

# **Pennsylvania's Department of Environmental Protection**

## **INFORMATION TECHNOLOGY STRATEGIC PLAN**

**2007-2010**

# Introduction

## **Agency Mission/Vision Statement**

To protect and improve the quality of the air, water and environment for the health and safety of the citizens of the Commonwealth, to protect the people from dangerous or unnecessary radiation from natural and man-made sources, including occupational and medical exposure, and to manage water and mineral resources in a way which insures against their undue destruction and depletion while allowing economic benefits from their use.

## **Overview of Core Business Processes**

1. Permitting, licensing and certification.
2. Inspection and compliance activities
3. Testing of samples and other laboratory activities
4. Insuring of personal property for mine subsidence
5. Training and education
6. Bonding and forfeiture activities
7. Monitoring projects for reclamation construction projects and contracts
8. Providing assistance for pollution prevention and energy efficiencies
9. Planning and executing environmental programs
10. Planning and executing environmental operations, such as clean-ups
11. Emergency response
12. Distributing and administering grants and subsidies
13. Implementing and operating enterprise information technology infrastructure, custom software, and Internet web sites in support of core business processes.

## **Overall Administration Priorities: Increased environmental protection and improved human quality of life**

Environmental protection is too often seen as a tradeoff with economic growth rather than as an engine of efficiency, productivity, and enhanced competitiveness. To the extent this win/lose mentality persists society will fail to take the necessary steps to protect the environment and will compromise quality of life and enhanced prosperity. To help change this dynamic, DEP will:

1. Ensure continuing reductions in pollution and waste, with an ultimate objective of eliminating pollution, waste, and harmful conditions.
2. Identify and implement approaches to environmental challenges that enable new economic growth.
3. Develop beneficial reuse markets for waste materials.
4. Spur technology development and deployment, especially where technology manufacture can be brought to Pennsylvania.
5. Increase protection of public health, public safety, mine safety, and the environment through more effective enforcement, better program and interagency coordination, and the development and implementation of more effective programs.
6. Provide greater protection of biodiversity and ecosystems.
7. Reduce overall costs through the use of emissions trading, pollution prevention, streamlined permitting and reporting procedures, and other innovations.
8. Support and encourage economic development that protects the environment and creates jobs.
9. Ensure greater engagement of citizens and other stakeholders in carrying out priorities.

## **Specific Priorities**

1. Sustainable energy production and use
2. Watershed protection
3. Community revitalization and development
4. Mine safety
5. Fiscal responsibility

# Keystone Plan

## OA/OIT Mission

The Executive Order 2004-8, as amended, dated December 19, 2005 and titled Enterprise Information Technology Governance Board, subordinates information technology governance under the policy oversight of the Enterprise Information Technology Governance Board consisting of the Governor's Chief of Staff, the Secretaries of Administration, Budget and General Services and the Office of Administration's Deputy Secretary for Information Technology.

The Office of Administration, Office for Information Technology (OA/OIT) is the executive agency directed by the Executive Order as responsible for leading and coordinating information technology services in the Commonwealth. OA/OIT implements the policy, planning, and budget directives adopted by the Enterprise Information Technology Governance Board. The following mission statement reflects its purpose:

*"To serve the Commonwealth of Pennsylvania and its citizens by providing enterprise-wide technology, policy, standards, architecture, information, and solutions to enhance system interoperability, security, and cost effectiveness."*

## OA/OIT Strategic Goals

In support of its mission, OA/OIT has developed the following high level goals to guide decisions and actions:

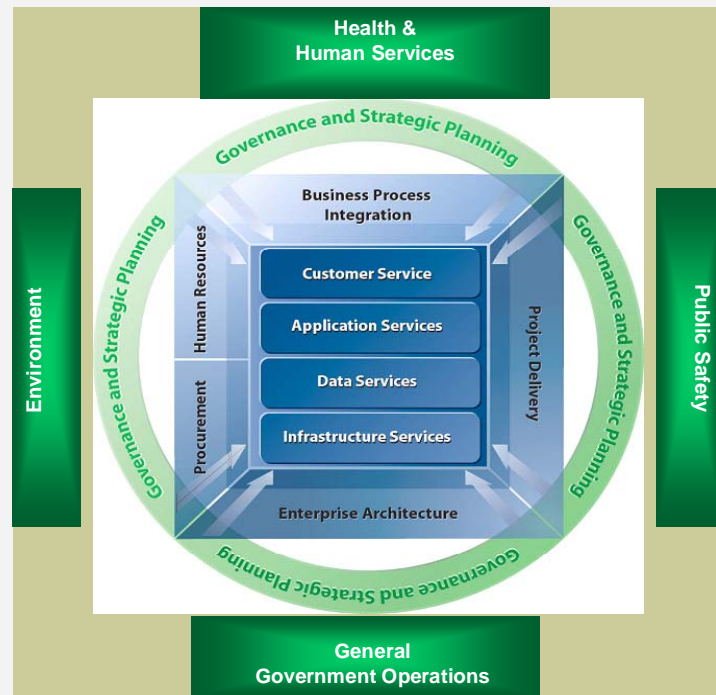
- \* Enterprise IT Management
- \* IT Business Focus
- \* Enterprise Architecture
- \* Measured Performance and Accountability
- \* Citizen Centric Processes and Solutions
- \* Commonwealth IT Workforce

