State of Illinois Annual Report 2021
Department of Innovation & Technology (DoIT)

Governor JB Pritzker
State Chief Information Officer and Acting Secretary
Jennifer Ricker

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The beginning of a calendar year provides an opportunity to reflect on progress and accomplishments of the previous year. At the Illinois Department of Innovation & Technology (DoIT), 2021 was an active year as we sought to modernize technology and solutions to better serve the residents of Illinois, while simultaneously continuing to respond to priority projects, many as a result of the pandemic.

While security is always top of mind, last year necessitated that we strengthen the security of our digital assets and move to a Zero Trust security posture. This included increased detection and response capabilities through new endpoint protection; reducing the attack surface area by eliminating legacy domains and decommissioning or upgrading unsupported systems; securing credentials through privilege management; and increasing security awareness with simulated phishing campaigns and additional training.

DoIT launched ILogin, the new enterprise standard for identity and access management, which provides a single digital ID for residents to access their state accounts, combining increased security with improved customer experience. We also strengthened our service management tools and successfully went live with major components of ServiceNow. This new platform will provide automated, centralized, and integrated processes, as well as a new, intuitive user portal and service catalog for users. Enhancements and expanded utilization of the platform will continue in 2022.

A new DoIT customer support website was launched to provide users with self-help resources and obtain the latest information on common questions and issues. Agencies also began receiving a new service metrics dashboard on a quarterly basis. With significantly improved accessibility and content experience, website modernization kicked off this year on a new platform designed to be customer centric and available in multiple languages.

Through targeted efforts, DoIT teams throughout the enterprise coordinated on a massive PC refresh project, replacing approximately one third of all desktops and laptops in 2021. Older devices and operating systems are less reliable, costly to maintain, and pose a security risk, so replacement of remaining outdated devices will remain a high priority in 2022.

We also introduced new and expanded service offerings such as predictive dialer and callback queues; Microsoft Bookings for customer appointment scheduling; and a document translation portal enabling agencies to translate documents to other languages.

Additionally, DoIT hosted the inaugural Tech Prairie STEAM Expo at the 2021 Illinois State Fair, highlighting innovation and emerging opportunities with 36 exhibitors and special events such as drone racing and eSports competitions.

Multiple applications were also implemented or upgraded. The hardware upgrade of the Integrated Eligibility System (IES) was a massive undertaking that had been planned for several years and was

successfully completed in September. A new e-Claims system was implemented to enable Department of Lottery winners to make claims online. The new OneOutdoor license and permit solution for DNR's outdoor recreational activities went live, with enhancements continuing to be added. Vax Verify, a new immunization record portal for resident access, launched for IDPH in August and was recently enhanced with SMART Health Card capability.

The DoIT ERP team reached a key milestone with the final transition of the originally scoped agencies, including DHS, to the finance platform. Currently, over 3,200 users across 65 agencies are using the SAP ERP system. Additionally, with the acquisition of a new Chicago-based State of Illinois office building at 555 West Monroe, the DoIT team was instrumental in the network infrastructure buildout.

The report that follows will detail these and many other accomplishments over the past year. We look forward to continuing this progress and momentum for the State of Illinois during 2022.

Jennifer Ricker
State CIO and Acting Secretary

Executive Summary

The Department of Innovation & Technology (DoIT) delivers statewide technology, innovation and telecommunication services to state government agencies, boards, and commissions, as well as policy and standards development, lifecycle investment planning, enterprise solutions, and privacy and security management.

DoIT's mission is to empower the State of Illinois through high-value, customer-centric technology by delivering best-in-class innovation to client agencies, fostering collaboration and empowering client agencies to provide effective and secure services to residents, businesses and visitors while maximizing the value of taxpayer resources.

