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## **Department of Technology**

### **Department Description**

The Department of Technology (DoT) supports the local government information infrastructure by providing uninterrupted, secure, and reliable information systems. The department institutes information management policies and procedures, maintains the city's information management systems and provides citywide telephone support. The department is also responsible for designing and maintaining the city's website and mobile app, including media services to city agencies, providing desktop and service desk support, operating the government access television channel, providing systems and applications support to the city's 311 call center and managing the city's telecommunication network. Additionally, the department's computer operation section provides printing, folding, inserting, and mailing services to enterprise agencies as well as project and account management, and procurement of technology related purchases to all city agencies.

### **Department Mission**

The Department of Technology will leverage technology to make Columbus the best-performing municipality in the Midwest.

## **Strategic Priorities for 2013**

In anticipation of a slow growth economy, the department will continue to focus on the core business functions of the city with efforts to improve business processes through IT efficiency gains. In addition, the department will continue to partner with other city departments to carry out mission-critical citywide initiatives, many of which are described below. The department is an important service provider, not just to other city agencies, but to residents of the Columbus metropolitan area as well.

### **From the Columbus Covenant:**

#### **Customer Service**

- Continue to enhance the city's electronic communication to residents through new media platforms. In 2013, the Department of Technology will work with city departments to redesign Columbus.gov. This redesign will optimize the user experience and increase the city's reach to customers in a secure, effective, and efficient manner by implementing enhanced security and analytics. DoT will also work to increase the city's online presence through social media and mobile platforms. Through a collaborative effort with city departments, DoT will continue to strengthen communication and promotion of city services that are accessible online and through mobile devices. Additionally DoT will revamp CTV by providing an innovative studio for departments to communicate their message through public service announcements, rich programming and interviews.

## Technology

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- Continue to enhance the Green Spot website ([columbusgreenspot.org](http://columbusgreenspot.org)) and presence on the MyColumbus mobile app to encourage residents, businesses, and community groups to take steps to protect our environment.
- MyColumbus mobile application, released in 2011, puts city services at the fingertips of residents and visitors, bringing to life many of Mayor Michael Coleman's initiatives to improve our quality of life. In 2013, MyColumbus will continue to grow and expand, enhancing opportunities such as service offerings of the 311 module of the application, the Neighborhood Pride feature within the MyNeighborhood module, addition of alert functionality to alert citizens of such things as upcoming trash collection. The application uses many integrated technologies, such as GPS for location services, RSS for City News Feeds, and has an entire social media center providing access to Twitter, Facebook, and YouTube. This is in line with Mayor Coleman's goal to position Columbus as a city of the 21st century. This strategy encompasses four mayoral initiatives to help city residents and make Columbus the best city in the nation to live, work, and raise a family: My Neighborhood, Get Active, Get Green (Green Spot), and 311.

## Neighborhoods

- Continue upgrading the Accela "one-stop-shop" permitting center system. Upgrades will incorporate new tools and hardware that will integrate and build upon the city's geographical information system (GIS), the city's 311 system, and a common citywide telephone service system.
- My Neighborhood website and the mobile app will continue to be a focal point for delivering city information and services such as parks, police/fire stations, and schools. Future expansions include CIP data, snow clearing information and Neighborhood Pride information.

## Safety

- Complete project to upgrade several Police Division applications to newer server platforms, which will improve service delivery and reduce costs.
- Continue to work with the Department of Public Utilities (Distribution Maintenance & Permits) and Columbus Fire Division to enhance the Hydrants Inspection application. This endeavor will improve upon business process flow in order to properly maintain the city fire hydrants.
- Work with Public Safety on their Neighborhood Camera initiative. The system will be interconnected using the city's fiber optic cable network. Five neighborhoods have been brought online to date: Mt Vernon, Linden, Livingston, Weinland Park and Hilltop. In 2013, the department will continue to work with Public Safety to develop plans for extending fiber connectivity to police precincts in Phase II of the Neighborhood Camera initiative.
- Work with Public Safety to bridge voicemail systems. Bridging the two systems together will allow seamless communications between Public Safety and other city agencies.

- Work with the Public Safety Department to backup video from police vehicles for disaster recovery purposes.
- Work with the Department of Public Utilities – Division of Sewerage and Drainage in the replacement of their Pretreatment Information Management System to modernize processes and integrate with other Department of Public Utilities systems.