### Associations & Hierarchy



# Environment Community of Practice

## Three Year Strategic Plan



## Mission

The Environmental Community of Practice (EnviroCoP) is comprised of Commonwealth agencies and commissions working to preserve Pennsylvania's scenic and natural resources and wildlife habitats, preserve cultural and historical resources, protect the environment, and promote travel, tourism, recreation, and community and economic development. These agencies are charged with upholding state and federal laws and regulations that protect and preserve Pennsylvania's access to public utilities, and improve the quality of life and air, land, water, and cultural/historical resources.

In support of its mission, the Environmental CoP has developed the following high level IT strategic objectives to guide decisions and actions:

1. Support the Governor's and the Commonwealth's highest priority business needs
2. Ensure that projects will be done in a collaborative manner, and that solutions are shared and used across agencies
3. Centralize the prioritization, decision-making and monitoring of future IT investments across the Commonwealth.
4. Structured IT Governance
5. Measured Performance
6. Increased Customer Focus
7. Increased revenue through the application of Technology

## Global Goals

The following is a list of global goals for the Environmental CoP (listed in no particular order):

- Support the protection and preservation of the Commonwealth's scenic beauty, natural resources, public lands, and quality of air, land, and water resources through the creation of agency enterprise databases and decision support applications.
- Integrate information across environmental data steward agencies through the use of XML, web services, and data models.
- Formalize data stewardship, focus on data quality, and create and adopt a common environmental data element dictionary to standardize environmental data across agencies and with our extended enterprise business partners.
- Streamline, automate, and reduce time required for the Commonwealth's environmental, wildlife management, public infrastructure, and public utility regulatory and review processes through the use of XML, web technologies, electronic document management, and electronic data sharing strategies.
- Create a statewide public lands database, improve landuse and forest management practices, adopt best management practices, and focus on floodplain management to improve wildlife and habitat management, improve water quality, and reduce flooding risk in Pennsylvania.
- Streamline environmental, wildlife, cultural/historical, and community and economic development grants management processes.
- Improve and increase citizen and business partner access to online government services.
  - ◆ Provide websites and web content to educate citizens and potential visitors about Pennsylvania's rich and diverse travel, tourism, culture, history, and recreational resources and allow them to discover, reserve, and purchase services online.
  - ◆ Provide online access to government documents, historical research materials, and publications.
  - ◆ Create efficient and accessible statewide Point of Sale licensing systems for hunting, fishing, and recreational activities.
- Increase opportunities for travel, tourism, and recreation in the Commonwealth to drive economic development and creation of new jobs.
- Create and maintain an effective State Water Plan.

# IT Strategic Goal #1: Data Quality.

Performance Objectives/ FY	Outcomes
Develop an Enterprise Data Quality Management Plan that addresses not only the current enterprise level issues, but provides for specific direction and goals.	<ol style="list-style-type: none"> <li>1. Quality-assured enterprise data tables through agency cleanup activities, implementation of maintenance practices, application of standards, and maximization of automated methods for audit control.</li> <li>2. A comprehensive enterprise Environmental Data Element Dictionary tied to metadata, electronic systems, software modules and agency business practices.</li> <li>3. Enhanced design standards that evolve around the Environmental Data Element Dictionary.</li> <li>4. Modified software development methodology that includes checks and balances for data quality.</li> </ol>
Re-evaluation of architecture used for Environmental Trends and Analysis and DEP's Data Reporting Environment.	<ol style="list-style-type: none"> <li>1. An improved SAS Reporting infrastructure that is efficient, has data integrity, and is "refreshed" when required.</li> <li>2. A "go forward" plan based on the long-term impact of using SAS at the Enterprise level in DEP, including cost to maintain the infrastructure and software, availability of staff and contractors to maintain/improve the platform, and a decision if future development projects should be in SAS.</li> <li>3. An improved value of resources for the department concerning FIXDWH database, the Discoverer Environment, and the Business Intelligence Portal.</li> </ol>
Continuation of the Project Management Methodology tasks to document all AS-IS and TO-BE business process models for new software applications and major software application enhancements developed for or by BIT.	<ol style="list-style-type: none"> <li>1. Documented AS-IS and TO-BE business process analysis for all core business functions in the repositories cross-referenced to the Enterprise Data Element Dictionary.</li> </ol>
Expand analytical relationship with Department of Health (DOH).	<ol style="list-style-type: none"> <li>1. An integrated set of tools to enable and enhance environmental data with DOH data.</li> </ol>
Improve and maintain web services for exchange of data to federal, state, and local governments and business partners.	<ol style="list-style-type: none"> <li>1. An upgraded Network Node infrastructure with newer technology and capabilities to integrate with version 2 mechanisms and standards as defined the United States Environmental Protection Agency (U.S. EPA), Environmental Council of States (ECOS) and States/Tribes..</li> <li>2. Accommodation of all data exchanges between DEP and other organizations in compliance with XML Standards Registry, U.S.EPA, the Center for Disease Control (CDC), and Office</li> </ol>

