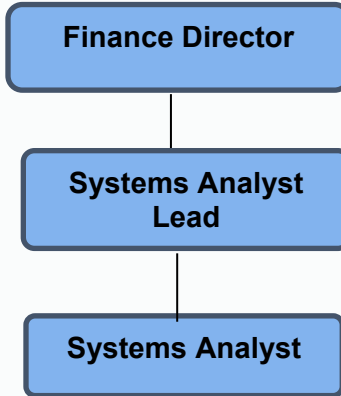# CITY OF FORT BRAGG

Fiscal Year
2024
Proposed Budget

INFORMATION TECHNOLOGY (IT)

TECHNOLOGY MAINTENANCE & REPLACEMENT INTERNAL SERVICE FUND

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┌─────────────────────┐
│   Finance Director   │
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┌─────────────────────┐
│   Systems Analyst    │
│        Lead          │
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┌─────────────────────┐
│   Systems Analyst    │
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The Technology Maintenance & Replacement Internal Service Fund, accounts for all costs associated with the internal computing and technological resources for all departments throughout the City.

SERVICE FUND DESCRIPTION

The Technology Maintenance & Replacement Internal Service Fund's costs include hardware, software, and service contracts associated with the City's computers and information technology infrastructure and personnel costs for the City's Information Technology division which resides in the Administrative Services Department. The Information Technology division is responsible for the following:

- Workstation administration
- Server administration
- Network infrastructure administration
- Layered CyberSecurity defense administration
- Telecommunication administration and installations
- Cloud services support
- Software maintenance and backups
- Asset tracking for IT equipment
- Social media and website maintenance
- Live streaming and AV production of City meetings
- Technical support for City/PD users and presenters at public meetings
- Public Wi-Fi administration and support
- Digital file archiving and distribution
- Public Access TV hardware allocation and administration

FY 2022/23 TOP ACCOMPLISHMENTS

COMMUNICATION:

- Implemented new High Definition video capture and streaming system at Town Hall for supporting "hybrid" meetings for both in-person and remote attendance via Zoom. This new system provides better video quality and decreases complexity in several ways, including automatically creating a live stream to CFB's Facebook page.

- Implemented both a new IT Ticketing system for internal use, as well as rolling out a new remote support / PC visibility capability.

- Completed decision and acquisition process for new, easy-to-use, and managed internal phone system. Implementation is on track for completion by the end of the FY 2023.

- Completed audit of all telephone numbers that the City is being billed for.

DATA / NETWORK SECURITY:

- Implemented government-approved, cloud-based server backups, with *secure isolation* of data from malware such as ransomware.
- Implemented Penetration testing and Vulnerability scanning automated tools so we can have visibility to previously hidden weaknesses and prioritize addressing them.
- Implemented vastly improved critical infrastructure Log storage with 1 Year retention times.
- Tightened Email "anti-spoofing" security to ensure that only we (and our approved third-party agents) can send mail from "fortbragg.com."
- Implemented automated weekly email anti-"phishing" training campaigns via KnowBe4.
- Implemented automated quarterly CyberSecurity online training campaigns, also via KnowBe4.
- Implemented MFA for critical accounts' access to Springbrook.
- Implemented new Windows Active Directory servers (replacing EOL hardware), including up-to-date Windows Server 2022 operating system. (Older OSes have many, many known and exploited security holes.)
- Acquired a new Next-Gen Firewall for installation at City Hall, properly sized to support all City traffic as needed.
- Acquired and provisioned small, portable, easy-to-use cellular hotspots for employees to use with laptops while traveling or for other remote work needs. (Avoids risks of using possible unsecured/unencrypted public Wi-Fi.)

INFRASTRUCTURE & SERVICES PERFORMANCE AND RESILIENCY:

- Completed Phase One of hardware upgrades required to maximize internal LAN switch availability and ability to prioritize Voice over IP traffic.
- Implemented Starlink low-orbit satellite connectivity for Internet and (soon) voice connectivity in case of local fiber damage or primary ISP outages.
- Began implementation of a new Network Management / Visibility System that will vastly improve our ability to detect problems with the network before they affect users (expected to be complete by the end of the FY).