### **Economic Development**

- Continue to develop, expand, and implement portions of a citywide connectivity plan that will outline the most efficient means to connect city facilities for data exchange and telephone voice traffic. This includes researching and implementing wireless fiber optic broadband network technology and integrating it with the overall city network, where practical. The department will use the information from this plan to determine the extent to which connectivity can be used as an incentive for economic development. The city has expanded their fiber footprint by nearly 160 miles of fiber optic cable in three separate projects providing extended service areas around the city for economic development opportunities. The three projects are completed and DoT is in the process of interconnecting all three for contiguous connectivity across the city.

### **Education**

- Continue to develop the GetActiveColumbus.com website initiated by the Mayor's Office and developed with input from the Columbus Health and Recreation and Parks Departments. In 2012, the GetActive module of the MyColumbus mobile app reaped the benefits of several enhancement efforts such as the addition of Art Walks and the transition of Neighborhood Walks and Bike Trails from pdf's to interactive maps. These enhancements will continue into 2013 with additional data being added to the interactive maps as well as the addition of new walks.

### **Peak Performance**

- Continue work with customers on an enterprise work order management system. This system will provide a platform to unify various workflows of the Recreation and Parks, Public Service and Finance and Management Departments. The purpose is to improve the ability to document and dispatch work orders, reducing lead times, improving quality, eliminating duplicative paperwork and collecting the data needed for continuous process improvement.
- Complete phase one implementation of the new state-of-the-art Columbus Human Resource Information System (CHRIS).
- Continue to enhance the city's voice over internet protocol (VoIP) telephone system by implementing Unified Communications. Unified Communications offers a variety of benefits including: **Voice and Unified Messaging** – the ability to manage emails and voicemails from a single inbox; **Personal Communicator** – PC based phone provides the flexibility to work from any location while still providing the same functionality as a desk phone; **Mobility** – single business number and voicemail regardless of device; cost savings on cell phone minutes

used by utilizing the VoIP infrastructure; **Conferencing** – voice and video conferencing capabilities utilizing the VoIP infrastructure saves the city time and money while supporting the Mayor's Green Initiative.

- Continue to convert city telephone services to a voice over internet protocol (VoIP), utilizing the city's current data network infrastructure investment. This will provide the latest technological advancements and allow the city to dramatically reduce telephone line costs while providing enhanced telephony service. Telephone calls will travel over the city's data network rather than a phone company's network.
- Continue to leverage and enhance the city's voice over internet protocol (VoIP) system by providing fax over internet protocol (FoIP). FoIP benefits include: eliminating analog line, paper and toner costs which will also support the Mayor's green initiative.
- Continue to improve and mature the Executive Steering Committee (ESC) best practices. The ESC will be engaged in technology project portfolio management throughout the city and is instrumental in the preparation of the DoT project budgets.
- Continue to support the city's 311 customer service system which provides access to city services and information with the highest possible levels of customer service delivery via the phone, web or mobile app interface.
- Work will continue on finalizing hardware and software configurations at the second data center. Work will also focus on developing and testing procedures to reconstitute mission-critical systems and applications in the event the citywide data center is unavailable. This effort also contributes to the city's overall pandemic and business continuity planning.
- Finish the renovation of the data center facility HVAC system by replacing cooling units not replaced in 2012 and renovate parking lots as needed.
- In 2012, DoT kicked off another general fund computer replacement project that will continue in 2013. This project will improve the efficiencies of these agencies by replacing existing outdated and aged computer equipment with new hardware. This replaces approximately 500 systems with new energy efficient systems and related displays. This will improve both efficiency of the end users and will continue to improve the energy efficiency and consumption of electricity.
- Implement a mobile dispatching system that will enable the Department of Public Utilities to optimize service order assignments, assign them to technicians in the field, and capture field information for immediate use. This is expected to produce efficiency and productivity gains, and make the Department of Public Utilities more responsive to customers. The initial project targets approximately 60 field employees and 20 office employees. It may be expanded to include additional work units and workflows. The mobile dispatching system will interface with the current work order system in use, known as CUBS, as well as the city GIS system.
- Having completed the implementation of SecureWorks managed security services, DoT will fully leverage this provider's capabilities to deal with the ever-evolving threat landscape and reduce security risks to city assets.

