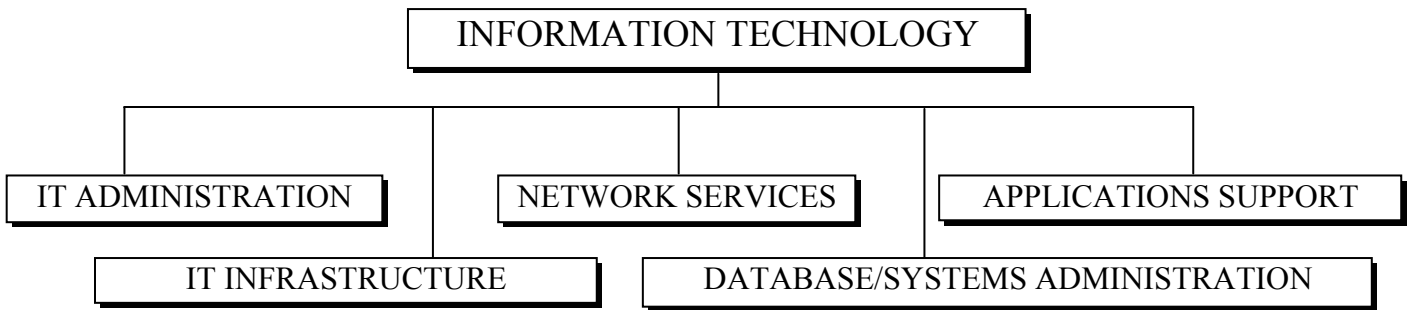
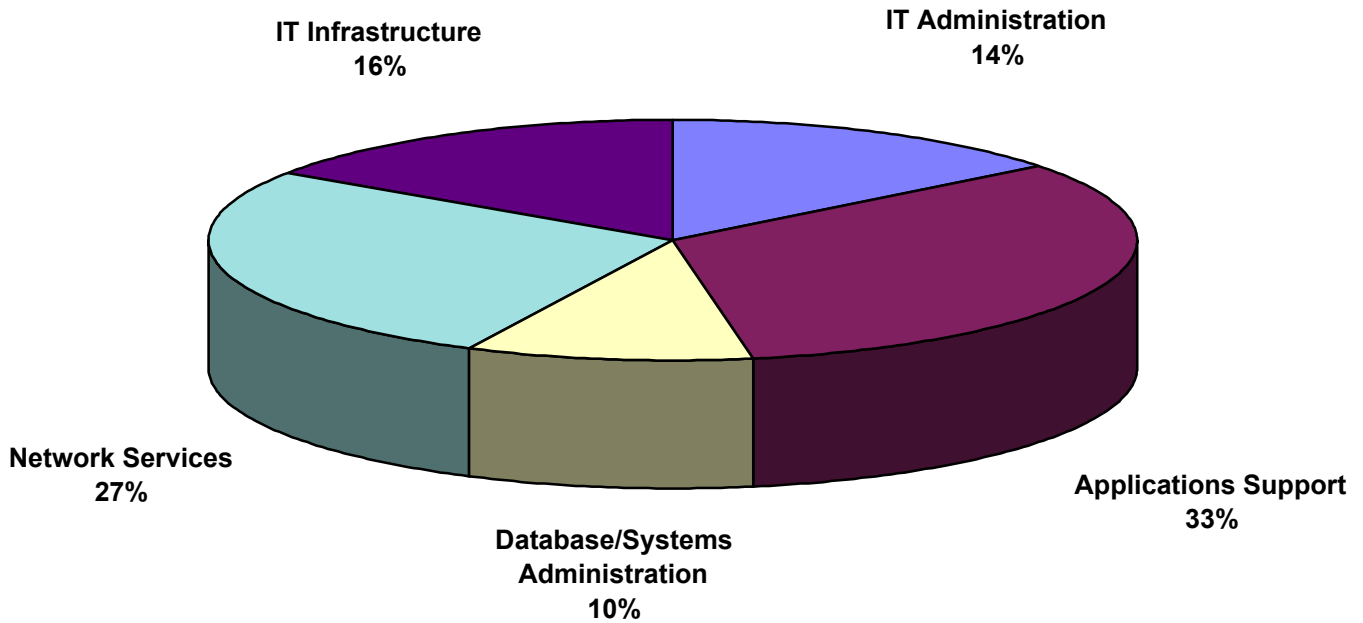