of Surface Mining, including:

- a. Implemented Chapter 105 exchange with PennDOT by Fall 2007
- b. Implemented Chesapeake Bay Non Point Source Best Management Practices exchange in FY 07-08.
- c. Implemented Ambient Air Monitoring Data exchange with EPA and DOH
- d. Implemented Toxic Release Inventory exchange with EPA and L&I
- e. Implemented Environmental Public Health Tacking exchanges with DEP/DOH/ DEP and CDC, with DEP and multiple non-PA state agencies
- f. Implemented Water Quality Samples exchange to EPA
- g. Federal ICIS/DMR exchange with EPA
- h. BLIX – Business License/Permit Exchange with Department of Revenue
- i. Implemented Network node Discovery Services to further Ad-Hoc Information
- j. Implemented NHD (National Hydrography Data) exchanges after MN delivers templates.
- k. Participation in Office of Surface Mining’s SSCR initiative and workgroup
- l. Participation in EPA Climate Control Registry
- m. Participation in EPA Carbon Exchange Registry

<b>Strategic Alignment</b> (List all Agency, Keystone Plan, and/or CoP goals aligned with the IT Strategic Goal entered above).	<b>Agency Mission /Goals</b> (X= yes)	<b>Key-stone Plan Goals</b> (X= yes)	<b>CoP Goals</b> (X= yes)	
Increase protection of public health, public safety, mine safety, and the environments through more effective enforcement, better program and interagency coordination, and the development and implementation of more effective programs.	X			
Reduce overall costs through the use of emissions trading, pollution prevention, streamlined permitting and reporting procedures.	X			
Enterprise IT Management		X		
IT Business Focus		X		
Enterprise Architecture		X		
Measured Performance and Accountability		X		
Support the protection and preservation of the Commonwealth's scenic beauty, natural resources, public lands, and quality of air, land, and water resources through the creation of agency enterprise databases and decision support applications			X	
Integrate information across environmental data steward agencies through the use of XML, web services, and data models			X	
Formalize data stewardship, focus on data quality, and create and adopt a common environmental data element dictionary to standardize environmental data across agencies and with our extended enterprise business partners.			X	
Streamline, automate and reduce time required for Commonwealth's environmental, wildlife management, public infrastructure, and public utility regulatory and review processes through the use of XML, web technologies, electronic document management, and electronic data sharing activities			X	
Create and maintain an effective State Water Plan	X		X	
<b>Strategic Projects</b>	<b>E/N</b>	<b>FY ST</b>	<b>FY END</b>	<b>Funding F/S/O</b>
Quality Management Plan for the Enterprise	N	07	08	S
Evaluation Study of SAS Infrastructure and Architecture at DEP	N	07	09	S
Enhancements and re-architecture of the Data Reporting Environment	N	07	09	S
Addition of C-CAT SAS extension (Case Crossover Analysis Tool), RIF (Rapid Inquiry Facility); and SOVAT (Spatial for Health/Environmental Correlations)	N	07	10	F
Chapter 105 Data Exchange with PennDOT	E	06	08	O – PennDOT provides – do not know source.
Single Source Coal Reporting (SSCR)	N	07	09	F



