Information Technology

Overview

Program responsibilities. The Information Technology Department has five primary responsibilities.

Desktop Services. The Department provides Computer Help Desk, Printer, PC replacement and Mobile (laptop) services for all Town Departments.

ERP System Administration. The Department provides Enterprise Resource Planning (ERP) System administration for the Town's MUNIS system and the Municipal Light Departments Cogsdale System.

GIS and Database Administration. This Department is responsible for maintaining the Town's Geographical Information System (GIS) and the several Databases developed by all Town Departments.

File Server and Communications Administration. This Department maintains the Town's Email System (Exchange), systems security (anti-virus, anti-malware and encryption), Terminal services, Web services, File storage, Backup Systems and Virtual Machines.

Technical Training. The Department is responsible for providing training in the use of a number of the Town's Systems, such as, Email, Web page maintenance, GIS and File Storage.

Staffing: The Information Technology Department has five full time equivalent employees consisting of: the Director, GIS/DB Administrator, IT Specialist I, IT Specialist II, and Technical Assistant.

Budget: The FY2012 budget was approximately \$840,000, with Desktop Services accounting for 22%, ERP System Administration 32%, GIS & DB Administration 17%, File Server & Communications Administration 24%, and Technical Training 5%.

Program outcomes/performance indicators: The department's performance indicators are primarily service quality measures, focusing on timeliness of service.

II. Department budget by function

The chart below represents our best estimates of the functional costs for the department. The benefit total is reflective of the entire department; however those expenses are presented as a percentage of FTE's.

In general, the "Other cost" component of each function consists of the Hardware refresh, Software Licensing and Software Maintenance costs associated with the function.

IT Department - Budget Recap									
	Desktop Services	ERP System Admin.	GIS/DB Admin.	File Server/ Communications Admin.	Technology Training	Total			
Salaries	\$66,613	\$101,505	\$63,441	\$63,441	\$22,204	\$317,204			
Benefits	\$18,044	\$27,496	\$17,185	\$17,185	\$6,015	\$85,926			
Other Expenses	\$105,469	\$137,280	\$56,040	\$120,596	\$9,613	\$429,000			
Total	\$190,127	\$266,282	\$136,666	\$201,222	\$37,833	\$832,130			

III. Staffing and Structure

The information Technology Department has five full-time employees to support the technology needs of 22 Town Departments and Divisions.

Management consists of the IT Director. There is no administrative support staff and each IT member contributes to each function as specified in the table below.

IT Department - FTE Distribution								
	Desktop Services	ERP System Admin.	GIS/DB Admin.	File Server/ Communications Admin.	Technology Training	Total		
Management	0.1	0.5	0.1	0.1	0.2	1		
Other	0.75	1	0.8	0.8	0.1	3.45		
Clerical	0.2	0.1	0.1	0.1	0.05	0.55		
Total	1.05	1.6	1	1	0,35	5		

IV. Goals, outcome measures, detailed descriptions and input/output measures for major programs

A. Program Description: Desktop Services

1. Goals

- a) To reduce resolution time for TECHSUPPORT requests.
- b) To reduce number of request recalls.

2. Program Outcomes

- a) Percentage of Requests Completed within 5 days
- b) Percentage of Request Recalls

3. Detailed description

The department currently services 230 desktop computers as well as 43 laptops. These are distributed throughout 22 departments in 11 buildings. Also serviced are 85 printers. Servicing involves software installations and updates, virus scans, repairs and replacements. Industry standard for computer replacement is 3yrs. Our replacement schedule is 5yrs. Printers are replaced on an as needed basis, typically 6 – 8yrs. Maintenance of software licensing is also a component of this function.

4. Input/output Measures

INPUTS	Actual FY 11	Budget FY 12	Estimated FY 12	Projected FY 13
 Number of Employees Department Expenditures 	1.05 \$148,307	1.05 \$192,451	1.05 \$190,603	1.05 \$190,127
OUTPUTS			1	
Number of TechSupport requests.	1523	N/A	1643	1780
Number of Techsupport requests resolved within 5 days.	1188	N/A	1265	1388
Number of request recalls.	82	N/A	91	98

B. Program Description: ERP System Administration

1. Goals

- a) To maintain System availability.
- b) To maintain Version Status at most current.

2. Program Outcomes

- 1. Percentage of system up-time.
- 2. Percentage of non-current version status.

