



# Information Technology

To provide technology solutions and services to all County departments, courts, and constitutional officers, as well as Loudoun County Public Schools (LCPS).

## Department Programs/Activities

### Infrastructure and Customer Service

Provides support, troubleshooting, and assistance to County staff, including management of end-user devices, networks, servers, and training, as well as broadband and cable TV franchise oversight. Conducts asset management and manages telephone and duplicating services for the County.

### Activities

- Service Desk and End-User Technologies
- Asset Management
- Central Services: Telephone and Duplicating Services
- Network Services
- Data Center Services
- Broadband and Cable TV

### Public Safety Support

Provides support for Computer-Aided Dispatch, 911 systems, the radio system, and the Emergency Communications Center (ECC).

- Public Safety Communications and Engineering Support
- Public Safety Technology Support

### Enterprise Systems Support

Provides support, troubleshooting, consultation, and analysis for enterprise applications and data.

- Oracle Enterprise Resource Planning (ERP) Management
- Business Intelligence and Analytics
- Enterprise Content Management (ECM)
- System Design, Development, and Support
- Quality Assurance and Quality Control (QA/QC)

### Technology Services

Supports the Department of Information Technology (DIT) with administrative and management services, professional standards, financial and budget management, procurement, payroll, and human resources management. Leads collaboration between financial and IT operations planning.

- Budget, Procurement, and Administration
- Human Resources

### Security

Manages security posture for the County. Conducts risk analysis, vulnerability assessments, and cybersecurity awareness training. Provides recommendations on technologies, infrastructure, and data protection for all County systems.

- Policy and Risk Management
- Threat Management



## Information Technology

### Project Management Office

Provides DIT with project portfolio analysis and strategic direction as well as training on processes and tools, including meeting with departments to understand their technology-related needs. Facilitates the management of DIT projects, including administration, reporting, and overall communication of schedule, costs, and risks.

- Project Management and Implementation

## Financial Information

### FY 2024 Adopted Information<sup>1</sup>

	Expenditures	Revenue	LTF	FTE
Infrastructure and Customer Service	\$20,719,099	\$0	\$20,719,099	47.07
Public Safety Support	10,505,593	1,465,280	9,040,313	11.00
Enterprise Systems Support	17,396,988	0	17,396,988	35.40
Technology Services	3,918,030	0	3,918,030	14.00
Security	3,188,597	0	3,188,597	7.00
Project Management Office	211,246	0	211,246	4.00
<b>Total</b>	<b>\$55,939,553</b>	<b>\$1,465,280</b>	<b>\$54,474,273</b>	<b>118.47</b>

### Capital Projects Fund

	Expenditures	Revenue	LTF	FTE
Project Management Office	\$156,512	\$156,512	\$0	1.00
<b>Total</b>	<b>\$156,512</b>	<b>\$156,512</b>	<b>\$0</b>	<b>1.00</b>

<sup>1</sup> Sums may not equal due to rounding.



## Information Technology: Infrastructure and Customer Service

### Service Desk and End-User Technologies

**What We Do:** This activity provides end-user customer service support for devices and applications.

Service Desk staff receives telephone, email, self-service, and walk-in requests for technical assistance from County staff and volunteers. Staff provides level-one problem resolutions for telephone, voicemail, computers, mobile devices, network services, and system issues. The goal of the Service Desk is to resolve as many calls as possible upon first contact. Service Desk staff performs proactive maintenance of end-user hardware and software.

Desktop Technology staff develops budgets and deployment plans for end-user devices. This involves evaluating new products and services based on research, analysis, configuration design, testing, and debugging. Staff specifies performance standards and architecture, and conducts system audits to verify compliance. Staff supports the installation, configuration, operation, and maintenance of hardware and software. Staff configures and administers the group policy for directory services to ensure appropriate system access. Staff manages the accessibility of software packages, making them readily available for users to download and install from their computers. Service Desk and Desktop Technology staff provide onsite technical support to the Board of Supervisors (Board) and for various Committee meetings.

**Mandate Information:** This activity is not mandated.

**Who Does It:** County staff provides this service, but contractual support may be required for project work.

**Why We Do It:** This activity supports countywide government offices and staff that provide mandated services and essential County programs. Many of the systems and services supported are designated as mission critical by the Emergency Management Executive Committee, requiring support 24 hours per day, all 365 days of the year. Staff responds during business hours and are on-call to address County user and department needs. Staff has successfully passed background screening required by the Federal Bureau of Investigation's (FBI's) Criminal Justice Information Systems (CJIS) Division, allowing them access to networks and computer systems that process or store sensitive information. This screening also satisfies the IT audit requirements associated with the County's annual financial audit.

**How We Do It Now – Current Service Level:** Current service level is intended to address all end-user technology issues to ensure workforce productivity. This includes triage of all end-user-identified issues to ensure they can be addressed expeditiously by staff with the appropriate technology expertise. DIT implemented a new help desk system this past year; and is piloting a new call center technology that will assist staff in providing increased levels of “first call” resolutions, and will also provide automated workflows for self-service options, which will allow resolution to issues without the need for staff to undertake any action. As of FY 2024, it is expected that current service level will support most service requests being closed within two days, with over half of the requests resolved on initial contact.

**How We Plan to Do It in the Future – Recommended Service Level:** Going forward, the recommended service level is to maintain the existing scope of services for the workforce. Over the next few years, DIT intends to further improve service levels and increase the percentage of user tickets closed by the first level of support, enabled by the expansion of support available 24 hours per day, seven days per week; adoption of new technology platforms; and increased automation.

**Information Technology: Infrastructure and Customer Service**

	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Estimated	FY 2025 Projected
<b>Close 90 percent of service call requests within two business days.</b>					
Number of calls opened	31,519	36,621	30,117	32,000	32,000
Average number of endpoints maintained per technology specialist	735	764	782	800	825
Percentage of calls closed within two business days	79%	83%	76%	75%	75%
<b>Optimize the percentage of service requests closed on initial contact.</b>					
Percentage of Service Desk calls closed on initial contact	65%	57%	52%	60%	60%
<b>Provide real-time collaboration and communication for the County workforce.<sup>1</sup></b>					
Number of active email users	n/a	n/a	6,458	6,800	7,000
Number of email messages sent	n/a	n/a	6,658,408	6,850,000	7,000,000
Number of active Microsoft Teams users	n/a	n/a	4,813	4,800	4,900
Number of Microsoft Teams chat messages sent	n/a	n/a	6,601,168	6,800,000	7,000,000
Number of online meetings in Microsoft Teams	n/a	n/a	66,067	70,000	74,000

<sup>1</sup> Data shown as n/a indicates a measure that does not have historical data.