- Replaced 13 of the City's PCs that were not meeting the performance needs of employee job requirements.
- Configured 11 "Toughbook" laptops (with built-in cellular connectivity) to be deployed in Police cars.
- Completed decision and acquisition process for higher security and higher performance internal Wi-Fi system.
- Completed decision and acquisition process for replacing additional EOL servers (File Servers and Hyper-V), expected by the end of the FY 2023.

PERFORMANCE / WORKLOAD MEASURES

Indicators	FY 2021/22	FY 2022/23
Number of requests for repairs and/or technical assistance	1,398	1,064
Spam messages blocked	197,728	148,679
Computer viruses blocked	9,752	8173
Views of Broadcasted meetings	52,782	9,648

FY2023/24 TOP PRIORITIES

COMMUNICATION:

- As part of the Town Hall physical improvement and upgrade project, we plan to expand and rebuild the TH Tech Room and replace/upgrade the audio and video cabling infrastructure.
- Cancel all unused/unneeded telephone lines.
- Save per-minute call charges by directing most outbound calling from the new telephone system to be completed via VoIP.

DATA / NETWORK SECURITY:

- Begin formal work against a security framework with a partner and tool that will result in a continuous process of detecting and addressing both possible existing and newly emerging security risks.
- Create formal Incident Response, Disaster Recovery, and Business Continuity Plans. Test all three of these by holding "tabletop exercises."
- Work with City Attorney and City Administration to create Surveillance Technology Policy.
- Work with City Attorney and City Administration to add cybersecurity indemnification language to all contracts.
- Replace our first-level Email protection / SPAM / Malware filter solution with one better able to meet current threats and SPAM filter evasion techniques.

- Since we now have several Firewalls, we will implement a F/W management system that will automate keeping our security policies up-to-date on all of them at once.
- Continue to improve our implementations and use of our new security "layers".
- Once our new switches have arrived and been installed, we will add Net Flow monitoring to our newly implemented NMS / SIEM. This will give us a much deeper ability to "see" the traffic on our network.
- Implement MFA for VPNs.
- Continue to roll out MFA across the organization.
- Isolate any remaining old OS devices behind F/W DMZs.
- Complete implementation of new LiveScan system at PD.
- Set up Radius services on AD servers, and integrate Firewalls with them for *automatic*, fine-tuned VPN access to resources based on User Groups.
- Set up old servers as "sandbox" environment. Use to determine time to restore entire servers from backups, and for use in case of malware attack.
- Develop process to address annual Identity Cert renewal/update requirements.
- Set up new CH Firewall as alternate VPN login path in case of a primary (PD) path outage.

INFRASTRUCTURE & SERVICES PERFORMANCE AND RESILIENCY:
- Provide Solutions Architect level participation in the FttP (Broadband) project.
- Work with Police Dept. to plan and roll-out new infrastructure for Police patrol connectivity and efficiency (VPNs over cellular service to laptops in patrol vehicles).
- Support the roll-out of new security cameras and new card reader door access control to the Police Dept. and certain other locations.
- Complete re-design of CFB IP addressing / subnetting space, and implement.
- Complete Phase 2 roll-out of hardware upgrades required to maximize internal LAN availability and improve internal traffic visibility/security by implementing new LAN switches at all locations.
- Implement new Next-Gen Firewall for installation at City Hall (purchased in FY2022-23, and properly sized to support all City traffic as needed). Once in place, will configure for higher performance connection to PD over a VPN, rather than the current Wi-Fi point-to-point connection.
- Once all hardware/software upgrades are in place, implement programming changes that will provide for auto-failover around certain current single points of failure.
- Design and implement a new, higher-performing Public Wi-Fi system for the downtown area.
- Implement new File Servers and Hyper-V servers.
- Rework how DHCP is set up to improve resiliency.

BUDGET OVERVIEW

The Information Technology's (IT) FY 2024 Proposed Budget is $701K, an increase of 15% from the prior fiscal year. Salaries and Benefits increased by 31% from Cost of Living Adjustments and step increases. The IT Systems Analyst lead was hired in November 2022. The annual cost will be realized in the new fiscal year.

In FY 2022, the City undertook various Network Systems, Office 365, and Firewall upgrades as Worldwide cyber threats increased against organizations of all sizes and types. These necessary deferred upgrades have increased the IT Budget year over year is necessary for secure, resilient operations in the current environment. The proposed budget will focus on Data/Network security, infrastructure & service performance, resiliency, and communications.