DoIT manages the Illinois Century Network (ICN), a service that creates and maintains high speed telecommunications networks providing reliable communication links to and among Illinois schools, institutions of higher education, public libraries, museums, state agencies, units of local government, and other entities that provide service to Illinois residents. The ICN is integral in providing free high-speed broadband to Illinois K-12 public schools as part of the Connect Illinois program, funded through the Rebuild Illinois initiative.

DoIT was codified as an agency by Public Act 100-0611 in July of 2018. The agency is guided by the foundational priorities listed below:

- Architecture & Governance: Maximize interoperability via service-oriented architecture and create roadmaps.
- Service Management: Create best practices for how we administer and maintain technology.
- Standardization & Modernization: Rationalize and standardize the tech stack in order to modernize and better support our systems.
- Data Management: Establish robust data practices environments to enable agency analytics.
- Information Security: Protect the data assets of the agencies and residents we support and serve.

During 2021, DoIT continued with the accelerated delivery of service solutions in response to pandemic needs, with the expansion of virtual agents and website modernizations. Identity and access management solutions were implemented over the past year to validate the identity of both internal and external users, and state infrastructure was strengthened with added security measures to guard against worldwide increases in cyber-attacks and fraud infiltrations. Service delivery tools for IT services were advanced in 2021 to better serve agency customers, resulting in faster, more efficient, and secure solutions for the residents of Illinois.

DoIT's accomplishments during 2021 are detailed below.

Status of IT Transformation

DoIT continued transformation efforts of both technology and personnel for its 35 mandated agencies. Through tech transformation—the activities required to transition several technical areas from the legacy environments into the DoIT enterprise such as network, end user computing, service desk, and infrastructure—DoIT is unifying and integrating siloed technology operations at each agency into an enterprise structure. This consolidation effort is aimed at addressing aged and unsupported systems, thousands of customized applications, and varied hardware components.

Another key component of this transformation effort is the unification of IT personnel functions across the agencies to help serve them more effectively and more efficiently, with a focus on enterprise goals. DoIT's federated approach seeks to leverage the work of staff that is common across the enterprise and can be standardized to gain efficiencies, while assigning activities that are unique, primarily applications development, to the agencies being served. To facilitate this end state and to comply with statutory requirements, DoIT is working with GOMB to transition legacy agency IT staff onto DoIT's payroll.

As of the end of 2021, the transformation status of each of the 35 DoIT-served agencies is listed below.

Agency	Transformation Tech Status	Transformation Personnel Status
Abraham Lincoln Presidential Library	Complete	Complete
Aging	Complete	To Be Completed
Agriculture	Complete	Complete
Arts Council	Complete	n/a
Capital Development Board	Complete	Complete
Central Management Services	Complete	Complete
Children & Family Services	In Progress	To Be Completed
Commerce and Economic Opportunity	In Progress	Complete
Corrections	Complete	To Be Completed
Deaf and Hard of Hearing Commission	Complete	n/a
Council on Developmental Disabilities	Complete	n/a
Employment Security	Complete	Complete
Emergency Management Agency	In Progress	To Be Completed
Environmental Protection Agency	Complete	Complete
Financial and Professional Regulation	Complete	Complete
Gaming Board	In Progress	Complete
Guardianship and Advocacy Commission	Complete	Complete
Healthcare and Family Services	Complete	To Be Completed
Human Rights	Complete	Complete
Human Services	Complete	To Be Completed
Insurance	Complete	Complete
Juvenile Justice	Complete	Complete
Labor	Complete	Complete
Liquor Control Commission	Complete	Complete
Lottery	Complete	Complete

Agency	Transformation Tech Status	Transformation Personnel Status
Office of Management and Budget	In Progress	n/a
Military Affairs	Complete	n/a
Natural Resources	In Progress	Complete
Prisoner Review Board	In Progress	n/a
Public Health	In Progress	To Be Completed
Revenue	Complete	Complete
State Fire Marshal	In Progress	Complete
State Police	Complete	To Be Completed
Transportation	Complete	To Be Completed
Veterans' Affairs	Complete	Complete

Budget Summary

DoIT utilizes a chargeback structure to recover its costs associated with IT and telecommunication services. Revenues are received from state agencies and other entities as payment for IT services rendered. A revolving fund was created as a mechanism to support centrally provided services rather than fund all central services directly though the GRF. This provides a structure to capture the full cost to the state in providing a service and to fairly distribute that cost to user agencies. As such, this fund serves as a real-time charge back vehicle to maximize federal funds participation in state programs.

