

## **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, including media services to city agencies, providing desktop and service desk support, operating the government access television channel (CTV), 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 2011**

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. In so doing, 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 upgrade the city's internet services (including social media) to provide residents with increased access to local government services and information. Additionally, the department will continue to extend the ability of city departments to reach their customers through new media in a secure, effective, and efficient manner by implementing enhanced web security and measuring tools.
- Research, plan, design and begin to implement a business intelligence initiative.
- Memorialize the Social Media Group to maintain standards and govern the use of social media.
- Expand the use of video on the internet.

## Technology

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- Continue to enhance the Green Spot website (columbusgreenspot.org) to encourage residents, businesses, and community groups to take steps to protect our environment.
- Complete phase two of the GetActive.com website.

## Neighborhoods

- Continue to upgrade 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 that enables our customers to perform online business functions that are not available today.
- Continue to work with the Development Department to create a comprehensive, interactive computer database that will track and provide information about city-acquired abandoned properties. These new databases will create better opportunities for these lots and/or structures to be acquired and put into productive use. The existing Home Again application will be expanded to track new projects associated with the Neighborhood Stabilization Program (NSP). In addition, the My Neighborhoods project will be enhanced to make the application more user friendly and informative for the public.

## Safety

- Continue to work with the Public Safety Department to establish a new and improved computer aided dispatch (CAD)/911 system.
- Continue to work with the Public Safety Department to develop a plan to upgrade several Police Division applications to newer server platforms, which will improve service delivery and reduce costs.
- Continue to work with the Public Utilities Department and the Fire Division to implement phase two of the Hydrants Inspection project. This endeavor is to improve upon bridging gaps in their business process to properly maintain the city fire hydrants.
- Work with the Public Safety Department on the Neighborhood Camera initiative. The system will be interconnected using the city’s fiber optic cable network. The department will develop plans for extending fiber connectivity to police precincts as a part of this initiative.

## Economic Development

- Continue to develop, expand, and implement portions of the 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. Information from this plan will determine the extent to which connectivity can be used as an incentive for economic development. The city is currently expanding its fiber footprint by nearly 160 miles of fiber optic cable in three separate projects in an effort to

provide extended services areas around the city for economic development opportunities.

### **Education**

- Continue to develop the GetActiveColumbus.com website initiated by the Mayor's Office and developed with input from Columbus Public Health and the Recreation and Parks Department.

### **Peak Performance**

- Work with customers to acquire an enterprise work order management system to provide a platform to unify the various workflows of the Recreation and Parks, Public Service and Finance (Facilities Management) 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, which includes go-live, and begin phase two implementation of the new state-of-the-art Columbus Human Resource Information System (CHRIS).
- 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 enhance the city's VoIP telephone system by implementing Unified Communications. Unified Communications offers a variety of benefits which include: 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 will save the city time and money while supporting the Mayor's Get Green Initiative.
- Continue to support customer service call centers utilizing the Interactive Voice Response (IVR) phone system and enhance customer communication by implementing a dialer application for automatic emergency and routine communications. The dialer application will be available to all city agencies for customizable use.
- Continue improving internal operations through the adoption and refinement of IT process best practices by taking a service oriented approach to providing customer value. This involves use of a service catalog, service portfolio management and service level agreements with all departments utilizing DoT's services.
- Work with the Auditor's Office to successfully upgrade citywide financial systems.