## Information Technology: Infrastructure and Customer Service

### Asset Management

**What We Do:** This activity supports and maintains the County's inventory for computer and IT-related equipment assets; and it also works with DIT staff and vendors to ensure that the necessary equipment is available.

Staff maintains the computer and asset inventory system and coordinates with contractors, vendors, and staff for the replacement and removal of assets. Staff maintains the organization and supply of IT equipment and components and works with the DIT buyer and vendors to place, track, and receive orders. Staff receives and inventories equipment from the vendor, configures and installs workstations and laptops, and de-provisions items for surplus. Staff produces depreciation reports and works with the Department of Finance and Procurement to ensure that County assets are reflected in the County's asset management module. Staff liaises with other County departments and responds to questions and concerns, researching and recommending solutions to resolve issues. The replacement cycle of current assets, new positions, new facilities, and new technologies drives this activity's work.

**Mandate Information:** This activity is not mandated.

**Who Does It:** County staff provides this service.

**Why We Do It:** This activity supports and enables staff to conduct business and mandated work in performing their duties to ensure that they can effectively support and provide services to Loudoun County residents.

**How We Do It Now – Current Service Level:** At current service level as of FY 2024, this activity manages a countywide portfolio of more than 23,000 asset-tagged IT items.

**How We Plan to Do It in the Future – Recommended Service Level:** Going forward, the recommended service level is to maintain the existing scope of services for the workforce. Over the next two years, DIT seeks to improve the service level of the Asset Management activity by implementing a single asset management system containing a repository of all IT-related equipment and licenses throughout the County network.

	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Estimated	FY 2025 Projected
<b>Provide administrative support for asset management to the Department and the County.</b>					
Number of items currently asset-tagged	22,742	23,190	24,220	23,620	23,620
Number of new IT items placed in service (with asset tag)	1,791	1,140	3,537	1,200	1,200
Number of items identified and removed from asset inventory (with asset tag)	709	1,266	2,897	1,800	1,200
Number of staff supporting asset management	1	1	1	1	1



## Information Technology: Infrastructure and Customer Service

### Central Services: Telephone and Duplicating Services

**What We Do:** This activity provides countywide duplicating and telephone services support.

Staff provides recommendations to the Office of Management and Budget and the Department of Finance and Procurement for budgeting and contract issuance. Staff manages contracts to ensure that vendor performance complies with the terms and provisions of contracts. Staff manages a countywide annual schedule of chargeback costs and budget for telephones and duplicating devices. This includes programming account codes into machines, reviewing and processing payments, and managing related departmental expenditures.

Staff maintains the inventory and detailed information on devices, and coordinates placement and replacement of such devices countywide. Staff provides technical support for the devices and responds to customer requests, troubleshooting issues and escalating to the vendor as needed.

**Mandate Information:** This activity is not mandated.

**Who Does It:** County staff provides this activity with contractual support.

**Why We Do It:** This activity provides centralized receiving, provisioning, and support for all telephone and multi-functional County devices. Additionally, this activity supports the chargeback of telephone services for all County telephones. This activity is necessary to allow for the operation and integrity of all County information systems, many of which support the provision of mandated services.

**How We Do It Now – Current Service Level:** At current service level, this activity supports the provision of telephone and printing/duplicating services countywide. As of FY 2024, meeting the current service level involves supporting approximately 6,400 telephone numbers and more than 400 multi-functional devices.

**How We Plan to Do It in the Future – Recommended Service Level:** Going forward, the recommended service level is to maintain the existing scope of services for the workforce. The nature of the services provided – and the level of support required – may shift as technologies continue to evolve. In the future, DIT may recommend increased integration between telephone and printing/duplicating software and other productivity platforms.

	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Estimated	FY 2025 Projected
<b>Provide telephone and Xerox services and support across the County.<sup>1</sup></b>					
Number of telephone numbers	6,026	6,314	6,323	6,400	6,450
Number of multi-functional devices	n/a	385	396	415	420

<sup>1</sup> Data shown as n/a indicates a measure that does not have historical data.



## Information Technology: Infrastructure and Customer Service

### Network Services

**What We Do:** This activity supports all networks providing connectivity to County facilities. The team coordinates cabling activities and hardware and software support for all County facilities, and configures all County network equipment. Staff monitors, troubleshoots, designs, implements, optimizes, renovates, and upgrades all aspects of County network infrastructure to ensure that this critical infrastructure is stable, available, and resilient. The supported networks include local wired networks, staff and public wireless networks, Virtual Private Networks (VPNs) for remote sites, microwave and fiber backbone networks, circuits for connectivity to all sites, and internet circuits. The team supports all the physical cabling required to support the network, including copper and fiber for site connectivity, cabling for user systems and telephones, network closets, core networks, and server connectivity. More than 130 sites are supported, including the Loudoun County Sheriff's Office (LCSO), Loudoun County Fire and Rescue (LCFR), and the ECC. This activity performs project management for "Moves/Adds/Changes," which pertains to new County employees, building renovations, and/or new facilities requiring cabling and network services.

**Mandate Information:** This activity is not mandated.

**Who Does It:** County staff provides this service. Vendors are used to perform some of the physical cabling support; and contractors are hired as needed.

**Why We Do It:** This activity ensures the operation and integrity of County information systems, many of which support the provision of mandated services. Public safety server operations and email services have been designated as mission critical by the Emergency Management Executive Committee. This activity also provides for continuity of operations and disaster recovery of some critical components of the network. Without this service, the County would be unable to operate and maintain its core information systems. Staff has successfully passed background screening required by the FBI's CJIS Division, allowing them access to networks and computer systems that process or store criminal information. This screening also satisfies the IT audit requirements associated with the County's annual financial audit.