3. Detailed description

The ERP (Enterprise Resource Planning) system is provided by Tyler Technologies and is called MUNIS. It provides a common repository for the entire Towns' financial, asset and personnel data. The MUNIS system is used by all departments and is a vital and critical component of the technology infrastructure. Administration is performed by the IT Director and involves version upgrades, weekly updates, help desk service call resolution, monthly file maintenance and system integration. We are currently involved with a second ERP installation with the Belmont Municipal Light Department (BMLD). The vendor is Cogsdale and is expected to be fully implemented in FY2012. This system will be used for utility billing (water/sewer, electric) and for BMLD financials, inventory, work orders, payroll. The Cogsdale system is being integrated with MUNIS and GIS.

4. Input/Output Measures

INPUTS	Actual FY 11	Budget FY 12	Estimated FY 12	Projected FY 13
 Number of Employees. 	1.6	1.6	1.6	1.6
Departmental Expenditures.	\$210,898	\$269,152	\$266,681	\$266,282
OUTPUTS				
System up-time percentage.	99.00%	N/A	99.00%	99.50%
Percentage of non-current version time.	50.00%	N/A	44.00%	45.00%

C. Program Description: GIS and Database Administration

1. GOALS

- 1. To maintain up to date GIS.
- 2. To increase Departmental use of GIS.
- 3. To maintain database efficiency.

2. Program Outcomes

- 1. Percentage of Departments using GIS.
- 2. Percentage of database up-time.

3. Detailed Description

A GIS (Graphical Information System) has become a critical component in municipal planning. The ability to spatially display information provides a substantial increase in efficiency for Planning, Utility work, Property analysis, Pavement management and Public Safety. Our GIS is based on Environmental Systems Research Institute (ESRI) platform. The main challenge in maintaining the GIS is keeping data updated. This is accomplished through the efforts of the GIS/DB Administrator using custom written as well as 'off the shelf' utility programs. We are constantly finding new uses to address data gathering needs in various departments. Included in this function is the maintenance of all database in the Town. Although the main platform for the Town is Microsoft SQL Server, we do have several other databases to maintain. Maintenance involves monthly updates, performance analysis, table modifications and system integration.

4. Input/Output Measures

INPUTS	Actual FY 11	Budget FY 12	Estimated FY 12	Projected FY 13
 Number of Employees. 	1	1	1	1
2. Departmental Expenditures. OUTPUTS	\$112,643	\$137,607	\$136,502	\$136,666
Number of Departments using GIS.	10	N/A	11	12
Database Up-time Percentage.	99.00%	N/A	99.00%	99.50%

D. Program Description: File Server and Communications Administration

1. GOALS

- 1. To maintain file system availability.
- 2. To maintain email system availability.

2. Program Outcomes

- 1. Percentage of File System Up-time.
- 2. Percentage of Email System up-time.

3. Detailed Description

The Town server infrastructure currently contains 25 servers. Maintenance involves monthly updates, configuration modifications, virus scans, log file analysis, and performance monitoring. Also included in this function is the Storage Network which allows critical data replication of School data to Town storage and Town data to School storage for disaster recovery purposes. Data backup to disk and tape for offsite storage is performed daily, weekly and monthly to ensure no loss of data for any reason. The Town utilizes Microsoft Exchange for email. There are currently over 300 mailboxes which are constantly scanned for viruses and SPAM. We have implemented an email archiving system. This will assist the Town by providing eDiscovery capability. We have started a virtualization project which will result in reducing our server count by at least 50% thereby reducing maintenance costs.

4. Input/Output Measures

INPUTS	Actual FY 11	Budget FY 12	Estimated FY 12	Projected FY 13
Number of Employees. Departmental Expenditures.	1 \$154,223	1 \$204,014	\$201,956	1 \$201,222
OUTPUTS				
File System Up-time Percentage.	98.00%	N/A	98.00%	99.00%
Email System up-time Percentage.	99.00%	N/A	99.00%	99.00%

E. Program Description: Technical Training

1. GOALS

1. To Increase Technical Proficiency of Staff.

2. Program Outcome

1. Percentage of reduction in Techsupport requests.

3. Detailed Description

Approximately 80% of the Town staff is not technically proficient. The IT Department conducts training classes when possible to assist other Town departments to properly utilize technology to reduce costs. These classes include GIS, ERP, Email, Website and Policy training. Unfortunately, IT Staff time is primarily used for maintaining systems operations. There just is not enough time to produce training classes and teach them. It is hoped that by performing the paradigm shift outlined in Opportunities below that more time may be devoted to training. The goal is to increase staff technical abilities which should reduce support requests.

4. Input/Output Measures

INPUTS	Actual FY 11	Budget FY 12	Estimated FY 12	Projected FY 13
 Number of Employees 	0.35	0.35	0.35	0.35
Departmental Expenditures.	\$32,984	\$37,875	\$37,636	\$37,833
OUTPUTS				
Number of Training Classes.	22	N/A	30	35
Number of Techsupport Requests.	1523	N/A	1643	1780

V. Innovations

Several Projects were started and others completed in FY2011/FY2012.

