DIGITAL COUNTIES

## INNOVATIVE SOLUTIONS TO FOR WESTCHESTER COUNTY



A LOOK INTO THE DEPARTMENT OF INFORMATION TECHNOLOGY (DOIT)

Westchester County

George Latimer, County Executive
Marguerite Beirne, Chief Information Officer
Department of Information Technology

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#### WHAT IS DOIT?

The Department of Information
Technology (DoIT) touches every aspect
of running an efficient, 21st century
government organization, from the
computers and phones on our desks to
the program brochures we design and
the machines they are printed on.

Over the past two decades we have automated nearly every county business function and streamlined processes that were previously manual, labor-intensive tasks. DoIT has helped contain or reduce costs throughout the county by advancing smart solutions in all areas of operation. The applications, servers and miles of network relied upon by employees to do their jobs and departments to fulfill their missions are built, maintained, secured and upgraded by dedicated DoIT staff day in and day out.

DoIT is a critical partner in Westchester County's commitment to promoting a sustainable environment of innovation that delivers value to county residents. Long gone are the days when IT organizations are viewed as simply the provider of technical services. DoIT and the role of the CIO

have both evolved to become an integral part in the planning and decision-making process in all areas of the county. IT is therefore core to the county's governing philosophy, and moving forward we will strive to be an even closer partner to the Latimer Administration, the Board of Legislators and all stakeholder departments and agencies. Deeper collaboration and increased communication will spark new solutions to the challenges we face as one organization.

DoIT has a long tradition of success and has established itself as one of the premier government IT agencies in the country, routinely ranking among the "Top 10" digital counties in the U.S. by the Center for Digital Government. DoIT continues to shine because of the committed and capable staff that have gone above and beyond to meet the needs of their user departments and deliver the high level of customer service and support they have come to expect.

We hope that you enjoy learning more about DolT in the pages that follow.

Marguerite Beirne, CIO

Lennox Harris, Deputy CIO

Aji Palappillil, Deputy CIO

**DolT** provides support to Westchester County departments and employees - providing what we call "workforce foundations" - so that all residents of Westchester receive the best in programming and service state-wide, nation-wide.

We DolT.

## Westchester County Places Third Nationwide in Center for Digital Government's 2024 "Digital Counties" Survey for Mid-Sized Populations

Westchester County continues to strive for excellence in using technology to deliver innovative governmental services. These efforts have been recognized by the Center for Digital Government (CDG), which awarded Westchester County third place nationwide in the 500,000 to 999,999 population category on its annual "Top 10 Digital Counties" list.

The CDG said: "Westchester County climbed the ranks to third place in its population category this year thanks to the Department of Information Technology's (DoIT) continued commitment to improving digital equity and exploring emerging technologies."

The County's increased commitment to cybersecurity was also a significant factor, with cybersecurity ranked the #1 priority of U.S. counties according to this year's survey.

Westchester County Executive George Latimer said: "Under the leadership of CIO Marguerite Beirne, our Department of Information Technology continues to deliver exceptional results. This award highlights the collaborative efforts of DoIT with all County departments, helping each to achieve their missions more effectively. I commend our team for their dedication and look forward to future innovations that will continue to benefit the people we serve."

The CDG survey, developed in partnership with the National Association of Counties (NACo), highlights the best technology practices among U.S. counties. It emphasizes initiatives that streamline government service delivery, enhance data analytics for informed decision-making, bolster cybersecurity and leverage innovative technologies to meet County priorities.

Beirne said: "Our dedicated team at DolT understands the critical role we play for the people of Westchester County. This award is a testament to our collective efforts over the past several years to build the smart use of technology into the DNA of Westchester County Government. I extend my gratitude to County Executive Latimer and his administration, the Board of Legislators, County leadership, and our talented DolT staff for positioning us to receive this prestigious honor."

NACo Executive Director Matthew Chase said: "The Digital Counties Survey illustrates how counties are on the cutting-edge, pursuing innovative approaches to serve our residents. Counties are thoughtfully adopting technologies like artificial intelligence and data platforms to enhance civic engagement, increase efficiency, and strengthen our communities today and for the future."



## Highlighted Department Accomplishments (2023-2024)

- Named one of the "Top 10 Digital Counties" in the United States (500,000 999,999 population category) for 2024 by the Center for Digital Government and National Association of Counties (NACo).
- Co-hosted a countywide Cybersecurity Tabletop Exercise with NYS Department of Homeland Security and Emergency Services (DHSES) on 5/8/24 with senior staff from all County departments to bolster the County's incident response capabilities and cybersecurity posture.
- Implemented Okta Multi-Factor Authentication (MFA), a leading identity management and access control platform that ensures secure and convenient access to various applications and resources.
- Implemented a solution to automate the creation of agendas and minutes for Board of Acquisition & Contract and live stream weekly meetings.
- Updated the County's password policies in order to be compliant with more stringent cybersecurity protocols and best practices.
- Replaced the Electronic Health Record/Case Management System used by the Department of Community Mental Health (DCMH).
- · Replaced 2,500 security phones used for internal communication by Department of Correction staff at the County Jail.
- Developed a portal that allows the County to track the sale of used (second-hand) goods as per Westchester County Law, Section 863.253.
- Upgraded HID SAFE, the system that helps manage the identities and access privileges of County Airport employees and contractors.
- Worked with the County Attorney's Office to launch a new online portal for the Family Court Bureau of the County Attorney's Office. The portal facilitates the receipt and handling of discovery materials.
- Completed enhancements to the Minority and Women Owned Enterprise Application to improve functionality and administrative features.
- Worked with DES to stream County Trunked Radio System fire and EMS radio transmissions via the internet so that that volunteer
  firefighters and EMS personnel can use their personal cellphones to monitor radio traffic.
- Implemented a Source Separation Inspection Data Viewer and Dashboard to enhance DEF's business operations.
- Created an online field mapping application to facilitate the ongoing collection of dam inspection data for the Parks Department.
- Worked with the Departments of Public Safety and Consumer Protection to develop an application to track the sale of second-hand goods in Westchester County.
- Worked with BOE to update the Polling Place Search application to include subdivision information.

