



Office of Information
Technology Services

Agency Overview and 2022 Highlights

December 22, 2022

Agenda



- ITS Overview
- Current Year Accomplishments
- Status of FY 2022-23 Additions



ITS By The Numbers

- 2,942 staff located in more than 60 NYS communities
 - 94 percent are IT professionals
- Maintain major financial and regulatory applications (DOL, OTDA, DMV, Tax etc.)
 - >5,000 total applications
- Tier III Cloud Data Center with 10,000 servers, 25 PB of storage, 1 PB of monthly traffic
- >1,400 miles of fiber optic cable
- 70,000 VoIP phones, 27,000 cell phones, 93,500 end user devices, 3,400 VDI connections

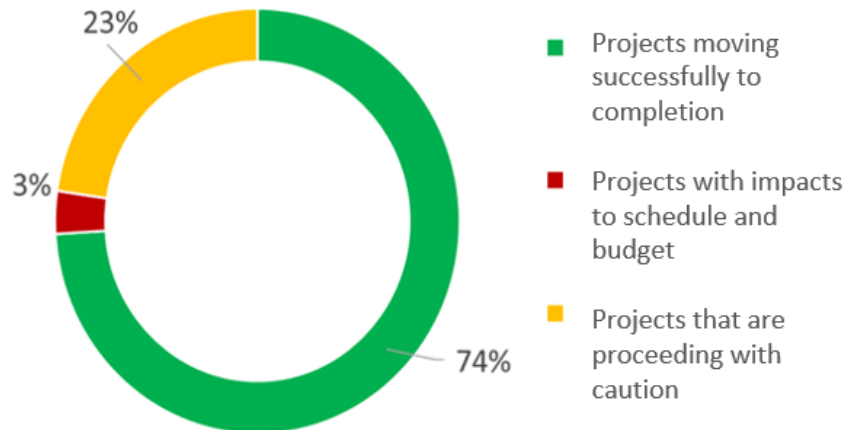




2022 Portfolio Highlights

- Since beginning of FY 23, a total of 62 projects have been closed
- 43 projects will close in next 30 days and 23 projects will close by the end of FY 23
- 213 active projects

Overall health of the IT Project Portfolio
Fiscal Year 2022-23 to Date



Supporting Legislative Mandates

Gender X

- Changed applications, forms and databases used by Executive Agencies to allow name/gender changes

Office of Cannabis Management

- Set up technology on expedited timeline for new office locations
- Implemented hemp licensing system
- Implemented licensing application system for growing and dispensing recreational marijuana

Broadband Mapping Website

- Worked with the Department of Public Service to create public, spatially-enabled site that allows users to search for available broadband service throughout the state, resulting in an increased NYS share of federal funding



Language Translation

- State agency websites required to offer translations for the 12 most commonly spoken non-English languages
- ITS advised all state agencies on implementation of language translation technology
- Website translation technology implemented for language translations that pertained to COVID-19 programs and services
- 84 public facing sites identified and translated (Spanish, Chinese, Russian, Yiddish, Bengali, Korean, Haitian-Creole, Italian, Arabic, Polish, French, and Urdu)
- Technology will continue to be implemented for new sites as they are created



Technology Projects – Improving Quality of Life for New Yorkers

- Web Directory of NYS Farms and Farm Products
 - Provides consumers with easy access to NYS products, promoting growth for the agricultural industry
 - Working with the Department of Agriculture and Markets, developed a searchable directory of NYS farms and farm products on their public site
- Consolidated Contact Center Knowledge Base Transformation
 - Expansion and replatforming of Tax and Finance’s Consolidated Contact Center Knowledge Base allows the agency to respond quickly and efficiently to callers’ inquiries for 10 agencies in real time
- NYS Parks Explorer Application
 - Improved search capabilities and interactive mapping




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NYS Integrated Eligibility System (IES) Program 2022 Accomplishments

- Received Federal Approval for \$298M in continued funding.
- Executed a System Integrator contract for development of Financial Management functionality.
- Received Federal Approval for development of Eligibility, Enrollment, and Case Management functionality.
- Procured Independent Verification and Validation (IV&V) services
- Continued development of Social Services Correspondence System - Notice Generation, correspondence search, view and print and integration with the IES Portal.
- Continued development of Fair Hearings functionality - New Fair Hearing Requests and recording retrieval completed.
- Completed Welfare Management System (WMS) Rules Extraction.





