OF NEW MEXICO IT STRATEGIC PLAN

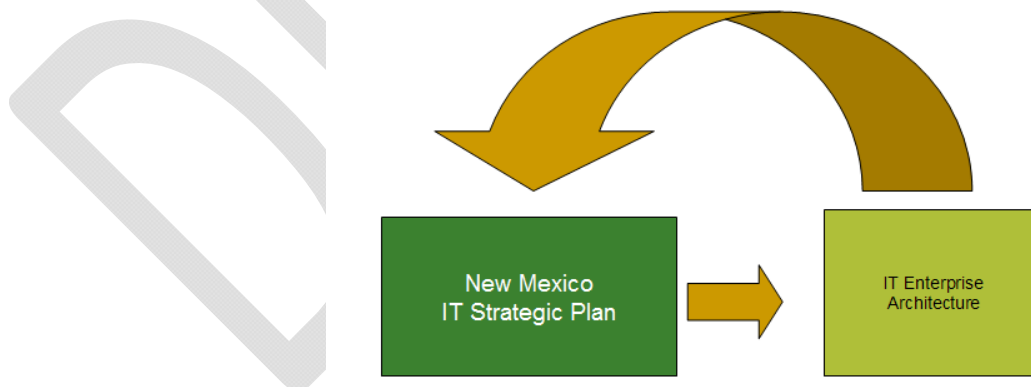
INFORMATION TECHNOLOGY COMMISSION APPROVAL OF THE IT STRATEGIC PLAN

The Department of Information Technology Act establishes the Information Technology Commission. The commission consists of 15 voting members each representing a specific constituency along with a number of non-voting members. It serves as both a “sounding board” for the Department of Information Technology, and to review and approve the development and implementation of the state information technology strategic plan, as well as the state information architecture.

In preparing the IT Strategic Plan, the Department of Information Technology cabinet secretary assesses the status of the information technology environment within the agencies and the enterprise, and establishes the Plan as the recommendation for moving the state forward. In approving the Plan, as well as the Enterprise Architecture, the Information Technology Commission ratifies the statewide IT direction to serve the residents of New Mexico.

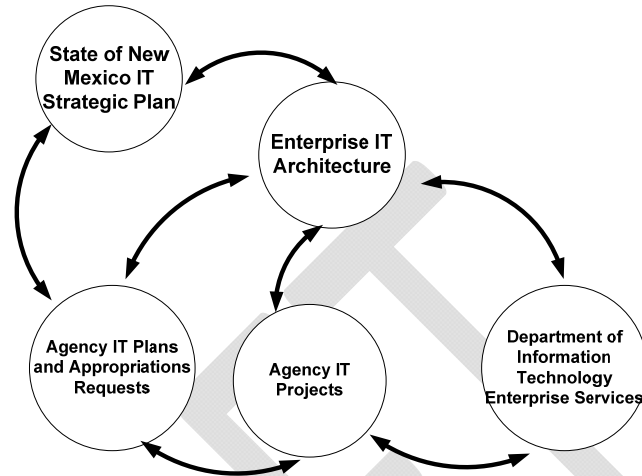
THE STATE OF NEW MEXICO IT STRATEGIC PLAN AND THE ENTERPRISE ARCHITECTURE

There is an ongoing relationship between the State of New Mexico IT Strategic Plan and the State of New Mexico IT Enterprise Architecture. Put simply, the Strategic Plan defines direction and priorities while the IT Enterprise Architecture defines standards and the framework for achieving these directions and priorities.



As the Governor and/or State of New Mexico Legislature identify priorities for information technology, the state IT Strategic Plan would incorporate these within the plan. The Department of Information Technology would also include these as guidelines within the IT Enterprise Architecture.

STATE OF NEW MEXICO IT STRATEGIC PLAN, THE ENTERPRISE ARCHITECTURE AND THE AGENCY IT ACTIVITIES



The Department of Information Technology Act requires that state agencies have their agency IT plans, projects, appropriation requests and IT procurements be in compliance with both the State of New Mexico IT Strategic Plan and the State of New Mexico Enterprise Architecture.

Agency activities also provide input into the Department of Information Technology enterprise service planning, as well as the Enterprise IT Architecture, and in turn to the State of New Mexico IT Strategic Plan development.

EXECUTIVE SUMMARY

Previous State of New Mexico IT Strategic Plans and IT Strategic roadmaps have been focused on four goals which have been in alignment with the Governor Richardson's Moving New Mexico Forward – *Creating a More E-efficient New Mexico* Performance Review. These goals are to:

1. Reduce cost of government operations through information technology
2. Reduce cost of information technology operations through an enterprise model
3. Improve delivery of services to the residents of New Mexico
4. Support economic development

GOVERNOR RICHARDSON'S INFORMATION TECHNOLOGY STRATEGIC GOALS FOR THE STATE OF NEW MEXICO

This State of New Mexico IT Strategic Plan incorporates these goals into a more comprehensive approach, based on the Governor's Executive Order 2008-11. The goals are:

1. ***Information Technology must drive efficient delivery of high quality government services that will benefit constituents and support economic development.***
2. ***Improve support for all state agency information technology programs.***
3. ***Implement and maintain a high quality technology infrastructure to serve resident and government clients.***
4. ***Reduce the cost of government operations through effective development, implementation and management of IT technical and application architectures, programs and services.***
5. ***Improve the value of the IT investment through enterprise models that improve and streamline the executive branch's information technology systems.***
6. ***Effectively manage IT investments and efficiently control IT assets, utilization and costs.***
7. ***Effectively secure IT assets, data, and systems and mitigate systemic infrastructure risks.***
8. ***Consolidate enterprise information technology services to mitigate and eliminate duplication.***
9. ***Identify and provide additional information technology services and functionality to support State of New Mexico public entities.***

STRATEGIES FOR ACHIEVING A MORE E-EFFICIENT NEW MEXICO

In his 2003 New Mexico Performance Review, Governor Richardson established the agenda for information technology in the service of state government as that of creating a more E-efficient New Mexico. The State of New Mexico IT Strategic Plan for FY10 through FY13 builds on that agenda.

STRATEGIES FOR ACHIEVING THE GOVERNOR'S INFORMATION TECHNOLOGY GOALS

Goal 1: Information Technology must drive efficient delivery of high quality government services that will benefit constituents and support economic development.

Strategy: The Department of Information Technology Secretary, as Chief Information Officer, will develop a State of New Mexico IT Strategic Plan that will provide guidance to agencies, outlining cost-efficient strategic directions to be incorporated into agency IT plans. The Strategic Plan will include cost-efficient solutions to agency business requirements effectively using emerging technologies.

Strategy: To identify and develop multi-agency service delivery applications providing comprehensive and easy to use access to government services. To establish and maintain a State of New Mexico Government agency application information map that will outline how information technology is used to provide services. The information map will be used to provide a background for agency and enterprise IT planning, including the development of interagency data-sharing programs.

Strategy: The Department of Information Technology will facilitate workgroups around citizen and business-centric web portals.

Goal 2: Improve support for all state agency information technology programs.

Strategy: The annual agency IT planning process will be leveraged and improved to structure a statewide enterprise approach to IT planning.

Strategy: Collaborative domain teams will be established to define shared resource opportunities for joint funding, development, and support. Collective approaches to IT investment will be utilized to the extent possible.

Strategy: The Department of Information Technology will partner with agencies to understand their current and future business drivers; to expand current solutions and remove ineffective solutions and to develop long-term solutions in support of agency missions; and to publish these solutions as part of the Department of Information Technology and State of New Mexico IT strategic plans.

Strategy: The Department of Information Technology Secretary as chief information officer will ensure executive management communicates to agencies the value and need to view information technology services at the enterprise and statewide level.

Strategy: The Department of Information Technology will revamp its organization structure to facilitate a single point of contact for major agency initiatives that cross multiple service groups through an identified coordinator who will have the authority to manage the initiative through completion.

Strategy: The Department of Information Technology will develop a strategic “business plan” that defines the vision for services and revenues over a five year horizon.

Goal 3: Implement and maintain a high quality technology infrastructure to serve resident and government clients.

Strategy: The Department of Information Technology has been designated as the enterprise infrastructure provider whose responsibility it is to build out and strengthen the enterprise infrastructure and related services. The Department, in consultation with public entities, will plan, invest, and implement services that maximize advances in technology and service options.

Goal 4: Reduce the cost of government operations through effective development, implementation and management of IT technical and application architectures, programs and services.

Strategy: An effective statewide Enterprise Architecture will be established to support public entities with their mission-based applications, providing a strong foundation of standards and best practices across the information technology life cycle. The 2004 Information Technology Enterprise Architecture Framework will be updated to support and guide ongoing architecture efforts. Technical domain teams will be established to identify and develop standard-based enterprise services.

Strategy: The Department of Information Technology, in consultation with public entities, will define application architecture(s) to limit the range of supported environments in order to develop concentrated skills and expertise, and reduce costs with the established exception process being available as appropriate.

Strategy: The Department of Information Technology’s review of agency RFPs will include their compliance with the state’s architecture standards as published.

Strategy: The Department of Information Technology will update and use the State of New Mexico Information Technology Enterprise Architecture (ITEA Framework) as its business, application and technical architecture, inclusive of enterprise portals. This revised ITEA will be the basis for standards and IT rules.

Goal 5: Improve the value of the IT investment through enterprise models that improve and streamline the executive branch’s information technology systems.

Strategy: Established models of it governance, service management, project management and system development life cycles, as well as independent verification and validation will be used to provide productive frameworks, best practices and common language and terminology that will be useful in maturing and improving the agency and enterprise information technology efforts.

Strategy: The Department of Information Technology, in consultation with public entities, will evaluate and select Enterprise services that can be provided in a cost-effective manner across multiple organizations.

Strategy: The Department of Information Technology will establish subject matter focus and domain teams that will analyze and develop recommendations on strategic initiatives such as data and resource sharing, architectures, and customer centric services.

Goal 6: Effectively manage IT investments and efficiently control IT assets, utilization and costs.

Strategy: The Department of Information Technology Act establishes the framework for agency IT investments and the Department's oversight role in the information technology investment life cycle, through project certification and IT Contract approval processes. The Department will continue to work with the agencies, the Department of Finance and Administration, the State Purchasing Office, and the Legislative Finance Committee to improve the processes that assure that IT Investments and IT asset management are carried out in the most responsible manner.

Strategy: An asset management program will be implemented to identify, track and control IT assets.

Strategy: To improve the value of Independent Verification and Validation (IV&V) for high-risk projects, the Department of Information Technology will pursue a funding model that provides more independence for IV&V services. The determination of high risk will be facilitated through the implementation of the risk management tool.

Goal 7: Effectively secure IT assets, data, and systems and mitigate systemic infrastructure risks.

Strategy: The Department of Information Technology offices of Security and Business Continuity are mandated to work with state agencies to develop and support plans and other measures to assure that mission critical information applications are protected and the integrity of their data is assured through efforts to eliminate cyber security threats, as well as threats to the vital day to day operations of the agencies.

Strategy: A comprehensive security policy will be maintained to define standards, identify responsibilities, and validate compliance.

Strategy: The Department of Information Technology will establish a business continuity and disaster recovery program with associated services.

Goal 8: Consolidate enterprise information technology services to mitigate and eliminate duplication.

Strategy: The strategy for consolidation was established to maximize agencies' efforts in support of their unique mission-critical programs and applications, while shifting support for infrastructure services to the state's enterprise infrastructure service provider.

Strategy: The Department of Information Technology will develop and maintain an IT Consolidation Plan based on Executive Order 2008-11 that defines the targets for consolidation, applications, equipment, processes, procedures and the architecture to be used to provide enterprise services, and will consult with state agencies to ensure that value to be achieved will be realized.

Strategy: The consolidation plan will be updated to identify enterprise services, data center and recovery center requirements and resource distribution.

Strategy: In order to assure compliance with the State of New Mexico IT consolidation direction, the Department of Information Technology will require agencies to include any data center upgrade plans in their annual IT plans.

Goal 9: Identify and provide additional information technology services and functionality to support State of New Mexico agencies.

Strategy: Ongoing identification of new and revised enterprise technology services will be facilitated through consultation with public entities, planning documents, industry research, technology service providers and discussions with other states.

Strategy: The Department of Information Technology, in consultation with public entities, will implement a service decommissioning process that would include strategies for revenue replacement and/or reduction in cost.



DRAFT

GOAL 1: INFORMATION TECHNOLOGY MUST DRIVE EFFICIENT DELIVERY OF HIGH QUALITY GOVERNMENT SERVICES THAT WILL BENEFIT CONSTITUENTS AND SUPPORT ECONOMIC DEVELOPMENT.

STRATEGIES

Strategy: The Department of Information Technology Secretary, as Chief Information Officer, will develop a State of New Mexico IT Strategic Plan that will provide guidance to agencies, outlining cost-efficient strategic directions to be incorporated into agency IT plans. The Strategic Plan will include cost-efficient solutions to agency business requirements effectively using emerging technologies.

Strategy: To identify and develop multi-agency service delivery applications providing comprehensive and easy to use access to government services. To establish and maintain a State of New Mexico Government agency application information map that will outline how information technology is used to provide services. The information map will be used to provide a background for agency and enterprise IT planning, including the development of interagency data-sharing programs.

Strategy: The Department of Information Technology will facilitate workgroups around citizen and business-centric web portals.

BACKGROUND

The State of New Mexico IT Strategic Plan

This State of New Mexico IT Strategic Plan FY10-FY13 is submitted to the Information Technology Commission and state agencies in fulfillment of the Department of Information Technology Act and 2009 Revision:

“The secretary, as chief information officer, shall prepare a state information technology strategic plan for the executive branch, and update it at least once every three years, which plan shall be available to agencies by July 31 of each year.

The plan shall comply with the provisions of the Department of Information Technology Act and provide for the:

1. Interchange of information related to information technology among executive agencies;
2. Coordination among executive agencies in the development and maintenance of information technology systems; and
3. Protection of the privacy and the security of individual information as well as of individuals using the state’s information technology systems.

The language of the Act and its 2009 revision provides that the ITC review and approve the State of New Mexico IT Strategic Plan: “The commission shall meet at least quarterly to review and approve the development and implementation of the state information technology strategic plan.”

Goal 1: Information Technology Must Drive Efficient Delivery of High Quality Government Services that will Benefit Constituents and Support Economic Development

Data as a State of New Mexico Enterprise Asset

The Information Technology Enterprise Architecture Framework (ITEAF), 2004, established that “New Mexico’s Data and Information are Enterprise Assets.” The ITEAF also established the principle that: “Whereas individual Agencies may have statutory ownership of data, information must be shared to maximize its benefit to the organization as a whole.”

This “Enterprise Asset” view of information technology application data acquired and used by state agencies was embedded into The Department of Information Technology Act, which assigned to the department the responsibility to: “develop and implement procedures to standardize data elements, determine data ownership and ensure data sharing among executive agencies.”

The strategic goal of this “Enterprise Asset” approach to information technology data is to enable a secure but fluid ability for the State of New Mexico Executive Branch, The State of New Mexico Legislature and the Courts to make informed decisions, govern more efficiently and to do more effective planning for the benefit of our constituents and to foster economic development.

State of New Mexico agencies have successfully devoted significant budgets, appropriations and staff resources to the development of agency-specific IT applications that provide the premise of the Governor’s strategic goal: *Information Technology must drive efficient delivery of high quality government services that will benefit clients and support economic development.*

Multi-use Applications and an Enterprise Information Map

The data as “Enterprise Asset” concept lays the foundation for the development of multi-use applications, along with an enterprise information map for the State of New Mexico. Agencies with similar business functions will be directed toward participation in a constituent portal approach, simplifying web access to state services.

This enterprise information map will be based on what each agency has developed or acquired by way of IT applications to manage its own specific data, and will be used as the foundation for assessing the relationship of the data to that used and needed by other state entities.

The enterprise overview of the use of information technology would illustrate how Agency IT budgets, Legislative and federal appropriations all contribute to drive efficient delivery of high quality government services benefiting the residents of the State of New Mexico and supporting our state’s economic development.

The strategy of establishing an enterprise information map will provide a “big picture” enterprise view of information technology within State of New Mexico Government that shows how the state’s enterprise asset of data is being used for the benefit of the state’s constituents. The map also will provide an opportunity to identify resource sharing possibilities and common platform benefits.

This Information map will enable the identification and development of a multi-agency service delivery applications approach and citizen and business portal, providing comprehensive simple access to government services.

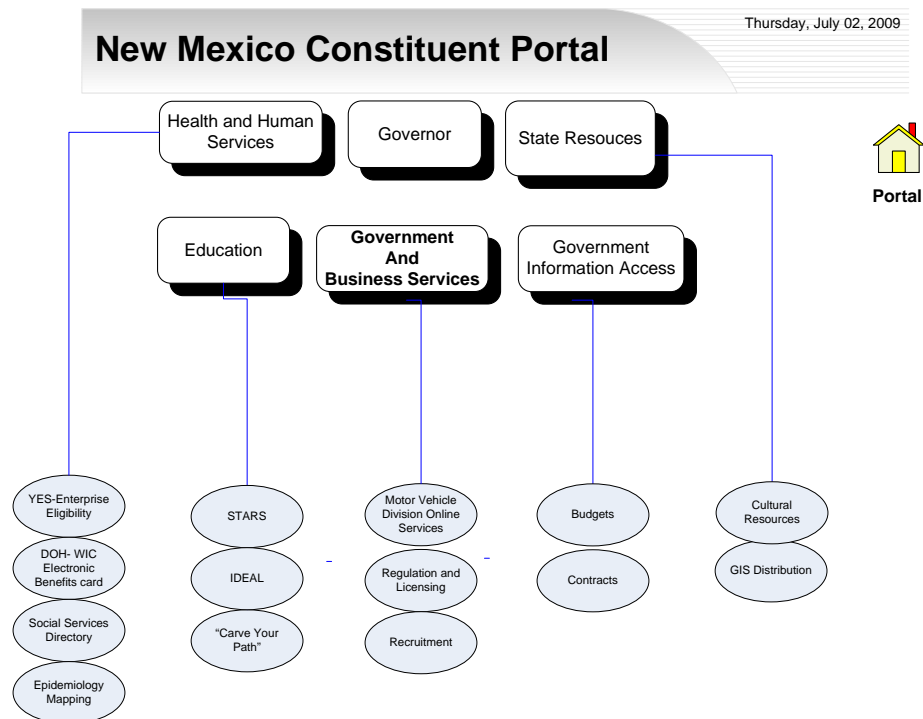
Goal 1: Information Technology Must Drive Efficient Delivery of High Quality Government Services that will Benefit Constituents and Support Economic Development

INITIATIVES

1. GOVERNMENT SERVICES PORTAL FOR NEW MEXICO’S CITIZENS AND BUSINESSES

As a strategic initiative, the Department of Information Technology will collaborate with state agencies to develop a Government Service Portal for residents and businesses. Such a portal will be made possible through a goal of identifying and developing multi-agency service delivery applications to provide comprehensive and simple access to government services.

