



# Erie County Strategic Information Technology Plan

2008-2011

October 16, 2009



# Strategic Information Technology Roadmap

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# Introduction

This document was prepared by the staff in the County of Erie Division of Information and Support Services and establishes the course for the delivery of Information Technology in Erie County government.

The effective use of Information Technology (IT) affects business efficiency. In the effort to provide a blueprint for the future direction of IT we have prepared a four-year strategic plan focusing on our commitment to excellence and change. Once the plan is approved and we transition from planning to development we will continue a periodic review of the plan.



# Executive Summary

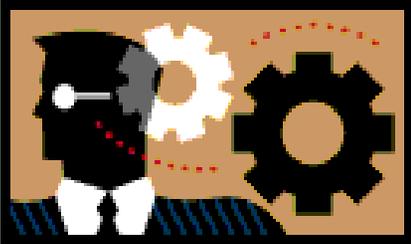
- The County of Erie Division of Information and Support Services (DISS) is challenged more than ever to operate efficiently, to deliver cost-effective, robust solutions, to protect Information Technology (IT) assets and to position the County's IT infrastructure for the future. In response to these challenges the DISS is taking an enterprise view and approach with regard to the deployment of IT solutions that meet business goals.
- The 2008-2011 Strategic Plan for Information Technology provides a blueprint for the future direction of major technology initiatives. It gives appropriate and effective direction and will provide a foundation for providing better service to the County's citizens.





# Our Objectives

- Support the County Executive's “Road to a Bright Future” initiative
- Align all activities with the business goals of the entire organization
- Treat information as a strategic asset
- Ensure secure electronic access to information services
- Deliver services less costly and more efficiently, e.g. “Do more with less”
- Provide support for all Lean Six Sigma projects
- Leverage the strengths of our existing framework
- Realize the Vision for the future



# Our Vision

The Division of Information and Support Services will deliver leading-edge information technologies to support the business needs of Erie County government, on-demand, and at the lowest possible cost per transaction.



# Our Mission

With one IT voice, enable the County of Erie to effectively and efficiently fulfill its mission through technology.



# Current IT Trends

“Less is More!”

- Hardware Trends
  - Server consolidation
- Software trends
  - Reduction in the amount of software in use
  - Easily-delivered, on-demand applications
  - Consolidated views to data / web-enabling data / portals



# Current IT Trends

- Organized/Normalized Data
  - Education of IT staff in state-of-the-art data management and organization techniques
  - Business Intelligence systems for the purpose of collecting, integrating, analyzing and presenting business information for the support of better business decision-making
  - Robust data mining tools
- Outsourcing
  - Buy the appropriate expertise for design, consulting, and knowledge transfer



# Current IT Trends

- Service is Paramount
  - Effective 1st, 2nd, and 3rd level of support
  - Reasonable Service Level Agreements (SLA)
  - Published metrics
- Get it Right the First Time!
  - Project Management Office
  - Recognized success
- Remote Work Force
  - Application access when roaming



# Current IT Trends

- Communicate, then Communicate AGAIN
  - Single Point of Contact (SPOC)
  - Surveys and published metrics
- Security
  - Cyber security spending now 10 percent of federal IT budget plans
- Disaster Recovery
- Collaboration and Conferencing
  - Video Conferencing
  - Webinars



# Erie County IT Assessment

## Political, Economic, Social, Technological (PEST) Analysis Factors that may impact our ability to provide effective services (As of January 2008)

### Political

- The Erie County Fiscal Stability Authority
- Lack of trust between government branches
- Erie County Employee Unions

### Economic

- Weak economy in WNY
- Aging population
- High cost of Doing Business in WNY
- Utility, grocery and transportation higher than average
- Increased reliance on non-tax, user based fees
- Increased reliance on intergovernmental aid

### Social

- Mobile workforce
- Aging population
- Users demand new technology
- Frustration with agencies/representatives
- Negative Media coverage
- Brand image

### Technological

- Competing Technology Services offered by other EC departments
- Vaporware
- Automation requiring Subject Matter Expert
- Rate of Technological Change
- Short time to realize ROI
- Continuous maintenance cycle