In FY 2023/24, the Proposed IT Budget for non-personnel costs is $479K, increasing 8% from the prior year. According to the City's Fund Balance and Reserve Policy, the unrestricted fund balance in the Technology Maintenance & Replacement Internal Service Fund is intended to help pre-fund large purchases and repairs and avoid big annual swings in funding needs. At the end of FY 2024, the fund balance is estimated to be under $9K, based on the Fund's 5-year plan and the substantial increases in operating expenditures during the last fiscal year.

IT DEPARTMENTAL BUDGET SUMMARY
FUND 521
DEPARTMENT: 4394

Description	FY 2021/22 Audited	FY 2022/23 Amended Budget	22/23 FYE Projected	FY 2023/24 Proposed Budget	% + /-
Expenditure:					
Personnel Services	$ 93,977	$ 197,640	$ 168,275	$ 220,806	31%
Non-Personnel Services	433,312	450,632	443,376	479,838	8%
Total Departmental Expenditure	527,290	648,272	611,652	700,644	15%
Revenue:					
Charges for services - Allocation ISF	497,457	471,859	612,088	612,088	0%
Transfers	-	-	135	6,884	4999%
Total Departmental Revenue	497,457	471,859	612,088	618,972	1%
Net Revenue/Expenditure	(29,833)	(176,412)	436	(81,672)	-18829%
Cost Allocation					
Expense - Cost Allocations	7,992	(8,212)	-	7,992	100%
Revenue - User Fees	(497,457)	(471,859)	(612,088)	(612,088)	0%
Net Cost Allocation	(489,465)	(480,071)	(612,088)	(604,096)	-1%
Net Expenditure	$ 459,631	$ 303,659	$ 612,524	$ 522,424	-15%

BUDGET DETAIL:
Fund #521

Department: 4394

Object	Description	FY 2021/22 Audited	FY 2022/23 Amended Budget	22/23 FYE Projected	FY 2023/24 Proposed Budget	% + /-
0100	Salaries & Wages	$ 69,056	$ 140,145	$ 124,966	$ 170,065	36%
0200	Employee Benefits	24,922	57,495	43,309	50,741	17%
	Personnel Services	**93,977**	**197,640**	**168,275**	**220,806**	**31%**
0319	Professional Services	390	-	-	50,000	100%
0351	Equipment Repair & Maint	1,964	4,100	3,000	4,200	100%
0366	Training/Travel Reimbursement	1,629	2,000	3,481	4,260	22%
0381	Small Tools & Equipment	6,627	3,500	4,784	5,000	5%
0382	Hardware	32,130	108,068	100,000	55,329	-45%
0383	Software	16,430	9,838	8,459	28,025	231%
0384	Hardware/Software Support	358,693	316,826	316,826	313,673	-1%
0619	Misc Exp/ PEG	-	5,000	5,000	19,351	287%
	Non-Personnel Services	**433,312**	**450,632**	**443,376**	**479,838**	**8%**
	Sub Total - Costs	527,290	648,272	611,652	700,644	15%
	Total Information Technology Services	$ 527,290	$ 648,272	$ 611,652	$ 700,644	15%