FY22 Budget Overview

Personnel - $286.0 Million:

Costs include DoIT legacy and transformed payroll, along with annualized costs of non-transformed agencies. The lines include all salaries and fringe benefits.

Base IT and Telecom Support - $177.0 Million:

These are the traditional DoIT charges such as phone bills, IT bills, and planned base electronic purchases from user agencies.

IT Contracts and Initiatives/Cash Flow Driven - $187.0 Million:

Funding budgeted by the agency for IT and telecom initiatives necessary to complete agency missions, often part of multi-year investments. Also, funding budgeted by the agencies for IT and telecom contracts that will be consolidated into DoIT. Additional spending authority to cover possible liabilities.

Capital Funding - $214.4 Million:

For critical IT projects including Enterprise Resource Planning (ERP), cybersecurity, and IT transformation projects supporting the modernization of state government. Also, for the K-12 initiative, to refresh aged components of the network and expand the existing network.

General Revenue Funding - $15.0 Million:

To the Illinois Century Network for broadband projects.

DoIT Special Projects Fund - $5.0 Million:

To the Illinois Century Network for broadband projects.

The following chart show a three-year snapshot of DoIT appropriations:

Department of Innovation and Technology	FY20 Appropriation	FY21 Appropriation	FY22 Appropriation
General Revenue Fund K-12	$10,000,000	$15,000,000	$15,000,000
Technology Management Revolving Fund	$650,000,000	$650,000,000	$650,000,000
Capital Development Fund – IT Projects	$393,942,296	$302,322,951	$204,988,327
Capital Development Fund – Statewide Broadband	$20,000,000	$15,782,700	$9,444,363
DoIT Special Projects Fund	--	--	$5,000,000
Total	**$1,073,942,296**	**$983,105,651**	**$884,432,690**

Key IT Milestones Achieved in 2021

Chief Technology Office

- Expanded DoIT's broadband E-rate consortium to include an additional 233 public K-12 school districts, connecting an additional 706 public K-12 facilities.
- Strengthened security offerings for the ICN's broadband customers through the addition of Cisco Umbrella for 78 public K-12 school districts, protecting 228,000 students, as well as 35,000 teachers and staff. Enabled auto Distributed Denial of Service (DDOS) for all public K-12 customers on the ICN network.
- Implemented ServiceNow as the enterprise IT service management platform to streamline and automate the internal workflow for client agency IT requests, providing better visibility to the service requestor and greater management of IT hardware and software.
- Replaced Integrated Eligibility System (IES) support hardware and software to improve system stability, performance, resiliency, and security.
- Originated a customer support website to provide a one-stop shop for client agency users to seek self-help and information on common questions and issues.
- Modernized and transformed numerous state agency websites and implemented website accessibility monitoring on 109 public-facing websites to ensure accessibility for over 79,000 webpages.
- Implemented language translation capabilities for ten essential state websites and launched the document translation portal, enabling agencies to self-translate documents into the six most frequently used languages in Illinois.
- Implemented and enhanced virtual agents (chatbots) on nine state websites to modernize the user experience for residents and to provide an additional method to access critical information.
- Prioritized PC refresh activities and decreased the number of aging computers in use by state agencies by 37%, resulting in improved user performance and reduced security risk
- Established the Enterprise Integration Practice (EIP) to better align Security, Architecture, and Data Governance across agencies for faster delivery of digital solutions by enabling high-quality and reusable Application Programming Interface (API) assets.
- Replaced end of support generator and battery backup system for the state's primary data center, improving overall resiliency for critical IT applications and services.

