

Information Technology Department

Mission

To provide the city with a telecommunications infrastructure that meets current and future technology needs and to provide accurate and timely information systems and technical support to all city departments and agencies and ultimately to its customers, the residents of Newton.

From the ground up, the Information Technology Department provides the resources and tools required by every department in the city.

Our department is dedicated to maintaining, overseeing, and supporting:

Our Fiber Network; The city fiber network has been in place since 2014 and continues to expand as new, additional sites come online. Our redundant backbone is a cost-efficient means to keep remote sites up and running even when catastrophic weather or hardware issues compromise our network.

Our Phone Network; Running on our fiber, we migrated to Voice over IP (VoIP) phones with Session Initiation Protocol (SIP) trunking in place of older T1 solutions. This digital technology offers a level of redundancy unavailable in previous solutions. We continue to enhance our phone system and use it to offer additional solutions to increase efficiency among departments.

Our Storage Area Network and Virtual Environment; Our current Storage Area Network (SAN) replaced the original SAN procured in 2013. The SAN is mirrored off-site and both live, off-site, and offline backups are maintained. These backups reach back extensively.

Our Financial Systems; Tyler Technology's Munis is our financial system. IT supports the system, manages rights and access, plays the role of project manager for all Munis-based initiatives, offers in-house training, coordinates vendor-based training, and assists in troubleshooting at all levels.

Our Geographic Information Systems; Newton's GIS system touches so many diverse systems; from voting precincts to school districts and waste collection to flood zones; conservation and tracking fire hydrant status, nearly every department benefits directly from the many layers in our GIS system.

Our Access to Data, Computers, and Devices; The IT Department is the primary service provider for all departments except for School, Police and Library. We have a great inventory system and replace equipment every 4 years or as needed. We meet with all departments on a regular basis to stay aware of initiatives and needs. We work with departments on procurement and implementation.

Our Website; The city website is based on a content management system by an international provider of municipal services. Every department is trained to maintain their own pages, while IT supplies rights, access, troubleshooting and assistance in initiatives and new challenges. We also have a web developer whose designs are highly valued and desirable by the city as well as many surrounding communities. From docket tracking to census automations, these initiatives have increased efficiency while enhancing transparency.

Our Customers; If there is one truth about Newton's IT Department it is that no two days are ever the same. We enjoy the diversity of departments, their challenges, and the relationships that blossom from successful interactions. We appreciate the opportunity to participate in such events as MLK Day, the Mayor's Community Breakfast, the Boston Marathon, Cooper Center for Active Living, our multiple sound and AV systems, as well as our creative use of Zoom, cameras, and conference rooms. Our willingness and skill in moving departments or individuals with short notice is well-respected. Our interaction with all departments is ongoing; we constantly have new initiatives brewing with most all of them. We are proud of the assistance we offer to departments staffed with their own IT personnel; we are always ready and happy to assist, even with short notice.

Newton's Information Technology is part of the success of every department via software, servers, solutions and systems. We pride ourselves on assisting teams to use enhanced, automated workflow to achieve efficiency and improved effectiveness.

Our team prioritizes security. We specialize in reliable and secure financial access. We deliver exceptional support. We design and support a state-of-the-art technology infrastructure delivering gigabit speeds to over sixty buildings. Staff include subject matter experts in mapping, cloud services, email, permitting, 311, web services and application development as well as serving key roles in many conventionally non-IT-related events.

We run bi-weekly tabletop sessions to discuss cybersecurity scenarios, review new solutions, share ideas and build experience.

Working with the federal Cybersecurity & Infrastructure Security Agency (CISA), we run constant penetration scans against the perimeter of our network while using their frequent email notifications to add rules to our firewalls.

Working with a well-respected vendor, we completed an IT Audit: CIS Top 20 Critical Security Controls Risk Assessment (Level 1). We addressed the findings and hardened our systems accordingly. We are now working on a higher tier: CIS Critical Security Controls Risk Assessment (Level 2).