- Worked with the County Clerk and a vendor to scan and index all existing Building Loan Agreements (BLA) in response to County legislation that designates digitally converted or created records filed in the County Clerk's Office as official records.
- Developed a new application to support the Westchester County Business FIRST Launch 1000 application.
- Worked with the County Executive's office to implement a streamlined application process for County Boards and Commissions using a
  module of Granicus, the web-based civic engagement solution implemented by DoIT.
- Supported the Office of Emergency Management in creating a Damage Assessment ESRI hub site to create a centralized location to coordinate and conduct assessments of the extent of damage to infrastructure, property, and local communities.
- Developed an online Residential Food Scrap Transportation and Disposal application for DEF.
- Worked with Department of Health to develop a solution to scan and index Childhood Lead Files in the County's enterprise document repository.
- Installed remotely controlled radio-direction-finding system equipment at two sites to find the source of interference to County radio systems.
- Implemented an application that allows Public Safety to issue tickets more efficiently to taxi and limousine drivers.
- Customized the 2024 Point in Time (PIT) survey to perform the HUD-required count of the unsheltered and sheltered homeless population.
- Developed an Incident Management System (IMS) for Department of Correction to create and manage documentation generated for an incident.
- Upgrade of the application that allows Fire, Police and Emergency Medical Services (EMS) Agencies and other emergency responders to be alerted via text messaging or email when they are dispatched by the Emergency Services Communications Center.
- Collaborated with DEF to enhance the Odor Complaint Form and Yonkers Joint WRRF (Ludlow Park) Notification List, making them more user-friendly for the general public.
- Developed a new Scale House Reporting system that is used by both the County and external municipalities.
- Entered into an inter-municipal agreement (IMA) with Nassau County to obtain source code for their financial disclosure application which was modified by DoIT to meet the County's requirements.
- Developed an application that helps inspectors in the Town of Eastchester identify residential sign violations according to a new local law.
- Collaborated with the District Attorney, Public Safety, and Human Rights Commission (HRC), to enhance the Law Enforcement Sharing Portal.
- Completed the collection of countywide Spring 2024 aerial photography and Planimetric datasets. These base map datasets are integrated
  into nearly every County and local government GIS mapping application.
- Continued to expand and attract additional visitors to the County's award-winning website as well as support and enhance the security of the content management system supporting County websites.



- Maintenance and support, including upgrades and/or expansions to all computer applications being used to support the daily operations of County departments.
- Continued to implement additional infrastructure and provide staff with licenses to access to the County's enterprise virtual meeting platform.
- Continued to virtualize and consolidate server infrastructure in order to provide the County with a more cost-effective and energy-efficient solution.
- Continued to assist local municipalities in building geospatial programs which benefit both county and municipal business functions.
- Continued to support the County's Shared Services initiative to augment local government services in the areas of GIS, printing, network infrastructure/e-mail, public safety, etc.
- Continued to train and support County departments in their efforts to create accessible documents for the Web as per Americans with Disabilities Act (ADA) compliance standards.



# IT's a fact



Awards reflect hard work and dedication.



Covid-19 brought workforce mobility into focus.

DoIT has provided 1,800+ virtual meeting software licenses to County employees to date.



Boxes of paper take up valuable space.

DoIT shredded and recycled 220 tons of it in the past five years.



DoIT is more than just computers.

It's a team of professionals fueling efficiency and making government smarter.

# IT's a fact



Scanning your old photos is one thing.

Scanning over 10 million pages of permanent records is another (DoIT) thing.



There are 3,141 counties in the United States.

Westchester ranked Top 10 (for IT) fourteen times.



DoIT develops and supports them so that every County department and agency can operate more efficiently.



Westchester is one of the most diverse counties in New York State.

DoIT supports multilingual and accessible websites and telecom services for all residents.

# IT's a fact



Cybersecurity is a top priority.

DolT requires cybersecurity awareness training for all County employees.



County business used to rely heavily on paper-based processes.

DoIT has automated many business functions in all County departments to streamline day-to-day operations.



Government websites can be boring,

Ever-changing art and articles mean over 1 million visitors. (per month.)



Graphics is a visual language.

DoIT Graphics Team brings ideas and people together in Westchester County.



- 1. Cybersecurity
- 2. Hire/retain/nurture competent IT personnel
- 3. Departmental IT collaboration
- 4. IT governance
- 5. Budget and cost control

- 6. Disaster recovery/continuity of operations
- 7. Cloud computing
- 8. Shared/collaborative services
- 9. Digital services/processes
- 10. Business intelligence/analytics



#### Five Main Organizational Areas

#### Office Technologies

Responsible for office productivity software, all employee PCs, the IT Help Desk and procuring/implementing new hardware and software. Also includes Municipal Shared Services, Education Center, Help Desk and Procurement / Asset Management.

#### Infrastructure

Manages the network, data center, cybersecurity and recovery efforts; ensures constant connectivity and smooth county operations. Also includes all telecommunications services (video, voice, data) for the county and many municipalities.

#### Departmental Systems

Thematically divided development teams work with departments to create and implement software and business process improvement solutions for all areas of government, including Public Safety, Physical Facilities and Health and Human Services. This also includes Geographic Information Systems (GIS), responsible for maintaining and distributing digital data and map-related information, services and programs in county and local governments.

#### Archives/Records Center

The central repository for the county's records from 1680 to present; benefits community, conservation and our historical record. The Records Center assures the county's compliance with state and federal regulations regarding records retention and disposition, including new Federal Rules for Civil Procedure, Freedom of Information Law requirements and legal discovery of e-records.

#### **Design Support Services**

Provides professional, original and creative graphic, Web, advertising and marketing-arts solutions through cooperation with county public information officers and executive staff to promote county programs and services.



#### DESIGN & SUPPORT SERVICES -

- Design & Support Services
- Digital Printing
- Mail Delivery

#### INFRASTRUCTURE \_\_

- Telecommunications
- Network/Server Engineering
- Data Center
- Data Storage
- Disaster Recovery
- Cyber Security

#### ■ OFFICE TECHNOLOGIES

- Municipal Shared Services
- Desktop Support
- Contract Management Admin/Procurement
- Education Center
- Asset Management

#### ■ DEPARTMENTAL SYSTEMS

- Workflow & Doc Mgmt
- HR/Finance/Budget
- GIS
- Health and Human Services
- Legal/Criminal Justice
- Physical Facilities
- Radio Systems
- E-911

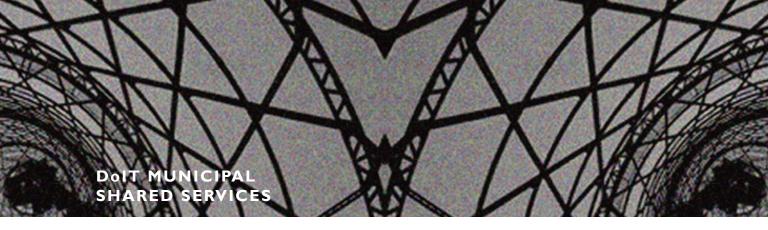
### Marguerite Beirne CIO

Lennox Harris Aji Palappillil

Deputy CIO's

#### ARCHIVES AND RECORDS CENTE

- Records Storage, Retrieval & Disposal
- Central Image Management
- County Archives



Westchester County is committed to a robust shared services program designed to help municipalities, school districts and other municipal entities save money, increase efficiency and reduce duplication of services.