**How We Do It Now – Current Service Level:** At current service level, this activity maintains existing network infrastructure and ensures network connectivity for new facilities as they come online. Current service level includes maintaining at least 99 percent operational availability of core network systems.

**How We Plan to Do It in the Future – Recommended Service Level:** Going forward, the recommended service level is to continue providing network connectivity and operational reliability for current and new facilities. As the number of County facilities increases, DIT has identified target staffing ratios expected to be necessary for meeting the service demands associated with the Network Services activity. These ratios will be monitored to help gauge whether sufficient staffing is available to cover service demands.

**Information Technology: Infrastructure and Customer Service**

	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Estimated	FY 2025 Projected
<b>Maintain 99 percent operational availability of core network systems.</b>					
Major core network backbone availability	99.95%	100.00%	100.00%	100.00%	100.00%
<b>Maintain a minimum ratio of engineers/project managers per category (minimum ratio).</b>					
Average number of devices on the network per engineer (4,200)	4,779	4,040	4,255	4,450	4,650
Average number of network segments per engineer <sup>1</sup> (190)	284	273	311	350	400
Average number of network projects per engineer (10)	10	11	12	13	13
Average number of locations per engineer (24)	26	24	26	26	27
Average cable project caseload per project manager (35)	26	26	31	30	30

<sup>1</sup> A network segment is a portion of a computer network.





## Information Technology: Infrastructure and Customer Service

### Data Center Services

**What We Do:** This activity supports the administration of the County's virtual server infrastructure and physical server systems. The team provides public and private cloud system architectural design and management; and manages virtual computer memory, network, and storage services for virtual systems. This activity also manages the County's storage environment and maintains backups for County data and systems stored on the County's enterprise server and storage infrastructure. Additionally, the Data Center Services activity manages the County's network file system as well as its permissions and security. This activity provides single authentication services for cloud and onsite systems. Staff manages internal websites and application systems, including subscription-based software [Software as a Service (SaaS) Systems], and supports the intranet and public website. This activity manages the services and equipment that provide redundancy and the ability for systems to communicate across the network, both locally and in the cloud.

**Mandate Information:** This activity is not mandated.

**Who Does It:** County staff provides this service with contractual support.

**Why We Do It:** This activity ensures the operation and integrity of County information systems, many of which support the provision of mandated services. Public safety server operations and email services have been designated as mission critical by the Emergency Management Executive Committee. This activity also provides for continuity of operations and disaster recovery of some critical components of the network. Without this service, the County would be unable to operate and maintain its core information systems. Staff has successfully passed background screening required by the FBI's CJIS Division, allowing them access to networks and computer systems that process or store criminal information. This screening also satisfies the IT audit requirements associated with the County's annual financial audit.

**How We Do It Now – Current Service Level:** At current service level, this activity maintains existing server infrastructure and sets up servers for new applications/services as they come online. Current service level includes maintaining at least 99 percent operational availability of all major computer systems annually.

**How We Plan to Do It in the Future – Recommended Service Level:** Going forward, the recommended service level is to continue to provide data center services and operational reliability for current and new systems/applications. DIT has identified target staffing ratios expected to be necessary for meeting the service demands associated with the Data Center Services activity. These ratios will be monitored to help gauge whether sufficient staffing is available to cover service demands.

	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Estimated	FY 2025 Projected
<b>Maintain 99 percent operational availability of all major computer systems.</b>					
Major computer availability	100%	100%	100%	100%	100%
<b>Maintain a minimum number of engineers per category (minimum number).</b>					
Average number of users per server/cloud engineer (900)	1,051	1,053	1,073	952	955
Average number of virtual servers per engineer (60)	66	76	77	69	70
Average number of SaaS systems per engineer (8)	10	9	9	8	9



## Information Technology: Infrastructure and Customer Service

### Broadband and Cable TV

**What We Do:** This activity oversees the County's two cable TV franchisees and ensures adherence to the obligations contained within the contractual agreements. This activity includes resolution for cable TV-related issues, from service availability to infrastructure safety concerns to right-of-way explanations. Additionally, this activity has included the surveying of cable TV and broadband performance and overall availability in Loudoun County. Staff visits sites to identify safety hazards, from unburied cables to low-hanging and unattached cables on telephone poles. With direction from the Board to narrow the broadband digital divide, Staff researches state and federal grant opportunities to develop Requests for Proposals (RFPs), working with appropriate stakeholders and interested parties in the expansion of quality high-speed broadband to all residents, with an agreed focus on the unserved and underserved residents of rural Western Loudoun County. Staff researches and analyzes legislative proposals and policies regarding broadband and cable TV issues; and is responsible for the execution of the County's Broadband Strategic Plan while providing regular updates to the Board focusing on the advancement of broadband. Staff serves as the liaison to the Communications Commission Advisory Group, creating agendas and minutes and researching action items.

**Mandate Information:** This activity is not mandated.

**Who Does It:** County staff provides this service with limited contractual support for legal issues.

**Why We Do It:** This activity ensures that the County's cable franchise vendors are adhering to their contractual obligations. As new and unique opportunities arise for the expansion of broadband into unserved and underserved areas, Staff works to bring them to fruition for the benefit of Loudoun County residents.

**How We Do It Now – Current Service Level:** At current service level, this activity meets the goals of ensuring that cable franchisees meet contractual obligations, and assists with the expansion of broadband in the County. As of FY 2024, meeting current service level involves handling approximately 20 to 40 maintenance tickets per cable franchisee annually, with approximately 30 days to resolve each ticket. Staff leverages the ticketing system to document and track all resident requests for service and assistance with issues, and to communicate progress through resolution. Staff also advances broadband expansion through the Virginia Telecommunications Initiative (VATI) and American Rescue Plan Act (ARPA) efforts as project administrators.

**How We Plan to Do It in the Future – Recommended Service Level:** Going forward, the recommended service level is to maintain the existing scope of services. While continuing to track and act on resident tickets, the team will be focused on advancing broadband service in the County, with the goal of ensuring that all residents have service opportunities meeting the Federal Communications Commission broadband definition (at a minimum).