During Cybersecurity Month in October, we made a strong training push to bring staff to the next level of cyber awareness using a suite of techniques including email help files, signage and phishing tests.

We administer nearly 900 email accounts and the corresponding Microsoft Office licensing. Working with the Law Department, we respond to all email-based municipal freedom of information requests.

We administer a redundant storage area network with three types of storage for backup and disaster recovery.

Newton's Geographic Information System (GIS) is an essential element of city processes, including taxation, permitting, public safety and public works operations. GIS is integrated with many of the most used public facing web applications, such as the Assessor's Database, the NewGov permitting system and our 311 system. City planners and school administrators rely on GIS created maps and visualizations. GIS is also a critical component for street and sidewalk construction, snow removal, waste collection, infrastructure repairs and inspection assignments as well as many other municipal functions.

Working with Customer Service, we assisted in the migration and creation of a new 311 system that delivers the functionality our residents and staff need.

Our applications developer created several game changing apps, including our in-progress City Council docket tracking system, our fire alarm software that runs in Dispatch and collects its data from a published app written by our web developer, as well as efficiency solutions for many varied needs.

Our website is displaying a new google search engine that indexes only the city site and the dockets system. We expect this to be a game changer. We have also developed an AI chatbot named Isaac. We continue to assist in training Isaac and have rolled this out to our Public Works and Health and Human Services home pages.

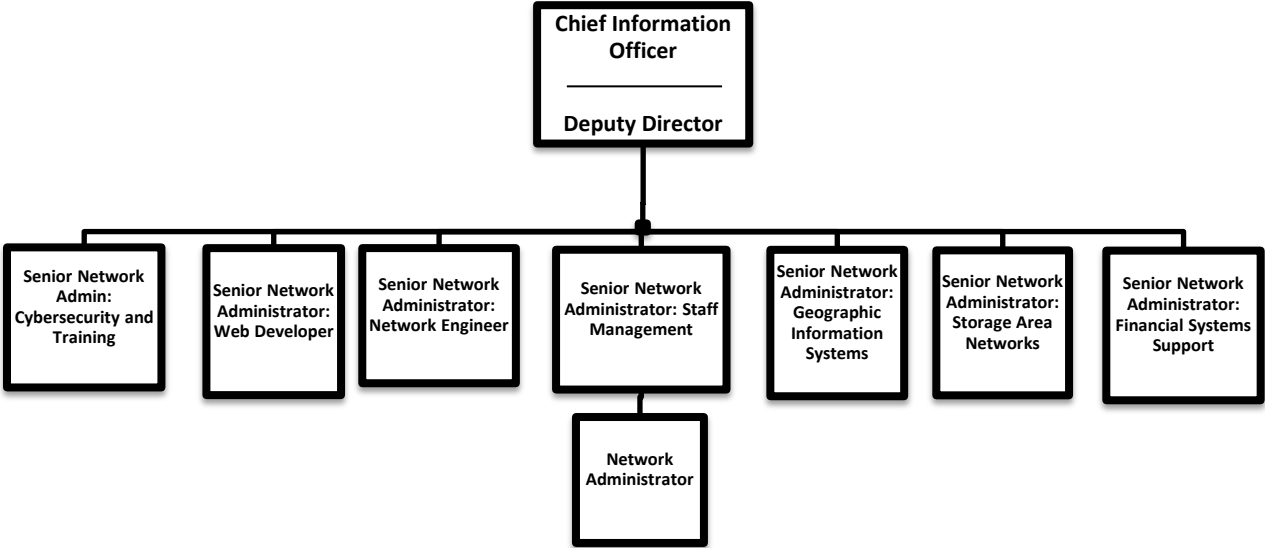
Our department works hard to have healthy, rewarding relationships with all other city departments, encouraging efficiency, better uses of technology be it support or solutions, and assistance with selection and implementation of new applications.