DoIT has a long track record of successfully delivering shared services to Westchester municipalities. The initiative began over 25 years ago with the Geographic Information Systems (GIS) Team, and was expanded in 2001 when DoIT contracted with Cablevision Lightpath to build the countywide fiber-optic network known as the "Westchester Telecom Network." This initiative allowed municipalities to take advantage of County-negotiated contract pricing, with high volume discount rates for both telephone and data services.

### Since then, many additional services have been added, including:

- Digital Printing Services
- Graphics Design Services
- Wide Area Network Management (WAN)
- Domain Name Services (DNS)
- E-mail
- Education and Training
- Multi-Function Device Contract
- Geographic Information System (GIS) services
- Criminal Justice Systems
- Emergency Services Systems
- Enhanced 911 Service



DoIT is in many ways a one-stop shop for all things "IT" in Westchester County Government. DoIT even encompasses areas that are not normally considered part of IT, including Graphics, GIS and Archives/Records. Since 1998, the department has been strategically organized into many functional teams, each with a team leader and dedicated staff that possess a wide range of skills. The following section details all DoIT teams, many of which have overlapping projects that require close communication and collaboration. Moving forward, the department has a goal to increase and improve internal communication to facilitate further cross-team collaboration and a more flexible organization overall.

#### **DoIT teams include:**

- Administration
- Archives and Records Center
- Asset Management
- Criminal Justice
- Data Center & Print Operations
- Desktop Support
- E-911 Administration
- Geographic Information Systems (GIS)
- Graphics
- Health & Human Services
- Human Resources & Finance
- Infrastructure Support Services
- Municipal Shared Services & Education
- · Network Engineering
- Physical Facilities
- Radio Group
- Telecommunications
- Workflow & Document Management

#### **ADMINISTRATION TEAM**

#### SCOPE AND RESPONSIBILITIES:

The Administration Team performs the financial, procurement and human resources functions to support the operations of DoIT and its staff members. Responsibilities include, but are not limited to:

#### THIS TEAM'S STAFFING:

The Administration team consists of four employees. The staff is proficient at a wide range of skills including:

- Expenditure accounting
- Revenue accounting
- Purchasing
- Cost analysis
- Statistical analysis
- Preparation of Operating and Capital budgets
- Monitoring of expenditures and revenues and preparation of budget forecasts
- Interdepartmental billing for IT services
- Billing of pass-through charges for multi-functional copiers, pagers, cell phones, postage
- Creation of purchase requisitions and purchase orders
- Invoice processing
- Resolution of billing issues with vendors

- Processing approval and payment of employee travel requests
- Booking of cash receipts including payments by non-county clients of IT services (municipalities, NY State Courts, Westchester Community College, Westchester County Medical Center) and surcharge receipts for land lines and cell phones
- Position control, vacancy control, canvassing of civil service lists and processing of new hires
- · Payroll and leave time processing
- Maintenance of confidential personnel and payroll records
- Preparation of contract authorization documents (resolutions) for adoption by the Board of Acquisition
- Management of contract payments, amendments and renewals
- Tracking of MBE/WBE statistics for DoIT vendors and preparation of annual report
- Fiscal management of department accounts and budget transfers
- Year-end closings and reserves
- Contract preparation, monitoring and management
- Development and preparation of reports to support management functions
- Policy development & analysis

#### **ARCHIVES & RECORDS CENTER**

#### SCOPE AND RESPONSIBILITIES:

Aligned with the overall mission of the Department of Information Technology (DoIT), the Westchester County Archives and Records Center's business purpose is to manage the county's public records in both paper-based and electronic format, to store the inactive records efficiently so that they are accessible to all county departments and to improve access to those records having enduring historical value -- for county departments, key partners in the historical community and the public at large. The Archives & Records Center was originally a division of the Office of the County Clerk. By amendment of the County Charter in 1999, the Chief Information Officer became Westchester's Records Management Officer and this unit became part of DoIT.

Begun in 1985 and opened to the public in 1989, the Archives is an award-winning program for preserving Westchester County government's rich documentary history and making it accessible to the public both now and in the future. Staff and volunteers in three areas support this mission: the Reading Room to which all reference inquiries and requests are directed and responded to and where many outreach educational programs have been held; the Scanning/Micrographics Unit that produces images and microfilm copies of the county's permanent records having historical, enduring value; and the Processing Room where archival records are appraised, prepared for storage, catalogued and indexed and where both online research resources and other finding aids are developed and enhanced.

#### THIS TEAM'S STAFFING:

The Archives and Records Center team consists of eleven full-time employees, and 12 Volunteers in Archives organized into distinct units to support the team's goals and mission.

#### SCOPE AND RESPONSIBILITIES:

The Asset Management/Warehouse Team provides services to all county departments and is responsible for tracking more than 6,200+ computers and related devices in the county network. This includes, but is not limited to personal computer (laptops, desktops), personal printers, special purpose printers, fax machines printers for the County Clerk, Board of Legislators, Board of Elections & Public Administrator, network multi-function copiers/faxes/printers/scanners, digital video recorders, network printers and more...

- Scheduling hardware/ software installations from all county departments.
- Performing site surveys for all computer-related installations.
- Interfacing with all county departments, vendors, consultants and contractors on all computer- related, hardware/software, moves, adds and changes.
- Creation of user-ids for new county employees, contractors, vendors, etc.
- Evaluating and participating in testing, recommending, and implementing new software/hardware tools used to improve and facilitate workstation asset management.
- Generating monthly reports of all asset management related items and activities.
- Processing of departmental Building Access Request Forms.

- Records retention process using E-WESTARM system.
- Maintain the DoIT warehouse which handles tracking, receiving, inspection, physical unloading, storage, delivery and maintenance of stocked and special ordered items.