Information Technology Maintenance & Repair Internal Service Fund Detail	FY 22-23 Adopted Budget	FY 23-24 PROPOSED BUDGET	FY 24-25 Projected Budget	FY 25-26 Projected Budget	FY 26-27 Projected Budget	FY 27-28 Projected Budget
521-4394-0384						
Licensing & Software Support & Maintenance						
Cisco Capital and Port 53 for endpoint security licensing & monitoring	18,139	$ 18,139	$ 18,139	$ 18,139	$ 18,139	$ 18,139
CDO-Cisco Firewall Cloud Management	2,021	$ 2,041	$ 2,061	$ 2,081	$ 3,001	$ 3,031
MCN/AT&T - Fusion Internet at CH	2,000	$ 1,907	1945	2120.05	2310.8545	2518.83141
Cisco LAN Switches Annual Licenses and SmartNet						
Springbrook Maintenance Contract Due July 1	47,479	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000
Auto CAD Subscription Due in October	4,400	$ 3,700	$ 3,700	$ 3,700	4,000	4,000
Parcel Quest	5,000	$ 5,000	5,000	5,000	5,100	5,100
Budget Software		$ 27,000	$ 27,000	$ 27,000	$ 27,000	$ 27,000
PD IBM Maintenance TracNet	14,500	$ 17,976	19,774	21,751	23,926	26,318
DLB Associates - IBM Server Maintenance	3,000	$ 3,450	3,968	4,563	5,019	5,520
App River / Spam Filter	1,600	$ 5,520	$ 5,520	$ 5,520	6,072	6,072
Granicus/Legistar Annual Maintenance Website and Gov Message	17,000	$ 18,791	$ 18,791	$ 18,791	20,000	20,000
Granicus Encoder Maintenance - Addition for new HD	4,400	$ -				
Granicus Encoder New	4,068	$ -				
Schedule Anywhere - PD Maintenance	600	$ 600	600	600	600	600
APBnet-TRAK-CriticalReach-Crime Bulletin Software - PD	600	$ 600	600	600	600	600
Adobe Enterprise agreement	4,000	$ 4,000	4,000	4,000	4,400	4,400
PD - Training TMS Annual Fees	2,400	$ 2,400	2,400	2,400	2,640	2,904
HWA UPS Maintenance and Warranty (four years)						
Civic Plus Site	-	$ -				
Code Publishing Company - Muni Code	2,500	$ 2,500	2,500	2,500	2,750	3,025
ESRI - ARC GIS concurrent users	10,000	$ 2,500	2,500	2,500	2,750	3,025
Knowbe4			7,514			8,000
Password Manager		$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200
Munimetrix Mainenance Due annually on July 28 / Papervision	1,800		1,800	1,800	1,980	2,178
Comcast For City at PD MDF	5,000	$ 5,000	5,000	5,000	5,500	5,500
Comcast Town Hall	2,200	$ 1,604	$ 1,604	$ 1,604	$ 1,800	$ 1,800
WT/CY Internet / VPN to PD		$ 2,667	2,667	2,667	2,800	2,800
PD Netmotion		$ 1,525	1,677	1,844	2,028	2,230
PD Netmotion Server						
PD Vision Mobile Software		$ 15,054	3,312	3,477	3,824	4,206
MCN - Fortbragg.com registration	240	$ 240	240	240	240	240
Beacon Read Center support (Water billing software) Paid in May	6,860	$ -				
CLIPs Annual Maintenance-PD	800	$ 1,001	$ 1,001	$ 1,001	$ 1,001	$ 1,001
Dude Solutions (DBA: Brightly) Maint Software	6,000	$ 6,000	6,000	6,000	6,000	6,000
Next Request	4,850	$ 4,850	4,850	4,850	4,850	4,850
SSL Certificate - Go Daddy	600	$ 600	600	600	600	600
StarLink	7,320	$ 7,320	7,320	7,320	7,320	7,320
Zoom	660	$ 816	$ 860	$ 860	$ 860	$ 860
Windows 365-Emails	9,600					
Archive Social	5,988	$ 5,990	6,589	7,188	7,188	7,188
Druva - Backup System - Cloud back ups	8,000	$ 7,666	8,000	8,000	8,000	8,000
Net-File FPPC Filing - City Clerk	2,900	$ 2,900	2,900	2,900	3,000	3,000
Kiosk - Connected sign	700	$ 3,500	$ 3,500	$ 3,500	$ 3,500	$ 3,500
Firewall Licensing & VPN	2,175	$ 2,671	4,021	4,250	4,675	5,142
Cisco SmartNet Maintenance Contract & VPN -Firewalls	880	$ 1,600	1,625	1,650	1,675	1,700
DUO Multifactor Authentication	2,412	$ 1,710	1,800	1,845	1,895	1,945
Cloud-based Logs retention	11,000	$ 11,379	12,289	13,000	13,000	13,000
vPen Testing annual software	7,500	$ 7,500	7,500	7,500	7,500	7,500
Cisco LAN Switches Licensing and SmartNet (Maintenance)	13,855	$ 13,855	13,855	14,000	14,140	14,281
Licensing for proposed new Wireless Access Points Internal Network- inc. security integration	14,173			5,100		
Docusign	300	$ 1,725	1,725	1,725	1,725	1,725
Nor-Cal Telephone Repair Service	4,000	$ -				
New Telephone System Licensing & Maintenance	8,150	$ 12,240	-	-		3,000
TeamViewer	$466.80	$466.80	$466.80	$466.80	$466.80	$466.80
Mailgun	1,080	1,080	1,080	1,080	1,080	1,080
Trello Project Tracking	120	$ 120	$ 120	$ 120	140	140
MCN/AT&T Internet at CH (already purchased)	$1,889	$ 1,889	$1,889	1,889	1,889	1,889
MDM - Mobile Device Manager		$5,300	$4,800	$4,800	$4,800	$4,800
Verkada Door Access Control Install & 10-Yr Licensing - CH, TH			$50,484			
Verkada Additional Cameras Install & Licensing - TH, GHM				$36,093		
Verkada Additional Cameras Install & Licensing - CH					$54,580	
MS 365 Government G3 Plan		$28,080	$28,080	$28,080	$28,080	$28,080
Sub-total- Software/Hardware Support Maintenance	$ 275,226	$ 313,673	$ 354,866	$ 342,914	$ 365,645	$ 327,475