As June 30th approaches, I'll be retiring from public service. I fully support Mayor Fuller's decision to entrust the department to the capable leadership of Gregory Ansaldi. It's with immense pride that I step away, knowing the department and the city are in such a strong position. Looking back, I'm filled with gratitude for the accomplishments we've achieved together, for the incredible team we've built, and for the opportunity to present this, my final budget, to the City of Newton. These years have been truly wonderful, and I'm deeply thankful for the confidence and trust the Executive Office placed in me.

Joseph P. Mulvey

Chief Information Officer

INFORMATION TECHNOLOGY



Financial and Operating Highlights

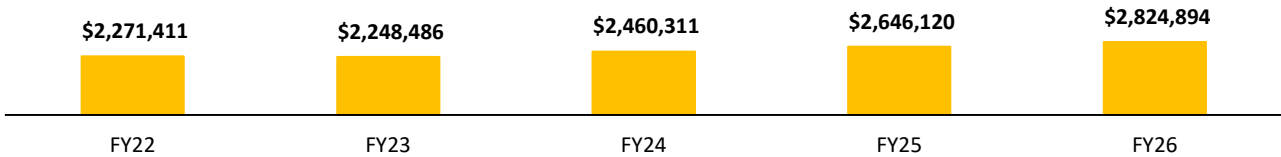
Financial Highlights

	<-----Actual----->			Original	Proposed
	FY2022	FY2023	FY2024	FY2025	FY2026
Expenditure by Department					
Administration	\$ 331,194	\$ 356,498	\$ 372,495	\$ 387,172	\$ 370,464
Micro/Network	\$ 1,068,821	\$ 1,067,401	\$ 1,034,424	\$ 1,147,631	\$ 1,225,189
Systems Program	\$ 709,869	\$ 656,520	\$ 875,701	\$ 927,800	\$ 1,038,950
GIS	\$ 161,527	\$ 168,067	\$ 177,691	\$ 183,517	\$ 190,291
Total	\$ 2,271,411	\$ 2,248,486	\$ 2,460,311	\$ 2,646,120	\$ 2,824,894
% Incr		-1.01%	9.42%	7.55%	6.76%

Personnel

Full-Time	13	13	12	12	13
Part-Time	0	0	0	0	0
Total	13	13	12	12	13

Total IT Expenditures



2024 Zoom Statistics

Meetings/Webinars	5,285
Meeting Minutes	2,250,459
Participants	47,425

Last 6 Months of 2024 E-mail

Sent	369,300
Received	216,575
Read	1,910,479
Email Accounts	1017

Storage Area Network

Total Space	112.5 TB
Available Space	68 TB
Memory	1.49 TB
Virtual Servers	63

Reduce Non-Emergency 911 Calls

Fire Box Alarm App	6,703
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Census Online Response

HOH 12206, Ind. 1916

Buildings on City Fiber	65
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NewtonMA.gov

Content Type	Count
Page	1527
Image Library	5046
Document Central	58211
Custom Content	13
News	331
Calendar	2830
Staff Directory	169
Service Directory	19
RFP Posts	545
Photo Album	19
FAQ	377
Facility Directory	97
Total	69184
Phishing Emails Sent 2024	5711
Phishing Emails Opened	2495
Phising Emails Clicked	268
Phishing Emails Reported to IT	730

Information Technology Department Fiscal Year 2026 Outcomes and Strategies

Cybersecurity remains a top priority, including amidst pandemics, weather events, day-to-day challenges and holidays. Our comprehensive approach is essential, considering the diverse threat landscape, which includes remote access vulnerabilities, mobile devices, email, perimeter devices, vendor equipment, malware (viruses, bots, ransomware), impersonation, and phishing.

An essential defense is a well-informed workforce. We consistently emphasize phishing awareness through training videos, poster campaigns, and advanced testing. We intensified our efforts during October's Cybersecurity Awareness Month, including new training videos, refreshed campaigns, and system improvements.

We maintain redundant critical hardware, including firewalls and load balancers. Our data center is duplicated off-site. Our telecommunications vision, policy, and standard operating procedures are regularly reviewed with staff. We actively monitor and respond to threat attempts, collaborating with CISA and the Department of Homeland Security to update and block known malicious IP addresses. We are decommissioning legacy servers and securing in-house applications. We use a recognized host for our web applications, enhancing security.