#### THIS TEAM'S STAFFING:

The Asset Management/Warehouse team currently consists of two people. The staff has a wide range of skills and responsibilities including:

- Project Management
- Database administration
- Construction consultation with DPW and all departments and schedule environmental surveys to meet departmental needs
- Prepare weekly, monthly and yearly reports of all asset management activity
- Provide inter-departmental analysis, as required, of IT needs with regards to asset management.
- Inventory Control

#### DATA CENTER & PRINT OPERATIONS

#### SCOPE AND RESPONSIBILITIES:

There are three distinct service areas within this team.

1. Professional Print, Finishing and Mail

This service area provides cost and time savings to all county departments and eligible municipalities by using in-house, professional, high-volume printing, finishing and mail equipment.

- 2. Mailroom Delivery and Pick-up
- Three Routes: MOB1, North and South County locations
- Combination of 95 mailstops
- 3. Data Centers and Remote Sites

This area monitors the UPS/Generator, fire suppression system FM200, HVAC AC units, all networks and servers. Environmental and energy usage monitoring capabilities were added not just for the two main Data Centers, but also for the remote departmental server rooms throughout the county.

#### THIS TEAM'S STAFFING:

The Data and Delivery Center consists of 7 full-time employees and 1 part- time hourly employee. The staff has a variety of skills, including:

- Computer Operations
- Print Operations
- Mail Variable Data Merge Services
- Delivery Services

#### SCOPE AND RESPONSIBILITIES:

The Criminal Justice and Public Safety Systems Team designs, builds, procures, implements, integrates upgrades and supports information systems and technology that help our departments and stakeholder agencies operate more securely, effectively and efficiently, and to make information more accessible. The team provides primary application support for the following county departments and agencies:

- Public Safety
- Correction
- Probation
- Emergency Services

The team also provides application support to the following county departments for select applications:

- Human Resources
- Parks
- · District Attorney's Office
- Community Mental Health
- Social Services
- Consumer Protection

In addition, the team supports a number of Shared Services which involve extending application support to municipal fire and police agencies.

#### THIS TEAM'S STAFFING:

The team currently consists of seven employees and four consultants. In addition, a full-time technical resident engineer is stationed at the Emergency Services Dispatch Center in Valhalla to provide support for the Computer Assisted Fire and Emergency Medical Dispatch System.

The staff is proficient at a wide range of skills including, but not limited to:

- Project management
- Database administration in Oracle and MS SQL Server
- Application support and server administration
- Development in:

Java / J<sub>2</sub>EE

Oracle Forms and Reports Crystal Reports

SQL and PL/SQL

Visual Basic, .Net / ASP

HTMI

C++

Web services

#### **GEOGRAPHIC INFORMATION SYSTEMS (GIS)**

#### SCOPE AND RESPONSIBILITIES:

Geographic Information Systems assists county departments and government agencies to improve service delivery to County residents through the cost-effective use of geospatial technologies and services. Program activities and resources will continue to be aligned with county government priority areas of fiscal responsibility, public health and safety, and to the environment. GIS utilizes industry-leading Environmental Systems Research Institute (ESRI) GIS software, leverages new opportunities towards integrating Open Source geospatial technologies (http://www.opengeospatial.org/) and a wide range of new geospatial data viewers such as Google Earth and ArcGIS Online. This team

The GIS Team also maintains the Westchester County GeoHub portal at https://gis.westchestergov.com/

serves all county departments.

The Westchester County GeoHub is the County's public platform for exploring, visualizing, and downloading location-based data. It includes applications such as Mapping Westchester County, Tax Parcel Viewer, Natural Resource Inventory, Hurricane Planning Zone, Find Your Elected Officials, and many other departmental user applications. The GeoHub also provides access to map services used to create APIs for web-based applications, and

hundreds of datasets including Basemap Planimetric, LiDAR, and 2-foot topo data that are available for download.

#### THIS TEAM'S STAFFING:

The GIS team consists of six highly qualified county employees with two decades of GIS analysis, database management and application development experience. Staffing is augmented, when possible, by college interns during the summer and winter holiday months. GIS staff is proficient at a wide range of skills including:

- ESRI (ArcGIS platform)
- Web Map Services (WMS)
- Database Administration in Oracle and MS SQL Server
- Web mapping APIs (ArcGIS Server JavaScript API, .NET, Google Map API, and the Microsoft Bing Map API)
- GIS Web services using REST or SOAP
- Application development in .Net environments
- Administration of ArcGIS Server and Web Servers
- Project Management
- Systems and Applications integration

#### **HEALTH & HUMAN SERVICES**

#### SCOPE AND RESPONSIBILITIES:

The Health and Human Services Team designs, builds, procures, implements and supports information systems and technology that help our departments and stakeholder agencies operate more effectively and efficiently, and to make information more accessible. The team provides information technology expertise to multiple departments and agencies in the county, including:

- Health
- Social Services
- Community Mental Health
- · Senior Programs and Services
- · Labs and Research
- Youth Bureau
- Office for Women
- · Human Rights Commission

In collaboration with the customer departments, create application solutions that help them automate their business processes and perform their work more efficiently and reliably. Many of these applications are mission critical. The team focuses its application expertise on developing IT strategies which deliver value and enhance the productivity of its customer departments so they can focus on delivering services optimally to Westchester County residents.

#### THIS TEAM'S STAFFING:

The team includes both project managers and application software architects. The project managers are highly skilled in requirements gathering and business analysis to help determine the best solution for a business need. These solutions are achieved through inhouse application development or vendor-purchased software.

The software architects are highly trained in state-of-the-art technology for application development. The team utilizes proven Open Source tools which enhance our ability to deliver stable software at a lower cost to build and maintain.

The Health and Human Services team consists of 10 people (9 employees and 1 consultants). The staff is proficient at a wide range of skills including:

- Project Management
- Vendor Systems Implementation
- Database Administration in Oracle and MS SQL Server
- Java / J2EE Development
- HTML Development
- SQL and PL/SQL Development
- Crystal Reports Development

#### **HUMAN RESOURCES/FINANCE/BUDGET**

#### SCOPE AND RESPONSIBILITIES:

The HR/Finance/Budget Team designs, builds, procures, implements and supports information systems and technology that help all County departments and stakeholder agencies operate more effectively and efficiently, and make information more accessible. The team provides support to many enterprise & public-facing applications and primary support to the following departments:

- Finance
- Human Resources
- Budget

This team supports the County's Financial/Budget/HR systems that are critical for internal business operations as well as for conducting business with outside vendors. In addition, all payroll transactions for County employees are conducted through the system managed by this team. The public can also view and apply for civil service exams through the Online Exam system developed in-house.