	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Estimated	FY 2025 Projected
<b>Ensure adherence to franchise agreements for cable TV.<sup>1</sup></b>					
Number of franchisee maintenance tickets – Comcast	n/a	41	46	30	35
Average number of days to resolve Comcast tickets	n/a	36	24	30	30
Number of franchisee maintenance tickets – Verizon	n/a	23	19	20	25
Average number of days to resolve Verizon tickets	n/a	29	36	30	30

<sup>1</sup> Data shown as n/a indicates a measure that does not have historical data.



## Information Technology: Public Safety Support

### Public Safety Communications and Engineering Support

**What We Do:** This activity provides an interoperable public safety radio system utilized by the following departments and agencies: LCSO, LCFR, the Department of Animal Services (DAS), the Office of Emergency Management (OEM), the Leesburg Police, the Purcellville Police, the Middleburg Police, Public Schools Safety and Security, and Public Schools Transportation, as well as regional and state partner agencies. The public safety radio system is comprised of multiple interconnected components including geo-diverse master radio sites containing processing and computing infrastructure linking ten radio transmitter sites together in real-time, approximately 3,500 mobile and portable radios for field use, and 50 radio dispatch consoles linking the ECC with first responders.

Staff provides technical and contractual management as well as system planning. Staff performs onsite inspections to ensure continuous operation, monitors and resolves service requests, monitors and maintains the operation of field hardware, coordinates repairs and preventative maintenance, and plans for system upgrades.

Staff oversees the installation, operation, and maintenance of bi-directional amplifier systems (BDAs), ensuring that required radio coverage is maintained inside of buildings such as schools and data centers. There are approximately 60 BDAs installed in both County-owned and privately-owned buildings throughout Loudoun County. This activity also provides monitoring of BDAs to ensure operational stability of installed equipment.

**Mandate Information:** The Code of Virginia § 56-484.16 mandates “E911,” which requires localities to maintain and operate a 911 service as the Public Safety Answering Point for emergency telephone calls. The radio system is used in concert with other systems to deliver 911 services; and is designated as a mission-critical service by the Emergency Management Executive Committee. The mission-critical designation requires non-stop operations at the highest level of importance.

**Who Does It:** County staff provides this service. The radio vendor provides some support services; and project-specific contractors are hired on an as-needed basis.

**Why We Do It:** The public safety radio system is a mission-critical system requiring high availability and reliability to support ongoing public safety operations for Loudoun County. Without this activity, the County would be unable to operate and maintain the public safety radio system, resulting in a significant risk to the health and safety of all County residents, and to the protection and loss of property within the County. Staff has successfully passed background screening required by the FBI’s CJIS Division, allowing them access to networks and computer systems that process or store criminal information. This screening also satisfies the IT audit requirements associated with the County’s annual financial audit.

**How We Do It Now – Current Service Level:** At current service level, this activity ensures availability of the radio communications system for critical public safety operations, with a minimum 99.9 percent availability each year. As of FY 2024, each radio engineer maintains approximately five to six 800 MHz radio sites; more than 1,700 portable, mobile, and control station subscriber radios; and up to 40 bi-directional amplifiers/antennas.

**How We Plan to Do It in the Future – Recommended Service Level:** Going forward, the recommended service level is to maintain current service level to ensure adequate support for public safety functions. DIT has identified target staffing ratios anticipated to be necessary for maintaining service levels; and will continue to monitor engineer workloads to ensure that appropriate coverage is provided.

**Information Technology: Public Safety Support**

	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Estimated	FY 2025 Projected
<b>Maintain a minimum number of radio engineers per category (minimum number).</b>					
Average number of radio tower sites per radio engineer (10)	9	5	5	6	7
Average number of portable, mobile, and control station subscriber radios per radio engineer (3,000)	3,006	1,527	1,709	1,750	1,800
Average number of bi-directional amplifiers/antennas per radio engineer (50)	42	28	32	35	40
<b>Maintain a minimum number of public safety engineers per category (minimum number).</b>					
Average number of ECC dispatch positions per public safety engineer (10)	23	25	16	16	20
Average number of systems/services supported per public safety engineer (20)	23	25	17	17	18
<b>Maintain radio communications systems to ensure 99.9 percent availability.</b>					
Percentage of time that the radio communications system was available (not including planned outages)	100%	100%	100%	100%	100%



## Information Technology: Public Safety Support

### Public Safety Technology Support

**What We Do:** This activity provides operational support information systems used by LCFR, LCSO, the Office of the Commonwealth's Attorney, OEM, and DAS.

Staff assists with planning, deployment, maintenance, and replacement of critical information systems. For Commercial Off-the-Shelf (COTS) solutions, DIT provides the infrastructure to host vendor solutions, assist with system optimization, and perform contract administration. For other specialized customer needs where cost-effective market solutions are unavailable, staff designs and builds custom software and databases. Staff performs System Development Lifecycle Activities (SDLC) to include requirements gathering, system architecture and design, development, testing, and implementation. Staff develops and produces reports and operational statistics for departments using vendor-built and DIT-built database systems.

**Mandate Information:** The Code of Virginia § 56-484.16 mandates "E911," which requires localities to maintain and operate a 911 service as the Public Safety Answering Point for emergency telephone calls. Many of the systems supported are designated as mission-critical services by the Emergency Management Executive Committee. The mission-critical designation requires non-stop operations at the highest level of importance.

**Who Does It:** County staff provides this service, with two vendors providing system-specific support.

**Why We Do It:** This activity is critical to operations for Loudoun County public safety agencies. Without this service, the County would be unable to operate and maintain public safety systems, resulting in a significant risk to the health and safety of all County residents, and to the protection and loss of property within the County. Staff has successfully passed background screening required by the FBI's CJIS Division, allowing them access to systems that process or store criminal information. This screening also satisfies the IT audit requirements associated with the County's annual financial audit.

**How We Do It Now – Current Service Level:** At current service level, this activity provides operational support and maintenance for all public safety information system platforms, in addition to managing the implementation of new public safety information systems projects. As of FY 2024, targeted improvements are underway to enhance service levels in terms of response times for support to end-users of public safety applications 24 hours per day, seven days per week.

**How We Plan to Do It in the Future – Recommended Service Level:** Going forward, the recommended service level is to maintain current service level for this activity. As technologies continue to evolve, staff will continue to monitor trends in support needs to ensure that this activity is appropriately resourced to maintain critical public safety applications.