## IT Strategic Goal #2: Improve and increase citizen and business partner access to online government services.

Performance Objectives/ FY	Outcomes
Provision to accept credit card transactions to support DEP business processes	<ol style="list-style-type: none"> <li>1. Modified DEP insurance business processes for premium payments by accepting credit cards for Mine Subsidence Insurance Renewals.</li> <li>2. Modified renewal processes for credit card payments for Waste Transportation Safety Act (90) stickers for trash truck Vehicle Identification Number (VIN) permitted to haul trash in PA.</li> <li>3. Implementation of Global Training Approval Process System (TAPS) for test exam scores, course completion, certification and educational credit units for Certified Operators' compliance with an evaluation for credit card utilization.</li> </ol>
Compliance with U. S. EPA's Cross Media Electronic Rulemaking (CROMERR)	<ol style="list-style-type: none"> <li>1. Acceptance of environmental information over the internet as a delegated state/tribe for collecting and forwarding the information to the U. S. EPA for Safe Drinking Water, Facility information, National Emissions Inventory, RCRA Handler data and compliance, Discharge Monitoring Reports, and Non Point Source Best Management Practices.</li> </ol>
Online Internet Renewal Application Processes	<ol style="list-style-type: none"> <li>1. Acceptance of NPDES Permitting Renewal Applications electronically via DEP's GreenPort.</li> <li>2. Impact study on NPDES eDMR software to electronically receive and store monitoring data from mine operators for other monitoring points that are not NPDES discharge points (stream sampling points, springs, wells, etc).</li> <li>3. Acceptance of Mine Operator License applications electronically with filing fee from the mining industry.</li> <li>4. Acceptance of Explosive Programs License applications (Sales and Purchase) electronically to DEP for review via work flow, and ability to send electronic copies of Licenses to applicant if approved.</li> <li>5. Acceptance of electronic submittal of underground mine permit applications and their supporting maps and other documents for routing to various DEP staff for review and make available for public review.</li> </ol>
Enhancements to Work Flow Processes within Government Operations	<ol style="list-style-type: none"> <li>1. DEP business practices modified for FileNet work flow processing for Air Quality's electronic Request for Determination, a process</li> </ol>

	<p>to determine if a DEP permit is required.</p> <p>2. Improved business processes for County Conservation Districts (CCDs) delegated duties.</p>
<p>Capability to accept electronic reports and test results per permit or grant requirements.</p>	<p>1. A modified DEP business process for accepting radon test results and mitigation results supported by electronic submission via the Internet with quarterly reporting to the U. S. EPA.</p> <p>2. A modified DEP business process for mining companies to report production results to both the Federal and State Government through one process.</p>
<p>Remedy the data gap concerning Non Point Source Best Management Practices (NPS BMP) on the land that affects water quality</p>	<p>1. A Commonwealth Repository of NPS BMPs hosting local stewards' data electronically or provision of input screens to the repository for data stewards where the business process is captured on paper.</p>
<p>Modify eFACTS to allow the Mining Program to track the various DEP Financial Guarantees (Re-mining, Land Maintenance and Conversion Assistance) made available to the mining industry to meet their bonding obligations.</p>	<p>1. Modified business processes to electronically track payment due dates, amount due, payment dates and payment amounts, edits to limit amount of guarantees provided to an operator and provide necessary management reports.</p> <p>2. Modified business processes for underground mine operators to submit notices of problems reported by the public and operators to DEP and to create Problem records in the BUMIS system automatically.</p>
<p>Modify eFACTS system to incorporate the tracking of Trust Funds established by a mine operator when a post mining discharge develops at a mining operation and develop a new detailed inventory record for the post mining discharge to record water quality and treatment system information.</p>	<p>1. Ability for PA DEP to record periodic updates of the worth of the trust, record any Trustee, and record disbursements to pay for the cost of treatment.</p>

<b>Strategic Alignment</b> (List all Agency, Keystone Plan, and/or CoP goals aligned with this IT Strategic Goal).	<b>Agency Mission /Goals</b> (X= yes)	<b>Key-stone Plan Goals</b> (X= yes)	<b>CoP Goals</b> (X= yes)	
Increase protection of public health, public safety, mine safety, and the environment through more effective enforcement, better program and interagency coordination, and the development and implementation of more effective programs.	X			
Reduce overall costs through the use of emissions trading, pollution prevention, streamlined permitting and reporting procedures, and other innovations.	X			
Enterprise IT Management		X		
Enterprise Architecture		X		
Citizen Centric Processes and Solutions		X		
Increased Customer Focus			X	
Increased revenue through the application of technology			X	
<b>Strategic Projects</b>	<b>E/N</b>	<b>FY ST</b>	<b>FY END</b>	<b>Funding F/S/O</b>
NPDES Permitting Renewal Applications	N	07	09	S
Radon Testing and Mitigation	E	06	08	S
Electronic Request for Determination (eRFD)	E	07	09	O – Special Fund
Act 90 Renewals with Credit Cards	E	06	08	O – Special Fund
Mine Subsidence Insurance Renewals with Credit Cards	E	06	08	O – Special Funds
Global Taps	E	06	08	O – Special funds
NPS BMP Commonwealth Repository	E	06	08	S
eDMRs for Mining	N	07	09	
Electronic Mine Operator Licensing	N	07	09	
Financial Guarantees	N	07	09	
Trust Funds	N	07	09	
Electronic Explosive Sales and Purchase Permits	N	07	09	S
ePermitting for Deep Mine Applications	N	07	09	F
County Conservation Districts eGovernment project	E	05	09	O