The illustration below depicts an example of a Constituent Portal that would provide access to New Mexico Government services for residents and businesses. This illustrates how this portal would provide links to common services along functional activity lines.



This portal will build on portal efforts illustrated below, such as the “Carve Your Path (CYP)” portal for career planning, which is a project of the Public Education Department, the Higher Education Department and the Department of Workforce Solutions; the Health and Human Services Departments’ YES Enterprise Eligibility portal for a one stop, “no wrong door” for social services clients; the Motor Vehicle Division Portal for online services, such as vehicle registration and drivers license activities.

Goal 1: Information Technology Must Drive Efficient Delivery of High Quality Government Services that will Benefit Constituents and Support Economic Development

“CARVE YOUR PATH”



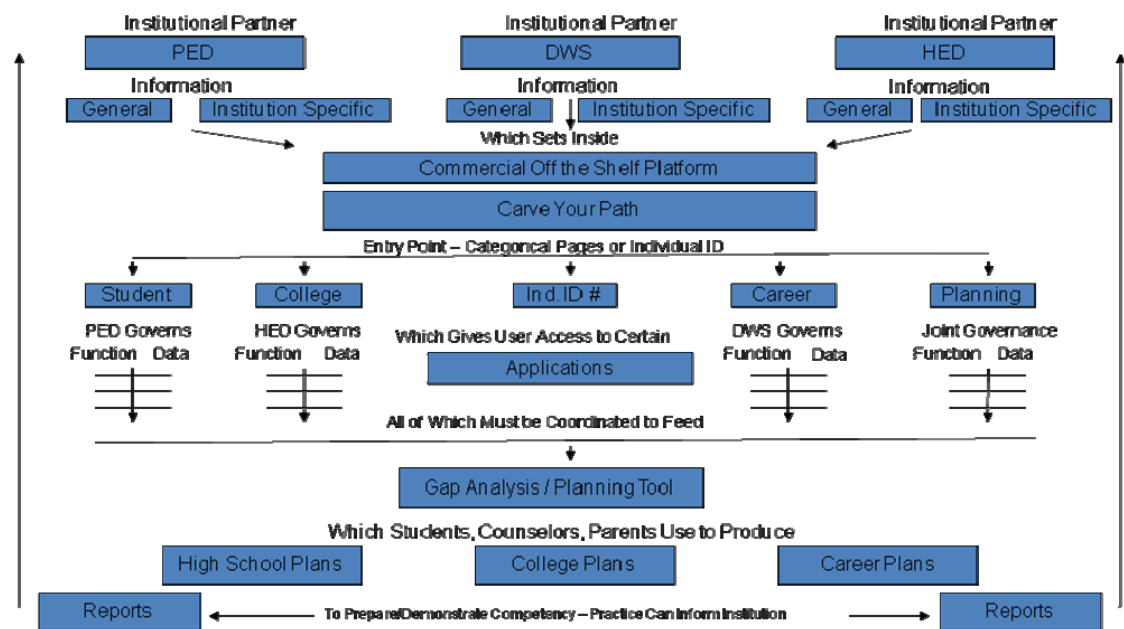
Carve Your Path/ESMS

the

High School, College and Career Management System

“Carve Your Path” is an example of a multiagency constituent application that would be part of the New Mexico Constituent Portal. It is designed to provide an educational portal that would be utilized by citizens of the State of New Mexico as they traverse High School, College and their careers as adults.

The project came about when the three agencies, Public Education Department, Higher Education Department and Workforce Solutions realized that they were embarking on three overlapping and related efforts.



The diagram above illustrates how the three institutional partners are collaborating to establish a single portal that would address their targeted populations as part of a career planning continuum for individuals as they move from one partner’s purview to another.

Goal 1: Information Technology Must Drive Efficient Delivery of High Quality Government Services that will Benefit Constituents and Support Economic Development

“YES” ELIGIBILITY

The Human Services Department is planning to implement an enterprise eligibility system that will serve as a web portal to allow citizens to access multiple social service programs. The end result will be a web accessible solution that enhances a “No Wrong Door” to make life easier for program participants.

The system will streamline eligibility processes across participating agencies meeting the following business needs:

- Seven agencies have the same need and will coordinate a shared solution
- The system must solve issues for 23 social service programs

AGENCY	PROGRAMS
Human Services Department	<ul style="list-style-type: none"> • Temporary Assistance for Needy Families (TANF) • Food Stamps (FSP) • General Assistance (GA) • Refugee Assistance (RCA& RMA) • Low Income Home Energy Assistance Program (LIHEAP) • Education Works Program (EWP) • New Mexico Works Support Services (NMW) • Medicaid
Department of Health	<ul style="list-style-type: none"> • Families, Infants & Toddlers (FIT) • Women, Infants & Children (WIC) • HIV/AIDS • Developmental Disabilities (DD) Medicaid Waiver • Immunizations • Family Planning Program (FPP)
Aging & Long Term Services Department	<ul style="list-style-type: none"> • Traumatic Brain Injury (TBI) • Program of All-inclusive Care for the Elderly (PACE) • Personal Care Option (PCO) • Mi Via Medicaid Waiver • Disabled & Elderly (D&E) Medicaid Waiver
Children, Youth, & Families Department	<ul style="list-style-type: none"> • Childcare Program
Commission for the Deaf & Hard of Hearing	<ul style="list-style-type: none"> • Communications Access Program
Developmental Disabilities Planning Council	<ul style="list-style-type: none"> • Treatment Guardian and Guardian Programs
Department of Workforce Solutions	<ul style="list-style-type: none"> • Workforce Investment Act (WIA) Programs

Design goals of the system:

Build a common platform; conform to state and federal standards; develop to be adaptable, scalable, and modular; meet goals of Social Services Architecture; common information architecture for multiple programs; enable common governance structure to build future coordination; bring social services to one common web portal



Goal 1: Information Technology Must Drive Efficient Delivery of High Quality Government Services that will Benefit Constituents and Support Economic Development

MOTOR VEHICLE DIVISION SERVICES PORTAL FOR ONLINE SERVICES

The Motor Vehicle Division of the Taxation and Revenue Department (MVD) is redesigning its web presence to be an online services portal. Constituents will be able to conduct most of their vehicle registration and drivers license business, including payments, online.

For those transactions requiring a visit to an office, such as testing or those requiring the presence of the vehicle, users will be able to locate their local offices and schedule these appointments. Wait times at these offices for drop-in visits will be available on the website as well.

The following is a representative list of transactions that may be available on this portal over time:

- Renewals and payments for vehicle registration and drivers licenses
- Change of address for vehicle registration and drivers licenses
- Ordering of driver records
- Ordering of specialty license plates
- Suspension and reinstatements
- Vehicle records

The agency application information map initiative, as well as the business domain and common business function collaboration efforts described below, will facilitate the development of this New Mexico Government services portal for residents and businesses.

2. ESTABLISH AND MAINTAIN A STATE OF NEW MEXICO GOVERNMENT AGENCY APPLICATION INFORMATION MAP

A State of New Mexico agency application information map will be established that will show how information technology is used to provide services. This information map would be used to provide a background for agency and enterprise IT Planning, including the development of interagency data-sharing programs.

The examples of proven applications and current projects described above as part of the “Government Services Portal” are only a small sampling of the tremendous strides made in recent years by State of New Mexico agencies in the use of information technology to serve their constituencies. Other Agency applications and projects are included in a high level representation of such information mapping in Appendix 1 – Examples from an “Agency Applications Information Map.”

A comprehensive report of the use of information technology by state agencies would serve to provide a big picture of how both legislative appropriations and agency budgets have been used towards the efficient delivery of high quality government services that benefit clients and support economic development.

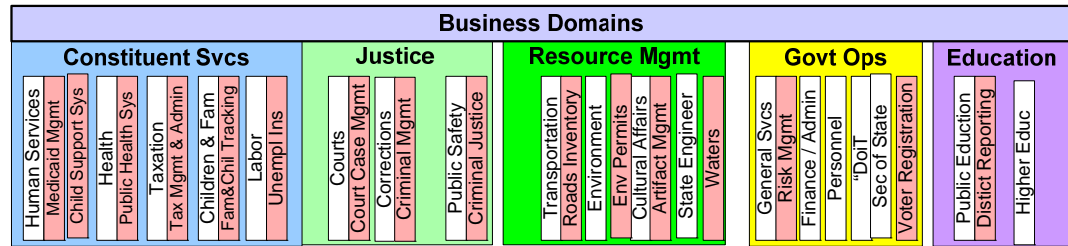
This mapping of applications and data would be organized around the business domains established in the “Information Technology Enterprise Architecture Framework, 2004.” These

Goal 1: Information Technology Must Drive Efficient Delivery of High Quality Government Services that will Benefit Constituents and Support Economic Development

Business Domains, Constituent Services, Justice, Resource Management, Government Operations and Education are described in the next initiative.

3. ESTABLISH BUSINESS DOMAIN TEAMS FOR THE DEVELOPMENT OF INTERAGENCY COLLABORATION AND DATA-SHARING PROGRAMS

The 2004 Information Technology Enterprise Architecture Framework used the diagram below to highlight how the State of New Mexico agencies could fit into one of five business domains.



Agency Strategic Architectures

These five business domains were established to help understand the functionality that IT could bring to state agencies and the possibilities that could be derived from collaboration between and among agencies in the same business domain.

This strategic initiative around the Business Domain Model calls for agencies within a specific domain to work together to find common data sets and business processes that can be better coordinated.

During the first year of this strategic plan, organizational meetings will be held along the business domain line with the CIOs and IT leads of the members of specific domains. An agenda and a set of expectations for each of the domains will be presented and progress will be reported to the Information Technology Commission on a periodic basis.

It may be necessary to update the domain definitions and participant distributions based on these meetings.



Constituent Services

Constituent services describe the mission and purpose of the New Mexico government in terms of the services it provides both to and on behalf of the state’s residents. It includes the delivery of resident-focused, public, and collective goods and/or benefits as a service and/or obligation of state government to benefit and protect the state’s general population.

Constituent Agencies:

- Aging and Long Term Services Department;
- Children, Youth and Families Department;
- Commission for the Blind;
- Commission for the Deaf and Hard of Hearing;
- Commission on the Status of Women;
- Department of Health;
- Department of Military Affairs;
- Department of Veterans Services;
- Developmental Disabilities Planning Council;

Goal 1: Information Technology Must Drive Efficient Delivery of High Quality Government Services that will Benefit Constituents and Support Economic Development

Educational Retirement Board; Governor’s Committee on Concerns of the Handicapped; Health Policy Commission; Human Services Department; Indian Affairs Department; Miner’s Colfax Medical Center; New Mexico Department of Workforce Solutions (Formerly Department of Labor); ONGARD; Public Employees Retirement Association; Retiree Health Care Authority; Taxation and Revenue Department; Workers Compensation Administration.

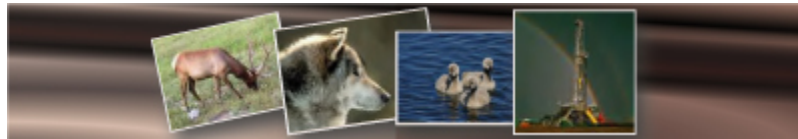


Justice

Justice services range from public safety and law enforcement, homeland security, the Courts systems and corrections, with its criminal management responsibilities.

Justice Agencies:

Administrative Office of the Courts; Administrative Office of the District Attorneys; Attorney General’s Office; Crime Victims Reparations Commission; Department of Corrections; Department of Public Safety; Judicial Standards Commission; New Mexico Sentencing Commission; Public Defender Department.



Resource Management

Resource Management encompasses natural and manmade state resources. Economic development, energy management, environment management, natural resources such as game, fish and water, transportation and highways are all elements of the resource management business domain.

Resource Management Agencies:

Board of Engineers and Surveyors; Department of Cultural Affairs; Department of Transportation; Economic Development Department; Energy, Minerals & Natural Resources Department; Environment Department; Game & Fish Department; Livestock Board; Office of the State Engineer; Organic Commodity Commission; State Fair Commission; State Land Office; State Records Center and Archives; Tourism Department



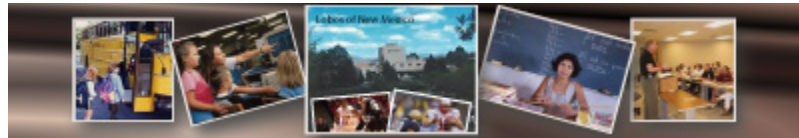
Government Operations

Goal 1: Information Technology Must Drive Efficient Delivery of High Quality Government Services that will Benefit Constituents and Support Economic Development

Government Operations refers to the back office support activities that enable the government to operate effectively. Finance, controls and oversight, executive functions, property management, information technology and human resource management are among such activities for Government Operations.

Government Operations Agencies:

Board of Architect Examiners; Board of Nursing; Department of Finance and Administration; Department of Homeland Security; Department of Information Technology; Gaming Control Board; General Services Dept; Governor's Office; Medical Board; Public Regulation Commission; Racing Commission; Regulation and Licensing Department; Secretary of State; State Auditor's Office; State Investment Council; State Personnel Office; State Treasurer's Office; Veterinary Medicine Board



Education

Education refers to those activities that impart knowledge or understanding of a particular subject to the public. Education can take place at a formal school, college, university or other training program. This Line of Business includes all government programs that promote the education of the public, including both earned and unearned benefit programs.

Education Agencies:

Council on Technology in Education; Department of Higher Education; Public Education Department; SDE - Division of Vocational Rehabilitation

4. ESTABLISH INTERAGENCY COMMON BUSINESS FUNCTION COLLABORATION

Across state agencies there are common business functions that would benefit from interagency function collaboration. The SHARE system addresses many business functions common to state agencies such as financial accounting, payroll and staff recruitment.

Other business functions that are common across agencies include fee and payment collections, interfaces to the credit card and banking system, license processing, etc.

GOAL 2: IMPROVE SUPPORT FOR ALL STATE AGENCY INFORMATION TECHNOLOGY PROGRAMS.

STRATEGIES

Strategy: The annual agency IT Plan process will be leveraged and improved to structure a common framework for agency IT planning and to gather data for a statewide enterprise approach to IT planning.

Strategy: Collaborative domain teams will be established to define shared resource opportunities for joint funding, development, and support. Collective approaches to IT investment will be utilized to the extent possible.

Strategy: The Department of Information Technology will partner with agencies to understand their current and future business drivers; to expand current solutions; remove ineffective solutions and to develop long-term solutions in support of agency missions; and will publish these solutions as part of the Department of Information Technology and State of New Mexico IT strategic plans.

Strategy: The Department of Information Technology Secretary, as the State Chief Information Officer, will ensure executive management communicates to agencies the value and need to view information technology services at the enterprise and statewide level.

Strategy: The Department of Information Technology will revamp its organization structure to facilitate a single point of contact for major agency initiatives that cross multiple service groups through an identified coordinator who will have the authority to manage the initiative through completion.

Strategy: The Department of Information Technology will develop a strategic business plan that defines the vision for services and revenues over a five-year horizon.

BACKGROUND

State Agency Information Technology Programs should be understood as IT activities or organizations built around the delivery of services to constituents through information technology. Such a program within the state agency might have one or more information technology applications that support that set of goals for delivery of state services to its residents.

Support for State Agency Information Technology programs is not limited to financial support, but also includes senior management agreement on technology goals, active business sponsorship of projects, enterprise infrastructure to enable the programs, and standards with which the programs should be managed; along with time and cost-savings best practices.

Support for state agency information technology starts internally with the agency strategic plan and the Cabinet Secretary, along with the agency Chief Information Officer or IT Lead. Support externally comes through the NM Department of Information Technology as oversight, guidance and service provider.

A significant vehicle for gaining internal and external support for the agency IT program is the **annual agency IT planning process**.

Goal 2: Improve Support for all State Agency Information Technology Programs

According to the Department of Information Technology Act:

Each executive agency shall submit an agency information technology plan to the secretary in the form and detail required by the secretary.