Information Technology Maintenance & Repair Internal Service Fund Detail	FY 22-23 Adopted Budget	FY 23-24 PROPOSED BUDGET	FY 24-25 Projected Budget	FY 25-26 Projected Budget	FY 26-27 Projected Budget	FY 27-28 Projected Budget
521-4394-0381						
Small Tools & Equipment						
Miscellaneous Small Tools - Cables, batteries, tools, ect.)	3,500	$ 5,000	5,000	5,000	5,100	5,200
Sub-total- Small Tools & Equipment	$ 3,500	$ 5,000	$ 5,000	$ 5,000		
521-4394-0351						
Equipment repair						
UPS Batteries	200	$ 500	500	500	750	750
Network Cabling	1,500	$ 1,500	1,500	1,500	1,500	1,500
Charging cables and bricks	200	$ 200	200	200	200	200
Video Cards 'Boards Cameras	2,200	$ 2,000	2,000	1,200	2,000	2,000
Sub-total- Equipment Repair	$ 4,100	$ 4,200	$ 4,200	$ 3,400	$ 4,450	$ 4,450
521-4394-0382						
Hardware - upgrades/infrastructure improvements						
Hardware						
IT Office Flooring Repair						
IT Office Ergonomic improvements						
User WorkStation Replacement 20 units @900 each	15,000	$ 18,000	$ 18,000	$ 18,000	20,000	20,000
Laptops		$ 1,800	$ 1,800	$ 1,800	2,000	2,000
User Monitor Replacements	3,000	$ 3,600	3,000	3,000	3,000	3,000
Plotters/Printers	2,000	$ 2,000	2,000	2,000	2,000	2,000
iPads for Council/Planning Commission	1,500	$ -	1,230	1,230	1,230	1,230
Granicus Encoder New	4,068	$ -				
TownHall Cables	-	$ 600	500	500	500	500
55 Inch Monitor for WWTF SCADA	-	$ -	1,200			1,200
Security Cameras - BBP	12,000			6,000	6,000	
Laptops for Toughbook replacement		$ 3,500		-		
SCADA Computer with Video Cards	-			3,000		3,000
Security Camera Monitoring for CH	6,000					
Public Use Kiosk PC - Connected Signs License Fee		$ -				
Wireless Access Points Internal Network	23,000	$ -	-	-		
Mixing board Town Hall	-	$ -	-	-		
HyperV Server	60,000					
Microphone Equipment		$ 2,000	2,000	-	1,500	1,500
Environmental Controls and Racking	500	$ 500	300	300	300	300
Email Server Dell R730 Hyper V	-					
UPS for PD & CH server rooms	3,000	$ 7,000	3,500	3,500		
Replace all EOL LAN switches with New or Refurbished current models	15,214	$ 15,929	15,929	-		
Replacement and new Firewall	2,041	$ -	-	-		
New Backup Hardrives	1,500	$ -	-	-		
PD - UPD Connection	3,000		3,000	3,000	3,000	3,000
Phone System	35,682	$ 400	400	400	400	400
Verkada Door Access Control H/W - CH, TH			$ 32,274			
Verkada Cameras H/W - TH, GHM				17,949		
Verkada Additional Cameras H/W - CH					33,280	
Sub-total- Hardware	$ 187,505	$ 55,329	$ 91,133	$ 60,679	$ 67,210	$ 38,130
521-4394-0383						
Software - upgrades/infrastructure improvements						
Software						
Windows Server Software 2022	1,000	$ 24,025	-	-	25,000	
Windows 11 Pro OS	1,000	$ 4,000	4,000	4,000	4,000	4,000
Office Standard 80 @ 239						
Sub-total- Software	$ 2,000	$ 28,025	$ 4,000	$ 4,000	$ 29,000	$ 4,000