## IT Strategic Goal #3: Upgrade Platform Enterprise Architecture to Meet GOA Initiatives and Maintain 24/7 Production Support

Performance Objectives/ FY	Outcomes
Migration to non-proprietary development software.	<ol style="list-style-type: none"> <li>1. A repository of non-proprietary software code for business processes that will be available for state/contracted employees regardless of Commonwealth agency.</li> <li>2. Reduction of costs for software architecture.</li> <li>3. Software applications that have better, long-term support.</li> <li>4. Agency compliance to enterprise Business Center of Excellence (BSCoE) initiative.</li> </ol>
Provision of updated technology software product training to DEP State IT employees	<ol style="list-style-type: none"> <li>1. A State workforce that can effectively use upgraded and new software products to support DEP Core Business Processes.</li> </ol>
Ensure all components of the integrated architecture are protected and redundant	<ol style="list-style-type: none"> <li>1. The Geospatial architecture has Spatial Data Engine (SDE) failover/replication</li> </ol>
Technology upgrades to enterprise Oracle Architecture	<ol style="list-style-type: none"> <li>1. Migration from 10g to 11g near the end of calendar year 2008</li> <li>2. Inclusion of all windows/Oracle Databases on agency Storage Area Network (SAN)</li> <li>3. Virtualization of all Windows/Oracle Databases</li> <li>4. Implementation of Real Availability Cluster (RAC) and/or failover for all mission critical Oracle databases.</li> <li>5. Investigation results on use of Automated Storage Management (ASM) on Sun Solaris (at Data Powerhouse) and Windows</li> <li>6. Upgraded Data Powerhouse.</li> </ol>
Technology upgrades to enterprise SQL Server Architecture	<ol style="list-style-type: none"> <li>1. Resolution of SQL Database monitoring</li> <li>2. Upgraded SQL Database architecture</li> <li>3. Evaluation results for SQL Server 2008 release</li> </ol>

<b>Strategic Alignment</b> <i>(List all Agency, Keystone Plan, and/or CoP goals aligned with the IT Strategic Goal entered above).</i>	<b>Agency Mission /Goals</b> (X= yes)	<b>Key-stone Plan Goals</b> (X= yes)	<b>CoP Goals</b> (X= yes)	
Increase protection of public health, public safety, mine safety, and the environment through more effective enforcement, better program and interagency coordination, and the development and implementation of more effective programs.	X			
Enterprise IT Management		X		
IT Business Functions		X		
Enterprise Architecture		X		
Commonwealth IT Force		X		
Ensure that projects will be done in a collaborative manner, and that solutions are shared and used across agencies.			X	
Centralize the prioritization, decision-making and monitoring of futre IT investments across the Commonwealth.			X	
Measured Performance			X	
<b>Strategic Projects</b>	<b>E/N</b>	<b>FY ST</b>	<b>FY END</b>	<b>Funding F/S/O</b>
Strategic Plan for migration from Oracle Forms and Reports	N	07	09	S
Impact study for migration of the development architecture for a migration from proprietary SAS applications.	N	07	08	S
Consolidation Impact Study to determine the methods and impacts of consolidating the SQL database environments to minimize future license costs.	N	07	08	S
SQL Enterprise Backup/Recovery Study	N	07	08	S
A security audit to determine if there are application and/or user security issues. Audit will show where there are inconsistencies in the methods used by the varying teams and applications.	N	07	08	S

## IT Strategic Goal #4: Streamline Permitting and Reporting Procedures in Business Lines For Government

Performance Objectives/ FY	Outcomes
Provision of technical tools in the field for efficient business processes based on DEP architecture and the data quality initiative.	<ol style="list-style-type: none"> <li>1. Improved data quality reporting from the field.</li> <li>2. Reduction of redundant data entry and collection</li> <li>3. Reduced delivery time of data availability</li> <li>4. Decreased time required by field staff to be in Central/Regional/District offices to report inspection/compliance/pollution prevention results in the field.</li> <li>5. Leveraged mobility knowledge with Federal Office of Surface Mining initiatives for Professional Employees (Engineers, Geologists)</li> </ol>
Support of the Rendell Administration's Business License Exchange Project (BLIX) with PA Department of Revenue	<ol style="list-style-type: none"> <li>1. Forwarding of DEP client information on renewals for the Department of Revenue's internal processes for tax status.</li> </ol>
Availability of current PA Map imagery and LIDAR data for technical assessments prior to issuance of authorizations and environmental decision making.	<ol style="list-style-type: none"> <li>1. Ability for various software applications requiring Commonwealth imagery to access a local copy of the enterprise PA Map Imagery and LIDAR data to avoid processing delays.</li> </ol>
Acceptance of Chapter 105 applications from PA Department of Transportation.	<ol style="list-style-type: none"> <li>1. Decrease of processing time for a PennDOT Chapter 105 permit by acceptance of PennDOT enterprise JPA data via XML files that are transferred into PA DEP.</li> </ol>
Environmental stewardship of Oil and Gas Attributes	<ol style="list-style-type: none"> <li>1. Impact study for a Commercial-off-the-Shelf (COTS) environmental system for business process integration as well as eFACTS integration (RBDMS).</li> </ol>
Support for House Bill 43, Uniform Environmental Covenants	<ol style="list-style-type: none"> <li>1. Implementation of revised business processes and software support for PA Brownfields.</li> </ol>