#### THIS TEAM'S STAFFING:

The team consists of eight people (six employees and two consultants). The staff is proficient at a wide range of skills including

- Project Management
- Database Administration in Oracle and MS SQL Server
- Development in:

Java / J2EE, XML, WebSphere Oracle Forms

Cobol

Business Objects HTML

PL/SQL

Versata

Web Services

Harbor/Kubernetes

**JBOSS** 

#### PHYSICAL FACILITIES

#### SCOPE AND RESPONSIBILITIES:

The Physical Facility Systems Team designs, builds, procures, implements and supports information systems and technology that help our departments and stakeholder agencies operate more effectively and efficiently, and to make information more accessible. The team primarily supports the following departments and agencies:

- Airport Administration
- Environmental Facilities
- Office for the Disabled
- · Parks, Recreation and Conservation
- Planning
- Public Works and Transportation
- Solid Waste Commission
- Tourism

The team also provides support to the following departments for select applications:

- Correction
- Public Safety
- Probation
- · County Executive's Office

#### THIS TEAM'S STAFFING:

The Physical Facility Systems team consists of five people (3 employees and two consultants). Team members are proficient at a wide range of skills including:

- Project Management
- Database Administration in Oracle and MS SQL Server
- Application server administration
- System integrations
- Hardware and Integrated Peripherals management
- Development in:

Java / J2EE and related technologies such as Spring and Spring Boot

Javascript and JQuery, Bootstrap CSS

XMI

WebSphere

Web Services

Crystal Reports/Business Objects

Oracle Forms

#### **RADIO GROUP**

#### SCOPE AND RESPONSIBILITIES:

The Radio Group manages radio communication projects and is responsible for radio system planning, specification, design and procurement. The group has system implementation, maintenance and troubleshooting capabilities, but normally supervises vendors responsible for these tasks. The group primarily supports the following county departments:

- Emergency Services
- Public Safety
- Public Works and Transportation
- Corrections

The county's radio systems are used by these departments, as well as by first responders in municipalities throughout Westchester. Every police headquarters, firehouse, hospital, fire truck, ambulance and Bee-Line bus in Westchester is equipped with a county radio. The group also manages radio site tenants, thus providing the stewardship needed to protect critical public safety resources while generating revenue for the County.

In 2012 the Radio Group began a multi-stage replacement and expansion of the county's radio systems. This expansion was motivated by the need for countywide coverage for "portable" handheld radios used by first-responders. The initial replacement stage was completed in 2022 and the final expansion stage is underway.

#### THIS TEAM'S STAFFING:

The Radio Group is made up of eleven members. Four staff members are employees; seven are consultants. Collectively, the Group has capabilities and experience in the following areas:

- Strategic planning
- Operational and project-specific budget planning
- Radio system project planning and management
- Analysis of end-user needs and radio system requirements
- · Radio system design and engineering
- Frequency coordination and FCC licensing
- Small and medium scale radio system installation & maintenance
- Radio system coverage modeling, measurement, and analysis
- System performance monitoring and troubleshooting
- Radio site management and infrastructure quality assurance
- Oversight of County infrastructure use by third-party tenants
- Assuring County compliance with federal regulations and relevant standards
- Site acquisition and radio site tenant administration

#### **WORKFLOW & DOCUMENT MANAGEMENT**

#### SCOPE AND RESPONSIBILITIES:

The Workflow & Document Management Team designs, builds, procures, implements and supports information systems and technology that help our assigned departments and stakeholder agencies operate more effectively and efficiently and make information more accessible. The team directly supports the following departments and agencies:

- · Board of Acquisition and Contract
- · Board of Legislators
- Board of Elections
- Consumer Protection
- County Attorney's Office
- · County Clerk's Office
- · County Executive's Office
- Public Administrator
- Tax Commission
- Independent Office of Assigned Counsel

In addition, we support Onbase, the County's enterprise document management solution. These applications help make departments operate more efficiently and also reduce the amount of paper being handled, which in turn reduces the likelihood for lost or misfiled documents and supports the county's environmental goals. These applications include automated workflow processes and scanning/imaging applications.

This team also works to promote government transparency through the implementation of web-based document management solutions for the County's Boards & Commissions. This includes new capabilities for remote public participation in County meetings and live streaming/recordings that are made available on-demand to the public.

#### THIS TEAM'S STAFFING:

The Workflow & Document Management Team currently consists of seven people (five county employees and three consultants). The members of the team are proficient at a wide range of skills, including:

- Project Management
- Database Administration MS SQL Server

#### Development in:

- Net / ASP / IIS
- HTMI
- Web Services
- Crystal Reports/Business Objects
- Development of workflow and imaging applications in OnBase software
- Administration of OnBase security and servers

#### **DESKTOP SUPPORT**

#### SCOPE AND RESPONSIBILITIES:

The Desktop Support Team support the computing needs of all county employees. The team has wide-ranging responsibilities that keep County operations in all departments running smoothly.

- Installs all personal computers, laptops, printers, multifunction copiers, fax machines, Android smartphones, DVR's and a wide range of peripheral devices.
- Replace County laptops and PC's that are broken and came off warranty.
- Maintain a level 1 helpdesk which supports approximately 5,000 users and handles 1,200 calls per month.
- Support the user community by troubleshooting user issues called into the helpdesk.
- Install and maintain the county's video conferencing system.
- Maintain Emergency Services PC's in both the TMC and the EOC to be used in the case of an emergency.
- Oversee the DoIT warehouse which handles the ordering, tracking, receiving, inspection, physical unloading, storage distribution, delivery and maintenance of stocked items.
- Research and provide specs for IT equipment orders.
- Maintain contracts for the repair of PC, printers and related equipment.

- Support infrastructure that manages all desktops and laptops remotely.
- · Support helpdesk application and call center.
- Support an asset management application which tracks all computer related equipment, video conferencing equipment, cell phones and desk phones.

#### THIS TEAM'S STAFFING:

The Desktop Support Group consists of two sections: Workstation and Help Desk. On the Workstation side, there is one workstation manager, one server engineer one Program Coordinator (Media Services), and 11 workstation employees. On the Help Desk side, there are two Staff Assistant (Info Systems), for a total of 16 people on this team. All Workstation Engineers are A+ certified. The staff is proficient with a number of programs pertinent to the different departments that they are supporting.

