Information Technology

PROGRAM DESCRIPTION

The Information Technology (IT) Department is responsible for supporting the District's computing infrastructure, including the Local Area Network, Wide Area Network, and Wireless Local Area Network. IT manages the District's servers and file systems, network infrastructure equipment, VoIP switches and phones, Internet access, databases, and email resources. IT supports approximately 380 workstations District-wide. The department maintains proper licensing and maintenance contracts for District owned software and hardware. The Information Technology Department partners with all divisions to evaluate technology needs and determine the best solutions to meet immediate needs, as well as the District's long-term needs. IT provides support for District–owned technology via the IT/Communications Service Desk. IT also provides 24x7 technical support for Integrated Operations through an after-hours on-call rotation.

BUDGET SUMMARY

Expenditures	2010-11 Actual	2011-12 Actual	2012-13 Budget	2013-14 Budget
Personnel Services	$1,011,585	$1,056,696	$1,081,998	**$1,116,838**
Materials and Services	796,051	717,744	933,792	**865,972**
Total Expenditures	$1,807,636	$1,774,440	$2,015,790	**$1,982,810**

PERSONNEL SUMMARY

Position	2010-11 Actual	2011-12 Actual	2012-13 Budget	2013-14 Budget
IT Manager	1.00	1.00	1.00	**1.00**
Sr. IT Systems Administrator	1.00	1.00	1.00	**1.00**
Sr. IT Database Administrator	1.00	1.00	1.00	**1.00**
IT Network Engineer	1.00	1.00	1.00	**1.00**
Systems Administrator-II	1.00	1.00	1.00	**1.00**
Service Desk Specialist-II	1.00	1.00	1.00	**2.00**
Systems Administrator-I	2.00	2.00	1.00	**1.00**
Service Desk Specialist-I	1.00	1.00	1.00	**0.00**
Total Full-Time Equivalents (FTE)	9.00	9.00	8.00	**8.00**

2013-14 SIGNIFICANT CHANGES

The increase in Personnel Services is due to expected wage and benefit increases, including PERS rate and medical cost increases.

The usage of Materials and Services, accounts 5340 and 5368, was analyzed during 2012-13 and the 2013-14 budget reflects a change in where items are budgeted. Account 5340 is expanded to include all hosted software solutions and annual subscription costs for software, and includes $116,142 for MUNIS annual maintenance and support, $90,500 for annual OnSceneRMS maintenance, a $35,000 placeholder for a transition to Microsoft 365, and the annual maintenance costs for all programs. Amounts in account 5368 relate to annual maintenance costs for hardware, telephone systems, District television, and firewall maintenance. Account 5414, Other Professional Services, includes $10,000 for HVAC software to improve system management remotely, among other items. Account 5347 Cable Access, includes the broadband internet connections throughout the District.

Information Technology, continued

STATUS OF 2012-13 SERVICE MEASURES

- **Provide technical support for and maintain the network infrastructure and maintenance needs of the District.** Ensure the security of the network is consistent with internal and BUG policies.

Goal(s)/Call(s) for Action:	VI/3; VII/A
Service Type(s):	Mandatory
Measured By:	MUNIS work orders are monitored to ensure issues are dealt with in a timely fashion. Actively participate in the BUG/BOT meetings, and maintain a representative in the BUG technical group.
Status or Outcome:	All of the major benchmarks for this Service Measure have been met. The goals established for network and systems uptime have been exceeded. The MUNIS work order module is currently being used as a unified service request solution for all of Logistics. The IT department has continued an active engagement with the Broadband Users Group (BUG), including negotiating a new fee structure and returning to a shared internet plan at the end of the current Integra contract in the fall of 2013.

- **Participate as an active partner in project management, planning, and implementation** to support District-wide business technology solutions.

Goal(s)/Call(s) for Action:	VI/5; VII/A
Service Type(s):	Management
Measured By:	Open lines of communication are experienced from inception to completion, resulting in a smooth and successful conclusion of the project.
Status or Outcome:	Information Technology continues to work actively with other departments to plan, evaluate, and implement various technologies. This fiscal year has included a number of significant projects that serve as strong examples of this partnership, including a thorough evaluation of next generation heart monitors, as well as working with EMS to test the new PulsePoint smart phone app. IT will actively participate in the E-GIS project over the next two years.