<b>Strategic Alignment</b> <i>(List all Agency, Keystone Plan, and/or CoP goals aligned with the IT Strategic Goal entered above).</i>	<b>Agency Mission /Goals</b> (X= yes)	<b>Key-stone Plan Goals</b> (X= yes)	<b>CoP Goals</b> (X= yes)	
Increase protection of public health, public safety, mine safety, and the environment through more effective enforcement, better program and interagency coordination, and the development and implementation of more effective programs.	X			
Reduce overall costs through the use of emissions trading, pollution prevention, streamlined permitting and reporting procedures, and other innovations.	X			
Enterprise IT Management		X		
IT business Focus		X		
Enterprise Architecture		X		
Ensure that projects will be done in a collaborative manner, and that solutions are shared and used across agencies			X	
<b>Strategic Projects</b>	<b>E/N</b>	<b>FY ST</b>	<b>FY END</b>	<b>Funding F/S/O</b>
Expansion of Mobility Platform for all DEP inspections/compliance activities	E	05	10	S
BLIX	N	07	08	S
Chapter 105	E	06	08	O - PennDOT

# IT Strategic Goal #5: Improved User Desktop Tools and Services

Performance Objectives/ FY	Outcomes			
Improved business processes concerning administrative tasks and inventories for Agency Personal Computers and Laptops.	<ol style="list-style-type: none"> <li>1. Reduced PC images within the agency.</li> <li>2. Standard method to store images at remote locations vice Central Office.</li> <li>3. A documented method and business processes to track software licensing serial numbers and/or key numbers in the OA/OIT Remedy Asset System.</li> <li>4. A documented method and business processes to manage the PC Local Administrator account and password.</li> <li>5. Improved business processes to manage Active Directory, SMS, and ePO to ensure tasks completions, up-to-date license reporting and synchronizations of computer accounts.</li> <li>6. A defined strategy for the care of employee personal folders (.PST), taking into account the OA/OIT Exchange 2007 initiatives to increase mailbox size and possibly decommission PSTs.</li> <li>7. A series of management reports citing desktop issues on:               <ol style="list-style-type: none"> <li>a. Installed software</li> <li>b. Virus reports</li> <li>c. McAfee compliance reports</li> </ol> </li> </ol>			
Retire Windows2000 on PCs	<ol style="list-style-type: none"> <li>1. Upgrade of all DEP PCs to XP as the foundation for the next version of Windows, most likely VISTA.</li> </ol>			
<b>Strategic Alignment</b> <i>(List all Agency, Keystone Plan, and/or CoP goals aligned with the IT Strategic Goal entered above).</i>	<b>Agency Mission /Goals</b> (X= yes)	<b>Key-stone Plan Goals</b> (X= yes)	<b>CoP Goals</b> (X= yes)	
Enterprise IT Management		X		
<b>Strategic Projects</b>	<b>E/N</b>	<b>FY ST</b>	<b>FY END</b>	<b>Funding F/S/O</b>



## IT Strategic Goal #6: Improved Network Management Systems

Performance Objectives/ FY	Outcomes
Improved proactive and secure network services to the agency.	<ol style="list-style-type: none"> <li>1. An Enterprise Security zone to protect internal servers with firewall protection, installation services and management software.</li> <li>2. Expansion of the Sniffer/Net Assist environment for detailed remote office Local Area Network (LAN) utilization monitoring.</li> <li>3. Cost/benefit analysis to determine effective method of switch replacements for unsupported CISCO switches in the RCSOB and several remote offices.</li> <li>4. A pilot to equip selected conference rooms in the RCSOB with WiFi to gain knowledge of its use and necessary support and determine if WiFi could resolve the long-standing LAN issue in the Bethlehem District Office.</li> <li>5. An assessment of DEP's network.</li> <li>6. Implementation of the Disaster Recovery Site at DPW's Selinsgrove facility.</li> </ol>
Improved physical data facilities environment operations.	<ol style="list-style-type: none"> <li>1. Elimination of a safety hazard concern by replacing of carpet tiles with hard-surfaced tiles in the Consolidated Computer Center.</li> <li>2. Replacement of aging batteries in the Consolidated Server Center.</li> <li>3. Upgrade Air Conditioning Units for the Uninterrupted Power Supply room for the Consolidated Server Center.</li> <li>4. Upgraded cabling in the RCSOB to Cat 6e per the Capital Project request \$5 Million.</li> <li>5. Upgraded IDFs that have reached end-of-life status.</li> <li>6. Access card readers for the Enterprise Infrastructure suite to provide better security and access tracking to protect expensive equipment and vital management computers.</li> </ol>