	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Estimated	FY 2025 Projected
<b>Provide timely applications development and enhancement support to public safety agencies.</b>					
Number of project requests	8	2	5	2	2
Number of projects completed	2	2	2	2	2



## Information Technology: Enterprise Systems Support

### Oracle Enterprise Resource Planning (ERP) Management

**What We Do:** This activity provides support for Oracle Enterprise Resource Planning (ERP), including Human Capital Management (HCM), financial management, and the budget-planning module Hyperion, for approximately 20,000 Loudoun County Government and LCPS employees.

Staff assists Loudoun County Government and LCPS departments with identifying solutions to enhance or modify functionality. Staff works with departments to understand their business needs for modifications or additions to the Oracle modules, and translates them into requirements. Staff analyzes requests to assess the systemic impact of any changes to the Oracle environment, including third-party products that may be integrated into the Oracle environment.

Staff assists Loudoun County Government and LCPS departments with troubleshooting issues. Staff resolves issues (either internally or through escalation) with the County's third-party-managed service provider or directly with Oracle technical support. Staff performs detailed technical analysis of issued tickets, and implements the appropriate enhancements or solutions to address any issues; and if the vendor resolves issues, the team manages the testing and migration to production for those issues. In addition, staff manages bi-directional changes to vendor interfaces based on changes to regulations (federal, state, and local), the vendor landscape, and/or business processes.

**Mandate Information:** This activity is necessary for compliance with the Code of Virginia §§ 15.2-1541.1 and 15.2-2510, which requires localities to maintain a centralized accounting system and prepare audited financial reports. This activity also supports the payroll system necessary to comply with federal law, Title 26 of the United States Code, which requires payroll tax withholding and annual reporting of wages. The ERP system is also necessary to maintain business processes and reporting capabilities required to comply with various other state and federal regulations covering financial management and human resources matters.

**Who Does It:** County staff provides this activity with contractual support. The third-party-managed service vendor maintains the Oracle infrastructure, including hardware, software, and backup of Oracle data as well as disaster recovery services.

**Why We Do It:** The Oracle ERP Management activity ensures the operation and integrity of financial functions such as payroll, procurement, cash management, employee benefits, and budgeting for Loudoun County Government and LCPS. Without this service, Loudoun County Government and LCPS would be unable to operate and maintain these core financial functions. Staff has successfully passed background screening required by the FBI's CJIS Division, allowing them access to systems that process or store criminal information. This screening also satisfies the IT audit requirements associated with the County's annual financial audit.

**How We Do It Now – Current Service Level:** Under current service level, this activity supports the Oracle ERP system, which manages key functions including financials, human resources, and payroll for the entire County and LCPS workforce. As of FY 2024, staff supports approximately 57 business process workflows for the County and 38 for LCPS, which includes regular service to maintain and enhance workflows to meet business process and data needs. At current service level, there are no unscheduled service outages and no data loss.

**How We Plan to Do It in the Future – Recommended Service Level:** The recommended service level is to maintain the current service level for this activity, while continuing to evaluate and adopt evolving technologies related to the ERP system.



## Information Technology: Enterprise Systems Support

	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Estimated	FY 2025 Projected
<b>Provide reliability and quality customer service of the ERP system through addressing tickets.</b>					
Number of HCM tickets	295	156	341	220	375
Number of financials tickets	155	80	214	150	250
<b>Sustain a secure ERP environment by reducing data breaches and minimizing loss of data from breaches.</b>					
Number of security-related patches and upgrades	68	68	51	75	75
Number of incidents of data loss	0	0	0	0	0
<b>Improve ERP effectiveness and efficiency by maintaining the current ERP version; and increase adoption of ERP solutions by supporting business process workflows.</b>					
Number of business process workflows supported for the County	57	57	57	57	57
Number of business process workflows supported for LCPS	38	38	38	38	38
<b>Ensure a highly available ERP system by minimizing unscheduled outages to less than three per year, and a duration of outage to an average of no more than one hour per outage.</b>					
Number of outages	0	0	1	0	0
Duration of outages (in hours)	0.00	0.00	0.16	0.00	0.00



## Information Technology: Enterprise Systems Support

### Business Intelligence and Analytics

**What We Do:** This activity provides development and support for various processes such as ingesting, storing, organizing, and maintaining data created and collected by various County departments. This activity also creates and maintains data pipelines and information repositories that enable County staff to extract business insights from data.

Staff uses various reporting and analytics tools to assist the departments in Loudoun County Government and LCPS with identifying solutions to enhance or modify reporting functionality and capabilities. Staff collaborates with departments to understand their business needs for modifications or additions, and translates them into requirements. Staff analyzes the requirements and assesses the potential impact of change on the current reporting environment, including third-party products. Staff manages the development environment, collaborates with department users for User Acceptance Testing (UAT) of the reports, and migrates tested reports to the production environment. Staff assists Loudoun County Government and LCPS departments with troubleshooting connectivity to databases, resolving the issue internally or through escalation with third-party providers.

**Mandate Information:** This activity is not mandated.

**Who Does It:** County staff provides this activity with vendor services as needed.

**Why We Do It:** Data management activities ensure security and governance of County data assets throughout the data lifecycle stages. Data engineering activities ensure that data is prepped and available for County staff to analyze and interpret through various business intelligence tools. This activity also allows for collaborating and sharing information within a department or multiple departments, and enables staff to make data-driven decisions.

**How We Do It Now – Current Service Level:** Under current service level, staff maintains and administers database servers and supports data migration and data integration. Staff provides development and maintenance support for numerous reporting platforms including, but not limited to, PowerBI, Crystal, Oracle, and SSRS reporting tools. As of FY 2024, this activity is anticipated to support approximately 980 County ERP reports, 380 LCPS ERP reports, 2,500 SSRS reports, and 650 PowerBI reports, as well as 675 SQL server databases.

**How We Plan to Do It in the Future – Recommended Service Level:** Going forward, DIT recommends continuing to support the organization with reporting and analytics needs. This may include efforts to implement enterprise-level data platforms, such as data warehouses, that are designed to enable and support business intelligence and analytics activities.