Information Technology Maintenance & Repair Internal Service Fund Detail	FY 22-23 Adopted Budget	FY 23-24 PROPOSED BUDGET	FY 24-25 Projected Budget	FY 25-26 Projected Budget	FY 26-27 Projected Budget	FY 27-28 Projected Budget
521-4394-0366						
Training and Conferences						
Training Budget						
Storm Wind - Distance Learning	2,580	$ -	2,580	-	2,750	
Training/Travel	2,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000
MISAC Fee	260	$ 260	260	260	260	260
Sub-total- Training & Confrence	$ 4,840	$ 4,260	$ 6,840	$ 4,260	$ 7,010	$ 4,260
521-4390-0741						
Public Wi-Fi Upgrades and Maintenace						
13DB Antenna	-					
Wireless station	1,000		1,000	1,000		
Cables and other hardware	-					
Equipment repair	300		300	300		
Mesh Radio						
ESTIMATE to replace /upgrade Public WiFi for all of downtown	-		25,000			8300
Sub-total- Public Wi-Fi	$ 1,300		$ 26,300	$ 1,300	$ -	$ 8,300
521-4394-0319						
PROFESSIONAL SERVICES						
NIST 800-171 & Other Security Consultants		$ 45,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000
Unexpected Consultancy		$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
Sub-total- Professional Services	$ -	$ 50,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
No Acct Number						
Information Technology Paid by other accounts						
Treatment SCADA Systems software update to 64bit	**510**		3,000	3,000	3,000	3,000
DownHome Loan Manager (CDBG Funds)	1,500		1,200	595	650	700
Water Treatment IPad Covers			426	426	450	450
Public Works Phone Covers			80	80	80	80
PD Smart Phone Covers			260	260	260	260
Part Time AV Tech PEG Work (see Payroll)	26,500		25,291	25,291	25,291	25,291
Half of CLIPS CAD (Ukiah PD)	774		774	774	774	774
Live Scan Machine TO BE PAID FOR WITH AF FUNDS 22-23	21,764	$ 3,600	3,960	4,356	4,791	5,270
Conference Call Bridge	336		336	336	336	336
PD Cogent - Criminal (booking) LiveScan Machine						
PD Netmotion Server - AF	$ 5,000		$ -	$ -		
Additional Verkada Cameras and Door Access Control - WT			$ -	$ 25,500		
Additional Verkada Cameras and Door Access Control - WWT			$ -	$ -	10,000	
Additional Verkada Cameras - BBP -- ESTIMATE			$ 25,000	$ -		
BlueBeam software		$ 1,150	$ 1,150	$ 1,150	1,250	1,250
FirstNet		$ 25,943	$19,869	$19,869	$19,869	$19,869
Other information (Not Calculated to IT Budget)	$ 56,384	$ 30,693	$ 81,346	$ 81,637	$ 66,751	$ 57,280
521-4394-0619						
PEG						
Franklin Studio Internet / Wi-Fi	1,800	$ 2,551	2,551	2,551	2,750	2,750
TH Camera Replacement	2,700		2,700	2,700		
Small Circuit Replacement	500		750	750		
Replacement Tricaster Server						
Replacement Mac Server		$ 8,000				
Softron Software		$ 2,800				
Replace speakers and recable audio / video		$ 6,000				
Sub-total- PEG	$ 5,000	$ 19,351	$ 6,001	$ 6,001		
Total Information Techonology	$ 483,471	$ 479,838	$ 513,340	$ 442,554	$ 488,315	$ 401,615