We use accentuated security for most email accounts. We are committed to ongoing investments in cybersecurity, continuously evaluating existing solutions, emerging trends, and future vulnerabilities.

Our first Risk Assessment Audit is complete, and we addressed its findings. We have begun a second tier of assessment. We are pleased with the methodology, teachable moments and the results. We are committed to advancing continually our security posture.

Outcome 1

Protect Our Data and Networks using
Hardware, Software, Awareness Training
and Employee Education

Outcome 2

Enhance Our Financial System

Modernizing our Tyler Technologies Munis system is unlocking significant potential for all departments, particularly Human Resources, Payroll, Schools, Parks, Recreation & Culture, and Purchasing.

We've been collaborating with these departments to implement numerous new

solutions and upgrades, with a focus on online portals. Our second year of utilizing the Employee Self Service (ESS) gateway for summer help demonstrates the value of this approach. These portals are

Information Technology Department

Fiscal Year 2026 Outcomes and Strategies

creating a 24-hour city hall. Portals for employment applications and vendor interactions will streamline processes, improve convenience, and enhance responsiveness, reducing the need for in-person visits, phone calls, and even emails.

The ESS portal empowers employees to manage benefits, update personal information, and submit other requests securely online. It also allows prospective employees to create accounts, apply for jobs, and upload documents, reducing paper and manual workflows. In partnership with the Newton Public Schools, we've implemented time and attendance tracking through the ESS portal.

The Bids and Contracts module, integrated with a Vendor Self Service portal, enables registered vendors to access purchase orders. DocuSign integration within the contract management module facilitates paperless signatures. Munis will host bids online, allowing registered vendors to submit proposals through the portal. Approved proposals will then seamlessly transition into our contract tracking module, eliminating paper handling, reducing lost contracts, and accelerating turnaround times. Following the water meter replacement project, we will partner with Public Works and Tyler to upgrade from the historic Utility Billing to the current Utility Billing platform (UBCIS). We also plan to collaborate with the Treasury Department and Tyler on a payment portal to enhance our online payment system.

The city's network backbone relies on a number of core switches, strategically positioned at key points within our wide area network. Installed in 2014, they are ready to be upgraded which we are on track to complete this calendar year.

Outcome 3

Replace Core Infrastructure

These switches facilitate access to our phone system, financial platforms, all network data, hosted applications, and backup systems. Serving as the core of our infrastructure, they enable municipal buildings to connect to essential cloud-based applications, including email, NewGov, 311, city hall systems, Zoom, and Teams.

Furthermore, they provide city and school buildings with access to our financial system, encompassing human resources, payroll, and procurement.

The IT Department has awarded a bid for the procurement of replacement equipment, monitoring software, and vendor support. The implementation will involve initial testing, cross-departmental coordination, and downtime communication.

Information Technology Department

Fiscal Year 2026 Outcomes and Strategies

Outcome 4

Embrace AI and Google to enhance Website, Municipal Transparency and Searches

-The internet is an indispensable research tool, and digital strategies ranging from web pages to social media are helpful for local governments to provide information and timely communication. Residents can find it difficult to navigate vast amounts of city data to find specific information, especially when unsure of the appropriate department.

We are actively improving information accessibility. We've launched the first phase of our Google Custom Search Engine, and after trials and refinements, we will continue to optimize it into a more powerful search tool. We are committed to employing innovative methods to simplify data retrieval and have answers readily available.

Specifically, we are implementing a chatbot to facilitate conversational searches and deliver precise information. Regular reviews of chatbot interactions will enable us to refine responses and enhance user experience. We are also developing a customized Google Search Engine tailored to Newton. These initiatives aim to allow the city website to be a more effective 24/7 resource, empowering residents and businesses to find the answers they need.

Furthermore, we are collaborating with an expert to enhance our metadata, improving search engine indexing and discoverability.

