2025 BOT STRATEGIC PLAN

THE BUREAU OF TECHNOLOGY (BOT) HAS MANY KEY INITIATIVES UNDERWAY. BELOW ARE THE AREAS OF FOCUS AND STRATEGIC INITIATIVES PLANNED FOR FY2025.

APPLICATIONS

ENTERPRISE APPLICATION SERVICES (EAS)

The Enterprise Application Services (EAS) team plans to complete retiring all applications on the iSeries (AS/400) and mainframe systems in 2025. EAS will identify and procure software that can automate application testing for applications located on different platforms and across various phases of the system development lifecycle, including unit testing, simulated load testing, quality assurance testing and user acceptance testing. Efforts will focus on improving application development and deployment processes through the responsible use of artificial intelligence (AI) and no-code/low-code software tools. These advancements will create dynamic, user-friendly interfaces, reduce rework, and shorten deployment timelines. EAS will ensure that all applications meet or exceed accessibility standards. Additionally, the team will modernize existing applications in collaboration with business owners, leveraging advancements in technology to enhance performance and reduce cybersecurity risks. Monthly maintenance patching activities will also become more efficient by utilizing scripting tools and cloud-based solutions, reducing the after-hours time commitment for employees.

PROJECT MANAGEMENT OFFICE (PMO)

The Project Management Office (PMO) will create and implement a comprehensive PMO Roadmap to establish, develop and mature its capabilities within BOT. This roadmap will align with BOT and Offices Under the President (OUP) goals, improve project delivery and enhance overall project management maturity. Following the County's AI Use Policy, the PMO will define and implement operational process efficiencies by utilizing AI tools to support its operations.

GEOGRAPHIC INFORMATION SYSTEMS (GIS)

The Geographic Information Systems (GIS) division will launch the Section Corner Survey Dashboard and an accompanying story-map application. The team will finalize contracts for new ortho/oblique and hyperspectral data collection projects. Ortho imagery refers to aerial photographs where imagery is geometrically corrected for scale and distortion to provide a top-down, map-accurate view, while oblique imagery is captured at an angle to offer a more perspective-based, three-dimensional appearance. Hyperspectral imagery captures data across hundreds of narrow, contiguous spectral bands, allowing for detailed analysis of materials and

objects based on their unique spectral signatures. In addition, GIS will complete the Imagery Data and Catalog project, which is a precursor to future data warehousing initiatives.

ENTERPRISE RESOURCE PLANNING (ERP)

The Enterprise Resource Planning (ERP) team will implement the iExpense and PCard systems to streamline expense reimbursement submission, approval, and payment processes for employees. These systems will include support for the County, Forest Preserves, and specific Cook County Health requirements. ERP will also oversee the implementation of the new Budget System. This system will support comprehensive budget planning and publishing for Cook County and the Forest Preserves. Additionally, ERP will expand the Taleo Talent Acquisition solution by introducing dashboards, LinkedIn integration, branding for OUP and enhancements to the Shakman Exempt site. Improvements to Taleo's integration with the ERP system will further streamline talent acquisition processes.

SECURITY

INFORMATION SECURITY OFFICE (ISO)

The Information Security Office (ISO) will update the Cook County Information Security Framework to incorporate the National Institute of Standards and Technology (NIST) Artificial Intelligence Risk Management Framework (RMF) by the second quarter of FY2025. Lifecycle management of the secure web gateway infrastructure will conclude by the fourth quarter. Additionally, ISO will integrate endpoint threat detection and response (ETDR) capabilities by the fourth quarter. ISO will also conduct initial NIST RMF Security Control Assessments and training sessions for Cook County stakeholders by the end of the fourth quarter.

INFRASTRUCTURE

GENERATIVE AI

BOT has developed a generative AI strategy and roadmap and generated a list of use cases in coordination with its business partners across OUP. BOT will advance its generative AI strategy through roadmap implementation and pilot projects, aiming to complete a subset of pilot projects prioritized from the 49 potential projects identified. The Information Security Working Group (ISWG) and a Cook County Board Resolution will guide AI policy and governance efforts. The County will evaluate submitted AI use cases for potential implementation in 2025 and roll out a multi-pronged user education plan, supported by online learning, to train employees on AI tools.

TELECOMMUNICATIONS AND NETWORK

Cook County will finish the migration of the current on-premises end-of-life/end-of-service Countywide Interactive Voice Response (IVR) solution to a fully supported cloud environment. Cook County will increase Wi-Fi coverage in the Daley Center and Rolling Meadows Courthouse. Partnering with Capital Planning, who is investing in $4 million in infrastructure, BOT will be adding approximately 300 access points in the Daley Center and more than 100 access points in Rolling Meadows Courthouse. Cook County's Telecommunications team will also support the Integrated Property Tax System (IPTS) by re-engineering the IVR integration into the new system, allowing customer self-service for the Offices of the Treasurer and Assessor over the telephone.