#### **GRAPHICS, PRINT & WEB EDITING**

#### SCOPE AND RESPONSIBILITIES:

Graphics provides creative graphic, web and marketing visual solutions in cooperation with and direction from the County Executive's Office of Communications, county departments' executive staff, program administrators and other staff to promote county programs and services and events across print, web and digital channels.

The team produces projects within the guidelines and objectives of the Office of Communications through a request system (Publication Requests).

In addition, in-house and specialty print trafficking, business graphics such as forms, presentations, stationery and election materials are all part of a county-wide project list.

The Web Requests team oversees the content and management of over 30 County websites, including the Westchester County Board of Legislators, Board of Elections, County Clerk and District Attorney.

The team produces, edits, and creates content for websites for the County of Westchester.

The Web Request team is also responsible for ensuring all content is up to County web standards, as well as ADA compliant.

#### THIS TEAM'S STAFFING:

Graphics and Web staff possess both technical and creative skill sets and have expertise in the communication, visual and graphic arts, web design, user experience, project management, print procurement, print trafficking, social media, UI mobile app and web app, content management and more.

#### Skill Area Detail:

- · Presentation design of all county web sites
- · Managing projects internally and across teams
- Print marketing development
- · Logo and form design
- Marketing campaigns (multi-media)
- Processing, preparing and designing both conventional and electronic mailings
- Producing art elements for use in video and digital media advertisements
- E-mail blast development and delivery
- User Interface Design (Desktop and Mobile)
- Accessible Design Standards (ADA)
- HTML, CSS, JQUERY and CMS
- Reviewing, processing and overseeing website requests from over 30 departments
- Creating and maintaining a copy of the County Web Standards

#### SCOPE AND RESPONSIBILITIES:

Infrastructure Support includes four sub-teams that manage and maintain the county's servers, and other infrastructure components. Coordinated leadership of these groups is a key factor to efficiency and helps facilitate a clear vision for the current and future use of Infrastructure-related technologies at the County.

#### 1. The Application Server Support Team

deploys all third party and in-house developed applications to the county's applications servers and is responsible for planning, implementing, configuring, supporting and upgrading the various application servers used by Westchester County to host Java-based applications. This includes Apache web server, middleware and various application servers, among others. The team also provides training in best practices and support to the various application development teams.

#### 2. The Storage and Backup Team

performs all server data and operating system backups, restores if necessary, and manages all large scale storage devices. The team provides disk storage resources for all large-scale county government applications. Physical storage platforms and support are from major industry vendors.

The team is responsible for data protection on a daily basis for county department servers and employee workstations/laptops.

The team is responsible for infrastructure applications that are used daily to maintain an effective storage environment. They include:

- Backup and recovery software for county servers and employee PCs
- 3. Server Engineering Team is responsible for all server hardware and operating system maintenance and designs, builds, procures, configures, implements, and supports information systems and technology throughout the entire Westchester County enterprise. The team monitors all servers 24x7 for application availability, perform capacity planning to prevent down time and performance issues, training for IT developers related to Microsoft Windows and Unix operating systems, as well as application support. The team provides support for appliances as well.
- **4. Security Team** is responsible for safeguarding the County's digital infrastructure, data, and systems. Their work includes monitoring networks for security threats, implementing cybersecurity tools, assisting with incident response, managing access controls and ensuring compliance with regulations.

#### INFRASTRUCTURE SUPPORT

#### THIS TEAM'S STAFFING:

All staff possess varied IT certifications, specific tech skills and other specialized training to support their respective areas. The team is currently comprised of 16 employees and 6 consultants who possess a variety of skills including:

- · Java programming and troubleshooting
- · Database design
- · Application Server Design
- · Data provisioning
- Storage hardware and software management
- Data retention
- Project Management
- Perl Scripts

- Windows Active Directory Troubleshooting
- WINS/DNS Troubleshooting
- Exchange Administration and Troubleshooting
- Right Fax Administration and Troubleshooting
- MDM Administration and Troubleshooting
- ListServ Administration
- IIS troubleshooting skills
- Database Administration in Oracle, Microsoft SQL, Postgres and MySQL
- Administration of security and network services in various UNIX environments
- Integration services between various UNIX environments and various Microsoft Windows operating systems
- Design and implementation of network management systems including element managers and Manager-Of- Manager systems

#### MUNICIPAL SHARED SERVICES & EDUCATION

#### SCOPE AND RESPONSIBILITIES:

Municipal Shared Services and Education
Training Center is responsible for managing
and administering Information Technology
Shared Services provided to local governments.
All shared services provided by the department
are listed on DoIT's website. DoIT also makes
available a number of contracts that
municipalities can leverage to save money,
including its contracts for multi-function
devices (MFD's) and telecommunications
services. The team is also responsible for
administering the eLearning platform available
to all County employees. This service was
extended in 2022 to local government staff.

Other responsibilities of the team include:

- Promote DoIT Shared Services program to local governments.
- Represent DoIT at various meetings, conferences and events related to Municipal DoIT Shared Services.
- Serve as the liaison between DoIT and municipalities for all DoIT Shared Services.
- Administer and support the Education Training Center. The Education Training Center, housed at 112 E. Post Road, is equipped with 14 personal computers (PCs) used by various departments for on-site training.

#### **NETWORK ENGINEERING**

#### SCOPE AND RESPONSIBILITIES:

The Network Engineering Team designs, manages, and supports the physical data network infrastructure and the data network transport. This includes the deployment of Network Services working in collaboration with other DoIT Teams, all Westchester County departments, municipalities, New York State Office of Technology Services (ITS) and vendors.

#### THIS TEAM'S STAFFING:

The Network Engineering Team consists of nine people (eight employees and one consultant). The staff is proficient at a wide range of skills including:

- Network Engineering
- Network Design and Support
- Network Security Design and Support
- Internet Protocols
- · Network Management and Monitoring
- Project Management
- IP Telephony Engineering and Support
- New Technology Research and Deployment
- Wireless Network Deployment
- Fiber Optics and Ethernet Cabling Standards

#### **TELECOMMUNICATIONS**

#### SCOPE AND RESPONSIBILITIES:

The Telecommunications Group (Telecom) manages and supports 6300+ telephones throughout the county. Telecom is responsible for adding, moving and making phone changes within county facilities and oversees all troubleshooting. The county entered into a five-year agreement with Cablevision Lightpath, Inc. (Lightpath) for telecommunications services, whose network reaches virtually all county facilities. Calls between county offices and other contract participants continue to be free; calls outside of the network and handled by Lightpath and charged at low, contract negotiated prices. In addition to the Lightpath network, the county manages a Cisco Unified Communications Manager (CUCM) which was upgraded to support the entire inventory of County telephones.