# INFORMATION TECHNOLOGY



**2006 BUDGET**  
**\$4,383,300**



**2006-07 APPROVED BUDGET  
INFORMATION TECHNOLOGY**

	<b>2004 ACTUAL</b>	<b>2005 APPROVED</b>	<b>2006 APPROVED</b>	<b>2007 PROPOSED</b>
<b><u>BUDGET BY PROGRAM</u></b>				
IT ADMINISTRATION				
Administration - IT	\$ 348,388	\$ 485,176	\$ 628,111	\$ 639,250
IT Training Provided	<u>2,349</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	350,736	485,176	628,111	639,250
IT APPLICATIONS				
Applications Support	1,403,190	1,492,042	1,442,836	1,465,580
Public Safety Applications	<u>182,020</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	1,585,209	1,492,042	1,442,836	1,465,580
DATABASE/SYSTEM ADMINISTRATION				
Operations/System Administration	<u>394,492</u>	<u>416,005</u>	<u>434,727</u>	<u>441,454</u>
TOTAL	394,492	416,005	434,727	441,454
IT MICROCOMPUTER SUPPORT				
Microcomputer/LAN Support	<u>1,316,289</u>	<u>1,152,001</u>	<u>1,192,626</u>	<u>1,210,945</u>
TOTAL	1,316,289	1,152,001	1,192,626	1,210,945
IT INFRASTRUCTURE				
Computer Replacement	581,250	581,250	590,000	601,800
IT Technology Funds	0	0	50,000	51,000
Telecommunications Fund	<u>44,000</u>	<u>44,000</u>	<u>45,000</u>	<u>45,900</u>
TOTAL	625,250	625,250	685,000	698,700
IT PROJECTS				
IT Projects - Applications	36,059	0	0	0
IT Projects - Network Services	<u>41,358</u>	<u>0</u>	<u>0</u>	<u>0</u>
	77,417	0	0	0
TOTAL	<u>4,349,393</u>	<u>4,170,474</u>	<u>4,383,300</u>	<u>4,455,928</u>
<b><u>BUDGET BY CATEGORY</u></b>				
Personnel Expenses	\$ 2,948,592	\$ 2,861,478	\$ 3,007,462	\$ 3,052,574
Operating Expenses	516,344	352,908	414,818	423,114
Interdepartmental Charges	839,092	742,032	750,782	765,798
Capital	<u>45,365</u>	<u>214,058</u>	<u>210,238</u>	<u>214,443</u>
TOTAL	<u>\$ 4,349,393</u>	<u>\$ 4,170,475</u>	<u>\$ 4,383,300</u>	<u>\$ 4,455,928</u>
<b><u>BUDGET BY FUND</u></b>				
General	\$ 4,349,393	\$ 4,170,475	\$ 4,383,300	\$ 4,455,928
TOTAL	<u>\$ 4,349,393</u>	<u>\$ 4,170,475</u>	<u>\$ 4,383,300</u>	<u>\$ 4,455,928</u>
<b><u>AUTHORIZED FTE's</u></b>				
Standard FTE's	<u>35.50</u>	<u>32.75</u>	<u>32.75</u>	<u>32.75</u>
TOTAL	<u>35.50</u>	<u>32.75</u>	<u>32.75</u>	<u>32.75</u>

**2006-07 BUDGET  
INFORMATION TECHNOLOGY DEPARTMENT**

**MISSION STATEMENT**

We leverage technology to improve city services.

**VISION STATEMENT**

The City of Boulder's vision is to use information technology to increase the capacity of the organization by improving Service Delivery, supporting Policy Development, and enabling Information Access. Please see the city's Strategic Technology Plan, May 2004, for additional information.

**BUSINESS PLAN NARRATIVE**

In developing the IT Department's budget for 2006-07, we focused on ensuring that we can accomplish our mission in a fiscally constrained environment without significantly compromising our long term strategies and goals. Since the 2002 budget cycle, the annual appropriation to the total IT budget (operating, personnel and internal services funds) has been reduced 25.8%, which is \$1,076,837 and 3.75 FTE.

However, as a result of the city wide reductions, the IT Department has witnessed an increased demand for IT services. At an increasing rate, city departments are turning to technology to maintain core services with reduced budgets and staff. Departments want to better leverage automation and web technologies, and are asking for quicker turnaround in IT development of these services. In addition to these direct services, IT must also continue to be proactive in implementing industry standard "best practices" for the enterprise. Examples include working collaboratively with department management, establishing policy and priorities, ensuring long term strategies with an enterprise focus, maintaining standards with flexibility, and staying current with the rapid advancement of technology and security risks.

To meet these service expectations with our reduced staffing and funding, IT management has focused on reinvesting internal cost savings and staff efficiencies within IT. Over the past few years, the IT Department has established policies and practices for hardware and software procurement, network and workstation setup standards, end user (Help Desk) support, service levels, and security procedures. Our objective has been to make IT as efficient as possible, reducing internal costs of service, while maximizing the value to the city and its citizens. We then reinvest our savings to other internal productivity improvement and cost savings projects. This approach has proven successful in that IT has attained industry standard best practices for significant portions of our services infrastructure without additional resources. We have not requested additional staff or funding appropriations from the general fund since Geographic Information Systems FTEs were added in 2001.