Integrated Eligibility System



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Expanding Risk Management Beyond Cybersecurity

- ITS is committed to protecting New Yorkers' information assets through the development of a Data Privacy program and an Enterprise Risk Management framework.
 - **Privacy.** In recognition of the importance of protecting the privacy rights of all New Yorkers, ITS hired the first statewide Chief Privacy Officer to establish a statewide IT privacy program, to include policies and processes that enable consistent and effective information privacy practices.
 - **Enterprise Risk Management.** ITS hired the Director of Enterprise Risk Management who is responsible for creating an enterprise risk management framework and broadening the enterprise view of risk to include technology, security, data, privacy, legal and operational risks.



FY 2022-23 Budget Update



- Digitization of Government Services
- Modernization of Systems for the Department of Tax and Finance
- Comprehensive Cybersecurity Solutions



Digitization of Government Services

The FY 23 Budget included \$10 million for the digitization of government services.

What we're doing:

- Rationalizing logons – New Yorkers should not have to enter data multiple times and remember multiple passwords
- Using the Empire Digital Pass to reduce fraud
- Giving New Yorkers the option to store credential on their devices
 - As of November, the enhanced Empire Parks Pass is now available for digital wallets



Tax Systems Modernization

The FY 23 Budget included \$10 million for the modernization of systems at the Department of Tax and Finance

- Requirement gathering for five projects completed by December
- Design started for six projects
- First Java Boot Camp held

Tax Mod Includes 11 projects:

- Case and Resource Tracking System
- Tax Accounting
- Reference Tables
- Correspondence
- Returns Processing and Case Identification and Selection
- Estate/Generic Tax Processing
- Wage and Withholding Tax Processing
- Online Services
- Check Re-Issue System
- Statewide Offset Program
- Real Property System Online



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Comprehensive Cybersecurity Solutions

The FY 23 Budget increased the ITS Cybersecurity Budget to \$61.5 million

ITS Processes

- NYS Information Security Policies & Standards
- IT Security Reviews
- Secure Architecture & Engineering
- ISO Service for Client Agencies
- NYS Security Operations Center and Joint Security Operations Center
- Cyber Incident Response Including Digital Forensics
- Penetration Testing/Threat Hunting
- Vulnerability & Threat Management
- Risk Management
- Compliance/Maturity Assessments & Audit Support
- Cyber Education/Outreach/Awareness



Layered Defenses

ENDPOINTS

- Access management
- Secure configuration
- Change & Patch Management
- Anti-virus/Anti-malware
- Endpoint Detection and Response
- Encryption
- Vulnerability Scanning

APPLICATIONS

- Secure System Development Life Cycle
- Secure Coding
- Access Management
- Web Application Firewall
- Security Reviews
- Vulnerability Scanning
- Penetration Testing

DATA

- Classification
- Encryption
- Secure Disposal
- Data Loss Prevention in O365

GOVERNANCE

- Policies, Standards, and Procedures
- Awareness & Training
- Audit & Compliance Activities

CLOUD

- Secure cloud services – O365, help desk, web-hosting, etc.