They include:

- 1. Email Archiving System installed and operating. Training classes being performed.
- 2. New ERP System (Cogsdale) for Light Department Ongoing Implementation Customer Portal in Development.
- 3. Website Enhancement CRM (Citizens Request Management System) Implementation,
- 4. Compliance with Personal Information (PI) Security regulations Policy Generation, Applications Penetration Testing.
- 5. Master Address Table (MAT) By-Law Voted at TM in April, Procedures being developed.
- 6. Smart Grid Pilot for BMLD Project Implementation.
- 7. Online Payments Added: Pet Licensing, Utility Bill Payments.
- 8. Pilot Program for Cloud Computing 2 Pilots for Email and Office Applications (Microsoft, Google).

VI. Opportunities and Issues for FY2013

• The IT Department does not have any administrative staff. The current staff all do some portion of administrative work such as, bill paying, ordering, payroll, memo creation, etc.

This is not efficient use of the skilled resources of the department. I am seeking sharing 15hrs/wk of administrative help with another department.

- We are working with a vendor to completely outsource maintenance of the Town's 85+ printers.
 - This will result in a reduction of printer supplies and repair costs.
- We are endeavoring to reduce paper use by modifying business processes.
- As a result of FY2012 Pilot Programs for Cloud Computing Services we will be moving Office Applications (Document, Spreadsheet, Presentation) and Email out of house to Cloud.

It is no longer cost effective for an organization of our size to continue purchasing hardware and software and maintaining them within our own buildings. Companies such as Amazon, Google, SalesForce, RackSpace and Microsoft have the enormous datacenters where server and storage space can be leased. Initial analysis has shown cost savings of at least \$5000.00 per year.

This paradigm shift will take several years, but I believe will result in a much more efficient and cost effective department.

TOWN OF BELMONT EXPENDITURES FY2013 PROPOSED BUDGETS

MUNIS Org & Obj	Account Title	FY10 EXPENDED	FY11 EXPENDED	FY12 TOWN FINAL VOTE	FY12 TOWN EST EXP	FY13 TOWN REQ LEVEL SERVICE	% Chg Level
Olg & Obj	Account Trie	EXI ENDED	EATENDED	FINAL VOIE	ESTEAP	LEVEL SERVICE	Service to FY 12
11551	INFORMATION TECHNOLOGY						
511000	FULL TIME WAGES	240,355	305,201	313,873	312,486	317,204	
517000	HEALTH INSURANCE	56,851	74,024	81,855	81,855	81,855	
517200	WORKERS COMP	457	438	585	585	672	
517800	MEDICARE	3,011	3,076	3,486	3,486	4,599	
	PERSONAL SERVICES	300,675	382,739	399,799	398,412	404,330	
<u>11552</u>							
524600	EQUIPMENT REPAIR	1,169	435	2,000	1,843	2,000	
530000	*PROF SERVICES - POLICY			50,000	50,000	50,000	
530300	SOFTWARE LICENSES	93,040	63,986	74,500	73,624	128,500	
530400	IT NETWORK SUPPORT	42,525	58,115	63,000	62,156	63,000	
531700	STAFF DEVELOPMENT	5,799	8,055	5,000	4,875	5,000	
542100	TECH OFFICE SUPPLIES	4,774	5,168	5,000	4,960	5,000	
542400	HARDWARE SUPPLIES	13,040	23,302	32,000	31,682	32,000	
542500	SOFTWARE SUPPLIES	636	2,953	5,000	3,962	4,000	
558100	SUBSCRIPTIONS & DUES	861	1,180	700	1,368	1,500	
	TOTAL OTHER EXPENSES	161,845	163,194	237,200	234,470	291,000	
<u>11553</u>							
585200	UPGRADE TOWN/SCHOOL NETWORL	62,176	62,141	63,000	62,423	63,000	
582900	FIBER NETWORK CONSULTANT			75,000	75,000	25,000	
587000	OTHER SOFTWARE & FIBER UPGRADES	S		16,100	13,228		
587100	CONTINUE TOWN IT REPLACEMENT	48,757	50,981	50,000	49.846	50,000	
	TOTAL CAPITAL EXPENSES	110,932	113,121	204,100	200,497	138,000	
	TOTAL INFORMATION TECHNOLOG	577 453	(50.054	041.000	022 280	022.222	0.00
	TOTAL INFORMATION TECHNOLOG	573,452	659,054	841,099	833,379	833,330	-0.9%

^{*} Study & Policy for Personal ID Safety for Town