

Cabarrus County

Digital Strategy

2025-2030



CABARRUS COUNTY

America Thrives Here

Introduction

Cabarrus County's Information Technology Services (ITS) is committed to driving innovation, enhancing efficiency, and ensuring secure, reliable services that empower government operations and improve citizen experiences. Our IT Digital Strategy is designed to build a forward-looking, technology-driven government by leveraging centralized support, shared services, and emerging technologies.

At the core of our strategy is **operational excellence**, where Enterprise IT centrally manages infrastructure, cybersecurity, data management, and cloud-based services. Our continued investment in modern platforms ensures scalable, resilient, and cost-effective operations that support the county's growing needs.

Effective **governance structures** guide IT priorities, ensuring alignment with the Board of Commissioners' goals. Through advisory boards and strategic planning councils, ITS enforces best practices, optimizes resources, and strengthens inter-agency collaboration to meet evolving service demands.

Cabarrus County operates under a **shared services model**, positioning ITS as a government-managed service provider. This approach fosters efficiency, streamlines procurement, and enhances cross-departmental innovation, supporting seamless technology adoption across all county operations.

Our future-ready strategy emphasizes **emerging technologies** such as artificial intelligence, robotic process automation, and predictive analytics to optimize workflows, improve decision-making, and enhance digital services. Cybersecurity remains a top priority, with Zero Trust principles, AI-driven threat detection, and proactive risk management ensuring a resilient digital ecosystem.

As Cabarrus County continues to evolve, our IT strategy remains focused on delivering **seamless digital experiences, adaptive cybersecurity, intelligent infrastructure, predictive data insights, workforce transformation, and scalable IT investment**. These focus areas ensure that technology remains a driver of innovation, transparency, and operational excellence across the county.

By embracing a future-focused approach, Cabarrus County ITS is shaping a smarter, more connected, and more resilient government that anticipates needs, adapts to challenges, and delivers exceptional services to its residents and stakeholders.

Technology Trends for Cabarrus County

Cabarrus County is embracing key technology trends to drive innovation, improve service delivery, and ensure operational resilience. These trends reflect the county's commitment to a future-ready government that enhances citizen engagement, optimizes efficiency, and strengthens cybersecurity.

Artificial Intelligence and Automation:

AI-driven solutions, including ChatGPT and Microsoft CoPilot Studio, are being leveraged to enhance decision-making, automate routine processes, and improve response times in service delivery.

Zero Trust Cybersecurity Architecture:

A proactive cybersecurity approach that enforces strict identity verification, continuous monitoring, and AI-powered threat detection to protect county systems and data.

Predictive Analytics and Data-Driven Governance:

Advanced data insights are being utilized to anticipate service demands, optimize budget allocations, and improve emergency response planning.

Cloud-First and Edge Computing Strategies:

Migration to scalable cloud infrastructure and adoption of edge computing solutions enhance system performance, enable real-time processing, and ensure business continuity.

Enhanced Digital Services and Citizen Experience:

A shift toward self-service portals, AI-powered customer support, and omnichannel engagement ensures a more seamless and responsive citizen experience.

Workforce Modernization and Intelligent Automation:

Robotic process automation (RPA) and AI-assisted workflows are streamlining internal processes, allowing county employees to focus on high-value tasks.

Smart Infrastructure and IoT Integration:

The county is investing in IoT-enabled monitoring solutions to improve facility management, energy efficiency, and infrastructure maintenance.

Strategic IT Investment and Cost Optimization:

By prioritizing scalable, high-impact technology initiatives and leveraging shared services, the county is ensuring sustainable and cost-effective IT investments.

Vision Statement

“To lead as an innovative, responsive, and trusted technology partner, empowering Cabarrus County through secure, transparent, and cost-effective solutions that drive operational excellence, enhance citizen engagement, foster inter-agency collaboration, and position our community at the forefront of digital innovation.”

Mission

“Cabarrus County Information Technology Services is committed to delivering secure, reliable, and user-focused technology solutions. Recognized for excellence and innovation, we empower county operations, enable collaboration among departments, and promote efficient use of resources. By centrally managing infrastructure, cybersecurity, and emerging technologies, we enhance transparency and responsiveness in serving our community.”