In addition, we are continually refining our in-house developed docket tracking program, an agenda management system designed to meet Newton's unique City Council needs. This program assists with organization, reporting, and document management, and its ongoing development, while still a work in progress, is expected to be invaluable.

FUND: 0001 - GENERAL FUND
DEPARTMENT: 111 - INFORMATION TECHNOLOGY

CITY OF NEWTON BUDGET
DEPARTMENT LEGAL LEVEL OF CONTROL

	ACTUAL 2022	ACTUAL 2023	ACTUAL 2024	ORIGINAL 2025	RECOMMENDED 2026	CHANGE 2025 to 2026
INFORMATION TECHNOLOGY SUMMARY						
51 - PERSONNEL SERVICES	1,115,224	1,167,683	1,195,192	1,300,597	1,363,207	62,610
52 - EXPENSES	752,165	707,852	936,496	1,020,840	1,137,990	117,150
58 - CAPITAL EXPENSES	202,704	180,080	116,531	100,000	100,000	0
57 - FRINGE BENEFITS	189,919	192,871	212,092	224,683	223,697	-986
TOTAL DEPARTMENT	2,260,012	2,248,486	2,460,311	2,646,120	2,824,894	178,774
IT ADMINISTRATION						
51 - PERSONNEL SERVICES	270,012	289,676	298,548	308,553	300,382	-8,171
52 - EXPENSES	10,491	15,230	17,157	17,240	20,240	3,000
57 - FRINGE BENEFITS	49,511	51,592	56,789	61,379	49,842	-11,537
TOTAL IT ADMINISTRATION	330,014	356,498	372,495	387,172	370,464	-16,708
MICRO/NETWORK SVS						
51 - PERSONNEL SERVICES	724,331	753,533	768,952	860,084	926,408	66,324
52 - EXPENSES	14,270	16,299	21,398	54,300	57,300	3,000
58 - CAPITAL EXPENSES	202,704	180,080	116,531	100,000	100,000	0
57 - FRINGE BENEFITS	117,516	117,489	127,543	133,247	141,481	8,234
TOTAL MICRO/NETWORK SVS	1,058,821	1,067,401	1,034,424	1,147,631	1,225,189	77,558
SYSTEMS PROGRAMMING						
52 - EXPENSES	709,849	656,520	875,701	927,800	1,038,950	111,150
TOTAL SYSTEMS PROGRAMMING	709,849	656,520	875,701	927,800	1,038,950	111,150
GIS ADMINISTRATION						
51 - PERSONNEL SERVICES	120,880	124,473	127,692	131,960	136,417	4,457
52 - EXPENSES	17,555	19,804	22,240	21,500	21,500	0
57 - FRINGE BENEFITS	22,892	23,790	27,759	30,057	32,374	2,317
TOTAL GIS ADMINISTRATION	161,327	168,067	177,691	183,517	190,291	6,774