	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Estimated	FY 2025 Projected
<b>Maintain County and LCPS ERP reports.<sup>1</sup></b>					
Number of County reports	n/a	982	982	982	982
Number of LCPS reports	n/a	381	381	381	381
<b>Maintain non-Oracle reporting tools.</b>					
Number of SSRS reports	920	1,819	2,524	2,535	2,585
Number of Crystal reports	956	956	970	902	906
Number of PowerBI reports	20	150	607	656	756
<b>Create and manage SQL server databases.</b>					
Number of databases managed	591	683	719	675	670
Number of upgrades and patches for database systems (patch SQL server)	663	690	777	700	700

<sup>1</sup> Data shown as n/a indicates a measure that does not have historical data.





## Information Technology: Enterprise Systems Support

### Enterprise Content Management (ECM)

**What We Do:** The Enterprise Content Management (ECM) activity provides content management, collaboration, and communication platforms for the County.

Staff collaborates with departments to understand their business needs for solutions, and translates them into requirements. Staff analyzes the requirements and assesses the potential impact of change on the current environments, including third-party products. Staff performs SDLC to include requirements gathering, system architecture and design, development, testing, and implementation. Staff also estimates, manages, and monitors the storage and computing requirements for the ECM environment, and works with the Data Center Services activity staff to proactively optimize the production environment.

**Mandate Information:** Portions of this activity are mandated. Records management activities are mandated through the Code of Virginia § 15.2-1242 and the Freedom of Information Act (Virginia Code § 2.2-3700).

**Who Does It:** County staff provides this activity with vendor and consulting services as needed.

**Why We Do It:** Without this service, the County would not be able to manage its records.

**How We Do It Now – Current Service Level:** Current service level includes support for collaboration and communication tools including Microsoft SharePoint, records management repositories, and Board meeting management tools. As of FY 2024, this includes managing approximately 160 million documents in Laserfiche and approximately 250 document management processes, as well as supporting approximately 3,800 SharePoint users across all County departments.

**How We Plan to Do It in the Future – Recommended Service Level:** Going forward, DIT recommends maintaining current service level for this function; although as technology evolves, the tools and level of support required may change over time.

	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Estimated	FY 2025 Projected
<b>Increase process automation to improve content management processes and reduce the amount of paper used.</b>					
Number of documents managed within Laserfiche	143,180,107	146,405,098	158,573,108	166,000,000	174,000,000
Number of document management processes	205	246	250	260	270
Number of ECM systems in production	120	171	186	190	190
Number of electronic forms created	425	525	565	575	600
<b>Increase the number of departments utilizing Microsoft SharePoint as a collaboration tool.</b>					
Percentage of departments utilizing Microsoft SharePoint	100%	100%	100%	100%	100%
Total number of SharePoint sites	512	626	752	806	912
Number of active SharePoint sites	502	611	730	789	890
Number of SharePoint users	2,732	3,141	3,545	3,800	4,000



## Information Technology: Enterprise Systems Support

### System Design, Development, and Support

**What We Do:** This activity supports application development, maintenance, and lifecycle activities. DIT manages more than 200 applications for County departments.

Staff works closely with departments and follows a software development model based on intensive collaboration to identify, design, develop, test, and deploy solutions. This activity manages and updates the applications and the supporting interface architecture. In addition, staff upgrades software, diagnoses issues, applies software and security patches, and adds functionality to these applications to address customer needs. This activity includes development and maintenance of custom applications, as well as support to COTS applications. This activity further provides analysis of custom applications for potential consolidation and migration to the cloud. Staff provides administrative support for the County's internet and intranet services and several public-facing portals. Staff supports change control processes for system development and deployment as well as provides vendor management.

**Mandate Information:** This activity is not mandated.

**Who Does It:** County staff provides this activity with vendor and consulting services as needed.

**Why We Do It:** Without this service, the County would be unable to operate and maintain core functions relying upon technology applications.

**How We Do It Now – Current Service Level:** At current service level, this activity supports the organization with the development and deployment of custom applications, as well as supports the maintenance of approximately 100 custom applications and more than 110 COTS applications, in addition to other systems integration support.

**How We Plan to Do It in the Future – Recommended Service Level:** Going forward, DIT will seek to identify more cloud-based solutions and seek to migrate custom applications to COTS-based solutions. While increased support may be needed for this activity in the short term to shift away from custom applications, over the longer term, these shifts would be expected to result in a stabilization of the amount of support required.

	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Estimated	FY 2025 Projected
<b>Develop custom applications for departments.</b>					
Number of custom applications developed	4	4	0	2	2
Number of departments supported	17	17	17	17	17
Number of new projects requested	9	2	0	2	2
<b>Provide support for applications.<sup>1</sup></b>					
Number of custom applications maintained	89	93	106	102	98
Number of COTS (commercial-off-the-shelf) applications maintained	n/a	114	114	116	118

<sup>1</sup> Data shown as n/a indicates a measure that does not have historical data.



## Information Technology: Enterprise Systems Support

### Quality Assurance and Quality Control (QA/QC)

**What We Do:** This activity supports the establishment of the County's practice and framework for quality assurance and quality control (QA/QC) to ensure that applications and technologies implemented are done in a standardized manner and are monitored appropriately.

Staff works towards standardizing a framework for system implementation processes, creating quality metrics, analyzing and evaluating metrics for continuous improvement, planning for internal audits, and preparing for the technology components of external audits (such as financial audits, HIPAA<sup>1</sup> audits, PCI DSS<sup>2</sup> audits, etc.) so that the organization may pass them with the highest compliance. This activity interfaces closely with the Project Management Office to ensure that QA/QC measures are included in the program management process, which includes system testing, user acceptance testing, and performance/load testing.

**Mandate Information:** This activity is not mandated.

**Who Does It:** County staff provides this activity.

**Why We Do It:** The QA/QC activity is necessary to support the Enterprise Systems Support Program as a whole, which supports core County functions. When QA/QC is adequately addressed, projects are more efficient and produce better functioning products for department and resident needs.

**How We Do It Now – Current Service Level:** Current service level involves support to all Enterprise Systems Support projects for system testing, performance and load testing, and quality assurance.

**How We Plan to Do It in the Future – Recommended Service Level:** Going forward, DIT recommends expanding the QA/QC function to reach additional programs and projects within the Department to increase overall quality and customer satisfaction. In addition, testing activities will be integrated into project plans.