- Continue enabling city agencies' ability to meet compliance with new and recurring regulatory requirements while transitioning to a converged Governance, Risk, and Compliance (GRC) model for integrated enterprise security risk management.
- Continue to expand GIS capabilities with a greater focus on assisting city agencies in integrating graphical information from the GIS central repository. This repository contains underlying geographic location information (e.g. street center lines, building and parcel locations) which is or will be utilized by many mission-critical applications such as the computer aided dispatch, 311 call center, the Accela “one-stop-shop” and MyColumbus.
- DoT will expand and enhance enterprise application service delivery by implementing Application Performance Monitoring software from one of the Gartner Magic Quadrant leaders. This software will help DoT monitor performance of critical systems, provide SLA metrics and compliance reporting and enable DoT to have better real time visibility of service interruptions and performance degradation, and allow for more proactive resolution.
- Continue the enterprise systems upgrade project to replace old mission-critical systems which are at end-of-life. These investments will improve system availability and efficiency. The major focus of the 2013 system upgrades will be the upgrade of older servers, and licensing for the Oracle and SQL private cloud platforms, which will help avoid the cost of expensive database servers in the future.
- In 2011, DoT began the replacement of our current help desk software with HP's IT Service Management (ITSM) software. This software tracks system availability and automates the ticketing and service response processes. This software is expected to be operational in 2012. In 2013, DoT will continue to refine and formalize service support processes, resulting in improved system availability and increased end-user satisfaction.
- During 2012, DoT completed a three phase implementation of HP's Application Performance Monitoring software (APM360). This project was an integral part of DoT's overarching ITSM initiative, which helps streamline and improve the delivery of IT services to our customers. In 2013, DoT will continue the implementation of the APM software to include additional critical applications; as well as expand the deployment of business process monitoring to additional city facilities. By doing so, this will provide enhanced real time visibility of service interruptions, performance degradation and allow for a more proactive response to identified issues. This initiative will also continue to provide valuable data for application and location performance, service level agreement metrics, and compliance reporting.
- Continue to improve and expand the capabilities of the Department of Public Utilities GIS dashboard by implementing improved functionality.
- In 2012, the DoT purchased a Citywide Enterprise Business Intelligence System (BI) which the Department of Public Utilities and Public Safety will use in their divisions. This software provides a more immediate response to the delivery of data analytics and reporting. This tool allows managers the ability to analyze data in many ways, giving them the ability to immediately respond to what is occurring and enable them to be proactive and make informed decisions in their

division and their customers. DoT will also work with other city departments to identify further opportunities for BI technology.

- In 2012, Columbus was named one of the most intelligent (Smart21) communities in the world by the Intelligent Community Forum (ICF). Columbus will compete again in 2013 for this prestigious award. DoT will play a leadership role, as was done in 2012, both strategically and tactically in continuing to build out the city's broadband infrastructure and ensuring that "the right information gets to the right people at the right time" through Columbus.gov, the city's mobile application and by supporting our internal customers. DoT continues to invest in and acquire the required skills and capabilities to make business intelligence, knowledge management and peak performance a sustainable success.

### **2013 Budget Notes**

- The Department of Technology purchases information systems hardware, software and related equipment and licenses on behalf of other city agencies. Funds for this purpose are budgeted in the Director's Office. In 2013, \$5.1 million is budgeted for these purchases. Of this total, \$2.3 million is budgeted in the general fund while the balance is allocated among various other funds. The additional responsibility of staffing the police communications area is the most significant change since 2012.
- The Information Services Division funds the cost of maintaining, supporting and licensing a large inventory of hardware, software, fiber and infrastructure for which DoT is responsible. A portion of the department's budget also funds debt service costs associated and rent payments for use of office space at 1111 East Broad Street. The costs borne by this division are billed back to the user divisions using an electronic billing model. As was the case in the past several years, all projected internal service charges to general fund agencies for technology services are budgeted in the Financial Management Division in 2013 in order to reduce the volatility of projections for the general fund. Internal service charges to other funds are billed back to each fund on a monthly basis.