<b>Strategic Alignment</b> <i>(List all Agency, Keystone Plan, and/or CoP goals aligned with the IT Strategic Goal entered above).</i>	<b>Agency Mission /Goals</b> (X= yes)	<b>Key-stone Plan Goals</b> (X= yes)	<b>CoP Goals</b> (X= yes)	
Enterprise IT Management		X		
Enterprise Architecture		X		
<b>Strategic Projects</b>	<b>E/N</b>	<b>FY ST</b>	<b>FY END</b>	<b>Funding F/S/O</b>
Selinsgrove Disaster Recovery Site	E	06	08	S
RCSOB Capital Project for Rewiring	E	06	09	S

## IT Strategic Goal #7: Improve Server Administration

Performance Objectives/ FY	Outcomes					
Increased storage capacity	<ol style="list-style-type: none"> <li>1. Accommodate drastic increases in GIS storage for new growth and migration of existing data from an aging HP SAN.</li> <li>2. Increased capacity in DEP's tape library to handle anticipated growth within established backup windows.</li> <li>3. A study to support migration from Veritas backup solutions to resolve ongoing support and contractual issues with Symantec.</li> </ol>					
Disaster Recovery	<ol style="list-style-type: none"> <li>1. Implemented disaster recovery hot site for PA DPH, enterprise server resources, and SAN.</li> <li>2. Study on the Backup and Redundancy policies for remote offices with standardized network storage solutions developed for regional offices with redundant capabilities in the RCSOB.</li> </ol>					
PA Data Power House	<ol style="list-style-type: none"> <li>1. An assessment for impact of business requirements on the UNIX Resources including ongoing capacity monitoring and capacity planning in conjunction with the Governor's Office of Administration.</li> <li>2. Implemented SAMBA printer and file sharing between PA DPH Unix servers and the DEP desktops.</li> <li>3. A plan to recover all PA DPH applications that fit with DEP's continuity of Government Plans for its business areas.</li> <li>4. Procedures to monitor thresholds and performance trends of the UNIX systems through Sightline.</li> </ol>					
<b>Strategic Alignment</b> <i>(List all Agency, Keystone Plan, and/or CoP goals aligned with the IT Strategic Goal entered above).</i>			<b>Agency Mission /Goals</b> (X= yes)	<b>Key-stone Plan Goals</b> (X= yes)	<b>CoP Goals</b> (X= yes)	
Enterprise IT				X		
Enterprise Architecture				X		
<b>Strategic Projects</b>			<b>E/N</b>	<b>FY ST</b>	<b>FY END</b>	<b>Funding F/S/O</b>
Selinsgrove Disaster Recovery Site			E	06	08	S

# Accomplishments

## **Environmental Program/Executive Staff Support**

1. Integration of NPDES Management System and Electronic Discharge Monitoring Reports with eFACTS
2. Act 90 Waste Hauler Stickers issued with Vehicle Identification Numbers
3. eBlasting Permit by Rule eGovernment Project
4. Water Attribute Viewer for the Enterprise (WAVE) GIS Tool released
5. Instream Comprehensive Evaluation GIS Tool Released
6. Creation of Commonwealth Repository for all Non Point Source Best Management Practices in Commonwealth regardless of Funding Source, Agency, or Federal Partners
7. Redesign of the Daily Update
8. Stream Relief GeoCoded to the National Hydrography Dataset
9. Act 220 2006 Annual Reports
10. NHD Raindrop Tool updated with NHD
11. Fish Tissue entry form for Streams and Lakes Integrated Management System (SLIMS)
12. Water Test Results Analyzer
13. Drinking Water Contaminant Analyzer
14. Toxic Release Inventory Analyzer updated
15. SDWIS data to EPA via network node TPA
16. National Emissions Inventory data to EPA via network node TPA
17. RCRA Handler data to EPA via network node TPA
18. Grandfathering actions and related activities for Certified Operators
19. Establishment of a Mercury Comments Database
20. Global Reservation Update with BOS assets
21. Mercury Switch database updates
22. DEP employee eNewsletter
23. MSI enhancements
24. Radiation Protection support for correspondence generation and invoicing
25. Growing Greener database changes
26. Georeferencing DCNR's scenic rivers to NHD
27. Mobile Platforms for inspectors and compliance staff in Waste Management
28. Homeland Security funding to integrate eFACTS with PA Incident Response System (PAIRS)
29. Compliance with EPA's Cross Media Electronic Reporting Rule (CROMERR)