The team also monitors and provides application support services for appliances that are part of a system that records and catalogs conventional and trunked radio and digital, conventional and VoIP phone conversations 24x7 for the departments of Emergency Services, Public Safety, Social Services and Transportation.

#### **TELECOMMUNICATIONS**

#### THIS TEAM'S STAFFING:

The Telecommunications Group consists of eight Telecom staff and four switchboard operators. The staff is responsible for the following:

- Project Management
- Telephony Coordination, Implementation, Monitoring, Traffic Management and Troubleshooting
- Administer and program all telephone adds, moves and changes
- Troubleshoot and repair telephones and wiring problems at all County sites
- Configure and manage various Cisco telecom products

- · Administer the Recording System
- Configure voice messaging, information and dialogue boxes
- Build complex call processing-trees for county departments
- Administer the speech-activated auto attendant
- Configure and manage the County's Conference Manager
- Train end-users on telephone use
- Audit and process vendor billing and call detail
- Manage interdepartmental billing and reporting for voice services
- Direct inquiries from the public
- Coordinate Cellular, Smartphone and Aircard deployment
- Train liaisons on administration of conferencing, voice messaging, dialogue and billing applications

#### E-911 ADMINISTRATION

#### SCOPE AND RESPONSIBILITIES:

- Support 36 Primary and 3 Secondary Public Safety Answering Points (PSAPs) for E-911 system.
- Respond to all system problems 24X7.
- · Correct any address database problems.
- Train local personnel in the correct use of E-911 equipment.
- Interface between municipalities and E-911 service provider, telecommunications company and the maintenance provider.
- Work with PSAP vendors and assist with CAD system upgrades.
- Advise and consult with businesses, schools and local municipalities on how to enhance their telephone systems to give specific location information to E-911.
- Point of contact for Westchester Government Wireless Priority and Government Emergency Telecommunications Services (Federal system).

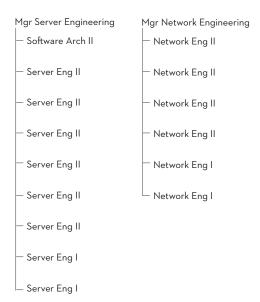
#### THIS TEAM'S STAFFING:

The E-911 Administration Team includes two County employees, specifically:

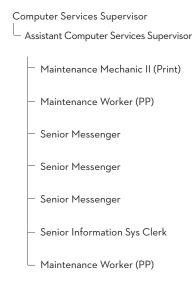
- One Assistant Director of Telecommunications
- One Program Administrator Telecommunications

#### **Deputy CIO**

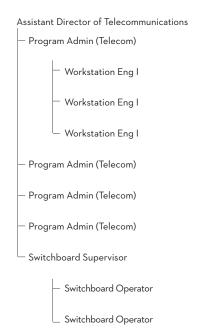
#### SERVER/NETWORK ENGINEERING



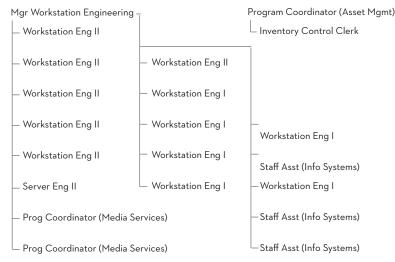
#### DATA CENTER/PRINT OPERATIONS/MAILROOM



#### **TELECOMMUNICATIONS**



#### OFFICE TECHNOLOGIES/HELP DESK/MULTI-MEDIA SERVICES



### GRAPHIC DESIGN & WEB SUPPORT



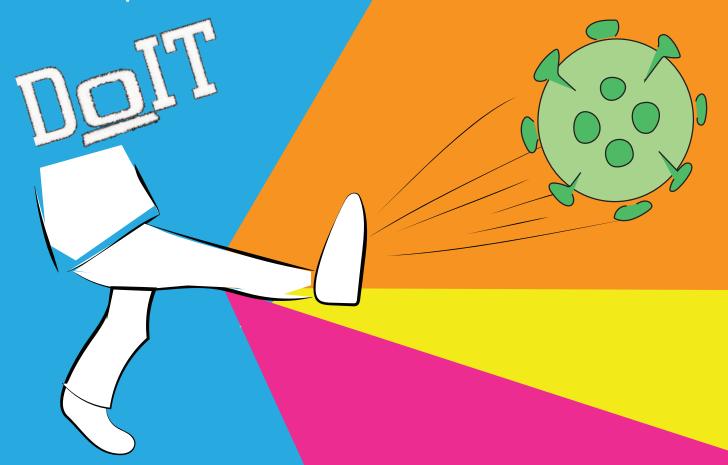
#### **SECURITY**

Info System Security Analyst Info System Security Analyst

#### **TECHNOLOGY ORGANIZATIONAL CHART**



## DolT Contributions and Achievements in Response to the Covid-19 Pandemic



DolT leveraged technology and the diverse range of expertise found among all DolT teams to support the County in its response to Covid-19 pandemic.

Below is a summary of DolT's major accomplishments and milestones that enhanced the County's efforts to effectively manage the pandemic while ensuring that the County remained 'open' for business.

- Vesta Alert Notification System: DoIT delivered public notifications from the County Executive on several occasions throughout the Covid-19 pandemic.
- On March 12th 2020, one day after the World Health Organization upgraded the Covid-19 outbreak from a Public Health Emergency of International Concern to a Pandemic, the County Executive delivered the first Westchester County Executive Public Address to Westchester residents, using the ENS Emergency Notification System (ENS).
- On November 13th 2020, DolT sent out another Public Address from the County Executive Office in both English and Spanish to address the updated concerns of Covid-19.
- On May 10th 2021, the County Executive reached out to Westchester residents to support the Covid-19 vaccination effort and to help alleviate confusion and concerns about safety and access to the vaccine.
- Covid-19 Data Dashboard: DoIT partnered with the County Executive's Office to build a COVID-19 case dashboard that provided daily case updates tied to New York State data, local test site information, and data trends. The dashboard continued to be updated with the latest metrics and additional information as requested until January 1, 2023. A mobile-friendly version of the map was also available.
- A key priority during the pandemic response was automating as much as possible to further increase efficiency. One example was DoIT's development of an innovative Automated Quarantine or Self Isolate Tool that helped the public determine whether they are subject to an Order of Isolation, an Order of Quarantine, or if it is recommended that they Self-Quarantine. Users of the application were presented with a series of questions and based on the answers the tool provided guidance on what is needed for the individual to do. The tool presented the individual with a maximum of eight questions and presented a summary guidance page once the questions are submitted. This application freed up valuable DOH resources who could then provide critical care/services to the public to keep them safe and to mitigate the spread of the virus.