- Coordinated all network and technology needs for the new state building at 555 W. Monroe, Chicago, including effectuating the state network buildout, facilitating all VoIP setup, videoconferencing, and IT equipment relocation, and assisting agencies with IT and telecom as they move from other locations.
- Developed and delivered quarterly agency-specific IT service metric dashboards to agency directors.

Administration

- Implemented a sheltered market solicitation to partner with a BEP consultant to analyze DoIT's BEP utilization for the purpose of increasing BEP contract goals.
- Increased BEP spending in FY21 over prior fiscal year.
- Hosted in-person supplier events in Chicago and Springfield in which DoIT's commitment to supplier diversity was highlighted.
- Expanded human resources recruitment strategy to include virtual job fair participation.
- Spearheaded passage of the Uniform Electronic Transactions Act, which facilitates the use of electronic signatures across state agencies.
- Initiated, organized, and managed the inaugural Tech Prairie STEAM Expo at the 2021 Illinois State Fair to highlight innovation and emerging opportunities with 36 exhibitors and special events such as a drone racing competition and eSports competition.
- Expanded resources on the DoIT STEAM website that connects students and educators with diverse and accessible STEAM learning opportunities in emerging fields such as quantum information science and computing.

Information Security

- Oversaw Information Security Awareness Training Program for over 60,000 state employees.
- Advanced Identity and Access Management (IAM) initiatives that enhance the security around employees' identities and validate the identities of Illinois residents who access state government services.
- Implemented the "Assume Breach" security hardening efforts including privilege management (for endpoints, servers, and remote access), proactive phishing solutions, elimination/consolidation of legacy domains, and the elimination/upgrading of outdated and out-of-support operating systems on workstations and servers.
- Deployed updated Security Information and Event Management (SIEM) tools to collect information throughout the State of Illinois enterprise, advancing security visibility and response activities.

ERP

- Onboarded seven additional agencies to ERP Finance, with 65 agencies and 3,200 users now in the system, and over $65 billion in vouchers processed since the program inception.
- Integrated the state's enterprise grants management system with ERP Finance so that grant transactions can be seamlessly documented in the state's financial system.

- Implemented the Human Capital Management SuccessFactors Recruiting module across 59 agencies, enabling the posting of nearly 9,000 jobs since going live.