- **Forecast IT expenditures and meet budgetary expectations.**

Goal(s)/Call(s) for Action:	VIII/5
Service Type(s):	Essential
Measured By:	Provide Finance with a 15-year capital spending plan to meet District technology requests.
Status or Outcome:	Completed and posted to the SharePoint budget site.

Information Technology, continued

STATUS OF 2012-13 SERVICE MEASURES, CONTINUED

- Monitor opportunities and proactively engage with partner agencies to support and encourage efforts in the area of electronic information system integration.

Goal(s)/Call(s) for Action:	VII/3
Service Type(s):	Essential
Measured By:	Prior to implementing new technology for large-scale projects as modeled by the MDC replacement project, engage with partner agencies as part of the learning and research phase. Entertain alternative purchasing options to ensure the best opportunities are realized.
Status or Outcome:	The IT Department continues to keep an open line of communication with partner agencies both in and out of the fire service. The objective is to identify the areas of technology overlap, with the intention of understanding who can offer experience, advice, or referral for any technology use now or are likely use in the future.

STATUS OF 2012-13 CHANGE STRATEGIES

- Increase protection and provide redundancy of physical critical servers and file systems – Participate in the design of the Station 56/South Operating Center (SOC) remodel to incorporate a communications room to support a secondary Fire Operations Center (FOC). Relocate the District's disaster recovery systems from the North Operating Center (NOC) to the SOC.

Goal(s)/Call(s) for Action:	III/3
Budget Impact:	Increase required
Duration:	Year 3 of 3
Budget Description:	Physical move of disaster recovery systems
Partner(s):	Not applicable
Status or Outcome:	IT has been closely involved in the design and planning stages of building construction for the South Operating Center (SOC). Upon the completion and move-in at SOC, the current disaster recovery site will be relocated to that facility. The current location at NOC is serving all the District disaster recovery needs regarding physical site redundancy and business continuity. The relocation to SOC will complete the disaster recovery project plan to host those services at the backup FOC and in a seismically resilient facility.

Information Technology, continued

- **Reduce the potential bottleneck of data throughput –** Provides improved performance in overall access to the District's critical systems. This is a multiple year Change Strategy in order to adapt as technology changes and capacity needs expanded, e.g., IGA to provide hosted services to partner agencies. In addition, this allows Information Technology to prepare and plan for an innovative and cost-effective approach to replace physical workstations for the next hardware upgrade cycle. Particularly ideal for the fire stations, the move from traditional computer hardware to a virtualized solution is anticipated. In fiscal year 2012, a proof of concept project is underway with the Fire Chief's Office to reduce the number of pieces of hardware necessary to access secure enterprise network resources. Overall, a significant decrease in hardware costs, as well as administrative overhead to support the environment, are the expected measurable outcomes. This initiative is also likely to result in a reduction in overall energy costs throughout the District.

Goal(s)/Call(s) for Action:	VI/5
Budget Impact:	Increase required
Duration:	Year 2 of 3
Budget Description:	Modules to upgrade data links to data storage network
Partner(s):	Not applicable
Status or Outcome:	IT has continued down the path of a high rate of server virtualization, centralized storage, and unified security solutions. In the last two fiscal years, the number of production servers has been cut in half, the speed and size of storage has doubled, and three disparate security devices have been replaced with a single, highly redundant solution.

- **Introduce redundancy to the wireless LAN to support an increased demand for the use of mobile devices and the re-activation of the apparatus Wi-Fi MDC updates -** The purchase leverages the existing wireless controller solution, while providing redundancy where fault tolerance does not exist today.

Goal(s)/Call(s) for Action:	VII/1
Budget Impact:	Increase required
Duration:	Year 1 of 1
Budget Description:	Additional Aruba Wireless Controller
Partner(s):	Not applicable
Status or Outcome:	The Aruba wireless controller has been implemented and now provides protection from a single-point of failure on the controller.

ADDITIONAL 2012-13 ACCOMPLISHMENTS

- In the second half of 2012, the entire District was upgraded from Vista to Windows 7. There were some particular challenges to slowly upgrading the station desktops due to issues with floating work assignments. To prevent disruption on that front, all station PCs were upgraded to Windows 7 in one evening. The effort was successful and over 75 computers were upgraded at 20 remote sites within the span of a few hours.