FUND: 0001 - GENERAL FUND
DEPARTMENT: 111 - INFORMATION TECHNOLOGY

CITY OF NEWTON BUDGET
DEPARTMENTAL DETAIL

	ACTUAL 2022	ACTUAL 2023	ACTUAL 2024	ORIGINAL 2025	RECOMMENDED 2026	CHANGE 2025 to 2026
111 - INFORMATION TECHNOLOGY						
0111153 - IT ADMINISTRATION						
PERSONNEL SERVICES						
511001 FULL TIME SALARIES	265,512	283,926	293,548	303,553	296,982	-6,571
514001 LONGEVITY	4,500	5,750	5,000	5,000	3,400	-1,600
TOTAL PERSONNEL SERVICES	270,012	289,676	298,548	308,553	300,382	-8,171
EXPENSES						
527400 RENTAL - EQUIPMENT	1,638	1,738	1,900	1,900	1,900	0
531900 TRAINING EXPENSES	4,252	6,907	6,825	10,000	10,000	0
534010 TELEPHONE	88	77	77	150	150	0
534020 CELLULAR TELEPHONES	842	3,726	4,585	1,250	1,250	0
534100 POSTAGE	0	0	0	20	20	0
534200 PRINTING	14	0	0	20	20	0
542000 OFFICE SUPPLIES	3,113	1,808	3,000	3,000	3,000	0
571001 PERSONAL EQUIP REIMBU	400	0	0	0	3,000	3,000
571100 IN-STATE CONFERENCES	144	0	0	300	300	0
573000 DUES & SUBSCRIPTIONS	0	974	770	600	600	0
TOTAL EXPENSES	10,491	15,230	17,157	17,240	20,240	3,000
FRINGE BENEFITS						
57DENT DENTAL INSURANCE	501	501	501	503	202	-301
57HLTH HEALTH INSURANCE	45,195	47,003	52,061	56,288	40,015	-16,273
57LIFE BASIC LIFE INSURANCE	104	114	114	114	57	-57
57MEDA MEDICARE PAYROLL TAX	3,710	3,974	4,113	4,474	4,356	-118
57OPEB OPEB CONTRIBUTION	0	0	0	0	5,212	5,212
TOTAL FRINGE BENEFITS	49,511	51,592	56,789	61,379	49,842	-11,537
CAPITAL EXPENSES						
585111 PC HARDWARE-ADMIN	1,179	0	0	0	0	0
TOTAL CAPITAL EXPENSES	1,179	0	0	0	0	0
TOTAL IT ADMINISTRATION	331,194	356,498	372,495	387,172	370,464	-16,708

CITY OF NEWTON BUDGET DEPARTMENTAL DETAIL
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		ACTUAL 2022	ACTUAL 2023	ACTUAL 2024	ORIGINAL 2025	RECOMMENDED 2026	CHANGE 2025 to 2026
0111154 - MICRO/NETWORK SVS							
PERSONNEL SERVICES							
511001	FULL TIME SALARIES	702,591	744,085	759,902	851,534	919,608	68,074
514001	LONGEVITY	6,150	7,150	8,050	8,050	6,300	-1,750
514309	OTHER STIPENDS	10,000	0	0	0	0	0
515005	BONUSES	0	0	500	0	0	0
515006	VACATION BUY BACK	15,090	1,797	0	0	0	0
515102	CLEANING ALLOWANCE	500	500	500	500	500	0
TOTAL PERSONNEL SERVICES		734,331	753,533	768,952	860,084	926,408	66,324
EXPENSES							
524010	OFFICE EQUIPMENT R-M	3,566	3,481	2,696	3,500	3,500	0
524014	VOIP & SIP HARDWARE M	0	0	2,310	22,000	25,000	3,000
524100	SOFTWARE MAINTENANC	9,104	12,817	16,392	15,000	15,000	0
524112	CLOUD STORAGE			0	12,000	12,000	0
571001	PERSONAL EQUIP REIMBU	1,600	0	0	1,800	1,800	0
TOTAL EXPENSES		14,270	16,299	21,398	54,300	57,300	3,000
FRINGE BENEFITS							
57DENT	DENTAL INSURANCE	3,026	2,925	2,832	2,822	2,619	-203
57HLTH	HEALTH INSURANCE	93,436	91,075	100,455	107,636	112,447	4,811
57LIFE	BASIC LIFE INSURANCE	180	189	175	170	114	-56
57MEDA	MEDICARE PAYROLL TAX	10,021	10,210	10,486	12,471	13,426	955
57OPEB	OPEB CONTRIBUTION	10,855	13,090	13,596	10,148	12,875	2,727
TOTAL FRINGE BENEFITS		117,516	117,489	127,543	133,247	141,481	8,234
CAPITAL EXPENSES							
585110	COMPUTER SERVER HAR	7,968	3,792	6,006	5,000	5,000	0
585111	PC HARDWARE-ADMIN	130,746	118,018	58,149	45,000	45,000	0
585120	COMPUTER SERVER SOFT	50,201	54,756	45,989	45,000	45,000	0
585121	PC SOFTWARE-ADMIN	13,789	3,515	6,387	5,000	5,000	0
TOTAL CAPITAL EXPENSES		202,704	180,080	116,531	100,000	100,000	0
TOTAL MICRO/NETWORK SVS		1,068,821	1,067,401	1,034,424	1,147,631	1,225,189	77,558