- Continue to build the infrastructure of the information technology disaster recovery center to provide the most effective environment to reconstitute mission critical systems and applications in the event the citywide data center is compromised. This effort also contributes to the city's overall pandemic and business continuity planning. In 2011, the department will put storage, backup and recovery, and virtualization infrastructure into operation at the disaster recovery center and begin to shift focus from infrastructure development to service continuity and recovery planning.
- Finish the renovation of the data center facility HVAC system and renovate parking lots as needed.
- Create a strategic plan that converges information security and DOT physical security, drives best-practice application of security processes, management, and technology, and results in cost-effective capital investments, and operational improvements. Establish the governance framework to support this plan and the metrics to measure its implementation.
- Continue to build a fully redundant infrastructure across the city's two data centers to provide the most effective and efficient means for ensuring the availability of mission critical systems and applications, in support of the city's overall contingency and continuity of operations plans.
- 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 computer aided dispatch, 311 call center, Accela "one-stop-shop" and WASIMS.
- Expand utilization of Insight ETE (an information technology business process tool), which currently tracks efficiency of key computer applications such as 311, WASIMS, Accela, EMBERS, and GIS to improve productivity and efficiency.
- Continue implementation of mobile technology for the Public Utilities Department through the use of mobile dispatching and a GPS system, which disseminates and provides field employees immediate access to crucial information.
- 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 2011 system upgrades will be storage, backup and recovery infrastructure at the main data center and the upgrade of the 311 infrastructure. The department continues to look to virtualization as a vehicle for efficiency gains and will evaluate the benefits of virtual desktop infrastructure.
- Begin providing upgraded media services projects including upgrade of the media services television playback facility to include enhancements to the automation system and the city's internet video capability.
- Complete transition of programming and scheduling activities for the Educational Access channel to Columbus City Schools, creating efficiencies within the media services PEG access operation.

- Continue to work with the Civil Service Commission and the Human Resources Department to establish “best practices” job families with classifications in logical career sequences and which contain Civil Service approved classifications established by Council and Mayoral action in all disciplines. These classifications will also have pay ranges competitive in the marketplace allowing the city to compete for the critical information technology skills it requires to maintain complex information technology infrastructures.
- Continue to improve and expand the capabilities of the Department of Public Utilities’ GIS Dashboard by implementing improved and increasing integration with Oracle EAM. The application will be improved by implementing new enhancements of the Enterprise ArcGIS software platform.
- Continue to improve the Department of Public Utilities’ Valve Editing application, by implementing new enhancements of the enterprise ArcGIS Software platform.
- Continue to expand the GIS data store by implementing new orthophotography mosaics which enhance the analytical capabilities of the GIS users.
- Continue to work with the Public Service Department to implement an improved 311 mapping system to incorporate new developments in Rich Internet Application development.

## **2011 Budget Notes**

- The department's recommended budget totals \$29,856,779 and includes funding for 17 full-time and 1 part-time staff in the Technology Director's Office and 120 full-time positions and 5 part-time positions in the Information Services Division (ISD). Unlike prior years, the Director's Office now includes not only administrative staff, but fiscal and human resources support staff as well.
- 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 budget. In 2011, \$5.1 million is budgeted for these purchases. Of this total, \$754,307 is budgeted in the general fund while the balance of \$4.3 million is allocated among various other funds.
- A nominal amount is also budgeted in the Director's Office, and billed to non-general fund agencies, for debt service for past improvements to the city's cable television infrastructure. The general fund portion of this debt is being serviced by the special income tax fund.
- Much of the department's budget goes towards maintaining, supporting and licensing a large inventory of hardware, software, fiber and infrastructure for which it is responsible. In 2011, \$3.1 million is budgeted for hardware and software maintenance and licenses.
- A portion of the department's budget also funds debt service costs associated with its capital improvement plan. The \$3.8 million in debt service is comprised of \$3 million in principal payments and \$816,767 in interest. Recent significant capital improvement projects include the phasing-in of the VoIP telephone system and the connectivity project.

## Budget and Program Summary

### DEPARTMENT FINANCIAL SUMMARY

<b>DIVISION SUMMARY</b>	<b>2008 Actual</b>	<b>2009 Actual</b>	<b>2010 Original Appropriation</b>	<b>2010 Estimated Expenditures</b>	<b>2011 Proposed</b>
Technology - Administration	\$ 5,522,360	\$ 5,164,574	\$ 8,560,591	\$ 6,034,298	\$ 7,203,734
Information Services	21,727,451	19,758,241	21,404,871	20,447,624	22,653,045
<b>TOTAL</b>	<b>\$ 27,249,811</b>	<b>\$ 24,922,815</b>	<b>\$ 29,965,462</b>	<b>\$ 26,481,922</b>	<b>\$ 29,856,779</b>

Figures for the Information Services Division do not include bond expenditures.