- Also in the second half of 2012, the vast majority of District data was migrated to a new storage solution without noticeable disruption. This includes all server data, all user shares, data backup targets, and user profile locations. Data replication to the disaster recovery site was also migrated to a new platform over this time. With this change, the amount of data that is being replicated to the redundant site grew and the frequency of replication was increased.

- Received a $25,500 MACC grant for the network connection to the new station 65 location.

2013-14 SERVICE MEASURES

Service Measure	2009-10 Actual	2010-11 Actual	2011-12 Actual	2012-13 Estimated	2013-14 Projected
Service Desk work orders	3,217	2,582	1,310	**986**	**850**
Business hours	3,217	2,489	1,219	**884**	**760**
Non-business hours	-	93	91	**102**	**90**
After-hours emergency alerts	-	-	-	**110**	**75**
Systems uptime target [1]	99.94%	99.95%	99.95%	**99.98%**	**99.99%**
Network services	-	-	-	**99.99%**	**99.99%**
File and logon services	-	-	-	**99.99%**	**99.99%**
Critical applications [2]	-	-	-	**99.98%**	**99.99%**
Technology Inventory (total)	-	-	-	**595**	**565**
Desktops in service	-	-	-	**207**	**220**
Laptops in service	-	-	-	**76**	**60**
Tablets in service	0	0	15	**15**	**15**
iPads in service	0	0	10	**18**	**30**
Virtual desktops in service	-	5	14	**70**	**120**
Servers in production	-	-	65	**55**	**50**
Network switches	72	72	81	**81**	**83**
Printers in service	-	-	-	**73**	**70**
Total shared data size (TB)				**18.85**	**20.00**
Offsite data protection (TB)				**14.50**	**17.00**
Total database size (TB)	-	-	-	**1.15**	**1.50**

[1] Uptime target measures only unplanned outages for services
[2] Critical application for this measure are MUNIS, OnSceneRMS, TeleStaff, and SharePoint

- **Provide technical support for and maintain the District's enterprise and mobile network infrastructure.** Continually assess and plan for future needs, staying current with rapid advancements in technology. Ensure the security of the network is consistent with internal and BUG policies.

Goal(s)/Call(s) for Action:	III; VI/4; VII/1 and 2
Service Type(s):	Mandatory
Measured By:	MUNIS work orders are monitored to ensure issues are dealt with in a timely fashion. Active participation in the BUG/BOT meetings and maintaining a representative in the BUG technical group.

- **Participate as an active partner in project management, planning, and implementation** to support District-wide business technology solutions.

Goal(s)/Call(s) for Action:	VI/4 and 5; VII/1 and 2
Service Type(s):	Management
Measured By:	Open lines of communication are experienced from inception to completion, resulting in a smooth and successful conclusion of the project.

Information Technology, continued

2013-14 SERVICE MEASURES, CONTINUED

- **Forecast IT expenditures and meet budgetary expectations.**
  - **Goal(s)/Call(s) for Action:** VIII/5
  - **Service Type(s):** Essential
  - **Measured By:** Provide Finance with a 15-year capital spending plan to meet District technology requests.

- **Monitor opportunities and proactively engage with partner agencies** to support and encourage efforts in the area of electronic information system integration.

  - **Goal(s)/Calls for Action:** VII/1
  - **Service Type(s):** Essential
  - **Measured By:** Prior to implementing new technology for large-scale projects as modeled by the MDC replacement project, engage with partner agencies as part of the learning and research phase. Entertain alternative purchasing options to ensure the best opportunities are realized.

2013-14 CHANGE STRATEGIES

- **Reduce the potential bottleneck of data throughput –** Provides improved performance in overall access to the District's critical systems. This is a multiple year Change Strategy in order to adapt as technology changes and capacity needs expanded, e.g., IGA to provide hosted services to partner agencies. In addition, this allows Information Technology to prepare and plan for an innovative and cost-effective approach to replace physical workstations for the next hardware upgrade cycle. Particularly ideal for the fire stations, the move from traditional computer hardware to a virtualized solution is anticipated. In fiscal year 2012, a proof of concept project was begun with the Fire Chief's Office to reduce the number of pieces of hardware necessary to access secure enterprise network resources. Overall, a significant decrease in hardware costs, as well as administrative overhead to support the environment are the expected measurable outcomes. This initiative is also likely to result in a reduction in overall energy costs throughout the District.