PHYSICAL

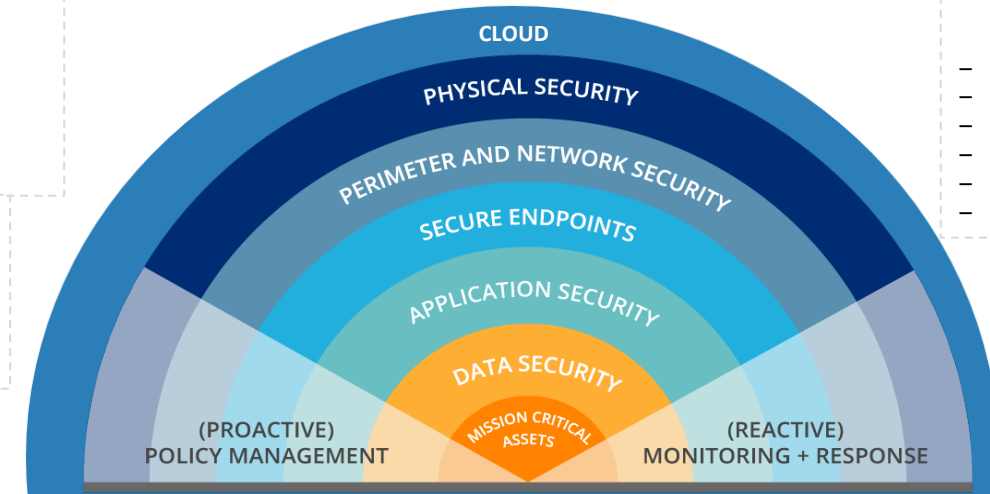
- Facility security – guards, CCTV, restricted access, etc.
- Data center policies, processes & multiple barriers to unauthorized access

PERIMETER & NETWORK

- Firewalls
- Intrusion Detection/Prevention
- Segmentation
- Secure remote access – Virtual Private Networks (VPN) with Multi-factor Authentication (MFA)
- Privileged Access Management
- Email Security, Advanced Threat Protection
- Secure Web Gateway - web filtering
- Encryption
- Wireless security
- Vulnerability Scanning

MONITORING & RESPONSE

- Managed Security Services
- Security Operations Center (SOC)
- Cyber Threat Management
- Incident Response & Digital Forensics
- Backups & Disaster Recovery



Incident Response – Identify, Contain, Recover

- Review security event to determine if it is a cyber incident.
- Determine type, scope, and severity of the incident.
- Make notifications to the appropriate parties.
- Contain the threat to avoid further spread or damage.
- Review system images and logs to determine what other systems were impacted, if any.
- Determine root cause of the incident and remediate any remaining gaps or vulnerabilities.
- Recovery of impacted systems after containment and remediation.



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**Office of Information
Technology Services**

**New York State Cyber Incident
Reporting Procedure**

What to Report?

Any adverse event that threatens the confidentiality, integrity or availability of government resources, or that involves misuse of computing resources or is disruptive to normal system or data processing operations, including:

- Misuse, criminal or unauthorized use of systems
- Data theft or accidental disclosure of data
- Unauthorized modification or deletion of data
- Web page compromise
- Credential compromise
- Unauthorized access attempts
- Denial of service
- Unauthorized changes to hardware, software or configuration
- Unauthorized or malicious software (malware)
- Unusual system behavior



Call
Cyber Command Center
(518) 242-5045

After hours (5 p.m. - 9 a.m., weekends and holidays), please call the NYS Watch Center at (518) 292-2200 and ask to report an incident to the Cyber Command Center.



Email
cycom@its.ny.gov

If you are including sensitive data and you are not a NYS Office 365 user, consider encrypting using the ITS Enterprise Information Security Office's PGP public key.

More information on the incident reporting procedures, the public key, and forms can be found at: <https://its.ny.gov/incident-reporting>

its.ny.gov/incident-reporting

Cybersecurity Partnerships

The FY 23 Budget included \$30 million for Cybersecurity Shared services. ITS is working with our partner, the Division of Homeland Security and Emergency Services to roll out these services to counties.

As a first step, Governor Kathy Hochul announced in February the creation of the Joint Security Operations Center (JSOC).

JSOC is a first-of-its-kind Hub for Data Sharing and Cyber Coordination across the State, NYC, the Big Five, other local/ regional governments, Critical Infrastructure and Federal Partners and serves as the nerve center for joint cyber efforts, including data collection, response and information sharing.



Services currently being offered at no cost to participating localities

- Automated cyber event alerting and response options
- Centralized security event logging
- Whole of state threat hunting capabilities and subscriber notifications
- Centralized support for State level shared service initiatives



Challenges Ahead

Highest priority is recruitment and retention

- Recruiting top talent and leveraging new HR resources
- Leveraging social media to attract new employees
- Building on existing relationships with NYS colleges

Cybersecurity is a constantly evolving threat

- We will continue to roll out new defenses
- Legacy applications are a vulnerability, both for the State and local governments