INFRASTRUCTURE CONSOLIDATION AND MODERNIZATION

BOT will modernize hosting environments by adopting a hybrid strategy, consolidating infrastructure in co-located data centers and/or the cloud and continue consolidation efforts in legacy data centers.

BROADBAND EXPANSION

BOT will continue expanding broadband access to address digital equity gaps, particularly in the Southland area of Cook County. This work, supported by ARPA funding and State of Illinois grants, includes expanding the County's existing fiber network to better serve underserved communities. Cook County will complete the construction phase of its broadband initiative in 2025. With grant investments totaling more than $14 million, Cook County will conclude the construction of phases two through four of the build-out of an additional 60 miles of fiber optic cable to expand the community network currently known as the "Chicago Southland Fiber Network."

BUSINESS CONTINUITY

BOT will develop an enterprise-wide business continuity plan. A selected vendor contract will be presented to the Cook County Board in FY2025, enabling implementation Countywide.

DISASTER RECOVERY

BOT will develop and implement an enterprise-wide disaster recovery (DR) plan for all critical systems. A vendor has been selected for this initiative, with project implementation beginning in the first quarter of FY2025. BOT will ensure that business continuity strategies align with the potential severity of losing applications that may not have a DR plan.

IDENTITY AND ACCESS MANAGEMENT (IAM)

The Identity and Access Management (IAM) initiative will streamline business processes with a unified IAM tool. This tool will incorporate identity analytics, facilitate application onboarding/offboarding, and support workflow approvals. By standardizing IAM on a single platform, BOT aims to achieve economies of scale and improve accessibility for both internal agencies and Cook County residents.

ENTERPRISE ARCHITECTURE

The Enterprise Architecture (EA) team is positioned to expand in accordance with the to-be state planned at its inception. In 2025, BOT will on-board architects specialized in solutioning, data, infrastructure and security domains to provide technical guidance for initiatives.

BOT will also establish an EA governance process and review board to help strategic alignment, decision making, technology modernization, optimization and create efficiency improvements.

BOT will also procure and implement an EA management tool to streamline EA workflow, manage architectural deliverables and facilitate the review process.

BOT will create a value stream and business capabilities matrix, then expand these initiatives to other OUP Bureaus to gain a broader perspective on capabilities across the organization.

BOT will also validate an OUP applications inventory in 2025. BOT will organize BOT application information, including core platform, functional, operational and usage information on the EA management tool, and develop a process to maintain it. This will mature the application portfolio to provide a quicker view of the key data to help with decision-making, identify any risks, and provide rationalization and cost optimization while also establishing a baseline platform and process to deploy Countywide thereafter.

PLATFORM MODERNIZATION

INFORMATION TECHNOLOGY SERVICE MANAGEMENT SYSTEM REPLACEMENT

This project will replace our current on-premises IT ticketing system with a new cloud-based system. The new system will have features and functions not available in BOT's current platform, including a configuration management database which takes data across the enterprise required to run IT, and brings it all together in a single place, giving IT operations teams visibility into all the IT resources in the organization. The platform will also include an IT service catalog which provides employees with a view of the available IT services.

LAPTOP REFRESH WITH 4-YEAR CYCLE

Following the new guidance from the Bureau of Finance, Enterprise Solutions will now be replacing computer equipment that has reached the end of its four-year (previously six-year) lifecycle. A four-year life cycle reduces equipment failure rates, provides improved compatibility with operating systems and applications as well as empowering employees to work more effectively.

OPERATING SYSTEM UPGRADE

BOT will upgrade approximately 3,000 devices throughout OUP to the latest operating system. The new operating system features a new user interface with a redesigned start menu and taskbar, improved touch controls, enhanced security features and integrated widgets for quick access to information.

ADMINISTRATION

VENDOR AND CONTRACT MANAGEMENT

BOT has contracts of various sizes and complexity with nearly 40 different vendors, some of which include resellers which in turn provide thousands of hardware and software products. Some contracts are utilized by specific Departments while others benefit the entire enterprise Countywide. Contracts are negotiated by a team that includes attorneys and subject matter experts. Once finalized, BOT manages the technical and business-related aspects of each contract, as well as the evaluations of the procured products and services.