# Erie County IT Assessment

Strengths, Weaknesses, Opportunities, and Threats Analysis (SWOT)  
(As of January 2008)

## Strengths

- Dedication of employees
- Technical desire to 'Do the right thing'
- Knowledge in respective areas
- Existence of core application strategy providing an outstanding foundation for integrated systems/processing
- Existence of virtualization and automated application delivery and management
- Some standards are established

## Opportunities

- Prove the value proposition of IT to the overall enterprise
- Provide tangible cost saving to the enterprise
- Realize positive synergies from a centralized, aligned and strategic IT organization
- Leverage existing networked County sites for disaster recovery (DR) plan
- Develop employee skill sets to increase self sufficiency

## Weaknesses

- Lack of current strategic plan; no long term strategy
- No Disaster Recovery Plan
- Obligated to support many applications for numerous diverse business needs
- Obligated to legacy applications requiring additional administration and support
- Lack of unified IT organization across the County of Erie
- Too much bureaucracy within the technology procurement process

## Threats

- Funding issues / future budget cuts
- Growth of other non-centralized IT
- Lack of a disaster recovery (DR) program
- Bureaucratic hurdles; union-based challenges
- Antiquated business process and culture



# Erie County IT Assessment

Microsoft Assessment (summary)  
(Conducted January 2008)

- Microsoft conducted an “Infrastructure Optimization Analysis for Microsoft Core Infrastructure Optimization Return on Investment” in October 2007 at no cost
- Strategy : Generating Value Through Improving IT Operations with Best Practices
- Recommendation: Further automation, consolidation, standardization could reduce labor costs by approximately 30%



# The Plan

- Goals
  - # 1 : Driving Operational Efficiencies
  - # 2 : Being More Customer-focused
  - # 3 : Protecting and Enhancing the Value of Our Assets



# Strategic Goal #1

- Driving Operational Efficiencies
  - Strategies
    - Business Warehouse
    - Consolidation of Disparate Systems
    - Process Automation
    - Self-Service Automation
    - Unified IT Organization
    - Re-engineer Business processes utilizing Lean Six Sigma methodology



## Strategic Goal #2

- Being More Customer-focused
  - Strategies
    - Business Continuity / Disaster Recovery Plan
    - Business Warehouse
    - Marketing and Communications
    - Process Automation
    - Self-Service Automation
    - Unified IT Organization



## Strategic Goal #3

- Protecting and Enhancing the Value of Our Assets
  - Strategies
    - Business Continuity / Disaster Recovery Plan
    - Business Warehouse

# Gap Analysis

An assessment of our ability to achieve the strategic goals and initiatives



<i>Goals</i>	<i>Strategy</i>	<i>Existing Tools</i>	<i>Gaps</i>
#2 Customer Focus #3 Protecting Assets	Business Continuity / Disaster Recovery Plan	Enterprise Storage (SAN) Advisory Services Monitoring Tools Virtualization Software Vendors / BusinessPartners	Lack of: Resources,Funding,Site  Legacy systems = complexity
#1 Efficiency #2 Customer Focus #3 Protecting Assets	Business Warehouse	Imaging Software SAP Portal Sharepoint	Lack of: Unified IT, resources and funding
#1 Efficiency	Consolidation of Disparate Systems	Core Applications Virtualization Software	Lack of: Unified IT, commitment, resources, and Subject Matter Experts
#2 Customer Focus	Marketing and Communications	E-Mail ERIE.GOV Intranet	Lack of: Commitment, Ownership, Methodology
#1 Efficiency #2 Customer Focus	Process Automation	Core Applications Industry Analyst Infrastructure Manageable printing and copying services	Business Process / Culture Procurement bureaucracy  Lack of Subject Matter Experts
#1 Efficiency #2 Customer Focus	Self-Service Automation	Core Applications Infrastructure	Lack of: Resources, sponsor
#1 Efficiency #2 Customer Focus	Unified IT Organization	Core Applications Executive Sponsorship Infrastructure	Lack of: Legislative Sponsorship Methodology