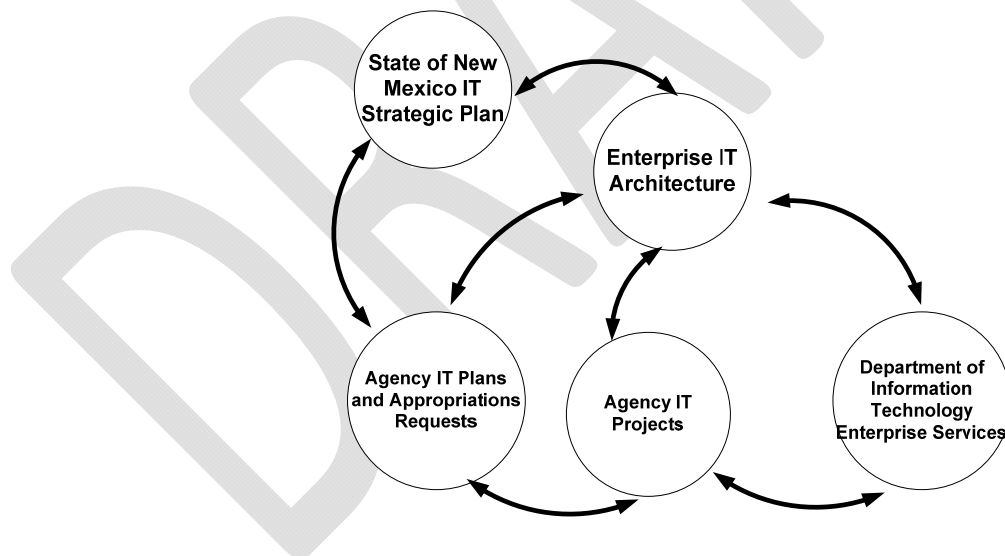
As the chief information officer, the Secretary shall:

Review executive agency plans regarding prudent allocation of information technology resources; reduction of data, hardware and software redundancy; and improvement of system interoperability and data accessibility among agencies;

Monitor executive agency compliance with its agency plan, the state information technology strategic plan and state information architecture and report to the governor, executive agency management and the Legislative Finance Committee on noncompliance;

Provide technical support to executive agencies in the development of their agency plans.

The agency IT plan describes how the internal agency IT organization intends to translate the business needs of the agency into productivity-enhancing technology initiatives. Through the annual agency IT plan process, the Department of Information Technology is able to target the development of enterprise services, identify any need to update the State of New Mexico IT Strategic Plan and/or Enterprise IT Architecture.



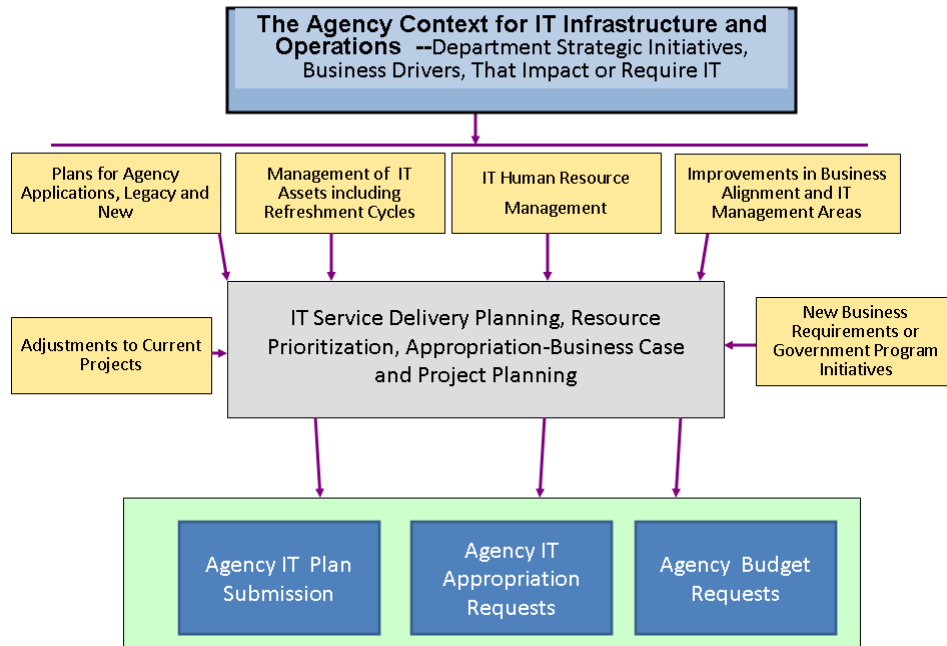
The illustration presented above shows the interrelationship between the agency IT program and the State of New Mexico IT Strategic Plan and Enterprise Architecture, as well as the Department of Information Technology provisioning of enterprise services. The lines of interactivity indicate the support structure for agency IT programs.

INITIATIVES

1. SUPPORT AGENCY IT PLANNING THROUGH THE ANNUAL AGENCY IT PLAN PROCESS

The strategic goal for the annual agency IT plan is twofold: to assist the agency in structuring its agency IT planning process and to provide a vehicle for enterprise IT planning.

Overview of Agency IT Planning Process



Because the annual agency plan is due at the beginning of September, along with the budgeting and appropriation request documentation for the following fiscal year, the plan actually covers the 10 months of the current fiscal year as well as the 12 months of the next fiscal year.

AGENCY IT PLANNING INPUT

The Agency Context for IT Infrastructure and Operations

The Agency Context includes: agency mission; agency business drivers; agency strategic initiatives; agency performance measures; agency description of it services.

Plans for Legacy and New Agency Applications

Plans for applications include: retirement, replacement of legacy applications; eliminations/consolidations; upgrades and updates; ongoing maintenance; identified gaps in coverage.

Management of IT Assets including Refreshment Cycles

Management of IT assets includes: asset management data and preparation of annual inventory report for NM Department of Information Technology; refreshment cycles; security and reliability upgrades; system monitoring and management tools.

IT Human Resource Management

IT human resource management includes: agency IT staff makeup; staffing gaps and recruitment; training requirements and plans; contract-based staffing needs and plans.

Improvements in Business Alignment and IT Management Areas

Alignments include: applications portfolio management; project portfolio management; vendor management; software development management; service management/operations support; IT fiscal and budget management.

Adjustments to current Projects

Annual reviews of projects include: current project inventory, staffing and funding commitments; project certification management; percentage of state resources managing projects versus contract project managers

New Business Requirements or Government Program Initiatives

Among the sources of new requirements are: federal or State of New Mexico initiatives or regulatory compliance changes; statutory mandates; opportunities for productivity improvements or citizen service level performance enhancements; collaboration opportunities with other state entities.

Planned Facility Improvements or Upgrades

In order to assure compliance with State of New Mexico IT consolidation directions, Department of Information Technology will require agencies to include any data center upgrade plans in their annual IT plans.

2. INITIATE AND SUPPORT AGENCY IT SERVICE MANAGEMENT EFFORTS

The NM Department of Information Technology has established the IT Service Management Plan, indicating its intention to establish an IT Service Management program for the enterprise services it provides for state agencies. Included in this plan is a commitment to the ITIL as the enterprise model for IT operations and service delivery.

Through the NM Department of Information Technology's Enterprise Training program, IT service management workshops and training programs will be offered to agencies.

Agencies are encouraged to adopt this enterprise service model within their internal IT services.

3. DEVELOP AN AGILE IT WORKFORCE TO PROMOTE ENTERPRISE IT KNOWLEDGE MANAGEMENT

As agencies become more dependent upon information technology and as the technology becomes more sophisticated, the challenge of staffing IT programs at both the agency and enterprise level increases. This is evident in both the recruitment and retention of skilled IT workers.

There are two related challenges: staffing programs and retaining institutional as well as technical knowledge.

IT SKILLS TRAINING

One piece of enterprise data requested in the FY11 Agency IT Plan template is the agency needs and plans for providing IT skills training for staff.

This set of information will be provided to the NM Department of Information Technology Enterprise Training program. When compiled, the Enterprise Training Program will use the data to plan coordinated training programs for agency IT workforces

Among course offerings given or planned are:

- Cyber Security
- Customer Service
- Information Technology Infrastructure Library (ITIL)
- Business Continuity

IT KNOWLEDGE MANAGEMENT

An unexplored avenue for sustaining IT skills and IT knowledge is networking among IT staff on a range of themes and technical areas of expertise:

- There are some 20,000 Microsoft-based desktops and laptops across state agencies, with a number of technicians supporting these common environments.
- There are a number of agencies with help desk staff that could benefit from discussions along common themes.
- There are project managers across the agencies that could benefit from sharing lessons learned and common solutions to common problems arising in projects.
- Oracle is used by a number of agencies whose staff could benefit from such networking.

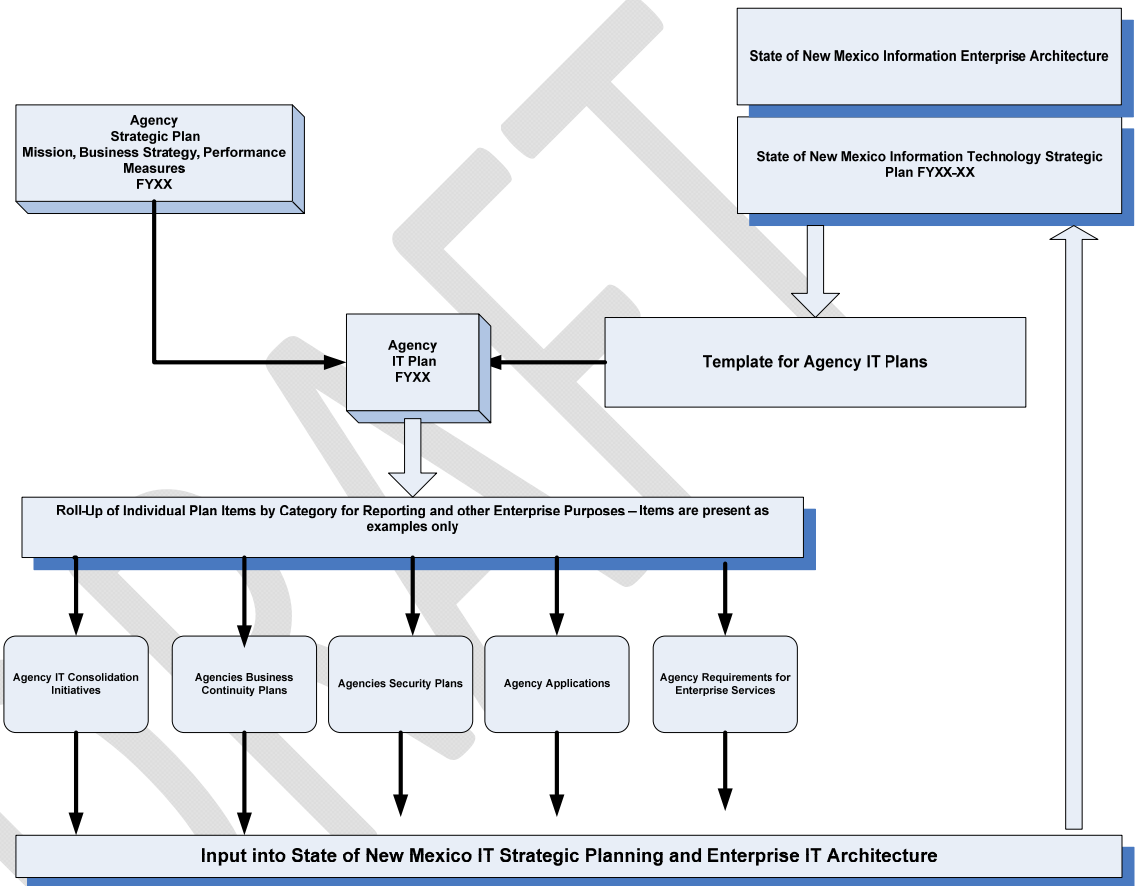
Technical knowledge used by state agencies and applications is a vital state enterprise resource that could be gathered, posted and refreshed on an ongoing basis for the benefit of state agencies.

This IT Knowledge Management approach would help with employee retirements and transitions, assuring the foundation for continuity of operations.

4. CREATE AND PUBLISH ANNUAL AGENCY PLAN REVIEWS

In the state’s enterprise IT planning process, the annual agency IT plan process provides invaluable information about the status of information technology within state agencies.

Beginning with the Agency IT Plans submitted in September of 2009 as part of the FY11 planning process, an annual plan review will be prepared and presented to the IT Commission on the agency IT accomplishments for the previous fiscal year and the planned accomplishments for the remainder of the current fiscal year.



As part of the Department of Information Technology strategic planning process, other areas of information requested in the Agency IT Plan template will be compiled on an enterprise level, and where appropriate it will be put into a report format to be shared with the IT Commission, the agency CIOs and IT Leads and others.

5. IDENTIFY JOINT FUNDING OPPORTUNITIES

Goal 2: Improve Support for all State Agency Information Technology Programs

The planning process provides an opportunity to identify agency specific plans for new applications, services, and processes that can be shared by other agencies. Early planning for these joint initiatives can lead to a shared funding approach. Support for the funding can then be provided by all entities including the Department of Information Technology.

6. DEVELOP A FIVE YEAR BUSINESS PLAN FOR SERVICES AND REVENUES

Development of a long term plan for services with projected revenues will mitigate the development of these same services within each organization and lower the total cost of ownership. Without a long-term plan, updated on an ongoing basis, the state is not able to make effective decisions on investments and acquisition of applications and products.

The plan will include projected revenues based upon expected agency need and service rates. This would also include a reduction in revenues for services that are planned for discontinuance.

7. PROVIDE FOR A SINGLE POINT OF CONTACT FOR MAJOR AGENCY INITIATIVES

The Department of Information Technology will identify single points of contacts for major agency initiatives that require planning and support across multiple service areas. The contacts would have the skills and authority to streamline processes and decision making, facilitate activities for projects, and resolve issues as they occur.

GOAL 3: IMPLEMENT AND MAINTAIN A HIGH QUALITY TECHNOLOGY INFRASTRUCTURE TO SERVE RESIDENT AND GOVERNMENT CLIENTS.

STRATEGIES

Strategy: The Department of Information Technology has been designated as the Enterprise Infrastructure provider whose responsibility it is to build out and strengthen the enterprise infrastructure and related services. The Department, in consultation with public entities, will plan, invest, and implement services that maximize advances in technology and service options.

BACKGROUND

Information Technology Infrastructure is defined as the technical support structure for agency specific business application and data.

New Mexico's information technology infrastructure includes its hardware (mainframes, servers, attached storage and tape back-up systems, routers, switches, etc.), interconnecting networks, associated software (operating systems, applications, both custom and off-the-shelf), as well as desktops, laptops and hand held devices used to connect with the business applications.

As part of the discussion within the "creating a more E-efficient New Mexico" approach that led to the establishment of the Department of Information Technology there was a vision of a single statewide enterprise infrastructure, with effective centralized IT services.

INITIATIVES

1. UPDATE AND EXPAND CURRENT SERVICES INFRASTRUCTURE

The Department of Information Technology has an ongoing commitment to improve, update and expand its current services infrastructure. Among initiatives being planned or implemented:

- In an effort to improve service and the speed of deployment of agency applications, establish a virtual server environment to readily support server environments for testing, development, administration, production, and disaster recovery.
- The enterprise e-mail system will be updated with equipment and software refreshment adding e-mail archiving and retrieval services.
- Provide a comprehensive staging and test environment for new data center applications without risk to production systems.
- Implement a standardized web hosting environment for agency applications.

2. ENHANCEMENT OF DATA CENTER CAPACITY and SECURITY

Goal 3: Implement and Maintain a High Quality Technology Infrastructure to Serve Resident and Government Clients

The Department of Information Technology will continue to work with the General Services Department and its Property Control Division to upgrade or replace the data center facilities including power and air conditioning systems.

DATA CENTER NETWORK

To effectively manage servers and systems in the data center, the Department of Information Technology will move from a set of disparate agency and functional networks to one unified network that provide:

- A Production Network using the latest industry standards to be more efficient and less complicated, reducing the Mean Time to Repair (MTTR)
- A Dedicated Backup Network to allow for continuous backups during working hours without impacting normal production traffic
- A Dedicated Administrative Network to allow for continuous monitoring, system administration and scheduled patches/updates to occur without impacting production or backup processes

3. IMPLEMENT A BUSINESS CONTINUITY/DISASTER RECOVERY CENTER

Beginning with a disaster recovery site for the SHARE enterprise accounting system, the state will be planning and contracting for a second data center that will also be used for a Disaster Recovery site for state applications.