Values

Innovation, Collaboration, Transparency, Resilience, Stewardship

Innovation: Embracing emerging technologies and fostering continuous improvement to deliver advanced, efficient solutions and drive government innovation.

Collaboration: Promoting strong inter-agency cooperation and partnerships through shared services, regional collaboration days, and community engagement initiatives.

Transparency: Ensuring openness and clarity in communication, decision-making, and operations to foster trust among county employees, stakeholders, and constituents.

Resilience: Building robust, secure, and responsive IT systems capable of maintaining service delivery and swiftly recovering from disruptions through proactive cybersecurity and disaster preparedness.

Stewardship: Responsibly managing IT resources, optimizing investments, and prioritizing fiscal responsibility to ensure cost-effective solutions aligned with the county's strategic goals.

Principle of the Digital Strategy

Strategy

The County's Digital Strategy is anchored in the vision, mission, values and focus areas of the Cabarrus County Board of Commissioners. Technology is the common thread that enables County departments to accomplish their respective goals. Technology is an essential element for the County to provide services and serves as a catalyst for business innovation. During the annual budget process departments identify their goals for achieving the County's vision and the Technology Services department presents digital innovation to improve delivery of services to meet these goals.

Cabarrus County Future-Focused IT Digital Strategy

Cabarrus County's IT Digital Strategy is built on a foundation of innovation, adaptability, and continuous improvement. As we look to the future, our mission is to be a technology-driven government that anticipates needs, embraces cutting-edge solutions, and enhances the lives of residents through seamless digital services. Grounded in our values of **Innovation, Collaboration, Transparency, Resilience, and Stewardship**, this strategy positions us to meet emerging challenges and opportunities head-on.

Strategic Future-Focused Areas

Seamless Digital Experiences and Next-Generation Citizen Engagement

Cabarrus County is committed to transforming the way residents interact with government services. The future includes AI-powered virtual assistants providing real-time support, a unified digital portal consolidating all county services into one seamless platform, and the integration of augmented and virtual reality (AR/VR) technologies to create immersive experiences for community engagement, planning, and training.

Cybersecurity as a Continuous Adaptive Strategy

The evolving cybersecurity landscape demands a proactive and adaptive approach. Cabarrus County will implement AI-driven security models that continuously evolve to address emerging threats. A Zero Trust architecture will enhance access controls and data protection, while an automated threat intelligence system will predict vulnerabilities and prevent attacks before they occur, ensuring a resilient and secure digital ecosystem.

Intelligent, Autonomous IT Infrastructure

The county's IT infrastructure will become more self-sustaining and responsive through AI and automation. Self-healing IT systems will detect and resolve issues automatically,

minimizing downtime and improving reliability. Cloud-native and edge computing models will enhance scalability, while IoT-driven monitoring will provide real-time insights for smarter infrastructure management and improved service delivery.

Predictive Data Insights and AI-Driven Decision Making

Data-driven governance will be central to optimizing services and making informed decisions. Advanced analytics will enable predictive insights for service planning and resource allocation. AI-powered data governance frameworks will ensure accuracy, accessibility, and compliance, while machine learning applications will improve forecasting in areas such as emergency preparedness, budgeting, and public policy.

Workforce Evolution and Intelligent Automation

As technology advances, so must the workforce. Cabarrus County will develop a human-AI hybrid workforce model, integrating AI-powered productivity tools to enhance efficiency. Intelligent automation and robotic process automation (RPA) will streamline workflows, allowing staff to focus on high-value tasks. Expanded training programs will prepare employees to adopt and adapt to emerging technologies, ensuring a resilient and future-ready workforce.

Sustainable and Scalable IT Investment

A sustainable IT investment strategy will ensure long-term operational efficiency and cost-effectiveness. Cabarrus County will prioritize scalable, high-impact technology initiatives through a structured IT investment roadmap. Expanding shared services and managed IT models will optimize resource allocation, while strategic public-private partnerships will accelerate innovation, bringing emerging technologies into county operations.

By focusing on these future-driven strategic priorities, Cabarrus County ITS is shaping a modern, resilient, and innovative government that meets the evolving needs of its residents, workforce, and partners.