CITY OF NEWTON BUDGET DEPARTMENTAL DETAIL
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	ACTUAL 2022	ACTUAL 2023	ACTUAL 2024	ORIGINAL 2025	RECOMMENDED 2026	CHANGE 2025 to 2026	
0111156 - SYSTEMS PROGRAMMING							
EXPENSES							
524011	GRANICUS/CIVIC R&M	18,023	31,636	36,000	36,000	36,000	0
524012	SAN HARDWARE M&S	3,563	5,997	0	0	0	0
524100	SOFTWARE MAINTENANC	45,090	40,966	84,543	85,000	85,000	0
524101	REVERSE 911 SOFTWARE	52,015	54,500	54,500	53,000	53,000	0
524102	FINANCIAL SOFTWARE MA	428,417	314,665	335,412	342,000	387,000	45,000
524106	MS OUTLOOK SOFTWARE	118,450	125,000	150,000	175,000	185,000	10,000
524107	FOIA SOFTWARE SUB & M	5,238	10,291	10,300	10,300	10,300	0
524108	KELDAIR SOFTWARE MAIN	9,803	7,464	12,229	12,000	12,000	0
524109	DEBTBOOK SOFTWARE	0	0	13,500	14,500	15,750	1,250
524111	NEWGOV ANNUAL MAINT	0	0	140,000	152,000	159,000	7,000
524114	ADOBE ANNUAL SUBSCR	0	0	0	0	18,000	18,000
524115	BORDER EQUIP ANNL SUB	0	0	0	0	25,000	25,000
524116	TIME CLOCK PLUS	0	0	0	0	4,900	4,900
530100	CONSULTANTS	0	32,894	0	0	0	0
534040	INTERNET ACCESS CHAR	24,802	20,495	30,619	36,000	36,000	0
542000	OFFICE SUPPLIES	20	0	0	0	0	0
558500	COMPUTER SUPPLIES	4,447	12,611	8,599	12,000	12,000	0
	TOTAL EXPENSES	709,869	656,520	875,701	927,800	1,038,950	111,150
	TOTAL SYSTEMS PROGRAMMING	709,869	656,520	875,701	927,800	1,038,950	111,150
0111157 - GIS ADMINISTRATION							
PERSONNEL SERVICES							
511001	FULL TIME SALARIES	118,880	122,473	125,692	129,960	133,917	3,957
514001	LONGEVITY	2,000	2,000	2,000	2,000	2,500	500
	TOTAL PERSONNEL SERVICES	120,880	124,473	127,692	131,960	136,417	4,457
EXPENSES							
524100	SOFTWARE MAINTENANC	16,092	17,167	17,215	18,000	18,000	0
558500	COMPUTER SUPPLIES	1,463	2,637	3,350	3,500	3,500	0
571001	PERSONAL EQUIP REIMBU	200	0	0	0	0	0
572000	OUT-OF-STATE TRAVEL	0	0	1,675	0	0	0
	TOTAL EXPENSES	17,755	19,804	22,240	21,500	21,500	0
FRINGE BENEFITS							
57HLTH	HEALTH INSURANCE	21,224	22,072	26,003	28,144	30,396	2,252
57MEDA	MEDICARE PAYROLL TAX	1,668	1,717	1,756	1,913	1,978	65
	TOTAL FRINGE BENEFITS	22,892	23,790	27,759	30,057	32,374	2,317
	TOTAL GIS ADMINISTRATION	161,527	168,067	177,691	183,517	190,291	6,774
TOTAL INFORMATION TECHNOLOGY		2,271,411	2,248,486	2,460,311	2,646,120	2,824,894	178,774