- Conduct agency assessment survey
- Define center requirements
- Select and implement a business continuity center

4. IMPLEMENT A STATE-WIDE BROADBAND NETWORK

Building telecommunications capacity for the State of New Mexico and its agencies is a multi-year project. The Infrastructure Voice and Radio Division of the Department of Information Technology will be continuing these projects:

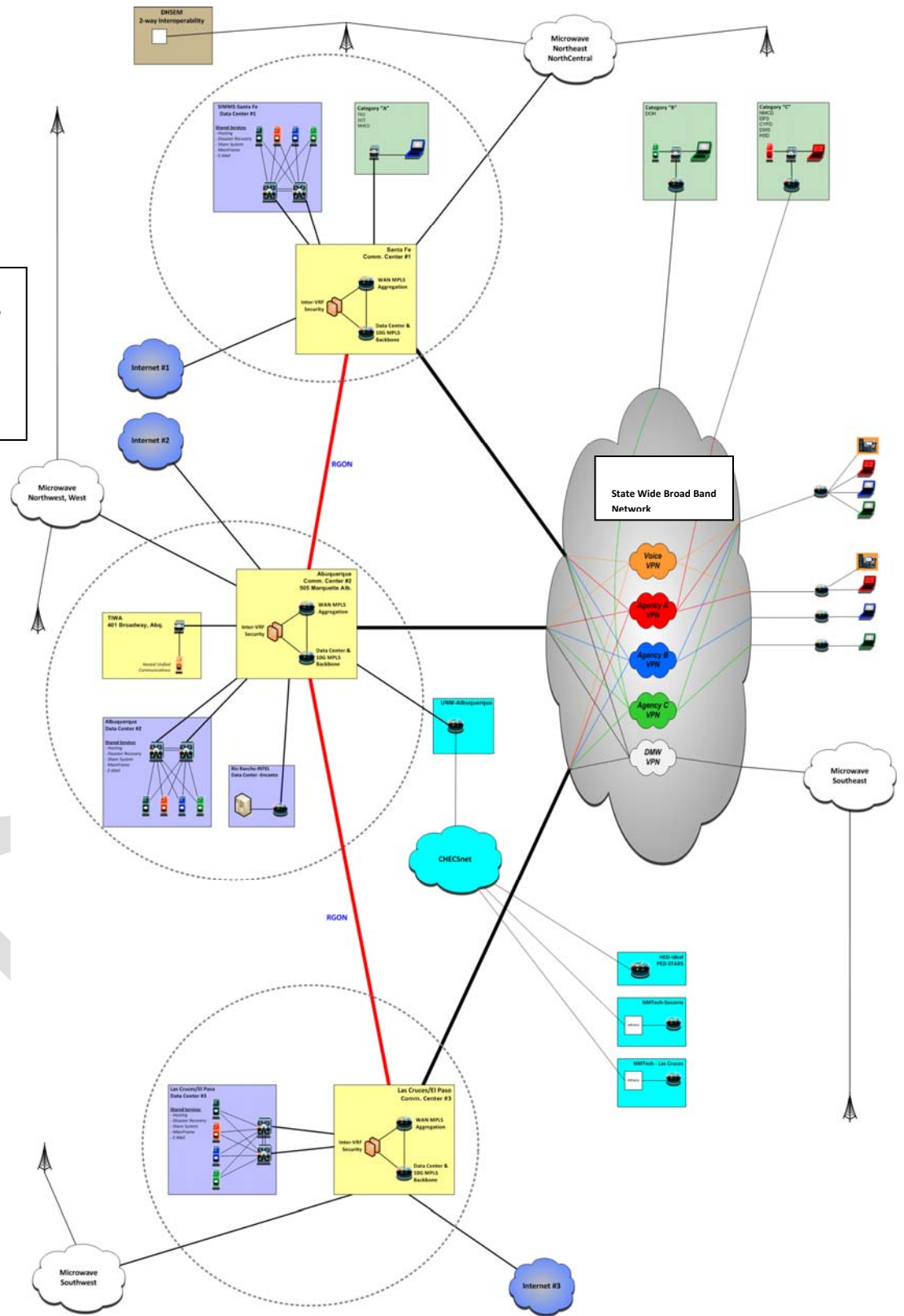
- Develop a statewide broadband network that integrates voice, video and data transmission and takes advantage of investments in high speed network services including digital microwave and fiber. **(See illustration that follows).**
- Integrate the state's fiber network with the overall broadband plan to enable high-speed connectivity.
- Provision and maintain the Rio Grande / I-25 Corridor Fiber.
- Complete the Southeast Quadrant and provision the connection as part of the broadband plan as appropriate.

Goal 3: Implement and Maintain a High Quality Technology Infrastructure to Serve Resident and Government Clients

- Establish the Northeast fiber connection between Santa Fe and Raton and provision the connection as appropriate.
- Continue the conversion of the Digital Microwave Network (DMW) from analog to digital.
- Continue to expand and upgrade the state's Core Network, ensuring all DoIT network equipment and operating systems are kept up to date and meet industry standards.
- Continue to upgrade two-way radios to narrow banding as required by the FCC by 2013 through a phased five-year approach to meet the federal requirement.
- Establish and implement the Voice-Over-Internet-Protocol (VOIP) strategic plan for the state as part of the broadband plan.
- Develop a plan for communication interoperability between DoIT and Department of Homeland Security and emergency responders.
- Develop a plan to offer consolidated Enterprise Interactive Voice Response (IVR) services to state agencies.

Goal 3: Implement and Maintain a High Quality Technology Infrastructure to Serve Resident and Government Clients

Illustration of a statewide broadband network that integrates voice, video and data transmission



5. IMPLEMENT A PERFORMANCE MANAGEMENT PROGRAM

In the transition from an agency-focused information technology environment to an enterprise information technology environment, we move from a line of sight management approach to a tools-based management approach.

In a line-of-sight management approach, the systems administrators can see the power lights of a server, can easily go to a keyboard and review system logs, and have some level of confidence about the health level of the systems in sight. He or she also knows about the configuration of the system and knows what needs to be done to maintain the system(s).

As the number of systems increase, the complexity of system administration increases and as the components and size of the data increase, the ability to manage on a line-of-sight basis becomes too difficult and the need for management tools becomes vital.

As part of the State of New Mexico Framework for Enterprise Architecture there is a set of Guiding Principles:

“Systems Management Principles” (Page ITEA-25)

Technology Selection will consider the ability to support centralized systems management of all components.

Motivation:

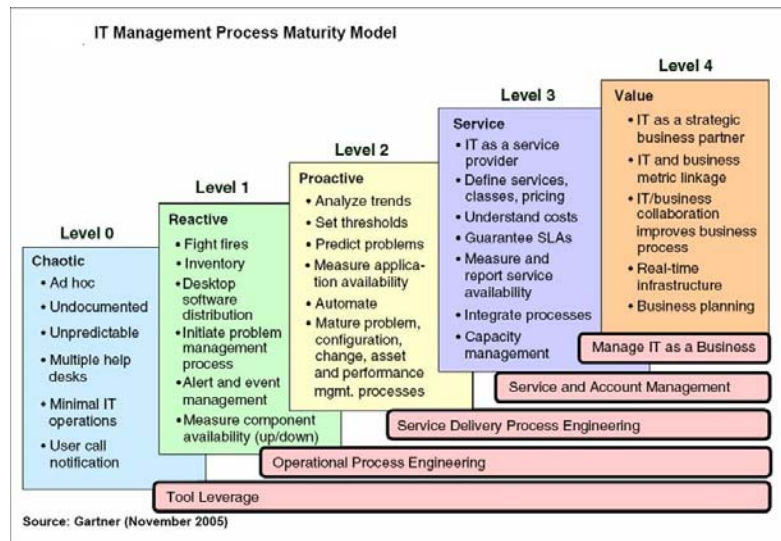
- Improve service delivery
- Reduce overall risk to the business
- Increase the quality and reliability of IT solutions
- Ensure effective use and deployment of technology resources
- Increase consistency, integration and accessibility of systems

A performance management program consists of (1) definition of performance standards, (2) a command and control center with tools to measure and track performance, (3) a process to communicate performance on an ongoing basis, and (4) the development of customer service level agreements.

A Command and Control Center operational framework is necessary to bring about consistency across platforms and technical teams. The Data Center Control and Command Center would enable Department of Information Technology to effectively manage servers and applications from a system management and performance perspective, assuring application availability and data integrity.

The performance program with a Command and Control Center would move the Department of Information Technology through a maturity process, from haphazard to structured, to repeatable and then consistent.

Goal 3: Implement and Maintain a High Quality Technology Infrastructure to Serve Resident and Government Clients



Enterprise System Management provides a toolset to manage components of the end-to-end application process, identifying all the IT pieces in between. Among the features are hardware and software cataloging from the asset management system, setting of thresholds for performance and up-time monitoring and both warnings and alerts to system administrators and application owners. A key ingredient is the monitoring of the IT path between the end-users and the application, so that if a network component is down, application impact can be determined.

6. CONTINUE BUILDING A SINGLE TRUSTED NETWORK FOR STATE OF NEW MEXICO AGENCIES

According to the Statewide Security Assessment and Strategic Plan for the State of New Mexico [OCIO, September 2003] “The state has little hope of securing or managing an information network unless that network is completely defined and configuration controlled.”

The State of New Mexico Framework for Enterprise Architecture lists best practices, and included in this listing is a best practice that pertains to Information Technology networking:

An enterprise-wide backbone network that provides a single network image as if it were a virtual, enterprise-wide LAN will be implemented.

Motivation:

- There is a need for access to information across the enterprise
- Must have architecture to support distributed systems
- Must support distributed applications, client server, internet and collaborative computing

Implications:

- Must support enterprise-wide Directory Services
- Distributed LANs must be interconnected

Goal 3: Implement and Maintain a High Quality Technology Infrastructure to Serve Resident and Government Clients

A Legislative appropriation of \$1.5M (Laws 2007, Chapter 28, Section 7 (9)) was appropriated for establishing an enterprise trusted network. The Department of Information Technology reviewed this appropriation and directed that a trusted network must start at the center, which is the Simms data center. The data center would support the enterprise trusted network. These funds were certified to cover the following initial steps towards an enterprise trusted network.

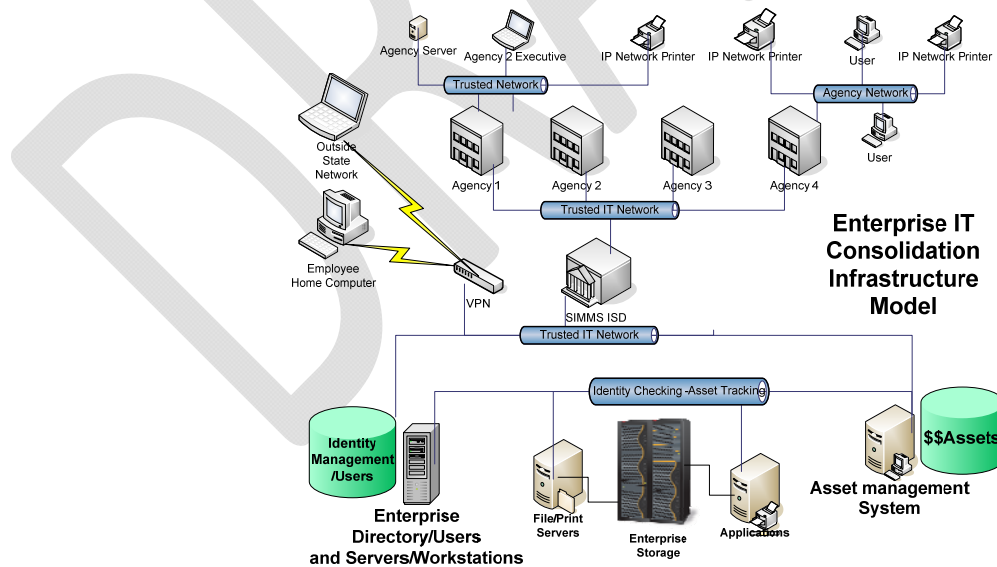
- Simms Data Center Power Re-circuiting
- Enterprise Information Technology Asset Management
- Enterprise Information Technology Performance Monitoring
- Enterprise Information Technology Asset Management Security

With the completion of these efforts, attention will be turned to expanding these functions beyond the Simms Data Center into the rest of the State of New Mexico IT enterprise. The design and plan for the broadband network will have an impact on the trusted network and both must be designed in an integrated manner.

7. ESTABLISH ENTERPRISE IDENTITY MANAGEMENT INFRASTRUCTURE

Identity Management has been recognized as an enterprise goal under initial IT Consolidation planning and IT Strategic roadmaps for the State of New Mexico. Identity Management could support agency and enterprise applications, asset management and network security.

The illustration below is a simple high-level depiction of how an identity management infrastructure would support a user's ability to login on a workstation or laptop and be identified to the enterprise network, a file server and specific applications.



The Department of Information Technology will establish a subject matter focus team that will analyze and develop recommendations on the development and implementation of an Enterprise Identity Management Infrastructure.

GOAL 4: REDUCE THE COST OF GOVERNMENT OPERATIONS THROUGH EFFECTIVE DEVELOPMENT, IMPLEMENTATION AND MANAGEMENT OF IT TECHNICAL AND APPLICATION ARCHITECTURES, PROGRAMS AND SERVICES.

STRATEGIES

Strategy: An effective statewide Enterprise Architecture will be established to support public entities with their mission-based applications, providing a strong foundation of standards and best practices across the information technology life cycle. The 2004 Information Technology Enterprise Architecture Framework will be updated to support and guide ongoing architecture efforts. Technical domain teams will be established to identify and develop standard-based enterprise services.

Strategy: The Department of Information Technology, in consultation with public entities, will define application architecture(s) to limit the range of supported environments in order to develop concentrated skills and expertise, and reduce costs with the established exception process being available as appropriate.

Strategy: The Department of Information Technology's review of agency RFPs will include their compliance with the state's architecture standards as published.

Strategy: The Department of Information Technology will update and use the State of New Mexico Information Technology Enterprise Architecture (ITEA Framework) as its business, application and technical architecture, inclusive of enterprise portals. This revised ITEA will be the basis for standards and IT rules.

BACKGROUND

IT Architecture is referenced and defined in the Department of Information Technology Act as "state information architecture," which "means a logically consistent set of principles, policies and standards that guides the engineering of state government's information technology systems and infrastructure in a way that ensures alignment with state government's business needs."

"The goal of New Mexico's IT Enterprise Architecture is to enhance coordination, simplify integration, build a consistent infrastructure, and generally allow greater efficiencies in the development of technology solutions to support agencies in the fulfillment of their missions to serve constituents. The intent is to realize these goals, while ensuring effective use of state resources, thereby enabling consistent, effective delivery of services to the employees, residents, and businesses of New Mexico." - *The information Technology Commission as adopted into the IT Enterprise Architecture Framework, 2004.*

Programs should be understood as activities or organizations built around the delivery of services to constituents. A program within the state or an agency might have one or more information technology applications that support that set of goals for delivery of state services to its citizens.

Services in this context refers to information technology activities with specific deliverables that can be either internal to an agency, or enterprise services delivered to multiple or all executive agencies.

INITIATIVES

1. UPDATE THE INFORMATION TECHNOLOGY ENTERPRISE ARCHITECTURE FRAMEWORK

In 2004 the Information Technology Enterprise Architecture Framework (ITEAF) was established. It was part of a twofold requirement of the General Appropriations Act of 2004, Chapter 114, Section 8, Subsection (12): “a state information architecture and information technology consolidation plan”

The 2004 State of New Mexico Framework for Enterprise Architecture was in essence a business case for funding a project to establish a program that would provide the IT Consolidation effort with an architectural framework within which to evaluate the “as-is” and to guide that effort with a “to-be” vision.

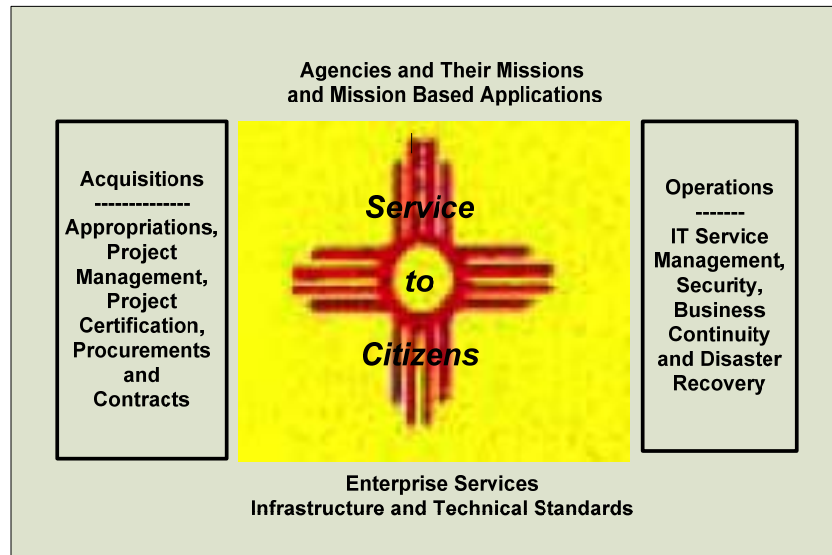
The 2004 Top Ten Guiding Principles of New Mexico’s IT Enterprise Architecture:

The ITEAF laid out ten principles for Information Technology in the State of New Mexico that should serve as the foundation for revisiting and updating the enterprise architecture:

1. New Mexico will maintain a single IT Enterprise Architecture. Strategic planning, resource allocation and IT investments will be optimized at the state level. The architecture definition will serve to focus on a core set of technologies to be supported by the state, enabling skill set development and preservation.
2. The IT Enterprise Architecture will be consistent with and supportive of the state’s strategic direction. RFP language will specify the technology architecture requirements to ensure compliance with the standard.
3. The IT Enterprise Architecture will drive the IT investment process to evaluate and improve investments in information systems.
4. New Mexico’s IT Enterprise Architecture is designed to support its core operations.
5. New Mexico’s IT Enterprise Architecture encourages the development of enterprise, or shared solutions to support common business functions.
6. The ITEA will be standards-based to ensure the interoperability of systems and the stability of the environment.
7. New Mexico’s Data and Information are Enterprise Assets.
8. New Mexico’s ITEA seeks to reduce complexity, risk, and improve efficiency.
9. The ITEA will support reuse for all enterprise architecture components.
10. Security must be designed into all architectural layers.

THE VISION – A FULL LIFE CYCLE APPROACH TO ENTERPRISE ARCHITECTURE

The illustration below depicts the components of an enterprise IT architecture that encompass the full life cycle of information technology focused on providing service to the residents of New Mexico.



- a. The goal of this architecture is to service the agencies and their use of information technology to actualize their business mission.
- b. The foundation of the architecture is infrastructure and technical standards that guide the use of information technology, and enterprise services that provide the agencies with common platforms for their business.
- c. The architecture provides the guidelines and technical framework for the IT acquisition processes, including appropriation requests, projects, procurements and contracts.
- d. The architecture provides the guidelines and technical framework for all aspects of IT operations, including IT service management and security, as well as business continuity and disaster recovery.

2. REVISE THE ENTERPRISE TELECOMMUNICATION ARCHITECTURE PLAN

The General Appropriations Act of 2004, Chapter 114, Section 8, Subsection (11) established requirements for an enterprise telecommunication plan as follows:

“The telecommunications architecture plan shall be in accordance with the State information architecture, information technology consolidation plan, and enterprise-wide information security program; and must be approved by the state chief information officer. The telecommunications architecture plan shall include a cost and savings analysis by agency.