During the coming year BOT will expand its vendor and contract management program to focus more heavily on evaluating vendors in terms of their success delivering products and services, reaching contractually agreed upon project milestones, and their minority-owned business enterprises and women-owned business enterprises (MBE/WBE) participation rates. As part of this effort, BOT will meet routinely with vendors to check-

in with comprehensive agendas and reiterate expectations for all deliverables. In addition, an expanded vendor and contract database will be created and launched for internal tracking and future procurement processing purposes.

STAFF DEVELOPMENT

BOT made considerable progress with staff development during 2024 and has a plan in place to reduce its staff vacancy rate further. As FY2025 unfolded, approximately 80% of BOT's 215 budgeted positions were filled, which is a marked improvement over the period immediately following the pandemic. This percentage is expected to rise during the first half of FY2025 and come close to topping out toward the end of the year.

BOT has established four primary hiring objectives for fiscal year 2025. First, BOT will launch a concerted effort to replace the small number of remaining legacy job descriptions with new or revised descriptions. Second, requests to hire for positions that are confirmed to be ready for posting will be submitted and closely tracked. Third, more BOT staff members will be asked to participate in the interview process. Finally, a variety of onboarding activities will be introduced beyond basic new employee orientation efforts to incorporate new employees in BOT's operations. Taken together, BOT believes that these steps will not only lead to a higher percentage of filled positions but also contribute to building staff cohesiveness and retention.

LEGAL TEAM

The Legal Team will complete an update of Cook County's IT Special Conditions (ITSCs) and formalize BOT's Policy Management Program. By the end of the third quarter, the team will finalize an RFQ for tech-related legal services. The team is also reviewing eDiscovery software to streamline the County's electronic data collection and review processes.

LEGISLATIVE OUTREACH

BOT will increase and expand its already robust briefing program to add Commissioner District Office visits in FY2025. Given the fast pace of technology advancement in such areas as generative artificial intelligence, cybersecurity, and cloud services, BOT must provide the Board of Commissioners with additional background information on the ever-growing portfolio of applications available to the County.

DATA ANALYTICS

DATA ASSESSMENT AND PLANNING

BOT will assess existing OUP data to develop a catalog and define integration requirements by documenting data assets, gaps, and ownership and setting integration priorities and timelines.

INFRASTRUCTURE SETUP AND GOVERNANCE

BOT will establish infrastructure and governance by implementing scalable data systems, creating data governance policies and roles and enforcing data quality standards and compliance.

DATA INTEGRATION

In FY2025 BOT will procure and implement a cloud-based solution to consolidate data sources by configuring the platform and mapping data and ensuring data security and real-time synchronization.

ANALYTICS AND REPORTING

BOT will enhance analytics and reporting by developing a unified reporting system, creating standardized dashboards and self-service tools and training users on reporting practices.

DATA STEWARD NETWORK AND EXPANSION

BOT will build a data steward network to foster collaboration by training Department's data owners, establishing communication channels and expanding integration across OUP Bureaus External Agencies.

MISSION

BOT plans, develops, and maintains enterprise technology services according to its guiding principles: life cycle management, cloud-smart, shared-first, sustainability, transparency, continuity, Countywide standardization, and reuse before buy, and buy before build.

BACKGROUND

Cook County has a shared-services IT governance model. This allows for the elected offices to exercise autonomy over their individual IT decisions while leveraging the benefits of procuring services and hardware via enterprise-wide contracts. Cook County's hybrid approach allows for flexibility and cost efficiency.

The Bureau of Technology (BOT) operates a centralized IT Service Desk, which supports several elected offices as well as Offices Under the President (OUP).

Pursuant to Cook County Ordinance No. 18-5634, BOT manages a Countywide Service Desk that provides Tier 1, or basic, help desk services Countywide.

Pursuant to Cook County Ordinance No. 14-1481, BOT is also responsible for creating security standards and policies through the Information Security Working Group which includes representatives of each separately elected office.

Additionally, BOT is responsible for Countywide network service and maintenance, and telecommunications. Beyond this role in Countywide operations, BOT provides all IT support for Offices Under the Cook County Board President.

BOT manages enterprise-wide contracts such as the contract for the County email system for many elected or otherwise separate offices, except for:

- Cook County Health
- Sheriff
- State's Attorney
- Treasurer

BOT provides computing equipment such as laptops, desktops and peripheral devices for:

- Offices Under the President
- Board of Review
- Land Bank
- Public Administrator
- Public Defender

BOT provides or supports all servers for:

- Board of Review
- Forest Preserves
- Offices Under the President
- Public Defender

BOT provides some server support for:

- Assessor
- Chief Judge
- County Clerk
- State's Attorney
- Treasurer

BOT supports a time and attendance system with biometric timeclocks for all agencies. BOT supports an Enterprise Resource Planning (ERP) System that covers some or all aspects of ERP services for all agencies.