## Budget and Programs Summary

DEPARTMENT FINANCIAL SUMMARY					
DIVISION SUMMARY	2010 Actual	2011 Actual	2012 Original Appropriation	2012 Estimated Expenditures	2013 Proposed
Technology - Administration	\$ 5,824,562	\$ 5,846,822	\$ 7,212,308	\$ 6,599,928	\$ 8,860,461
Information Services	20,510,647	21,221,351	23,120,549	22,511,851	24,418,991
<b>TOTAL</b>	<b>\$ 26,335,209</b>	<b>\$ 27,068,173</b>	<b>\$ 30,332,857</b>	<b>\$ 29,111,779</b>	<b>\$ 33,279,452</b>

<b>DIVISION SUMMARY BY OBJECT LEVEL ONE</b>					
<b>ADMINISTRATION INTERNAL SERVICES FUND</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Original Appropriation</b>	<b>2012 Estimated Expenditures</b>	<b>2013 Proposed</b>
Personnel	\$ 1,934,046	\$ 1,911,545	\$ 2,101,502	\$ 1,903,552	\$ 3,695,711
Materials & Supplies	678,116	1,222,810	821,098	650,552	957,718
Services	3,027,949	2,691,610	4,199,708	3,877,317	4,107,032
Other	29,237	-	-	-	-
Capital	141,786	20,857	90,000	168,507	100,000
Transfers	13,428	-	-	-	-
<b>TOTAL</b>	<b>\$ 5,824,562</b>	<b>\$ 5,846,822</b>	<b>\$ 7,212,308</b>	<b>\$ 6,599,928</b>	<b>\$ 8,860,461</b>

<b>DIVISION SUMMARY BY OBJECT LEVEL ONE</b>					
<b>INFORMATION SERVICES INTERNAL SERVICES FUND</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Original Appropriation</b>	<b>2012 Estimated Expenditures</b>	<b>2013 Proposed</b>
Personnel	\$ 12,027,171	\$ 12,311,825	\$ 12,858,720	\$ 12,424,863	\$ 13,192,513
Materials & Supplies	297,569	296,545	298,752	288,752	289,852
Services	4,709,105	4,716,225	5,409,035	5,301,191	5,698,127
Debt Principal	2,708,778	3,034,723	-	3,690,700	4,290,700
Other	6,679	7,027	-	-	-
Capital	96,017	115,757	71,000	71,000	71,000
Interest	665,328	739,249	4,483,042	735,345	876,799
<b>TOTAL</b>	<b>\$ 20,510,647</b>	<b>\$ 21,221,351</b>	<b>\$ 23,120,549</b>	<b>\$ 22,511,851</b>	<b>\$ 24,418,991</b>

DEPARTMENT SUMMARY BY FUND					
<b>FUND SUMMARY</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Original Appropriation</b>	<b>2012 Estimated Expenditures</b>	<b>2013 Proposed</b>
Information Services	\$ 26,335,209	\$ 27,068,173	\$ 30,332,857	\$ 29,111,779	\$ 33,279,452
<b>TOTAL</b>	<b>\$ 26,335,209</b>	<b>\$ 27,068,173</b>	<b>\$ 30,332,857</b>	<b>\$ 29,111,779</b>	<b>\$ 33,279,452</b>

DEPARTMENT PERSONNEL SUMMARY					
<b>DIVISION</b>	<b>FT/PT*</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Budgeted</b>	<b>2013 Budgeted</b>
Admin. Internal Service Fund	FT	15	16	17	34
	PT	1	1	1	1
Information Services	FT	116	112	121	121
	PT	5	5	5	5
<b>TOTAL</b>		<b>137</b>	<b>134</b>	<b>144</b>	<b>161</b>

\*FT=Full-Time PT=Part-Time

2013 Operating Budget  
Department of Technology

Financial History by Program

Personnel by Program

Program	Mission	Financial History by Program				Personnel by Program			
		2010 Budget	2011 Budget	2012 Budget	2013 Proposed	2010 FTEs	2011 FTEs	2012 FTEs	2013 FTEs
Technology Administration	To provide leadership and administrative support for the department by directing business office activities, including fiscal support, contract management, personnel and customer relations and to provide project management for enterprise-wide applications.	\$ 8,560,591	\$ 7,203,734	\$ 7,212,308	\$ 8,860,461	16	17	17	34
Information Services Administration	To provide leadership and administrative support for Information Services Division. Responsible for fiscal support services for the division including cable fund debt service, billing and revenue analysis, encumbrances, payments, payroll and human resources.	\$ 4,877,982	\$ 5,434,476	\$ 6,107,966	\$ 6,963,352	0	0	0	0
Desktop Support / End User	To deploy and maintain the city's desktop computer systems in a manner that will ensure high availability to city employees.	\$ 1,383,886	\$ 1,579,635	\$ 1,652,263	\$ 1,642,187	15	17	17	17