<b>DIVISION SUMMARY BY CHARACTER</b>					
<b>ADMINISTRATION INTERNAL SERVICE FUND</b>	<b>2008 Actual</b>	<b>2009 Actual</b>	<b>2010 Original Appropriation</b>	<b>2010 Estimated Expenditures</b>	<b>2011 Proposed</b>
Personnel	\$ 1,357,649	\$ 1,740,658	\$ 1,906,689	\$ 1,956,310	\$ 2,075,965
Materials & Supplies	983,258	773,073	1,222,869	873,288	1,171,129
Services	3,141,428	2,503,567	4,753,233	3,052,074	3,899,990
Other	-	83,760	-	-	-
Capital	40,025	30,745	677,800	152,626	56,650
Transfers	-	32,771	-	-	-
<b>TOTAL</b>	<b>\$ 5,522,360</b>	<b>\$ 5,164,574</b>	<b>\$ 8,560,591</b>	<b>\$ 6,034,298</b>	<b>\$ 7,203,734</b>
<b>INFORMATION SERVICES INTERNAL SERVICE FUND</b>	<b>2008 Actual</b>	<b>2009 Actual</b>	<b>2010 Original Appropriation</b>	<b>2010 Estimated Expenditures</b>	<b>2011 Proposed</b>
Personnel	\$ 12,200,195	\$ 11,493,263	\$ 12,237,907	\$ 12,064,997	\$ 12,737,863
Materials & Supplies	724,801	231,383	370,930	300,930	378,349
Services	4,888,024	4,410,828	5,319,247	4,624,018	5,542,843
Principal	2,308,011	2,881,138	2,708,778	2,708,778	3,034,723
Other	-	9,908	-	-	-
Capital	936,830	86,665	96,500	96,500	142,500
Interest	669,590	645,056	671,509	652,401	816,767
<b>TOTAL</b>	<b>\$ 21,727,451</b>	<b>\$ 19,758,241</b>	<b>\$ 21,404,871</b>	<b>\$ 20,447,624</b>	<b>\$ 22,653,045</b>

DEPARTMENT SUMMARY BY FUND					
<b>FUND SUMMARY</b>	<b>2008 Actual</b>	<b>2009 Actual</b>	<b>2010 Original Appropriation</b>	<b>2010 Estimated Expenditures</b>	<b>2011 Proposed</b>
Information Services	\$ 27,249,811	\$ 24,922,815	\$ 29,965,462	\$ 26,481,922	\$ 29,856,779
<b>TOTAL</b>	<b>\$ 27,249,811</b>	<b>\$ 24,922,815</b>	<b>\$ 29,965,462</b>	<b>\$ 26,481,922</b>	<b>\$ 29,856,779</b>

DEPARTMENT PERSONNEL SUMMARY					
<b>DIVISION</b>	<b>FT/PT*</b>	<b>2008 Actual</b>	<b>2009 Actual</b>	<b>2010 Budgeted</b>	<b>2011 Budgeted</b>
Admin IS Fund	FT	10	16	16	17
	PT	1	1	1	1
Information Services	FT	128	117	120	120
	PT	4	4	3	5
<b>TOTAL</b>		<b>143</b>	<b>138</b>	<b>140</b>	<b>143</b>

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

2011 Operating Budget  
Department of Technology

Financial History by Program

Personnel by Program

Program	Mission	Financial History by Program				Personnel by Program			
		2008 Budget	2009 Budget	2010 Budget	2011 Proposed	2008 FTEs	2009 FTEs	2010 FTEs	2011 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.	\$ 1,445,418	\$ 8,481,749	\$ 8,560,591	\$ 7,203,734	10	20	16	17
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.	\$ 5,569,810	\$ 5,208,199	\$ 4,877,982	\$ 5,434,476	12	0	0	0
Citywide Technology Purchases	Funding for customer-specific technology-related supplies, equipment and services.	\$ 5,137,700	\$ -	\$ -	\$ -	0	0	0	0

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Financial History by Program

Personnel by Program

Program	Mission	Financial History by Program				Personnel by Program			
		2008 Budget	2009 Budget	2010 Budget	2011 Proposed	2008 FTEs	2009 FTEs	2010 FTEs	2011 FTEs
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.	\$ 2,803,669	\$ 1,515,776	\$ 1,383,886	\$ 1,579,635	24	15	15	17
Help Desk	To provide a single point of contact for users to obtain solutions to technology needs, questions, and challenges.	\$ 673,130	\$ 882,116	\$ 712,574	\$ 604,227	8	10	8	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.	\$ 1,480,150	\$ 1,130,134	\$ 1,168,346	\$ 1,315,591	11	10	11	11
Applications Programming	To develop and/or maintain various information technology systems and applications that facilitate business practices throughout the city.	\$ 3,632,082	\$ 2,763,197	\$ 2,520,169	\$ 2,372,919	32	27	25	23