Our next step in leveraging this internal reinvestment strategy is to focus on software and application services. This includes increased accountability for project commitments, creating enterprise web services, developing hub and spoke architectures, and using open source software when it makes business sense. This process will be phased in over the next 24 to 36 months with the bulk of the core changes initiated during the 2006 budget year. This renewed accountability of resources, labor budget, and schedule will ensure that the city receives maximum benefit from its IT investments. Though we do anticipate the need in future budget cycles for additional funding in order to keep up with the insatiable demand for IT services, we will continue to use our fiscally constrained internal reinvestment strategy for the 2006-07 budget cycle.

While meeting this fiscally constrained strategy, we must also manage one of the most challenging aspects of technology... constant change. Using sound business management techniques, we routinely review several key areas of a project request to ensure that technology will solve the business challenge and savings will be realized. Savings are then reallocated within IT (for internal projects) or to the city department or fund (for department or enterprise projects) to fund other projects or areas needing improvement. This long term approach allows us to repeatedly leverage our limited funds, meet an ever changing environment, and uphold service expectations by city departments.

Examples of projects that have resulted in internal IT Department savings include aggressive contract renegotiations, upholding technology standards, converting expensive software to open source (low or no cost) options, implementing remote software management tools, investing in security efforts to reduce the impact of spam and viruses, and standardizing setup of hardware devices. Enterprise examples include citywide imaging, server-based computing, system integration and web based tools and services. Overhead costs have been reduced by hundreds of thousands of dollars and several thousand hours of IT and city staff time has been saved.

## **GUIDING PRINCIPLES AND/OR INVESTMENT STRATEGY**

The following points embrace the long term strategic direction of the IT Department, support our mission and follow IT industry best practices:

- Align IT services with the current and future needs of the city organization and its customers,
- Improve the quality of IT services delivered to the organization, and
- Reduce the long term costs of IT services

Based on this, the following guiding principles have been used to prioritize the IT Department 2006-07 budget:

- 1). Maintenance and support of existing systems (essential):** Approximately 90% of the total proposed IT budget and 87% of our FTE hours. These are critical services that guarantee existing systems function and perform properly. This includes maintenance of the network and server infrastructure, software applications, databases, and workstations; Help Desk services for customer support; data backup and recovery; business continuity planning and

disaster recovery; and security. Essential services also include technology asset management, centralized purchasing, planning, quality control, IT/client relationships, and staff training and development. A portion of our essential work includes application modifications in order to meet changing requirements, such a new council directive or changes in the law, city charter or codes.

- 2). **Improvements of Systems (desirable)**: Approximately 8% of the total proposed IT budget and 10% of our FTE hours. These services are performed if any improvements to existing software applications are needed based on changing business needs. If an existing application no longer meets the business needs of the city or its departments, the application must be changed or replaced. These services ensure that the city stays current in its use of technology, therefore avoiding costly major replacements of out dated technology. Some examples of major upgrades to existing systems include the transition from the mainframe environment to the client-server and web technology used today. For example, when the mainframe was replaced in the late 1990's, every system on it had to be converted to work in the new environment. This multi-year conversion project was costly, yet provided significant cost savings, a strong return on investment, eliminated potential Y2K issues, and provided city employees and departments with enhanced flexibility.
  
- 3). **Implement New Systems (discretionary)**: Approximately 2% of the total proposed IT budget and 3% of our FTE hours. These are a portion of the projects that have been requested by or are specifically designed for City departments. These services or elements do not exist in the current environment. These projects are new investments in technology to improve services, reduce overhead, and save staff time. Expected financial returns are documented and approved prior to implementing the project. Even still, a portion of these projects can be postponed in the short term without significant impact. As the city's economy recovers and discretionary projects are identified, these project investments must occur to continue to advance the city's use of technology.

## **CITY COUNCIL GOALS**

The IT Department supports several of the city council goals through maintenance and support of the city's technology environment and implementing projects.

### **Transportation**

#### **Network and Telecom Connectivity**

IT supports a robust network infrastructure that connects all city departments and staff via email and other electronic communications. This, in addition to conference calling, helps reduce the need for city staff to travel across the city to various meetings.

#### **Nexus Project (a.k.a. server based computing)**

One key aspect of this project is that it provides nearly all city computing services over the internet. A city employee can access all their computing resources and tools from their home computer, which needs only an internet connection. No complex software install or

configuration is needed. This environment encourages employees to work from home, therefore reducing traffic congestion and related environmental impacts. Using this technology, it's possible to create a more aggressive telecommuting policy that supports certain city jobs working nearly full time at home.