**2013 Operating Budget  
Department of Technology**

Financial History by Program

Personnel by Program

Program	Mission	Financial History by Program				Personnel by Program			
		2010 Budget	2011 Budget	2012 Budget	2013 Proposed	2010 FTEs	2011 FTEs	2012 FTEs	2013 FTEs
Help Desk	To provide a single point of contact for users to obtain solutions to technology needs, questions, and challenges.	\$ 712,574	\$ 604,227	\$ 596,786	\$ 633,295	8	6	6	6
Systems Administration	To design, implement and maintain the city's core information technology data processing server infrastructure, and maintenance and support for the city's enterprise wide software licenses including Oracle services.	\$ 1,168,346	\$ 1,315,591	\$ 1,405,959	\$ 1,314,372	11	11	12	11
Applications Programming	To develop and/or maintain various information technology systems and applications that facilitate business practices throughout the city.	\$ 2,520,169	\$ 2,372,919	\$ 2,399,155	\$ 2,636,875	25	23	23	23
Government Television Channel	To coordinate contracts for video programming services, prepare scripts and provide editing services for production programs.	\$ 552,296	\$ 657,896	\$ 745,739	\$ 750,596	4	4	7	8

Technology

2013 Operating Budget  
Department of Technology

Financial History by Program

Personnel by Program

Program	Mission	Financial History by Program				Personnel by Program			
		2010 Budget	2011 Budget	2012 Budget	2013 Proposed	2010 FTEs	2011 FTEs	2012 FTEs	2013 FTEs
Network	To coordinate the design, installation, maintenance and repair of the city's metronet infrastructure as well as to maintain inside building cabling and design and install city owned fiber optic cabling plant, provide preventive maintenance/repair of outside fiber optic and coaxial cable plant.	\$ 1,563,194	\$ 1,516,134	\$ 1,738,586	\$ 1,723,029	8	7	9	9
Security	To ensure the availability, integrity, and confidentiality of the city's information systems, data network and externally hosted web sites and to help departments achieve their business goals through provision of risk mitigation services and security education.	\$ 814,632	\$ 689,346	\$ 439,654	\$ 456,478	8	7	3	3
Account Management	To provide information technology account management services to customer agencies.	\$ 630,082	\$ 669,815	\$ 688,512	\$ 596,876	6	6	6	6

**2013 Operating Budget  
Department of Technology**

Financial History by Program

Personnel by Program

Program	Mission	Financial History by Program				Personnel by Program			
		2010 Budget	2011 Budget	2012 Budget	2013 Proposed	2010 FTEs	2011 FTEs	2012 FTEs	2013 FTEs
Computer Operations	To provide the services of data and application storage on enterprise disk system and magnetic tapes, microfiche and printing of reports, mailing and CPU usage calculation.	\$ 1,288,620	\$ 1,218,309	\$ 930,597	\$ 1,013,693	13	12	11	12
Database	To provide database administration to support the functions of the city's software applications.	\$ 779,954	\$ 843,484	\$ 864,302	\$ 875,509	8	8	7	7
Telephone Services	To provide telephone services, training and consulting to city agencies.	\$ 377,087	\$ 418,720	\$ 309,160	\$ 351,220	3	4	4	4
Project Management	To provide IT services to project sponsors to enable them to receive new or enhanced technology to satisfy their business requirements.	\$ 1,039,802	\$ 1,080,269	\$ 956,214	\$ 970,613	9	9	8	8
Contracts	To provide holding area for license fees and software maintenance agreements.	\$ 3,136,650	\$ 3,236,455	\$ 3,004,491	\$ 3,323,983	0	0	0	0
Architecture	To establish information technology standards for the city.	\$ 230,487	\$ 670,609	\$ 948,815	\$ 868,563	2	6	8	7

2013 Operating Budget  
Department of Technology

Financial History by Program

Personnel by Program

Program	Mission	<u>Financial History by Program</u>				<u>Personnel by Program</u>			
		2010 Budget	2011 Budget	2012 Budget	2013 Proposed	2010 FTEs	2011 FTEs	2012 FTEs	2013 FTEs
Arlingate Data Center	To provide maintenance services to the city's data center facility.	\$ 329,110	\$ 345,160	\$ 332,350	\$ 298,350	0	0	0	0
		\$ 29,965,462	\$ 29,856,779	\$ 30,332,857	\$ 33,279,452	136	137	138	155