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Financial History by Program

Personnel by Program

Program	Mission	Financial History by Program				Personnel by Program			
		2008 Budget	2009 Budget	2010 Budget	2011 Proposed	2008 FTEs	2009 FTEs	2010 FTEs	2011 FTEs
Government Television Channel	To coordinate contracts for video programming services, prepare scripts and provide editing services for production programs.	\$ 743,876	\$ 522,287	\$ 552,296	\$ 657,896	4	3	4	4
Interconnect	To design and install city-owned fiber optic cabling plant, provide preventive maintenance and repair of outside fiber optic and coaxial cable plant, and to design, install and maintain inside building cabling.	\$ 790,816	\$ -	\$ -	\$ -	5	0	0	0
Metronet	To coordinate the design, installation, maintenance and repair of the city's metronet infrastructure.	\$ 1,201,539	\$ -	\$ -	\$ -	6	0	0	0
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.	\$ -	\$ 1,861,590	\$ 1,563,194	\$ 1,516,134	0	9	8	7

**2011 Operating Budget  
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Financial History by Program

Personnel by Program

Program	Mission	Financial History by Program				Personnel by Program			
		2008 Budget	2009 Budget	2010 Budget	2011 Proposed	2008 FTEs	2009 FTEs	2010 FTEs	2011 FTEs
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.	\$ 260,933	\$ 820,497	\$ 814,632	\$ 689,346	2	8	8	7
Account Management	To provide information technology account management services to customer agencies.	\$ 585,369	\$ 543,606	\$ 630,082	\$ 669,815	5	5	6	6
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.	\$ 2,407,232	\$ 2,184,305	\$ 1,288,620	\$ 1,218,309	0	12	13	12
311 Support	To maintain systems and applications for the city's 311 call center.	\$ 116,849	\$ -	\$ -	\$ -	2	0	0	0

Technology

2011 Operating Budget  
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Financial History by Program

Personnel by Program

Program	Mission	Financial History by Program				Personnel by Program			
		2008 Budget	2009 Budget	2010 Budget	2011 Proposed	2008 FTEs	2009 FTEs	2010 FTEs	2011 FTEs
Web Support	To maintain and support citywide internet and intranet web applications, and provide web site links for citizens and departments.	\$ 932,083	\$ -	\$ -	\$ -	5	0	0	0
Database	To provide database administration to support the functions of the city's software applications.	\$ -	\$ 1,034,259	\$ 779,954	\$ 843,484	3	9	8	8
Telephone Services	To provide telephone services, training and consulting to city agencies.	\$ 147,431	\$ 230,283	\$ 377,087	\$ 418,720	2	3	3	3
GIS Systems	To provide project management and database administration for the citywide GIS project.	\$ 675,357	\$ -	\$ -	\$ -	3	0	0	0
Project Management	To provide IT services to project sponsors to enable them to receive new or enhanced technology to satisfy their business requirements.	\$ -	\$ 1,006,347	\$ 1,039,802	\$ 1,080,269	0	9	9	9
Contracts	To provide holding area for license fees and software maintenance agreements.	\$ -	\$ 3,288,632	\$ 3,136,650	\$ 3,236,455	0	0	0	0

2011 Operating Budget  
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Financial History by Program

Personnel by Program

Program	Mission	<u>Financial History by Program</u>				<u>Personnel by Program</u>			
		2008 Budget	2009 Budget	2010 Budget	2011 Proposed	2008 FTEs	2009 FTEs	2010 FTEs	2011 FTEs
Architecture	To establish information technology standards for the city.	\$ -	\$ 281,842	\$ 230,487	\$ 670,609	0	2	2	6
Arlingate Data Center	To provide maintenance services to the city's data center facility.	\$ 466,250	\$ 323,750	\$ 329,110	\$ 345,160	0	0	0	0
		\$ 29,069,694	\$ 32,078,569	\$ 29,965,462	\$ 29,856,779	134	142	136	136

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