This activity does not currently have any adopted performance measures; but over time, staff will continue to evaluate the service demands and processes associated with this activity to gauge whether relevant metrics can be implemented in the future.

---

<sup>1</sup> HIPAA is the Health Insurance Portability and Accountability Act.

<sup>2</sup> PCI DSS are Payment Card Industry Data Security Standards.



## Information Technology: Technology Services

### Budget, Procurement, and Administration

**What We Do:** This activity provides fiscal and budgetary oversight for DIT, timely and fiscally-responsible procurement of goods and services, office inventory management and control, payroll reconciliation, and front office support. Budget, Procurement, and Administration staff monitors the individual program budgets within DIT, providing projections and recommendations on how to most efficiently utilize the allocated funding to deliver IT solutions and services for individual departments and countywide enterprise solutions. This activity provides oversight and fiscal management of other funding sources, including Capital Asset Preservation Program projects, Capital Improvement Program projects, and miscellaneous grants and revenues. This activity supports all divisions within DIT for all matters involving contracts and purchasing, and is the liaison between DIT and the Loudoun County Procurement Division for purchase orders.

**Mandate Information:** This activity is not mandated.

**Who Does It:** County staff provides this activity.

**Why We Do It:** The Budget, Procurement, and Administration activity provides sound oversight and implementation of the DIT operating budget and overall DIT fiscal affairs, including financial support for the County's IT-related needs. This activity also manages procurement, which is vital to supporting the services provided by DIT. This activity serves as the essential link between DIT and the Department of Finance and Procurement and the Office of Management and Budget, ensuring adherence to County policies that govern purchasing and financial management.

**How We Do It Now – Current Service Level:** At current service level, the activity's goal is to execute all procurements within five business days and pay all invoices within 30 days. As of FY 2024, this activity is expected to oversee approximately 650 requisitions, 1,000 credit card purchasing transactions, and the processing of an estimated 2,750 invoices annually.

**How We Plan to Do It in the Future – Recommended Service Level:** Going forward, the recommended service level is to maintain current service level for financial and procurement support. As technology systems and contracts evolve, new and different types of processes and procedures may need to be developed to support the financial side of DIT operations. DIT will continue to monitor the volume and nature of evolving purchasing support needs to ensure that this activity is appropriately resourced to maintain service standards.

	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Estimated	FY 2025 Projected
<b>Provide financial and purchasing support to the Department.</b>					
Number of requisitions issued	512	621	652	650	650
Number of purchase orders created	290	413	422	450	500
Number of invoices paid	2,350	2,517	2,813	2,750	2,800
Number of credit card transactions processed	652	873	1,127	1,000	1,100



## Information Technology: Technology Services

### Human Resources

**What We Do:** The Human Resources activity oversees the hiring of personnel, compensation and leave issues, policy development, and performance reviews, as well as works with the Department of Human Resources (DHR) to facilitate employee relations. This activity oversees and coordinates all departmental human resource matters, including compensation, benefits, leave, Family Medical Leave Act (FMLA) and Fair Labor Standards Act (FLSA) compliance, Americans with Disability Act (ADA) requests, and workers' compensation and disability claims. This activity further coordinates policy and procedure development and updates, personnel issues, discipline, and general maintenance of employee information. It also handles all departmental recruitment and hiring of personnel, ensuring compliance with the Equal Employment Opportunity Commission (EEOC) guidelines on employee selection procedures by reviewing each applicant's panel interview, personal references, previous employers, CJIS fingerprinting, and a thorough background investigation consisting of credit, criminal, driving, and education verification.

**Mandate Information:** This activity is not mandated.

**Who Does It:** County staff provides this service. However, DIT contracts out the following human resources functions: background verifications (credit, criminal, driving, and education) and CJIS fingerprinting.

**Why We Do It:** This activity allows DIT to meet human resources-related service needs in a timely and efficient manner without causing higher workload demands for centralized staff in DHR.

**How We Do It Now – Current Service Level:** As of FY 2024, this activity coordinates human resources processes and needs for a workforce of 119.47 FTE, plus any temporary and/or contractual support positions. Current service level is intended to ensure timely and EEOC-compliant recruitments, up-to-date employee records, management and employee support related to performance, and overall coordination between DIT and DHR.

**How We Plan to Do It in the Future – Recommended Service Level:** In the future, the recommended service level is to maintain current service level and continue supporting the overall coordination between DIT and DHR. Going forward, DIT would like the Human Resources activity to play a role in coordinating training and certifications for the workforce to ensure that workforce skills keep pace with evolving technology needs.

	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Estimated	FY 2025 Projected
<b>Provide human resources support to recruit and sustain DIT human capital.<sup>1</sup></b>					
Number of new hires	10	13	15	15	15
Number of employee action forms processed	50	30	38	35	35
Average time to hire in days (time from the date of authorization to recruit to the start date)	n/a	n/a	115	90	90

<sup>1</sup> Data shown as n/a indicates a measure that does not have historical data.



## Information Technology: Security

### Policy and Risk Management

**What We Do:** This activity provides risk analysis for incoming technologies to establish compliance with the County's policies and Technology Roadmap. Staff assesses system vulnerability and manages the tools and technologies used to discover security vulnerabilities in the County's network. The County works with dozens of vendors to administer systems and software. Staff in this activity performs due diligence to ensure that these vendors meet security requirements, in addition to managing contracts with security-related vendors. Staff evaluates new technologies through research and implementation of new security technologies that address critical County needs. This activity interprets security policy and audit compliance for DIT and manages the security awareness program across the County in partnership with the Data Center Services activity.

**Mandate Information:** This activity is not mandated.

**Who Does It:** County staff provides this service with additional support through contractual services.

**Why We Do It:** This activity provides services in support of other County departments with mandated services. For example, HIPAA, PCI/DSS compliance, and routine assessments are managed through DIT's Security Program. Annual financial audits include an IT security assessment, as managed through DIT's Security Program, to ensure the integrity of County and school financial systems. Key contributions of this activity include analyzing risk, recommending policy to mitigate risk, and evaluating compliance. Staff and contracted staff have successfully passed background screening required by the FBI's CJIS Division, allowing them access to networks and computer systems that process or store criminal information. This certifies the staff to accompany contractors doing work in these facilities. The staff security screening also satisfies the IT audit requirements associated with the County's annual financial audit.