## **DEP Architecture Platform Upgrades**

1. Re-architecture and documentation for eGovernment foundation to move forward with credit card processes for fee payments
2. Daylight Savings Time modifications to software and hardware
3. Upgrade of all Oracle applications and database to OEM10g Release 2
4. SQL 2005 Migration for all enterprise Microsoft applications
5. Negotiations and LOU with PA Department of Welfare for disaster recovery site at Selinsgrove Hospital.
6. Environmental Data Element dictionary project as foundation for quality management initiative and IT consolidation by CoP.
7. Update and upgrade of gNet to Version 6.
8. License reorganization by consolidating development database servers/databases; re-use database licenses from production database consolidation and virtualization; and upgrade development databases to common versions.

9. Grid management
10. Fault Tolerance web servers

### **DEP Infrastructure Projects**

1. SMS Service Pack 2 Upgrade PCs and Servers
2. IBM Director Deployment in Networking Infrastructure
3. Virtual Desktop Analysis
4. Desktop Zero Touch Study
5. Core Upgrade (Routers, etc)
6. CSC Physical Security and audit controls
7. Diagnostic upgrades

### **Governor's Office of Administration Business Architecture Structure Projects**

1. DEP's Process for SAP Reorganizations AS IS business process analysis
2. AQ's electronic Request for Determination TO BE documentation
3. AQ's Source Test Emissions Review TO BE documentation
4. AQ Continuous Emissions Monitoring TO BE documentation
5. Transfer of knowledge from AQ contractor (CIBER) to BIT
6. Act 167 AS IS study
7. Energy Fuel Set-Aside AS IS Study
8. Impact study for Mining's Financial Guaranty and Trust Programs

### **Governor's Office of Administration Information Architecture Projects**

1. Accessibility reports for external websites per Governor's Office

### **Governor's Office of Administration Technical Architecture Projects**

1. Firewall consolidation
2. Enterprise Virtual Private network Phases 2 and 3
3. Implementation of Enterprise Anti Virus Solution
4. Implementation of Host Intrusion Prevention system/Enterprise Security Agent
5. Implementation of Internet Filtering and Access Control (SurfControl)
6. Implementation of Security Incident Management System
7. Implementation of network Intrusion Prevention systems
8. Implementation of Email Scanning and Threat Prevention
9. Implementation of Change, Problem and Asset Management Services

# Challenges

1. Mandate Department-wide Quality management training at all staff levels.
2. Augment the Quality Management Training with Change Management Training to ready the Department for a new way of doing business and cultural shift.
3. Address the data quality issues that automation brings to light, including a processing unit for error correction and validation as well as an audit plan.
4. Institutionalizing processes involving the Project Management Office and the Project Management methodology.
5. Coordination efforts required to distributed information technology positions throughout the department that do not report to the Bureau of Information Technology.
6. Skill sets to support FileNet applications
7. Development of an archiving policy for electronic system records in production.
8. Implementation of credit card procedures in an agency with many special appropriations and maintenance fees.
9. Migration of newly designed DSF external websites to the latest Commonwealth Standard of AquaLogic.
10. Unfunded IT complement positions

## Document Compilation

1. Senior IT Managers prioritize/reprioritize IT projects every quarter, including projects tagged for the next Fiscal Year.
2. All-hands IT Staff Meeting in the RCSOB auditorium for all IT divisions and sections to hear the upcoming GOA/OIT initiatives, DEP initiatives, and BIT initiatives. The staff then divides down into their specific teams to document projects that will roll into or be introduced the next FY along with resources required, training required, projected time for initiative, and other details.
3. Senior IT Managers reorganize the next FY's priorities after reviewing team projects results with CIO.
4. A call is made to the agency for Community of Practice Projects desired where the value will be \$100,000 or more.
5. The strategic plan was drafted using all of the above input.

## Strategic Plan Sign-off

**Approval and Authority to Adopt the "Enter Agency Name Here" IT Strategic Plan.**

*We approve the IT strategic plan as described above.*

Name <i>[type or sign name]</i>	Title	Date
Robert Rottet	Applications Development, Chief	6/18/07
Joseph P. Bennett	Data Operations and Management, Chief	6/18/07
Lee Harclerode	Enterprise Infrastructure, Chief	6/18/07

Kristoper Adams	Administrative Office	6/18/07
Nancie L. Imler	Chief Information Officer	6/18/07
Patrick McDonnell	Deputy for Administration	6/18/07