### **Bike to Work application**

In collaboration with GO Boulder, IT developed an application to track all registrations for Bike to Work Day. This application was then used by the Denver Regional Council of Government (DRCOG) for supporting the Denver region on Bike to Work Day.

### **Internet Applications and Services**

We are continuing to enhance the City's Web site to provide more interactive and transactional services to the public. In addition to signing up and paying for Parks and Recreation classes online and obtaining a variety of permits from Planning and Development Services, new services that will soon be available include payment of parking tickets and utility bills. This continues to help reduce the need for vehicle trips to City offices.

## **Environmental Sustainability**

### **Use of Web technology to extend workstation life**

Shifting away from client/server to Web based technologies will extend the life of our existing workstation inventory. This is due in large part to the reduced memory demands of the web. If a workstation can get to a browser, the application will run. It is far less costly to upgrade servers than workstations.

In addition to web technologies, we are also pursuing several other projects that are focused on extending the useful life of the city's workstations. This will help reduce the city's annual volume of expired equipment and technology waste stream. We are also continuing our effort of selling retired computer equipment to Action Computers. They are a Denver area EPA certified technology reseller/recycler.

### **Energy Efficient Purchasing**

We are continuing the effort of purchasing computer equipment and LCD monitors with the ENERGY STAR rating. This saves energy consumed by the equipment, as well as reducing the heat output thus helping to lower a building's HVAC demands.

### **Imaging Project, Phase 2**

Phase 2 of the Imaging Project is focused on deploying use of the Imaging System to the all city departments. This not only continues to reduce the city's consumption of paper, but also helps to streamline business practices and help city staff more easily find city documents and information.

## **Economic Sustainability**

### **Shift toward Open Source software**

The City's shift toward Open Source software lowers the IT costs of operations while allowing greater control and flexibility (we own the source code). Recent examples in IT's move toward Open Source include phasing out WebSphere (web server platform) in favor of Apache/Tomcat. Other Open Source tools that we are adopting, which include Eclipse (web development tool), Firefox (web browser) and Totos (time management tool) bring significant value to the city.

### **Integration**

In an effort to bring efficient services to the City, we are starting a new integration strategy based on a hub and spoke model. This simplified approach will enable applications to share data quickly, thus allowing IT to easily create new links between our various databases. For example, our joint efforts with Boulder County on address standards and a unified dataset will provide the link point for many application integrations.

### **Imaging**

Expanding use of the imaging application will allow the city to be in control of one of its most important assets, Information. In the past, finding specific information on paper documents has been both too difficult and time intensive, or no one knew where the information existed. The imaging application combined with our new search tool "Bougle" will dramatically reduce the labor costs in finding and retrieving documents.

### **Measuring Software infrastructure**

Software ages and eventually needs to be replaced (recently shown with our utility billing software). IT is launching an effort to determine the useful remaining life of all existing software applications in use at the City. Our goal is to establish a "Software replacement fund" to avoid costly surprises when applications reach end-of-life and can no longer be supported.

### **Accountability**

We are beginning the processes to bring accountability to applications services through the use of "Best practices", service request, project time tracking, time allocated enterprise contracts and priority listings. Through monthly client meetings with departments we will prioritize their needs in an effort to bring higher and timelier value to the organization.

### **Revenue Systems**

IT supports several key systems that bill, receive, track, and manage the City's revenues. These include Sales Tax, Landlink (Building Services System), Assessments, Utility Billing, Parking Tickets, and Parking Permits. Enhancements to our revenues systems that are being pursued included integration of GIS in order to better identifying and map trends, changes and impacts in tax revenues.

## Community Sustainability

### Youth at risk

This new application tracks services provided by the city to students for treatment or assessment of different issues such things as 'family problems', 'alcohol and drugs' or 'social skills'. This information was previously tracked manually with paper. Each time an interventionist meets face to face or over a phone with his/her client (school children), the information that tracks progress of the issue is readily accessibly and easily referenced by the interventionist.

## CHANGES TO BUDGET BETWEEN 2005 AND 2006 APPROVED BUDGETS

There were no changes to the Information Technology Department's base budget between the 2005 and 2006 approved budgets.

## PERFORMANCE MEASURES

	<b>Actuals 2004</b>	<b>Target 2005</b>	<b>Target 2006</b>	<b>Target 2007</b>
1. Percentage of City cost to Market cost (Outside consultant cost) for the following:				
a) Applications Support	42%	<100%	<100%	<100%
b) Network Services	60%	<100%	<100%	<100%
c) System Admin Support	65%	<100%	<100%	<100%
2. Number of help desk calls per PC	4.35	4.0	4.0	4.0