Goal 4: Reduce the Costs of Government Operations through Effective Development, Implementation and Management of IT Technical and Application Architectures, Programs and Services

The state-owned digital microwave telecommunications system shall be used at all locations possible to enhance statewide telecommunications and leverage state-owned resources without incurring additional costs.”

Since 2004 there have been significant accomplishments in the area of the State’s telecommunications architecture towards enabling state consolidation of all the disparate and redundant networks.

A revised Enterprise Telecommunications Architecture Plan would become part of the Enterprise IT Architecture. The statewide broadband plan will follow and be a part of the Architecture Plan.

3. ESTABLISH TECHNICAL DOMAIN TEAMS

This initiative would re-establish the 2004 ITEAF technical domain teams’ effort to assist in the development of standards and best practices in a number of areas. These domain teams, consisting of technical volunteers (and requests by the State CIO for specific representation) from various agencies, would provide input into a number of technical areas, including but not exclusively the following:

Application Domain

The application domain focuses on effective application architecture to enable a high level of system integration, reuse of components, and rapid deployment of applications in response to changing business requirements.

Platform Domain

The Platform Domain defines roles, policies, standards, life-cycle definitions and decision-making criteria for the acquisition, deployment, set-up and provisioning of computing and data storage hardware. It defines the personal and business computing hardware systems to be used by agencies. The architecture addresses decision criteria and best practices for the acquisition and deployment of platforms. The architecture also identifies management and remote access components, which are critical to platform use.

Systems Management

The Systems Management Domain defines the roles, technologies, standards, and policies necessary to identify and manage the information assets of the state. The Systems Management Domain comprises standards for identification, administration, audits, and disposal. Major categories addressed in this domain are Asset Management, Change Management, Console/Event, Help Desk/Problem Management and Business Continuity

4. REVISIT AND SUPPORT THE SOCIAL SERVICES ARCHITECTURE

The Social Services Architecture, or SSA, was published October 31, 2005.

“The purpose of the SSA is to provide a framework to coordinate and drive current and future social services business and IT projects across multiple agencies by sharing common business services/functions. The SSA is one of several business domain architectures within the NM Enterprise Architecture.”

The following agencies were identified as core participants in SSA plan development:

- The New Mexico Department of Health (DOH)
- The New Mexico Human Services Department (HSD)
- The New Mexico Aging and Long-Term Services Department (ALTSD)
- The New Mexico Public Education Department (PED)
- The Children, Youth, and Families Department (CYFD)

Other stakeholders include:

- The New Mexico Department of Workforce Solutions
- The New Mexico Worker's Compensation Association
- The New Mexico Department of Veterans Affairs
- The New Mexico Department of Education/Division of Vocational Rehabilitation
- The New Mexico Developmental Disabilities Planning Council
- The New Mexico Commission for the Deaf and Hard of Hearing
- The New Mexico Commission for the Blind
- The New Mexico Health Policy Commission
- The New Mexico Tele-health Commission and Tele-health initiative participants, and
- A comprehensive list of non-profit service providers, partners and constituent advocates.

"The SSA fits under the umbrella of the Constituent Services Business Domain, published in the State of New Mexico Framework for Enterprise Architecture Program. The SSA could be defined as a well-governed structure that makes it possible to identify the business, information, and technology functions within the constituent services domain of the State of NM."

The Social Services Architecture Plan was envisioned as:

- Ensuring the reality of the implemented enterprise is aligned with the intent laid out by the stakeholder agencies.
- Helping to make integration possible between various agencies that make up a business domain – in this case – constituent services.
- Supporting integration as essential to ensure that business rules are consistent across the SSA organization entities, that the data and its use is immutable, interfaces and information flow is standardized, and the connectivity and interoperability is managed across the enterprise.
- Facilitating **change** and manage it effectively to any aspect of the enterprise. It will provide system developers faster **time-to-market**, thus

Goal 4: Reduce the Costs of Government Operations through Effective Development, Implementation and Management of IT Technical and Application Architectures, Programs and Services

reducing systems development, applications generation, and resource requirements.

- Last, but not least, fitting with the Governor’s initiatives for consolidation, although convergence would be a more apt term. The SSA helps the State strive towards a standard service portfolio for social services.

5. SUPPORT GEOGRAPHIC INFORMATION SYSTEM ARCHITECTURE

The 2009 Regular Session House Joint Memorial 81 GEOSPATIAL INFO SHARING TASK FORCE reads as follows:

“Requesting the Secretary of Information Technology, in cooperation with the Office of the Governor and the New Mexico Legislative Council, to convene a task force to study the sharing of geospatial information and data analysis crucial to addressing cross-jurisdictional issues, including emergency responsiveness; requesting the task force to study how effective public policy decisions can be made at state and local levels using integrated data analysis and data management models and methodologies; requesting the task force to consider how to provide optimal location information for businesses and industries, schools and hospitals and other public and private services; requesting the task force to evaluate the broad spectrum of managing natural resources and environmental issues; requesting the task force to consider how a permanent center of excellence in data analysis and data management can be developed and used, including cross-training, to improve policy and decision-making at all levels.”

The Department of Information Technology and agencies utilizing this technology will organize a task force to fulfill this memorial, developing both this geospatial technology architecture and the inter agency sharing of underlying data.

6. STRENGTHEN AGENCY IT PROGRAMS DELIVERING MISSION-RELEVANT APPLICATION AND SERVICES

Through this State of New Mexico IT Strategic Plan with its attention to existing agency IT programs and applications, a revised enterprise architecture, enterprise models for maturing IT programs, structuring agency IT Plans and other aspects delineated within these pages, a major underlying theme in the Governor’s Executive Order and the Department of Information Technology Act is the strengthening of agency IT programs.

7. CONTINUE THE DEVELOPMENT OF THE ENTERPRISE SERVICE CATALOG

Enterprise services are a fundamental aspect of the State of New Mexico’s Enterprise Architecture and a significant piece of the vision of the State of New Mexico Legislature’s establishment of the Department of Information Technology and the Governor’ Executive Order 2008-11.



The screenshot shows the homepage of the New Mexico Department of Information Technology. The header features the DoIT logo and navigation links: Home, Leadership, About the Department, News, Quick Links, and Contact Us. A sidebar on the left lists various services and documents. The main content area is titled "Welcome to the Department of Information Technology Services Catalog" and includes a brief description of the catalog's purpose. Below the text is a table with four columns: Enterprise Application and Desktop, Hosting and Storage, Voice Communication, and Data Network and Internet. Each column lists several services with hyperlinks.

Enterprise Application and Desktop	Hosting and Storage	Voice Communication	Data Network and Internet
Email	Mainframe Hosting	Desktop	Wide Area Network
Application	Application Hosting	Telephony	Local Area Network
Maintenance	Equipment Hosting	Toll Services	Network
Software Application	Server	Microwave	Engineering & Design
Design & Development	Administration	Radio Network	Internet Access
Managed Desktop	Data Storage & Backup	Wireless Voice & Data Services	
File and Print			

The Enterprise Service Catalog posted on the Department of Information Technology website is but a step in the process of development of a range and depth of services available to state agencies.

8. BUILD ON THE ENTERPRISE IT SERVICE MANAGEMENT PLAN

In November of 2007, Department of Information Technology created its IT Service Management Plan, *A Plan to Provide Information Technology Services*.

The purpose of the enterprise IT service management plan is to have a roadmap for the Department of Information Technology to improve the delivery of existing services and deploy additional Enterprise Information Technology (IT) services. The goal of the plan is to ensure services are aligned with business needs; cost-efficient; exhibit superior performance; and are operationally effective. In other words, this plan addresses *how* DoIT will improve the management of defining, delivering and supporting IT services through the use of industry best practices.

Key findings of the assessment described in the plan included the need to:

- Define Service Catalog and effectively “market” the catalog to customers
- Increase visibility into service demand
- Define policies and procedures to address:
 - Constant reactive, fire-fighting mode
 - Functional responsibilities not clearly defined
- Assess the cost allocation and recovery model

Goal 4: Reduce the Costs of Government Operations through Effective Development, Implementation and Management of IT Technical and Application Architectures, Programs and Services

- Increase staff levels in select areas
- Review the Financial Management dependency on manual processes and look to automate
- Implement an Enterprise IT Service Management (ITSM) tool for process enablement

The Department of Information Technology Service Catalog is now available on-line at <http://www.doit.state.nm.us/services.html> and the commitment to the ITIL service delivery model discussed in this document under Goal # 5 are among the initial results of this assessment and Enterprise IT Service Management Plan.



DRAFT

GOAL 5: IMPROVE THE VALUE OF THE IT INVESTMENT THROUGH ENTERPRISE MODELS THAT IMPROVE AND STREAMLINE THE EXECUTIVE BRANCH'S INFORMATION TECHNOLOGY SYSTEMS

STRATEGIES

Strategy: Established models of it governance, service management, project management and system development life cycle, as well as independent verification and validation, will be used to provide productive frameworks, best practices and common language and terminology that will be useful in maturing and improving the agency and enterprise information technology efforts.

Strategy: The Department of Information Technology, in consultation with public entities, will evaluate and select enterprise services that can be provided in a cost-effective manner across multiple organizations.

Strategy: The Department of Information Technology will establish subject matter focus and domain teams that will analyze and develop recommendations on strategic initiatives such as data and resource sharing, architectures, and customer centric services.

BACKGROUND

Enterprise refers to the executive branch of the government of the State of New Mexico of New Mexico, including all business processes and IT support systems. **1.12.12.1 NMAC**

Enterprise Architecture defines an enterprise-wide, integrated set of components that incorporates strategic business thinking, information assets, and the technical infrastructure of an enterprise to promote information sharing across agency and organizational boundaries. The enterprise architecture is supported by architecture governance and the allied architectures of business, information, technology, and solution. **1.12.12.1 NMAC**

Enterprise Models are depictions or representations that enable understanding of complex systems. The models chosen for this strategic plan include a model for State of New Mexico and agency IT governance; a model for Department of Information Technology enterprise and agency IT service delivery; a model for IT project management; a model for system or product life cycle development; and a model for independent verification and validation. These models hold the potential to contribute to the reduction of IT operational costs and to improve and streamline the executive branch's information technology systems.

INITIATIVES

1. IMPLEMENT AN ENTERPRISE MODEL FOR IT GOVERNANCE

COBIT or *Control INITIATIVES for Information and related Technology* is a model established by the IT Governance Institute to assist organizations to develop organizational structures and processes by which to align the use of information technology with the business strategy of the organization


Goal 5: Improve the Value of the IT Investment through Enterprise Models that Improve and Streamline the Executive Branch's Information Technology Systems

COBIT model is organized into four processes:

1. Plan and Organize
2. Acquire and Implement
3. Deliver and Support
4. Monitor and Evaluate

The model also includes a maturity model for all its identified areas.

The COBIT model for Information Governance is appropriate for the State of New Mexico and for executive agencies:

	<p>Strategic Alignment: A requirement for state agencies in their agency IT Plan, projects and procurements. The Strategic alignment is with both State of New Mexico IT strategy and enterprise architecture, as well as with agency missions.</p>
	<p>Value Delivery: Assuring that IT delivers on its promises to the agency and the State of New Mexico</p>
	<p>Resource Management: Optimizing the investments in applications, infrastructure and people.</p>
	<p>Risk Management: Understanding the realities of risk for applications, infrastructure, projects and IT operations and mitigating their impacts</p>
	<p>Performance Management: Tracking the strategy implementation, project progress, operations expectations all in a measureable manner</p>

This model is useful as a planning and reference for agency senior management, including the Chief information officer. As part of its support for Agency IT Programs, the NM Department of Information Technology will offer workshops in the COBIT approach to agency IT Governance.

The strength of the COBIT model is that it is easily understood and applicable to State of New Mexico agency IT management.

Department of Information Technology will be developing a white paper on the applicability of the COBIT approach to state agencies and the governance of Information Technology for the State of New Mexico.

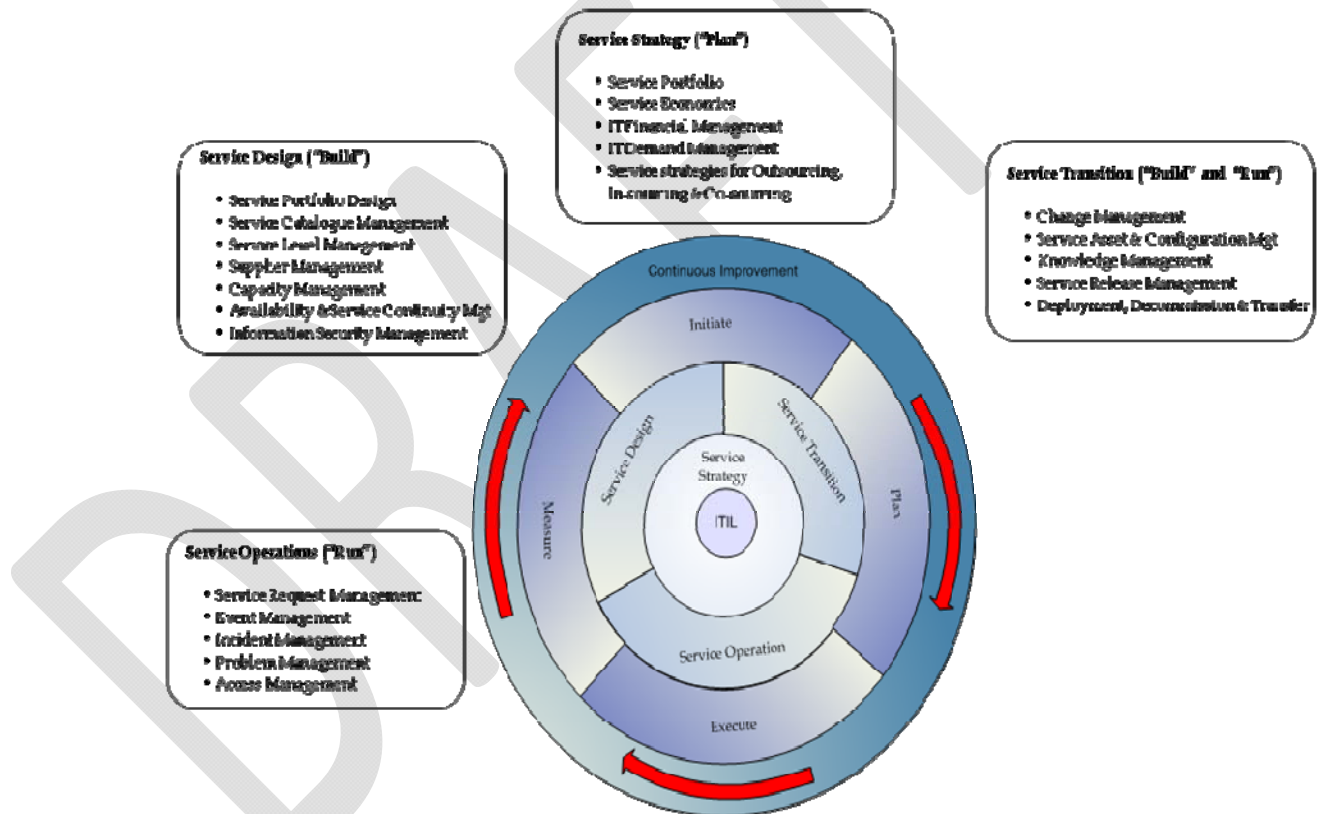
Goal 5: Improve the Value of the IT Investment through Enterprise Models that Improve and Streamline the Executive Branch's Information Technology Systems

Information on Cobit can be found at

<http://www.isaca.org/Template.cfm?Section=COBIT6&Template=/TaggedPage/TaggedPageDisplay.cfm&TPLID=55&ContentID=7981>

2. PROMOTE THE USE OF ITIL – THE INFORMATION TECHNOLOGY INFRASTRUCTURE LIBRARY – AN ENTERPRISE MODEL FOR OPERATIONS AND SERVICE DELIVERY

The *Information Technology Infrastructure Library* or ITIL is a model for operations and service delivery that grew out of the United Kingdom's Office of Government Commerce. The model is useful in the planning and operations of an agency IT organization, and especially in project planning for transitions to operations.



The fundamental approach of the ITIL is a structured and clearly defined set of processes governing operations and service delivery.

Department of Information Technology has committed to such a process and is offering training in this discipline to its own staff and to other agencies through its Enterprise Training program.

Information about ITIL and its sponsor can be found at <http://www.itil-officialsite.com/home/home.asp>

3. PROMOTE AN ENTERPRISE MODEL FOR MANAGING IT PROJECTS.

The Project Management Institute or PMI promotes professional management of projects, whether they are information technology or any other major effort. Where Business Domains, COBIT, and ITIL relate to ongoing programs, project management by definition deals with projects which are “temporary endeavors undertaken to create a unique product, service or result.”

The Project Management Institute’s PMP or Project Management Professional certification is recognized by the NM Department of Information Technology and other state agencies as the standard for hiring or contracting for project managers for their IT projects. The certification is based on exams which test knowledge of the PMI Project Management Book of Knowledge or PMBOK®.

While PMI models planning, execution, monitoring and control, its strength for State of New Mexico IT Projects is in its emphasis on integrated planning, scope management, time or schedule management, cost and quality management, project team and communications management and especially risk management. The State of New Mexico recognizes these important elements of project management.

The NM Department of Information Technology through its Enterprise Training program will work with agencies to schedule project management courses.

The NM Department of Information Technology will also support professional networking opportunities for agency project managers.

Information about the Project Management Institute can be found at <http://www.itil-officialsite.com/home/home.asp>

4. PROMOTE THE USE OF AN ENTERPRISE MODEL FOR A SYSTEM DEVELOPMENT LIFE CYCLE

Several development and implementation methodologies are recognized within the IT industry as providing structured processes for achieving project success. The size, solution, complexity and products to be implemented are key elements of making the decision on the specific methodology to be used. Each agency should use a proven standard for project implementation.