**START**

# Strategies & Initiatives

## 1. Unified IT Organization

- a) Review / Refine Organizational Structure
- b) Establish a Project Management Office (PMO)
- c) Establish Service Level Agreements
- d) Provide Incentives for Employees

## 2. Marketing and Communications

- a) Establish Better Communication with 'Customers'
- b) Build Trust Between Government Organizations
- c) Web-based Problem Reporting/Resolution

## 3. Consolidation of Disparate Systems

- a) Move off of Legacy Systems
- b) System Utilization Measurement



**START**

# Strategies & Initiatives (cont'd)

## 4. Self-Service Automation

- a) Open Government (Public Access)
- b) Web-based portal
- c) Web Payments
- d) Implement Employee Self-service

## 5. Process Automation

- a) Expand, enhance, and integrate core application solutions
- b) Virtual Desktop Infrastructure (VDI) / Thin Client
- c) Integrate User Data
- d) Multi-channel communications in/out NYS IT
- e) Standard Workflow
- f) Streaming Applications
- g) Single Sign-on



**START**

## Strategies & Initiatives (cont'd)

### 6. Business Continuity / Disaster Recovery Plan

- a) Create a Business Continuity Blueprint
- b) Create a Disaster Recovery Blueprint

### 7. Business Warehouse

- a) Financial Dashboard
- b) Archiving
- c) Business Intelligence systems – collect, integrate, analyze, present business information for better decision-making
- d) Data Warehousing / Data Mining
- e) Enhance Knowledge-based / Knowledge Transfer
- f) Document Management



# Strategic Goal #1 Roadmap

## Driving Operational Efficiencies

### Achievements in 2008 / 2009

- Review / Refine Organizational Structure
- Dynamic Allocation (virtualization)
- Integrate User Data
- System Utilization Measurement
- Streaming Applications

### In Progress 2009

- Establish a Project Management Office (PMO)
- Expand, enhance, and integrate core application solutions
- Move off of Legacy Systems
- Virtual Desktop Infrastructure / Thin Client

### Initiatives for 2009 – 2011

- Multi-channel communications in/out NYS IT
- Standard Workflow
- Single Sign-on





# Strategic Goal #2 Roadmap

## Being More Customer-Focused

### Achievements in 2008/2009

- Implement Employee Self-service
- Establish Better Communication with ‘Customers’
- End User Over-site Committee
- DISS Official Commitment of Service
- Provide Incentives for Employees

### In Progress 2009

- SAP CRM / Solutions Manager Module
- Build Trust Between Government Organizations
- Web-based Problem Reporting/Resolution
- Web Payments
- Establish Service Level Agreements

### Initiatives for 2009 – 2011

- Open Government (Public Access)
- Web-based portal



# Strategic Goal #3 Roadmap

## Protecting and Enhancing the Value of Our Assets

### Achievements in 2008/2009

- OnBase Document Management
- Email Archiving
- Create a Business Continuity Blueprint

### In Progress 2009

- Create a Disaster Recovery Blueprint
- Business Intelligence Systems

### Initiatives for 2009 – 2011

- Enhance Knowledge-based / Knowledge Transfer
- Financial Dashboard
- Data Warehousing / Data Mining





# Basic IT Principles

- Challenge the old policies and procedures
- Practice Lean Six Sigma methods
- Rationalize the software portfolio
- Minimize configurations
- Automate redundant tasks
- Be aggressive in implementing new technology
- Let the refined business processes drive IT requirements
- Enterprise approach
- Measure successes



# 10 Basic IT Principles

- 1. Reliable
- 2. Secure
- 3. Flexible
- 4. Innovative
- 5. Responsive
- 6. Transparent
- 7. Accommodates Diversity
- 8. Consistent Interoperability
- 9. Affordable
- 10. Sustainable



# Cost & Benefits

In Progress 2009

- Detailed Description of Initiatives
- Impact Evaluation
  - Quantitative Benefits
  - Qualitative Benefits
- Cost of Plan
- Return On Investment





Erie County  
Division of Information  
and Support Services

*Enabling Excellence in  
Erie County With One IT Voice*