Data

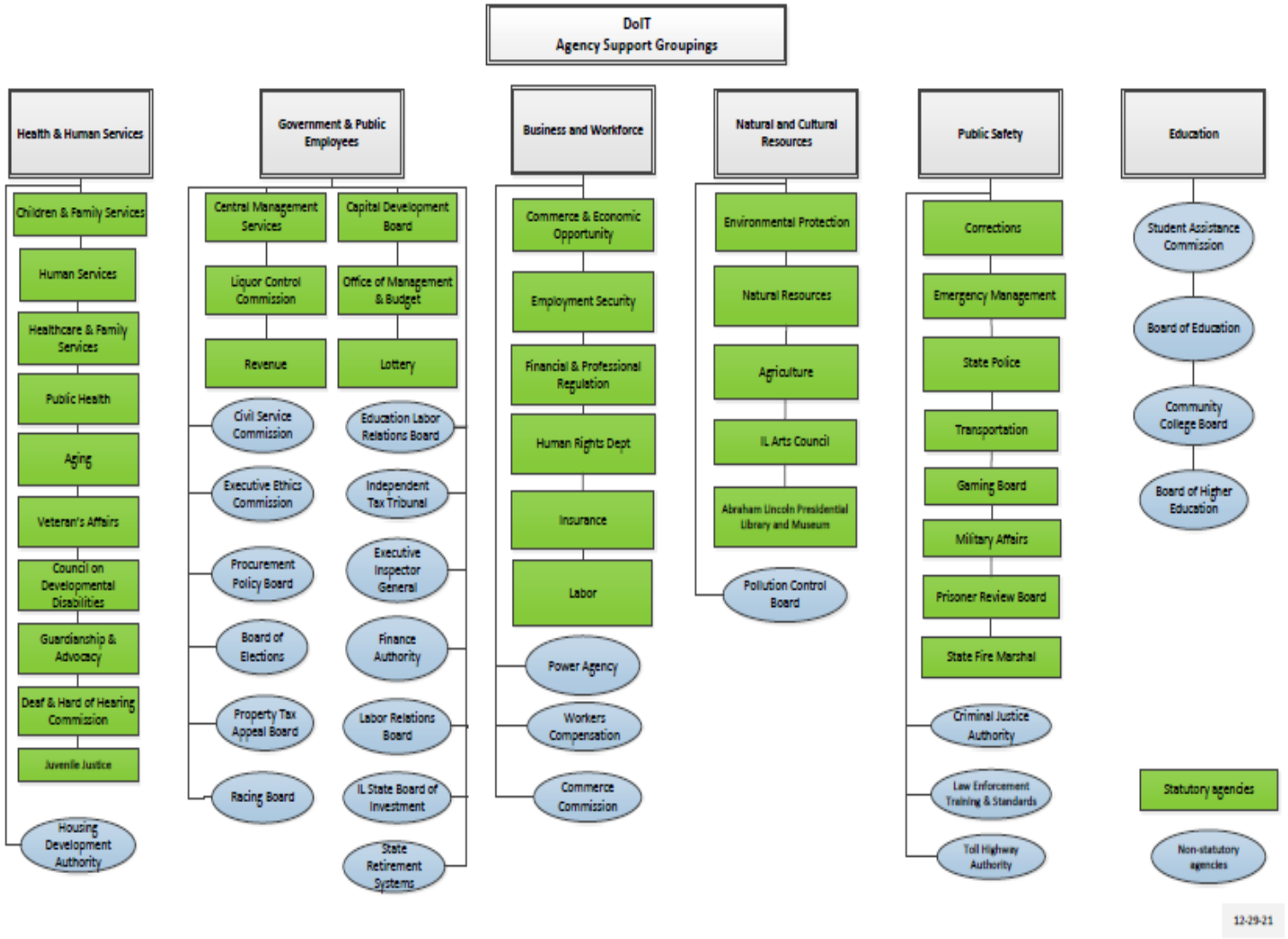
- Identified State Data Practice tools and support needed for enterprise services.
- Installed new environments for visualizations and data governance to better support agency data management.
- Provided COVID-related data dashboards to assist with critical decision-making.

Agency Collaborations

- Transitioned the Department of Financial and Professional Regulation's (DFPR's) professional licensing and banks/financial institution licensing solutions to a hosted model, allowing for the decommissioning of antiquated servers.
- Migrated and modernized DFPR's online renewal system.
- Implemented DFPR's federally mandated real estate appraiser's national registry fee processing and reporting.
- Researched and implemented a customer scheduling tool for the Department of Employment Security (DES), enabling residents to schedule appointments for services.
- Enabled predictive dialer for the DES contact center, providing for more efficient use of agent time. The dialer predictively queues and dials customers to leave messages for calls that go to voicemail.
- Implemented identity and access management solutions and fraud detection capabilities to DES' online unemployment claims filing system.
- Launched DES' system for its short-term compensation program.
- Integrated new self-registration and online invoice payment feature for the Department of Insurance's Tax Services solution.
- Completed the Department of Commerce and Economic Opportunity's (DCEO) eGrants modification to improve processing time for the Advantage Illinois loan program.
- Launched a management and reporting system at DCEO to support engagement with Illinois businesses, state and local units of government, consultants, chambers, and other entities to deliver programs and services within DCEO's Office of Regional Economic Development and Office of Minority Economic Empowerment.
- Upgraded the LIHEAP system to allow distribution of supplemental funds to thousands of residents.
- Created a new application for DCEO's Film Office to capture requests from businesses for tax credits.
- Launched the Department of Human Rights' online Enterprise Licensing and Permitting platform for the Public Contracts Unit, helping to enforce provisions of the Illinois Human Rights Act.
- Created an e-claims system to enable the Department of Lottery to offer an online solution for winners to submit winning lottery tickets online for prizes up to $10,000, eliminating the need to come into the claims center.