SDLC is used as an acronym for both software development life cycle and for system development life cycle. For IT projects, SDLC is also referred to as Product Development Life Cycle.

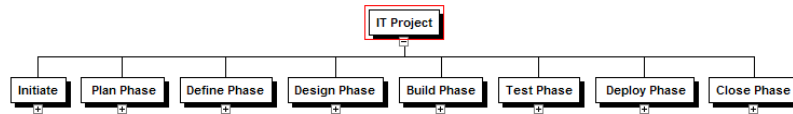
The Department of Information Technology “Project Oversight Memo” establishes the requirement for a product or solutions development life cycle approach to state IT projects and mandates its use as the basis of agency and IV&V reporting:

“Product development life cycle” is a series of sequential, non-overlapping phases comprised of iterative disciplines such as requirements, analysis and design, implementation, test and deployment implemented to build a product or develop a service.

Goal 5: Improve the Value of the IT Investment through Enterprise Models that Improve and Streamline the Executive Branch's Information Technology Systems

While such product or system development cycles will vary according to the complexity of the project, the State of New Mexico is clear that each project should have a defined development cycle and it should be followed.

The selected method should be defined within the architecture for review by the Architecture Committee. Exemptions from the defined life cycle as mentioned herein will require review and acceptance prior to project approval.



Whether a full blown software development project or procurement and implementation of a COTS – Commercial Off-The Shelf solution, or even an agile web development project, the following are elements of a typical IT project's system development life cycle: Initiating the project based on business requirements; planning the project's organization, budget and schedule; defining the solution's technical specifications; designing the solution; building or coding the solution; testing the solution and obtaining end user acceptance; deploying the solution; and finally obtaining the sponsor's signoff on the solution in order to close the project.

Specific projects may compress or expand on each of the described phases.

The Project Oversight Memo states that, "During the project management lifecycle, agencies shall select and implement a phase product development lifecycle methodology approved by the Department."

The NM Department of Information Technology Project Oversight Memo can be found at <http://www.doit.state.nm.us/project.html#Certification> along with other project certification documents.

5. PROMOTE THE USE OF AN ENTERPRISE MODEL FOR INDEPENDENT VERIFICATION AND VALIDATION

The State of New Mexico has adopted the need for projects to be seen from the "outside" to assure that the project is being managed appropriately and is addressing the purpose for which funding was appropriated or assigned.

The state has established the IV&V process as a key ingredient in its IT project risk mitigation strategy by requiring IT projects subject to project certification to have established plans for acquiring independent verification and validation.

Verification

"Verification" means the project is adhering to project management disciplines, planned and performed according to its project plans and that such adherence can be verified by an independent examination of project documents and other evidence.

Validation

“Validation” means that the project deliverables and project results meet the business and technical INITIATIVES established by the project sponsors, ensuring that the end product meets the documented performance outcomes and requirements of the project.

Independent

“Independent” means autonomous and impartial verification and validation assessment of a project’s adherence to project management plans and compliance with business requirements. These independent assessments are performed by an entity that is not responsible for developing the product or performing the activity being evaluated.

Independent Verification and Validation

“Independent verification and validation (IV&V)” is the means of obtaining an independent and objective view of an IT project with the intent of protecting the state of New Mexico’s interests, and is focused on the management of the project and its compliance with specified requirements through its development stages.

As part of its ongoing process improvement, the Project Oversight and Compliance Division of NM Department of Information Technology will be working with agencies and IV&V vendors to improve this vital risk mitigation strategy.

The definitions supplied here are part of the revision process for improving this important oversight function. Previous definitions are contained in The NM Department of Information Technology Project Oversight Memo, and can be found along with other project certification documents at <http://www.doit.state.nm.us/project.html#Certification> .

6. IDENTIFY OPPORTUNITIES FOR DATA AND RESOURCE SHARING, COMMON ARCHITECTURES, AND CUSTOMER CENTRIC SERVICES

Establish focus teams to identify, discuss and analyze options and opportunities for resource sharing. Cost-effective solutions for supporting technologies, applications, geographic distribution of resources, and services should be reviewed. This will include a review of how other states and government entities have implemented shared resource programs to improve service and/or save money.

GOAL 6: EFFECTIVELY MANAGE IT INVESTMENTS AND EFFICIENTLY CONTROL IT ASSETS, UTILIZATION AND COSTS.

STRATEGIES

Strategy: The Department of Information Technology Act establishes the framework for agency IT investments and the Department's oversight role in the information technology investment life cycle, through project certification and IT Contract approval processes. The Department will continue to work with the agencies, the Department of Finance and Administration, the State Purchasing Office, and the Legislative Finance Committee to improve the processes that assure that IT Investments and IT asset management are carried out in the most responsible manner.

Strategy: An asset management program will be implemented to identify, track and control IT assets.

Strategy: To improve the value of Independent Verification and Validation (IV&V) for high-risk projects, the Department of Information Technology will pursue a funding model that provides more independence for IV&V services. The determination of high risk will be facilitated through the implementation of the risk management tool.

BACKGROUND

Investment Oversight:

While all expenditures must follow Department of Finance and Administration processes and State Purchasing procurement policy, IT investments made by State of New Mexico agencies must be aligned with their agency strategic plan, the State of New Mexico IT Strategic Plan, the State of New Mexico IT Enterprise Architecture, and their own agency IT plan. There is also an established exception request process.

Information Technology Investment Life Cycle

IT investments have a complete life cycle from the acquisition process to the end of life processes for both software and hardware, and each phase of the investment life cycle calls for appropriate management of state assets. Agencies must plan for such a life cycle.

Management of Information Technology Assets

State of New Mexico agencies are responsible for proper management of their IT assets, as well as providing an annual inventory of these assets to NM Department of Information Technology, so that such assets can be evaluated as part of the enterprise IT investment management.

Project Management:

One of the initiatives of the Governor's "Creating a more Efficient New Mexico" is to improve Project Management: "Project management entails not just completing a project on time (a project is a temporary process undertaken to solve a well-defined goal or objective with clearly defined start and end times, and a set of clearly defined tasks), but also controlling limited resources efficiently and effectively to make sure that the original goals are reached. Effective IT project management has become increasingly important in today's environment of tight budgets."

The recommendation to establish a project management office to ensure that taxpayers are getting the full benefit of technical projects at the lowest possible cost has become part of the function of Department of Information Technology’s Project Oversight and Compliance Division.

Project Management and Procurement

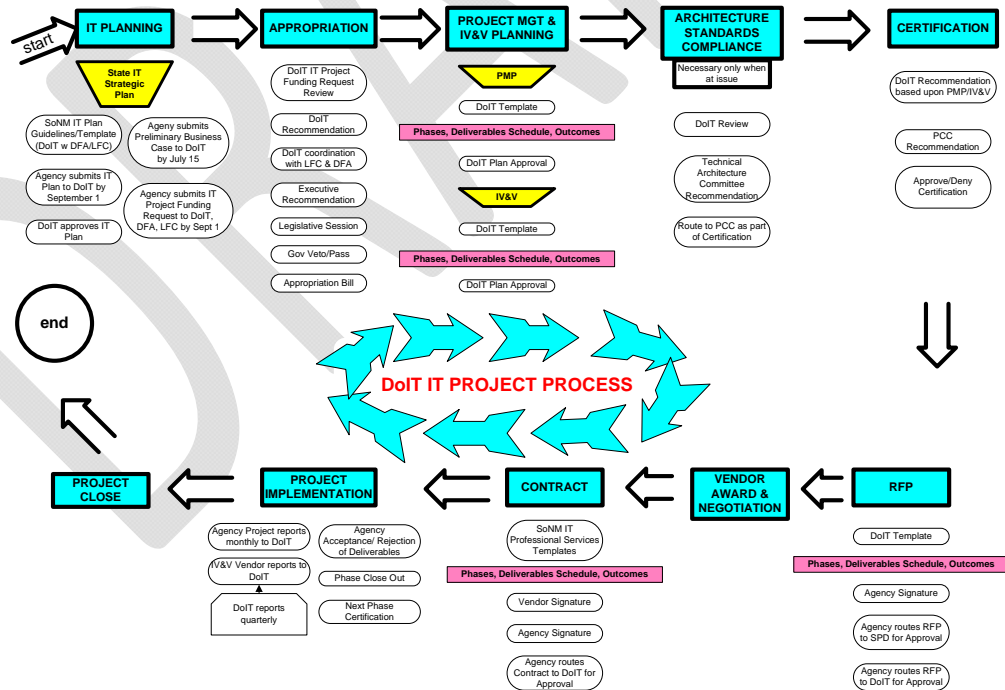
The Department of Information Technology Act spells out the responsibilities of the Cabinet Secretary/CIO with regards to monitoring the agencies and their adherence to the State of New Mexico IT Strategic Plan and to the Enterprise Architecture. It also delineates the oversight of projects and IT procurements.

The diagram below shows at a high level the processes overseen by the NM Department of Information Technology’s Project Oversight and Compliance Division. These processes are aimed at assisting agency management of IT investments in their acquisition and deployment phases.

INITIATIVES

1. MAINTAIN IT PLANNING, APPROPRIATION REQUEST, PROJECT CERTIFICATION AND PROCUREMENT PROCESSES

The following diagram provides a high level overview of the Department of Information Technology Project Oversight and Compliance Division’s involvement in the oversight of proposed and actual projects as part of its role to assure that state funds for IT initiatives are effectively and efficiently used to achieve the goals for which they were designated.



Each of the steps in the process has its associated set of requirements and procedures, and the Project Oversight and Compliance Division is constantly working with agencies and internal Department of Information Technology staff to improve on these to make the life cycle of a major project more efficient.

A PROJECT PORTFOLIO MANAGEMENT SYSTEM

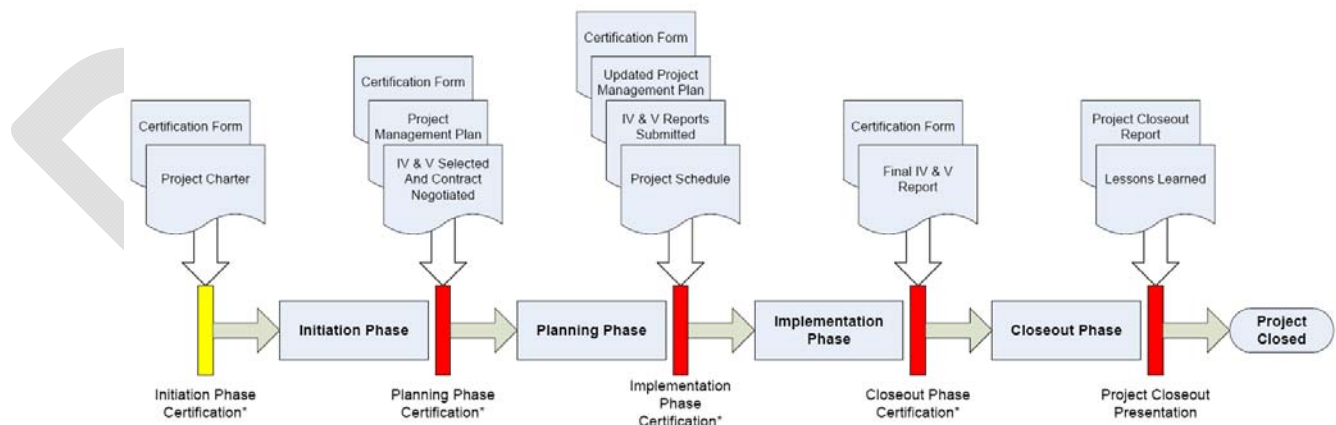
An Enterprise Project Portfolio Management system would enable the Project Oversight and Compliance Division to automate and track online all agency projects from their initial appropriation request to their certification processing, and the contracts that are issued after review by Department of Information Technology, through to project closure. Various entities such as the LFC, DFA and others would be able to have access to project status information that is otherwise provided through a series of spreadsheets. It would enable online reporting by the agencies and dashboard visuals for the NM Department of Information Technology oversight management of state projects. The Department will evaluate the options and cost of this product and plan accordingly.

2. MAINTAIN PROJECT CERTIFICATION AND MODIFY INDEPENDENT VERIFICATION AND VALIDATION PROCESS FOR HIGH-RISK PROJECTS

Project Certification Phases

For IT projects that fit into certain parameters, there is an established project certification process. During this process projects and required documentation are reviewed to assure that the projects are being well managed. Reviewers also ensure that the agency has anticipated and addressed risks to the successful completion of the project. Projects are also reviewed for their compliance with Enterprise Architectural and operational standards.

IT Project Certification Timeline and Gates

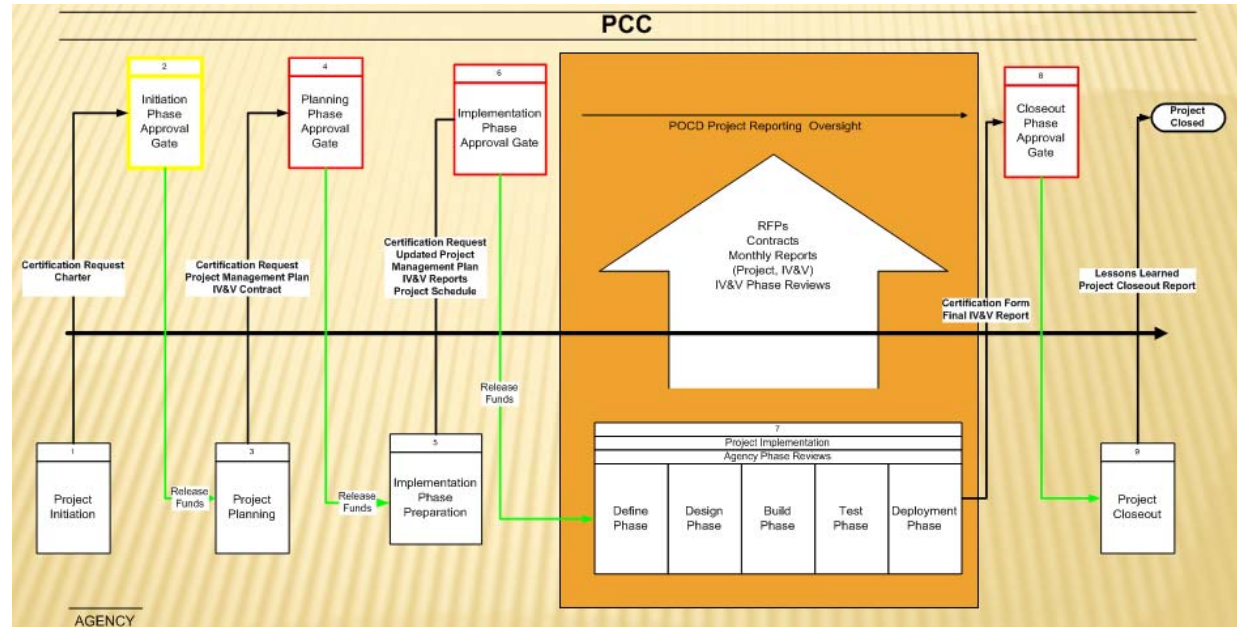


Independent Verification and Validation

Independent Verification and Validation is required for most certifying projects as an important state investment risk mitigation strategy. The illustration below highlights the role of the IV&V process and IV&V vendor in tracking the project through the implementation phase of the project.

Goal 6: Effectively Manage IT Investments and Efficiently Control IT Assets, Utilization and Costs

During the implementation phase, the IV&V vendor reports and the monthly project reports submitted to the Project Oversight and Compliance Division help to ensure that the State, through Department of Information Technology, is tracking the investments made to achieve the agency’s goals.



Large and complicated projects have a higher risk than others. Identification of these projects will be accomplished using a “Risk Assessment” tool that quantifies projects based upon evaluation of profile items. Those projects in the high risk category will have an extended set of risk mitigation activities including separate IVV reporting to the Oversight and Compliance Division.

3. ENHANCE IT CONTRACT MANAGEMENT PROCESSES

The Department of Information Technology Office of Contract and RFP Review is responsible for assisting in the approval of information technology procurements and contract vendor requests for executive agencies that are subject to the Procurement Code, prior to final approval. The Office of Contract and RFP Review will also facilitate the approval by the DoIT Secretary of executive agency information technology contracts and amendments to those contracts, including emergency procurements, sole source contracts and price agreements, prior to approval by the Department of Finance and Administration.

The strategic goal of the Office of Contracts and RFP Review is to keep improving and streamlining the contract management process. Agencies will be kept up-to-date on the required forms and processes required through the contracts webpage. <http://www.doit.state.nm.us/contracts.html>

Another strategic goal for the Office of Contracts would be the establishment of an online contracts management system accessible to the agencies. A contract management solution would benefit both internal and external customers by enabling each to manage and track their contracts. Improving process management, increasing workflow efficiency, retrieval of information and statistics would be automated. Agencies could view the status of their

contracts, which would alleviate the need for telephone calls regarding the status of their contracts.

A product and cost evaluation will be conducted along with discussion with other entities, to select a solution.

4. IMPROVE VENDOR OR SUPPLIER MANAGEMENT

A key initiative toward meeting the strategy of more effectively and efficiently managing IT investments would be a more proactive stance in vendor or supplier management. State of New Mexico agencies utilize vendors or suppliers to acquire IT equipment, software applications and professional services as well as maintenance and warranty coverage.

While there is a state price agreement process through which vendors are chosen to be on lists of vendors in various IT fields with established pricing for their services, and the contract approval process assures that each contract has clearly defined deliverables used as the basis for payments to the vendor, the state often does not adequately leverage its position with its IT vendors.