**How We Do It Now – Current Service Level:** As of FY 2024, current service level involves partnering and collaborating with departments and agencies to enhance the County's cybersecurity maturity and to preemptively detect malicious activity and respond to active threats before endpoints are comprised. This activity secures network traffic, endpoints, emails, cloud migration activities, and incident response preparedness. The current service level is intended to deliver security awareness training annually to the entire County workforce.

**How We Plan to Do It in the Future – Recommended Service Level:** In the future, DIT intends to continue to meet the evolving security risk management needs of the organization, while maturing cybersecurity readiness and ensuring that employees are aware of the most up-to-date cybersecurity defense methods and understand how to manage risk.

	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Estimated	FY 2025 Projected
<b>Maintain 100 percent of employees completing annual security awareness training.</b>					
Percentage of employees who have completed annual security awareness training	92%	78%	81%	90%	90%



## Information Technology: Security

### Threat Management

**What We Do:** This activity manages email (spam filters) and web filtering for malware and other malicious threats. Staff manages the filtering and encryption system for the County's email system and responds to requests for assistance with blocked emails, malicious email outbreaks, and secure email issues. Staff responds to requests for assistance with blocked websites as well as blocks malicious websites identified during security investigations. Staff manages firewalls to maintain the County's perimeter connections to the internet, and manages the County's remote access VPN solutions. Staff also manages systems for network access control and discovery through the identification of devices connected to the County network, and then determines if the device should be allowed to connect to the County network. This activity manages the systems that control virus and malware protection for all County workstations and servers in addition to managing the encryption and movement of data in and out of the County network to prevent data loss.

**Mandate Information:** This activity is not mandated.

**Who Does It:** County staff provides this activity with vendor and consulting services as needed.

**Why We Do It:** This activity provides services in support of other County departments with mandated services. For example, HIPAA, PCI/DSS compliance, and routine assessments are managed through DIT's Security Program. Annual financial audits include an IT security assessment, as managed through DIT's Security Program, to ensure the integrity of County and school financial systems. County staff as well as contracted staff have successfully passed background screening required by the FBI's CJIS Division, allowing them access to networks and computer systems that process or store criminal information. This certifies the staff to accompany contractors doing work in these facilities. The staff security screening also satisfies the IT audit requirements associated with the County's annual financial audit.

**How We Do It Now – Current Service Level:** Current service level is to block attacks from the internet, protect users from hostile websites, protect desktops and laptops from threats, and secure email accounts from receiving malicious emails. As of FY 2020, meeting current service level involved screening approximately 14 million emails. As of FY 2024, it is anticipated that 24 million emails will be screened while close to 5 million threats will be removed; and approximately 5 million external attacks from the internet will be blocked.

**How We Plan to Do It in the Future – Recommended Service Level:** In the future, DIT intends to meet evolving threat management needs by continuing to leverage partnerships with vendors to include email gateway protections, endpoint protections, network protections, and security monitoring so that the organization may combat threats in real-time.

	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Estimated	FY 2025 Projected
<b>Manage email-related threats.</b>					
Number of emails received	17,903,559	19,496,609	23,611,990	24,000,000	25,000,000
Number of threats removed	4,784,932	5,448,705	4,602,510	4,800,000	5,000,000
<b>Manage endpoint-related threats.<sup>1</sup></b>					
Number of blocked external internet attacks	3,863,440	5,761,267	2,940,058	5,000,000	5,000,000
Amount of workstation malware removed	3,493	8,727	236,530	10,000	10,000
<b>Manage mobile device-related threats.</b>					
Number of managed iOS devices	2,560	2,524	2,961	3,000	3,000
Number of managed iOS devices not on current patch level	1,033	1,580	1,592	1,000	1,000

<sup>1</sup> High variability can occur in security-related measures due to evolving trends in the threat environment as well as evolving tools and processes used to identify and remove threats.



## Information Technology: Project Management Office

### Project Management and Implementation

**What We Do:** This activity provides insight into the County's IT-related needs, ensures proper vetting of hardware and software, and provides project management and oversight on projects assigned to functional team members as opposed to dedicated project managers.

Staff identifies new technology projects via the intake process, or by collaborating directly with departments and their leaders. Staff works with project stakeholders and subject matter experts to ensure that the intake request provides the necessary information for staff to analyze and determine the need for resources, level of effort, materials, schedule, and cost to successfully deliver technology projects. This analysis defines the scope of the work, activities, and deliverables required for the successful completion of the project.

To better support the number of IT-related projects, staff provides project management oversight and tools to guide DIT functional team members with project execution and communication with stakeholders. Staff creates processes and templates to help guide non-traditional project managers to be successful.

**Mandate Information:** This activity is not mandated.

**Who Does It:** County staff provides this activity. Contractual project managers are used for capital or enterprise projects requiring time-defined services.

**Why We Do It:** This activity is necessary for the evaluation of requests and implementation of County IT projects, many of which support the provision of mandated services and/or core County functions. This activity supports project management methodologies and best practices to enable IT projects to be delivered on time, with higher quality, and within estimates and expectations.

**How We Do It Now – Current Service Level:** At current service level, this activity partners with departments to ensure that all project requests go through the intake process and meet enterprise technology and security standards. As of recent years, meeting current service level involves conducting intakes for approximately 70 to 110 technology project requests annually.

**How We Plan to Do It in the Future – Recommended Service Level:** In the future, the recommended service level for this activity would include proactively working with departments to identify business process needs to then identify and leverage appropriate technology solutions. The volume and nature of project requests may change over time as DIT increasingly seeks to identify enterprise-wide solutions and as other technologies continue to evolve, including the ability for end-users to do development independently. In the future, DIT expects to understand project success by tracking customer satisfaction results and determining whether projects achieve their intended outcome(s).

	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Estimated	FY 2025 Projected
<b>Coordinate and manage the County's IT technology requests.</b>					
Number of requests processed through intake	105	77	75	100	100
Number of technology and security reviews	93	70	61	70	75
Number of projects created	63	79	43	60	65
Number of active projects	178	252	250	180	190
Number of projects completed	73	60	100	100	100