- Implemented a web-based e-mail subscription management system at the Department of Revenue to allow the public to subscribe to news and information while increasing DOR's ability to communicate effectively with residents and reduce the cost of communications.
- Developed the Department of Public Health's Vax Verify system, providing a solution for Illinois residents to register and securely gain access to their immunization history.
- Advanced the Key Information Delivery System (KIDS-Child Support) child support enforcement program for the Department of Healthcare and Family Services (HFS) by implementing a new child support enforcement remedy with the Illinois Deaf and Hard of Hearing Commission using the Enterprise Licensing Program application.
- Launched three new systems for HFS: (1) Long Term Care Admissions Tracking used by 300 caseworkers; (2) Child & Adolescent Needs & Strength (CANS) Assessment for recipients seeking mental health support and services; and (3) Managed Care Organizations (MCO) Complaint Portal utilized by providers and MCOs to resolve disputes.
- Completed COVID-related changes to the Medicaid Management Information System to ensure accurate claims processing.
- Implemented an advocacy system for the Department of Children and Family Services (DCFS) to provide a data repository for the creation, maintenance, tracking, and storage of all clients and interventions in the DCFS Advocacy Office.
- Collaborated to create the new Ally solution for DCFS, which leverages Microsoft Teams to connect youth in the child welfare system with their case worker and other safe contacts in their trusted circle.
- Collaborated with the Department of Veterans Affairs and the Capital Development Board on the buildout of the new Chicago Veterans Home.
- Developed a new system for the Department of Agriculture's Cover Crop Grant Program, repurposing an existing system to decrease development time.
- Continued the transformation of the Illinois State Museum to the Department of Natural Resources (DNR) through centralizing infrastructure and modernizing workstations, servers, network, and security.
- Advanced the functionality and features of DNR's ExploreMoreIL to align with license and permitting applications for 2021 outdoor recreational activities.
- Completed the upgrade and modernization of the Environmental Protection Agency's Safe Drinking Water Information System.
- Modernized the Illinois State Police's LEADS application to a new technology platform that offers added functionality to the legacy system.
- Completed the network modernization of IEMA's mobile command vehicles.
- Transitioned the State Fire Marshal's servers, hardware, and HVAC system to modern solutions.

Appendix A – DoIT IT Support Structure for State Agencies



Appendix B – 2021 DoIT Press Releases Issued

3-2-21
State of Illinois Announces New Human Capital Management System for State Hiring

3-25-21
Illinois DoIT Announces IT/Telecom Solicitation Opportunity for Minority Vendors

4-5-21
Governor Pritzker Proclaims April as Innovation and Technology Month in Illinois

4-21-21
Illinois Capital Development Board Announces Design Firm for $80 Million Rebuild Illinois Funded Central Computing Facility in Springfield

6-8-21
State of Illinois Innovation and Technology Receives National Recognitions

6-24-21
Illinois DoIT to Present Tech Prairie STEAM EXPO at 2021 Illinois State Fair