For the most part agency IT staff are not trained in contract and vendor/supplier management, and one of the reasons that agencies engage vendors/suppliers is that they do not have the in-house expertise required to achieve the IT foundation for the business requirements.

Agencies involved in acquisition of commercial off-the-shelf or "COTS" solutions can find themselves following the vendor recommendations for platform, operating systems and other supporting technologies that are not commonly used in the state or supported by Department of Information Technology.

There are two initiatives that can provide a higher level of management over vendors and suppliers:

TRAINING FOR IT STAFF IN VENDOR AND CONTRACT MANAGEMENT

Department of Information Technology and State Purchasing will collaborate on developing guidelines and workshops dealing with effective management of vendor and supplier relationships. This training would deal with the RFP process, effective contract negotiation, developing productive relationships with vendor contractors towards acceptable deliverables, and working through contract and project issues.

IMPROVING THE VENDOR, AGENCY AND DEPARTMENT OF INFORMATION TECHNOLOGY DIALOGUE ON ACCEPTABLE TECHNICAL PLATFORMS AND ARCHITECTURE

The dialogue between the vendor, agency and Department of Information Technology about the technical architecture and platforms must begin early in the process, even in the RFP, so that the technical underpinning of the solution will fit more readily into the experience and operations of both the agency and Department of Information Technology as the state moves towards reduction of data centers and the co-location of systems in the Data Center; and the reduction of platforms through leveraging of systems that support multiple applications.

5. EVALUATE ENTERPRISE LICENSING AND IMPLEMENT AS APPROPRIATE

Enterprise licensing is a specific instance of vendor or supplier management, and a variation on the state price agreement process. Through a concerted effort the focus of licensing can shift from agency-by-agency licensing agreements to a State of New Mexico Enterprise approach that holds not only for licensing, but for support and training as well, resulting in both price advantages and knowledge-sharing between state agencies.

Focus teams will evaluate opportunities for implementation of enterprise licensing to reduce overall cost.

6. IMPLEMENT IT ASSET MANAGEMENT

In terms of investment management, the following are three business requirements that have been identified for asset management:

Accountability for IT Components and Assets - Lack of control means lack of accountability. Without the accurate record-keeping and independent validation provided by an Asset Management solution, it is extremely difficult to audit spending, audit equipment use, identify failures or oversights, and hold anyone responsible for such failures. With an Asset Management solution, such auditing and tracking is automatic, signaling alerts when unexpected events occur.

Assess Total Cost of Ownership - The truest measure of costs and savings is the Total Cost of Ownership (TCO). But TCO is difficult to measure without accurate record keeping, proper capitalized value calculation and responsible assignment and proration of related expenses. An Asset Management solution provides the tools for easy reporting of TCO.

Assess Fully Capitalized Value of Assets - Proper budgeting requires knowing the fully capitalized value of assets. Without sufficient inventory and costing, the State is using approximations. An Asset Management solution will generate this level of data accurately as routine reports.

An asset management initiative will identify products, their cost and the value to be received. Appropriate planning for implementation will be completed.

7. IMPLEMENT A LIFE CYCLE MANAGEMENT PROCESS

A significant concern raised during the Information Technology Commission review of IT projects is the sustainability of the project's outcome. This concern is also raised by many of the business cases related to appropriation requests that speak of the outmoded or end-of-life of the hardware or software of an agency application.

Business-critical agency applications should have a life cycle plan that starts with the project plan and anticipates when the application would be replaced or significantly upgraded. The business case template for appropriation requests includes a requirement for the anticipated costs of such an application over a five-year period.

GOAL 7: EFFECTIVELY SECURE IT ASSETS, DATA, AND SYSTEMS AND MITIGATE SYSTEMIC INFRASTRUCTURE RISKS.

STRATEGIES

Strategy: The Department of Information Technology offices of Security and Business Continuity are mandated to work with state agencies to develop and support plans and other measures to assure that mission-critical information applications are protected and the integrity of their data is assured through efforts to eliminate cyber security threats, as well as threats to the vital day-to-day operations of the agencies.

Strategy: A comprehensive security policy will be maintained to define standards, identify responsibilities, and validate compliance.

Strategy: The Department of Information Technology will establish a business continuity and disaster recovery program with associated services.

BACKGROUND

State of New Mexico Data

The Department of Information Technology Act includes the following as a responsibility of the Department of Information Technology Cabinet Secretary as the Chief Information Officer of the State of New Mexico: "Develop and implement procedures to standardize data elements, determine data ownership and ensure data sharing among executive agencies."

As a valuable State of New Mexico asset, agency and enterprise data must be effectively secured, and, "Standards must be developed to allow the secure and authorized sharing of data and information." In addition, "Authoritative sources of the data and information must be identified; program areas, following authorization and security standards, must provide enterprise access to specified data and information."

INITIATIVES

1. INITIATE AND SUPPORT INTER AGENCY DATA-SHARING

The Information Technology Enterprise Architecture Framework relates that "New Mexico's Data and Information are Enterprise Assets" and "Whereas individual agencies may have statutory ownership of data, information must be shared to maximize its benefit to the organization as a whole."

The Department of Information Technology responsibility to: "Develop and implement procedures to standardize data elements, determine data ownership and ensure data-sharing among executive agencies" is to enable a secure but fluid ability for the State of New Mexico executives to make decisions and to more readily govern.

Two key steps in this direction are to move forward on the agency business domain initiative outlined with Goal 1, and the Geographic Information Architecture initiative listed with Goal 4.

2. PROMULGATE AND ENFORCE STATE OF NEW MEXICO CYBER SECURITY STANDARDS

Malicious intruders can bring business to a halt, as in a distributed denial-of-service attack that renders a system temporarily inoperable; or they can create thornier problems, as when a hacker unleashes data-destroying code or downloads proprietary secrets. In addition, attacks are seldom isolated. A breakdown in one agency can reverberate throughout an entire state network, disrupting the flow of vital information and services to many end-users.

Given the constantly evolving nature of cyber threats and the fact that millions of messages, data files and transactions flow through state networks and across the Internet each day, cyber security is critical to state operations.

Strategically, there must be:

- Developed enterprise information security architecture;
- Developed information security policies, standards, and procedures using best practices;
- Monitoring of significant changes to state information assets for major threats, legal or regulatory requirements;
- Monitoring, investigating, and reporting of breaches to ensure all necessary security safeguards are maintained;
- Established and defined processes and procedures for security incidents;
- Developed and implemented security training and awareness programs that educate employees, contractors and vendors with regards to the state's information security policies and procedures.

In order for State of New Mexico data must be effectively secured against security breaches, the following efforts are underway:

- To develop and enhance national cyber analysis and warning capabilities; providing and coordinating incident response and recovery planning efforts; identifying and assessing cyber threats and vulnerabilities; supporting efforts to reduce cyber threats and vulnerabilities for State of New Mexico Agencies.
- A Security Steering Committee has been established. Members include representation from the Information Technology Commission, CIO Council and DoIT executive management. The Security Steering Committee is currently reviewing an updated state cyber security policy.

Department of Information Technology will continue to manage and administer DoIT agency and enterprise firewalls and remote access VPNs.

3. PROMULGATE AND SUPPORT AGENCY BUSINESS CONTINUITY AND DISASTER RECOVERY PLANNING AND IMPLEMENTATION

State of New Mexico data must be effectively secured not only against security breaches but also against loss by disruption of business operations. Measures must be undertaken to recover from any disaster impacting the agency, state data operations or any other factor that might impact normal operations.

The creation of the Department of Information Technology marks the dedication of resources specifically to Business Continuity. Continuity of Operations is beginning to have more validity in strategic planning efforts for the state as well as individual agencies. Therefore, agencies are just beginning to direct resources to this effort.

Business Objectives: 1. Identify the state's mission critical systems; 2. Ability to resume critical business functions, i.e. business continuity; 3. Identify cold, warm, hot sites and Managed DR Services required for the state's mission-critical applications

Technical Objectives: 1. Recovery Objective Validation - Evaluate the impact to DoIT business / operational functions resulting from a disaster; 2. Define the amount of sustainable time from outage to recovery of the states critical applications; 3. Evaluate Department of Information Technology's Data Center's recovery capability using current processes and procedures for services; 4. Establish recommendations for improvements to meet the Recovery Point and Recovery Time Objectives for critical applications.

Business Continuity and Disaster Recovery services have not been incorporated into Department of Information Technology's Service Catalog. DoIT will be releasing an RFP in September 2009 that will include Business Continuity and Disaster Recovery Managed Services. A Business Continuity Steering Committee has been organized. Mission, vision statements, roles and responsibilities, and a Business Continuity Management policy have been adopted. The DoIT Office of Business Continuity has completed initiation, planning, and implementation certification for the DR Assessment and Feasibility Study project. The DR Assessment and Feasibility Study contract is completed and work has begun.

GOAL 8: CONSOLIDATE ENTERPRISE INFORMATION TECHNOLOGY SERVICES TO MITIGATE AND ELIMINATE DUPLICATION.

STRATEGIES

Strategy: The strategy for consolidation was established to maximize agencies' efforts in support of their unique mission-critical programs and applications, while shifting support for infrastructure services to the state's enterprise infrastructure service provider.

Strategy: The Department of Information Technology will develop and maintain an IT Consolidation Plan based on Executive Order 2008-11 that defines the targets for consolidation, applications, equipment, processes, procedures and the architecture to be used to provide enterprise services, and will consult with state agencies to ensure that value to be achieved will be realized.

Strategy: The consolidation plan will be updated to identify enterprise services, data center and recovery center requirements and resource distribution.

Strategy: In order to assure compliance with State of New Mexico IT consolidation directions, the Department of Information Technology will require agencies to include any data center upgrade plans in their annual IT plans.

BACKGROUND

Since IT Consolidation was first introduced in Governor Richardson's 2003 Moving New Mexico Forward, and Executive Order 2004-14, a number of important milestones have been reached and progress towards the goal has been achieved, not the least of which has been the establishment of the Department of Information Technology:

- Agencies have internally organized around a chief information officer or IT lead;
- SHARE has been implemented as the enterprise financial, payroll and recruiting system has been implemented;
- Microsoft Outlook has been implemented to provide enterprise email and calendaring for some 20,000 State of New Mexico executive agency employees with one common address book;
- The enterprise data center at the John Simms building has been upgraded in terms of its electrical and cooling systems, along with the replacement of an antiquated physical security and monitoring system;
- There has been an increase in the number of agency servers and systems being hosted in the Simms data center out of the recognized need to have these servers and systems residing in a secure and managed facility;
- The governance for IT Consolidation has shifted from a specially created IT Consolidation Executive Board to the Department of Information Technology Cabinet Secretary and Deputy Cabinet Secretaries, with review and approval of appropriate architecture, strategic plan and or rules by the Information Technology Commission.

The Governor's Executive Act 2008-11 specific states:

"NOW THEREFORE, I Bill Richardson, Governor Bill Richardson, Governor of the State of New Mexico, by virtue of the authority vested in me by the Constitution and the Laws of the State of New Mexico do hereby order as follows:

1. As the single, unified executive branch department for information services and technology, the Department of Information Technology shall continue to consolidate all enterprise information technology services and IT functionality within executive agencies as deemed appropriate under the Act.
2. The Department of Information Technology is designated as the single, unified executive branch department with IT consolidation authority to act as the State's enterprise infrastructure services provider, including telecommunications."

This strategic goal "consolidate enterprise information technology services to mitigate and eliminate duplication," requires revisiting and revising the 2004 IT Consolidation Plan, and establishing a new roadmap for reducing duplication of technology services in the executive agencies.

INITIATIVES

1. DATA CENTER CONSOLIDATION WITH PRODUCTION SERVERS AT THE DATA CENTER

One of the foundation technical objectives from the strategic goals for IT Consolidation has been "Common Hosting/data center model with standards for power protection, physical access, weather and other best practices operational standards."

The Simms Data center has been identified as the enterprise infrastructure service provider data center, both under General Services and now under the Department of Information Technology.

As an appendix to the 2004 IT Consolidation Plan, the business plan for General Services Department was presented as the "Enterprise Information Technology Plan."

In developing its case for enterprise thinking, the document lists the complexity of data center management with the argument that an enterprise data center approach would eliminate the duplication of efforts of each agency needing to manage its own data center replete with all the operational equipment and effort.

Data Center Environment	<ul style="list-style-type: none">• Battery power backup• Generator power backup• Power conditioning equipment• Fire suppression systems• 7/24 active security• Tape vault• Cooling and humidity control• Power/temperature/water/intrusion alarming• Firewall isolation (masonry or fire retardant floor to roof)• Video monitoring (24 hour internal and external)
-------------------------	--

In their November 2006 Review of IT Consolidation, The LFC raised concerns about the capacity of the Simms Data center and its ability to house agency servers and applications as the enterprise data center.

Since that review, the Enterprise Data Center in the John Simms Building has undergone a major \$6 million-dollar upgrade in electrical distribution and power protection, air cooling and more. When completed before the fall of 2009, the data center will have four UPSs and two generators, with adequate capacity for more than an additional 2,500 systems.

A remote monitoring and notification system to ensure proper performance on a physical security to the data center has been greatly enhanced with new access control and video monitoring system. The building perimeter is monitored by 360-degree pan, tilt, zoom cameras, and access to the building now require an assigned proximity badge. Direct access to the data center is further enhanced with the use of biometric proximity card readers to ensure positive identification.

**GOVERNOR'S OFFICE DIRECTIVE FOR DATA CENTER CONSOLIDATION –
AGENCY PRODUCTION SERVERS TO BE CO-LOCATED**

Interagency Memorandum

To: All Cabinet Secretaries and Directors
From: Brian Condit, COS, Office of Governor Bill Richardson
Subject: IT Consolidation
Date: June 4, 2009
Cc:

As you know, in order to optimize and capitalize on limited State resources, New Mexico has invested over \$6 million dollars to upgrade the State Data Center, located in the Simms building. These upgrades include expansion of the cooling, power, wiring, security and improvements to other critical infrastructure components. The Data Center now has the capacity to host more than 2,000 additional server units. The statewide network is being re-architected to provide for network redundancy to a business continuity/disaster recovery data center.

Pursuant to Executive Order 2008-11, the Department of Information Technology (“DoIT”) has been designated the single, unified Executive branch department with authority to act as the State of New Mexico’s enterprise infrastructure services provider and consolidation authority.

Therefore, and in support of that Executive Order, all Executive agencies are hereby ordered to:

1. Catalog all servers by use (e.g., production, development, and test) and delineate plans to migrate all production servers to the Simms Data Center within the next year;
2. Incorporate all migration plans into your FY11 Agency information technology ("IT") plan; such plans being due to DoIT no later than September 1, 2009. DoIT will be distributing specifics in its agency IT plan guidance and will provide the inventory information collection tool.

2. REVISE AND UPDATE IT CONSOLIDATION PLAN

The 2004 IT Consolidation Plan as well as the IT Strategic Roadmaps published by the Office of Chief Information Officer for the years 2004 through the formation of the Department of Information Technology (2007) are the sources for the following list of targets around an enterprise architecture that supports consolidation to reduce duplication of technology services.

While some of these items are being addressed through various initiatives, these targets would be the framework of a revised and updated IT Consolidation Plan as well as a revised and updated Enterprise Information Technology Architecture. In consultation with agencies, the plan will be updated and included in this strategic plan.

The focus areas for 2010 include (1) production servers to the Data Center, (2) backup and recovery center, and (3) broadband network implementation. Reviews of agency upgrades to their data environments will be reviewed in relation to overall consolidation plans.

This list is organized by the four business objectives stated for IT Consolidation:

BUSINESS OBJECTIVES OF CONSOLIDATION

NUMBER	DESCRIPTION
Business objective 1	Reduce cost of government operations through IT.
Business objective 2	Reduce cost of IT operations through an enterprise model.
Business objective 3	Enhance delivery of services to clients.
Business objective 4	Support economic development

TECHNICAL OBJECTIVES OF CONSOLIDATION TO REDUCE DUPLICATION OF SERVICES

Number	Description
Business objective 1	Reduce cost of government operations through IT
Technical objective 1	Identity management and directory services
Technical objective 2	Common business functions and data interchange and discovery methodology for all agencies to access and use for report creation. –To be accomplished at the inter-agency level.
Technical objective 3	Enterprise asset management system that provides service life cycle models, equipment and software upgrade information, software distribution functionality.
Business objective 2	Reduce cost of IT operations through an enterprise model.
Technical objective 4	Common IT service architecture and operating environment, including standards, SLA (service level agreements) approach, governance model and improved funding mechanism.
Technical objective 5	Common security management including comprehensive security standards, network, data, application, internet.
Technical objective 6	Common hosting/data center model with standards for power protection, physical access, weather and other best practices operational standards.
Technical objective 7	Statewide approach for business continuity

Goal 8: Consolidate Enterprise Information Technology Services to Mitigate and Eliminate Duplication

	and disaster recovery.
Technical objective 8	Implement an efficient and cost effective network architecture that supports high bandwidth links across State of New Mexico that is based on enterprise standards that apply to all agencies internally and the enterprise.
Technical objective 9	Enterprise network infrastructure standards for efficient management of routers, switches, firewalls, IP addressing, routing protocols, naming conventions, etc.
Technical objective 10	Elimination of duplication in network infrastructure capacity where enterprise network infrastructure provides bandwidth usable by agencies that have had their own bandwidth and support staff.
Technical objective 11	Platform reduction solution eliminating duplication and wasted resources such as unused storage capacity through consolidation of common enterprise solutions, services, applications, servers and databases.
Technical objective 12	Enterprise purchasing and Licensing agreements negotiated based on the ability to management agreements through effective asset management.
Business objective 3	Enhance delivery of services to clients.
Technical objective 13	Cost effective desktop services support model.