- DoIT custom developed the COVID-19 Quarantine and Isolation Release Letter Request Application used by the public to request release letters from the Department of Health after testing positive for COVID-19. This application guided the user through a series of questions that ultimately generated a letter, if eligible, that confirmed their ability to re-enter the workplace, etc.
- COVID-19 Large Gathering Event Notification Form: In March 2021, in response to NYS interim COVID-19 regulations for catering halls and Food Service, DoIT staff worked with Health to develop a web form which was required to be completed by the responsible party or parties hosting an event with 51 or more attendees or any size event that allows dancing, entertainment, cocktail hour, etc. The automated web form and process allowed responsible parties to report the required information to the WCDOH in a timely fashion.
- CommCare Contact Tracing Application: From May 26, 2020-December 15,2022 NYS required WCDOH staff to utilize the Dimagi CommCare system for COVID-19 case investigations, contact tracing and reporting. CommCare helped manage the tremendous number of COVID-19 cases and contacts and centralized the case investigation and contact tracing process statewide. DoIT staff worked with DOH on the CommCare rollout managing the system implementation, setting up users and acting as first-line of user support for the application. Additionally DoIT staff had regular meetings with Suffolk County IT staff to collaborate on system use and best practices.
- Board of Elections (BOE) Election Inspector Examination and Training Portal: This portal was developed by DoIT as a solution to provide inspector examinations and training to elections workers online during a time when in-person trainings were deemed too risky.
- Reopen (Health Status Attestation Portal) for County Employees and Contractors: DoIT staff developed an internal web-based application for County staff and contractors to complete a health attestation that would authorize them to work onsite. The application monitored temperature and asked a series of questions related to symptoms/health status.

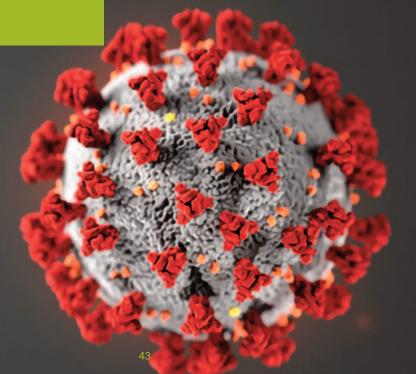
- DoIT's Desktop, Asset Management, Telecom and Infrastructure teams collaborated to ensure that employees could continue to work remotely and have access to all County resources required to continue to do their jobs at pre-pandemic levels.

  This included rapid deployment of hardware, software licenses (virtual meetings) and revised policies to allow for greater flexibility while still ensuring the security of the County's network.
  - Deployed over 300 laptops (laptops that can connect remotely to County desktops/applications) for employees to access the Network during lockdown allowing them to continue business operations.
- DolT Desktop, Infrastructure (Network/Server), Telecom teams helped set up the Westchester County Center as a hospital and clinic. DolT provided architecture, design, and implementation support working with NYS vendor partner (Haugland). Installed 100 VolP phones and wireless access points for County Network connectivity. DolT supported other pop-up vaccination clinics, including the rapid deployment of advanced networking, hardware/software (e.g., desktops, laptops and printers) and telecom solutions.
- DoIT played a key role in deciphering public health/pandemic data coming out of the State, and developed an internal dashboard for Executive Leadership so that they can make informed decisions and communicate effectively with the public. Accurate, data-driven communication pulling from the most reliable sources was vital to ensure that all stakeholders could make the most informed decisions possible. Data gathering and analysis were therefore prioritized to decide where to allocate county resources in the most effective manner possible.
- Webex (virtual meeting) technology was used effectively by the Department of Social Services (DSS) to conduct interviews and virtual home visits to keep workers safe. Child Protective Services also used this technology to continue to perform their core mission to keep children safe. At DSS Call Centers for Food Stamps, employees were able to work remotely to field an unprecedented number of calls to complete applications. VoIP technology was also used for Paratransit scheduling, another critical service that residents relied on throughout the pandemic.

- Implemented new/enhanced tools to support virtual and live-streaming meetings at all County Boards & Commissions. This tool also supported public participation in live-streamed meetings by allowing participants to register ahead of time and then participate virtually in an organized/streamlined
- Developed new online tools for the public to communicate with the County during the pandemic online "Contact us" and COVID-Complaint Portals were created for the public to report any issues they were experiencing.
- The county's Enterprise Webex solution has played a critical role in keeping operations going throughout the County government, including online events, staff meetings, commissioners meetings, board meetings, etc. To date, around 1,800 Webex licenses have been deployed to the County workforce.
- COVID-19 Wastewater Surveillance Dashboard: GIS developed an internal dashboard for the County's Department of Environmental Facilities and NYC Department of Environmental Protection to show data collection measurements of Covid-19 genome testing in wastewater. The dashboard includes maps of the Westchester County and NYC Sewage Treatment Plants and various bar graphs capturing key genome data.

- COVID-19 Leave Tracking: DoIT enhanced the countywide Leave Management system to allow Department of Human Resources to track Covid-related absences/leaves and work from home schedules. This enhanced communication between staff and management/HR while allowing for detailed reporting related to Covid-related leave.
- Online Exam Fee Waiver: During the pandemic, the County Executive suspended all civil service exam filing fees. DoIT made changes to the County's online application program so that candidates were not charged exam fees.
- Check Scanners: During the pandemic, DoIT installed check scanners in different locations to assist County departments with electronic deposits.
- An online visitor scheduling tool (Acuity) was implemented in the County Clerk's Office to coordinate visits in such a way that reduced or eliminated in-person wait times and potentially crowded and unsafe conditions for onsite visitors to the office.

- DoIT developed a number of online grant applications to support various community businesses and organizations directly impacted by the pandemic, including:
  - County of Westchester Industrial Development Agency (CWIDA) Disaster Loan Program Application
  - Westchester County Small Business Emergency Grant Application
  - WEDC MWBE Small Business COVID-19 Impact Accelerator Grant Application
  - WOW Award Nomination Form
  - Chamber of Commerce (COC) Grant
  - · Launch1000 Grant
  - Non-Profit Grant
  - Non-Profit Religious Institution Grant
  - Downtown Improvement Grant
  - Business First Grant Program For Diverse Businesses



Westchester County