8-16-21
Tech Prairie STEAM Expo to Showcase Innovators Throughout Illinois

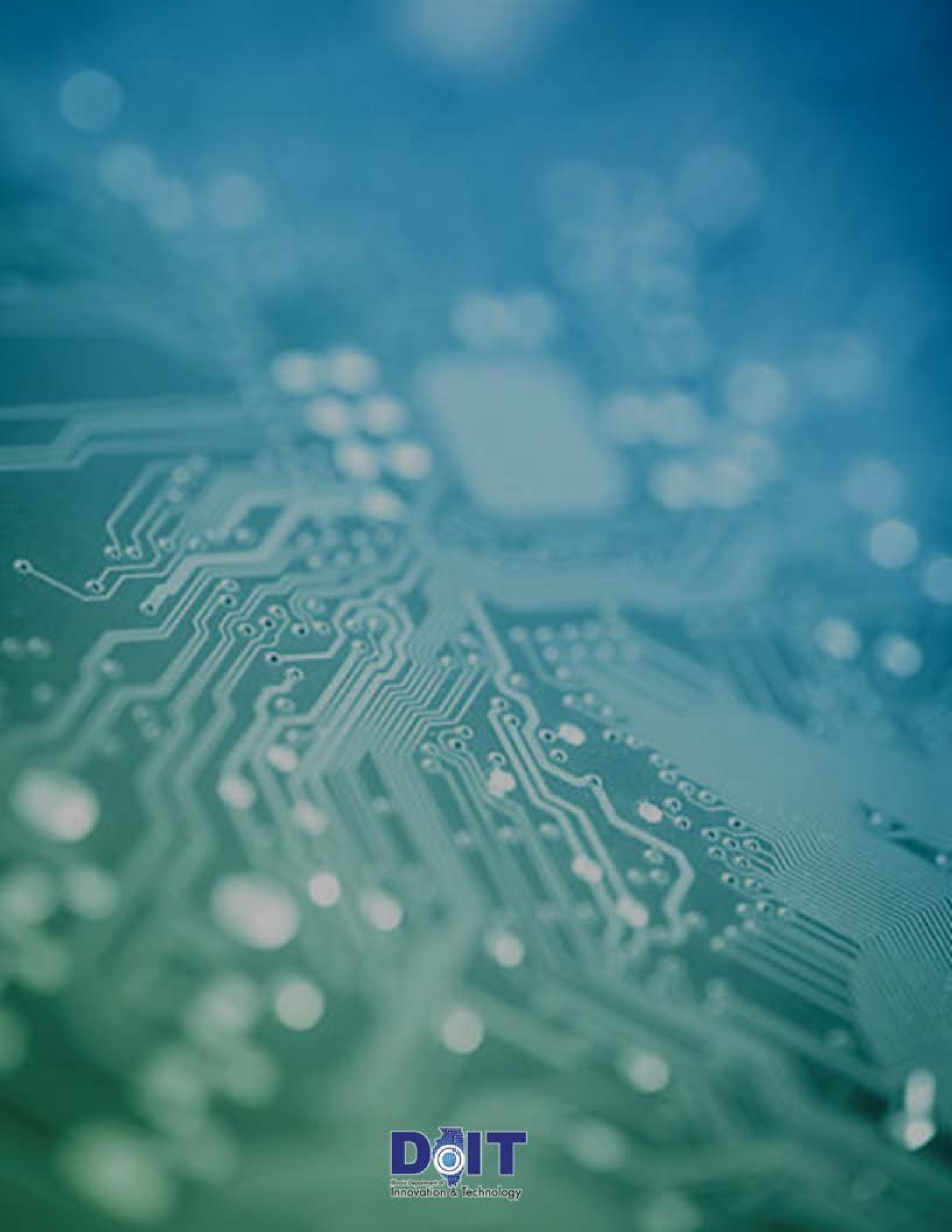
9-8-21
Illinois Enterprise Resource Planning (ERP) Program Achieves Significant Milestone

9-27-21
IDES and DoIT Partner to Launch Identity Management Solution for Unemployment Insurance Benefits System

10-1-21
Governor Pritzker Proclaims the Month of October as Cyber Awareness Month in Illinois

11-23-21
Illinois Department of Innovation & Technology (DoIT) Hosts Supplier Days

12-8-21
Computer Science Education Week Recognized December 6-10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