GOAL 9: IDENTIFY AND PROVIDE ADDITIONAL INFORMATION TECHNOLOGY SERVICES AND FUNCTIONALITY TO SUPPORT STATE OF NEW MEXICO PUBLIC ENTITIES.

STRATEGIES

Strategy: Ongoing identification of new and revised enterprise technology services will be facilitated through consultation with public entities, planning documents, industry research, technology service providers and discussions with other states.

Strategy: The Department, in consultation with public entities, will evaluate and select enterprise services that can be provided in a cost-effective manner across multiple organizations.

Strategy: The Department of Information Technology will implement a service decommissioning process that would include strategies for revenue replacement and/or reduction in cost.

BACKGROUND

Because Department of Information Technology operates on a charge-back cost recovery basis that is governed by the Federal Office of Budget Management A-87 Guidance, each service must be funded on its own and profits cannot be made nor used to fund other services.

This budget factor and reliance on legislative appropriations makes funding of new services and their start-up a slowing factor for Department of Information Technology as the enterprise infrastructure service provider.

A key aspect of this strategy to “Identify and provide additional information technology services and functionality to support State of New Mexico agencies,” would be identifying and actualizing ways of collaborating with agencies on the funding and support of innovative technologies.

INITIATIVES

1. MONITOR TECHNOLOGY TRENDS

Because the marketplace is constantly changing in the information technology field, one of the strategies for Department of Information Technology as well as state agencies is to stay conversant with emerging technology.

The Information Technology Commission with its diverse make-up, the colleges and universities with their technology training programs, and key vendors with whom the state does business should be tapped as resources.

Periodic workshops on trends in emerging technology would be a useful vehicle for the evaluation of these trends for state government, whether on an agency or enterprise level.

2. IDENTIFY UNADDRESSED AGENCY TECHNOLOGY NEEDS

The annual agency IT Plan should be an important source of information about the unaddressed needs of state agencies. Sections dealing with agency concerns and needs, the agency internal plans for the rest of the fiscal year when rolled up to an enterprise perspective will shed light on what should become part of the enterprise agenda.

An enterprise analysis of the appropriations requests will also provide important data about what the agencies need to accomplish their missions and business agenda. Attention has and should be given to multiple requests for similar technology solutions, and these might be the basis for Department of Information Technology to establish new or expanded service offerings.

3. PARTNER WITH AND AMONG AGENCIES ON EMERGING TECHNOLOGY PROJECTS

For funding, resource, and specialized experience reasons, agencies are often able to move in a more agile manner into emerging technology. The state needs to establish a climate of technological sharing so that advances by agencies can be leveraged by others.



DRAFT

APPENDIX 1 – EXAMPLES FROM AN “AGENCY APPLICATIONS INFORMATION MAP”

The proposed State of New Mexico Information Map described as an initiative under goal 1 will provide a big picture of agency applications and data enabling the fulfillment of identifying and effectively managing data as an Enterprise Asset.

The Information Technology Enterprise Architecture Framework (ITEAF), 2004, established that “New Mexico’s Data and Information are Enterprise Assets.” The ITEAF also established the principle that: “Whereas individual Agencies may have statutory ownership of data, information must be shared to maximize its benefit to the organization as a whole.”

This “Enterprise Asset” view of information technology application data acquired and used by state agencies was embedded into The Department of Information Technology Act which assigned to the department the responsibility to: “develop and implement procedures to standardize data elements, determine data ownership and ensure data sharing among executive agencies.”

The Agency Information Map would include high level descriptions, identification of constituents served, data collected tracked and analyzed, and opportunities for data sharing among agencies along with current or planned sharing applications and projects.

The following are high level examples of existing agency applications whose operations have significantly enhanced service delivery or projects that have been planned or are underway.

CONSTITUENT SERVICES



Constituent services describe the mission and purpose of the New Mexico government in terms of the services it provides both to and on behalf of the state residents. It includes the delivery of resident-focused, public, and collective goods and/or benefits as a service and/or obligation of the state government to the benefit and protection of the state's general population.

APPLICATION – DOH WOMEN INFANTS CHILDREN ELECTRONIC BENEFITS CARD



WIC is the Special Supplemental Food Program for Women, Infants and Children (WIC). It is a federal program administered by the U.S. Department of Agriculture, Food and Nutrition Service, and the New Mexico Department of Health, Public Health Division. In New Mexico, other WIC Programs are also available through Indian Tribal Organizations.

Information technology is used to provide participants with the New Mexico Connections Card that eliminates the need for printed checks.



The New Mexico Connections Card resembles a credit-debit card powered by a small computer chip. The card holds two to three months-worth of a WIC participant’s benefits information, and is used instead of WIC checks.

The card simplifies the participant’s grocery shopping through its ability to be used as needed rather than using WIC checks that must be used for their face value at once. The card also provides data on the type, brand and cost of each WIC food item so that New Mexico WIC can better control food costs through informed food package decisions and maximization of rebates on infant formula and other foods.

EDUCATION



Education refers to those activities that impart knowledge or understanding of a particular subject to the public. Education can take place at a formal school, college, university or other training program. This Line of Business includes all government programs that promote the education of the public, including both earned and unearned benefit programs.

APPLICATION PUBLIC EDUCATION STARS



The Student Teacher Accountability Reporting System (STARS) is a collaborative effort of the New Mexico State Legislature, Public Schools and the Public Education Department (NMPED). The STARS program is a comprehensive student and staff information system that provides a standard data set for each student served by New Mexico’s 3Y-12 public education system. This application serves multiple purposes, to:

- Meet the current PED and federal reporting requirements;
- Improve education decision-making through the use of high quality decision support tools;
- Provide a longitudinal data system (LDS) of student progress over time; and

- Report timely and accurate education data to state and federal education stakeholders

PROJECT HIGHER EDUCATION – IDEAL- INNOVATIVE DIGITAL EDUCATION AND LEARNING

About IDEAL-NM

New Mexico is the first state in the nation to create a statewide eLearning system that encompasses all aspects of learning from traditional public and higher education environments to teacher professional development, continuing education and workforce education.

IDEAL-NM
INNOVATIVE DIGITAL EDUCATION AND LEARNING
A NEW MEXICO HIGHER EDUCATION AND PUBLIC EDUCATION PROGRAM

Home : P-12 : Higher Ed : State Agencies : Archive

- About IDEAL-NM
- Partnerships
- News and More
- Contact Us
- How to find us

NEW! Get the latest IDEAL-NM brochure here!

NEW! How much can you save by taking an online class?

IDEAL-NM Innovative Digital Education and Learning in New Mexico
IDEAL-NM provides eLearning services to P-12 schools, higher education institutions, and

P-12 Online Learning
Students and educators in public education face new challenges today. [LEARN MORE](#)

HIGHER ED Online Learning
Welcome to NMLN's Higher Education Online Learning Clearinghouse. [LEARN MORE](#)

STATE AGENCIES Online Training
The IDEAL-NM project calls for the development of online courses to be used by New Mexico governmental agencies. [LEARN MORE](#)

Learn more at <http://www.ideal-nm.org/>

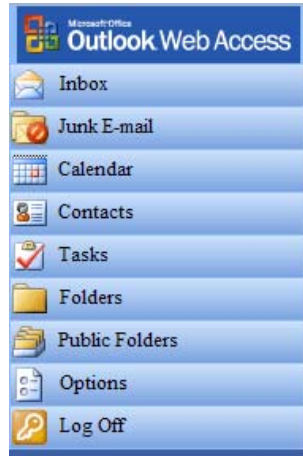
GOVERNMENT OPERATIONS



Government Operations refers to the back office support activities that enable the government to operate effectively. Finance, controls and oversight, executive functions, property management, information technology and human resource management are among such activities for Government Operations.

APPLICATION – ENTERPRISE WEB ACCESSIBLE E-MAIL

In 2005 as an initial step in the State of New Mexico IT Consolidation effort, an enterprise e-mail program was established to provide a single unified email service to executive and other state agencies. This program provided a single enterprise directory and a standardized email address for the State of New Mexico typically `firstname.lastname@state.nm.us`.



About 20,000 users, each with Mail Box Storage of 100Megabytes. There are some 1600 users of smart phones or Blackberry® devices.

Users are able to access their email and calendar entries from the desktop or laptop using the full Microsoft Outlook client, or at home or elsewhere using Outlook Web Access.

In FY10 the enterprise email program will be upgraded through Legislative Appropriations.

PROJECT GSD – RISK MANAGEMENT ELECTRONIC CONTENT MANAGEMENT

The GSD Risk Management Division (GSD/RMD) has identified opportunities to improve the management of paper business processes for six out of seven bureaus within the Risk Management Division. Those bureaus are Workers’ Compensation, Contracts, Loss Control, Legal, Property and Casualty, and Employee Benefits. All of these bureaus deal with paper documents, onsite file storage, and off site file storage.

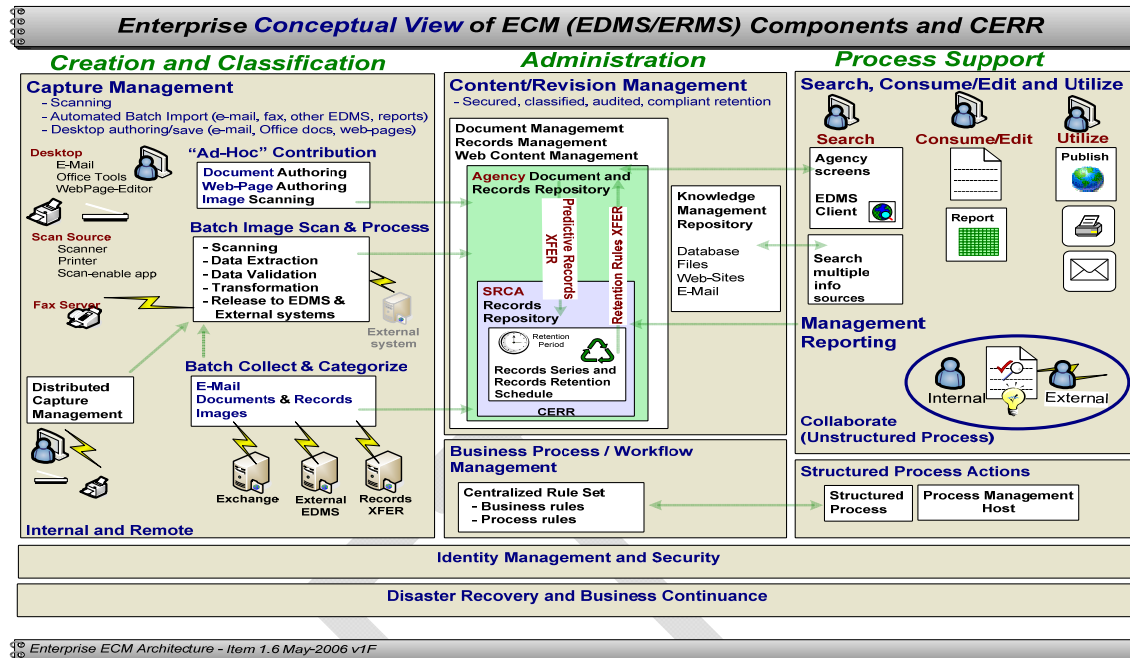
GSD/RMD prioritizes their document imaging and management needs into planned phases:

- Phase I – Workers’ Compensation (Active & New);
- Phase II – Legal, Employee Benefits & Workers’ Compensation (Closed Onsite Files);
- Phase III – Loss Control, Workers’ Compensation (Closed Offsite Files);
- Phase IV – Property and Casualty Workers’ Compensation (Closed Offsite Files);

Worker’s Compensation deals with on-the-job injury claims. Claims involve forms, medical history, medical treatment notes, mediation, Judge’s rulings and much more. Additionally, a claim can be closed but the file is stored for any future related injuries until the death of the claimant.

The GSD Risk Management Division (RMD) business processes are paper intensive. Substantial GSD/RMD business process improvements are achievable through implementing document scanning, electronic document management and electronic records management.

The illustration below is a high level picture of how such an Electronic Content Management system works.



There are other Electronic Content Management system projects involving the Taxation and Revenue Department, the Human Services Department and the State Records Center and Archives.

JUSTICE



Justice services range from public safety and law enforcement, homeland security, the Courts systems and corrections, with its criminal management responsibilities.

APPLICATION TRACS- TRAFFIC AND CRIMINALSOFTWARE

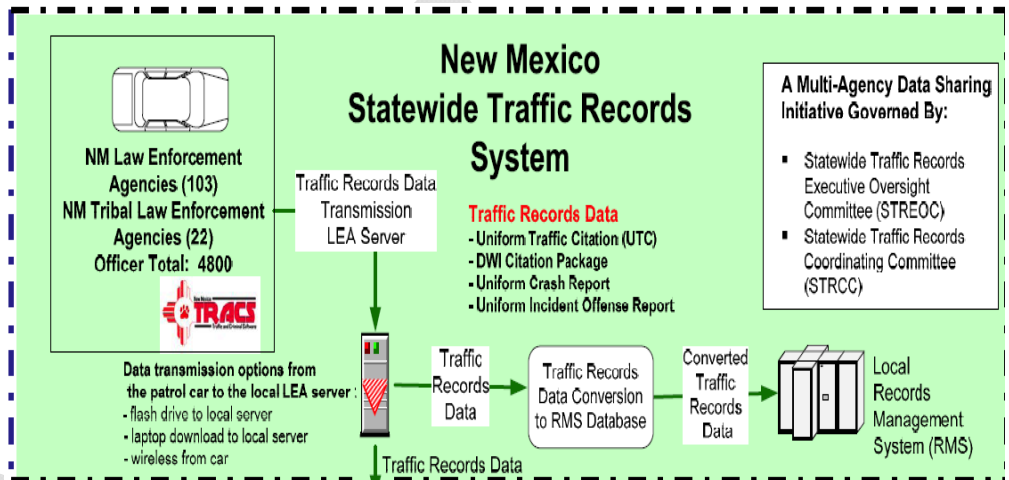


TraCS stands for the Traffic and Criminal Software. It is software that was developed between Iowa and the Federal Government. It is a data-filled

collection tool for law enforcement and is public domain software. It provides a software development tool for development of forms.

The primary users of the system include: pilot law enforcement agency officers, management and administrative personnel, and the New Mexico Court teams.

The diagram below provides a high level of the architecture and operations of this on-line traffic records system that is based on the use of information technology, providing law enforcement officers with laptop equipment for their vehicles and over the air transmission of data back and forth to centralized record repositories.



New Mexico TraCS Pilot Success:

Standardized Data Collection Statewide supports NM State Statute 66-8-102.4 Uniform police reports and procedures for DWI arrests; streamlined and automated collection of incident data in the field; reduced errors and missing information in forms; officers spend thirty percent less time on paperwork and are active on the roads; there are currently more than 440 officers from 12 law enforcement agencies utilizing TraCS.

PROJECT – ADMINISTRATIVE OFFICE OF THE COURTS – CASE MANAGEMENT INFORMATION SYSTEM

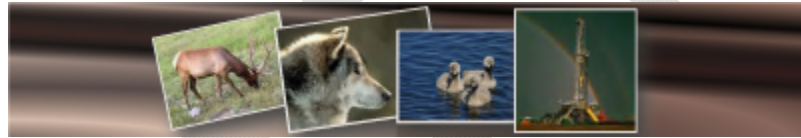
The Judicial Information Division (JID) maintains one of the few consolidated statewide court case tracking systems in the United States for multiple Court districts. This allows the judiciary to provide up-to-date offender information to Judges throughout the system. This information is essential to the justice process since knowledge of warrants, protective orders and past offenses enhance a Judge’s ability to deliver appropriate bonding and sentencing decisions. Executive Branch justice agencies also use judicial information to assist in making accurate charging decisions and appropriate correctional facility placement determinations.

As such, a case management system is integral to an effective justice process and to the overall impact justice has on the citizens of New Mexico.

A new Case Management System will integrate traffic, civil, and criminal case management information, enabling communication and data-sharing between all state Courts and other justice-related entities. The new system is expected to increase productivity and efficiency by giving Judges and Court staff more accurate and timely access to files.

In addition, the new system is expected to increase access to Court information by lawyers, citizens, and other participants in the judicial process. The new system is expected to provide infrastructure that will allow development of electronic filing systems, which will enable litigants and their legal counsel to file documents electronically. This will eventually alleviate existing severe burdens imposed by paper storage requirements.

RESOURCE MANAGEMENT



Resource Management encompasses natural and manmade state resources. Economic development, energy management, environment management, natural resources such as game, fish and water, transportation and highways are all elements of the resource management business domain.

PROJECT – DEPARTMENT OF CULTURAL AFFAIRS -CULTURAL RESOURCE INFORMATION SYSTEM (NMCRIS)

New Mexico's extraordinary wealth of historic buildings and districts, archaeological sites, and cultural landscapes are an essential part of what makes this a special place for residents and their out-of-state guests.

The preservation of New Mexico's historic treasures has enormous impacts on the social and economic well-being of New Mexicans. It underlies the state's vigorous heritage tourism industry and builds healthier local communities.

The Historic Preservation Division's many activities include:

- Identifying and recording prehistoric and historic places, nominating them to the National Register of Historic Places and the State Register of Cultural Properties, and maintaining records of those places to be used for planning and research.
- Administering tax-credit, low-interest loan, easement, and grant programs to provide preservation incentives.
- Providing preservation-related technical assistance to agencies, local governments, and private owners.
- Administering preservation laws and assisting other agencies and local governments in developing preservation regulations and ordinances.

- Developing educational programs about New Mexico's past and about the value of preserving our heritage.

The goal for the NMCRIS project is development and deployment of an up-to-date, integrated database and application for the management of State of NM archeological and architectural cultural resources. The new web-based application will feature:

- An integrated relational and geospatial database
- New web-enabled data acquisition and query applications to augment present system functionality



DRAFT