  - **Goal(s)/Call(s) for Action:** VI/4 and 5; VII/1
  - **Budget Impact:** Increase required
  - **Duration:** Year 2 of 3
  - **Budget Description:** NetApp storage expansion and Juniper 10GB switches
  - **Partner(s):** Not applicable

- **Evaluate opportunities for IT to provide an external service delivery model** to support regional agencies. Develop an enterprise service delivery model to accommodate technology needs over extended geographical locations.

  - **Goal(s)/Call(s) for Action:** VI/5; VII/1
  - **Budget Impact:** Resource neutral
  - **Duration:** Year 1; no projected end date
  - **Budget Description:** Placeholder to provide Canby Fire Information Technology services
  - **Partner(s):** Communications, Fire Chief's Office

2013-14 CHANGE STRATEGIES, CONTINUED

- **Evaluate the District's use of mobile technology.** Refresh the overall mobile technology strategy, considering both future and current solutions. This review includes all platforms of mobile computing including laptops, tablets, smart phones, and the applications that run on them. This also includes management and provisioning solutions for mobile devices and an effort to help shape BUG policy to allow for the best use of mobile technology for the District.

Goal(s)/Call(s) for Action:	VI/4 and 5; VII/1
Budget Impact:	Increase required
Duration:	Year 1 of 1
Budget Description:	Placeholder for VMware Horizon Suite and Mobile environment refresh
Partner(s):	Fire Chief's Office

Information Technology, continued

		Actual Prior FY 2011	Actual Prior FY 2012	Budget Prior FY 2013	Budget Proposed FY 2014	Budget Approved FY 2014	Budget Adopted FY 2014
10215	General Fund						
5001	Salaries & Wages Union	3,060					
5002	Salaries & Wages Nonunion	576,171	614,846	622,816	637,410	637,410	637,410
5004	Vacation Taken Nonunion	53,452	44,362	47,909	49,035	49,035	49,035
5006	Sick Taken Nonunion	34,622	39,747	9,582	9,810	9,810	9,810
5008	Personal Leave Taken Nonunion	3,671	4,080	4,106	4,206	4,206	4,206
5010	Comp Taken Nonunion	488	846				
5015	Vacation Sold	3,748		16,452	13,471	13,471	13,471
5016	Vacation Sold at Retirement		7,720				
5018	Comp Time Sold Union		1,227				
5021	Deferred Comp Match Nonunion	6,520	18,918	27,377	28,021	28,021	31,935
5120	Overtime Union	6,660	11,430	5,400			
5121	Overtime Nonunion	6,606	4,046	7,000	2,500	2,500	2,500
5123	Comp Time Sold Nonunion	138					
5201	PERS Taxes	124,351	103,383	147,832	160,538	160,538	160,538
5203	FICA/MEDI	51,155	54,119	56,659	57,230	57,230	57,230
5206	Worker's Comp	12,427	18,704	13,332	13,464	13,464	13,464
5207	TriMet/Wilsonville Tax	4,673	5,006	5,198	5,342	5,342	5,342
5208	OR Worker's Benefit Fund Tax	211	220	283	305	305	305
5211	Medical Ins Nonunion	89,580	94,965	89,552	99,508	99,508	99,508
5221	Post Retire Ins Nonunion	6,525	8,700	7,200	7,200	7,200	7,200
5230	Dental Ins Nonunion	11,431	11,539	11,363	11,878	11,878	11,878
5240	Life/Disability Insurance	7,241	6,620	9,387	9,231	9,231	9,231
5270	Uniform Allowance	171		550	175	175	175
5290	Employee Tuition Reimburse	8,683	6,216				
5295	Vehicle/Cell Allowance				3,600	3,600	3,600
	Total Personnel Services	**1,011,585**	**1,056,696**	**1,081,998**	**1,112,924**	**1,112,924**	**1,116,838**
5300	Office Supplies	78	90	250	200	200	200
5301	Special Department Supplies	8,635	2,568	7,100	3,750	3,750	3,750
5302	Training Supplies	101					
5330	Noncapital Furniture & Equip	22,557	9,890	21,598	5,752	5,752	6,481
5340	Software Licenses/Upgrade/Host	11,985	14,083	10,797	483,098	483,098	483,098
5350	Apparatus Fuel/Lubricants	758	438	1,100	1,100	1,100	1,100
5361	M&R Bldg/Bldg Equip & Improv	80					
5367	M&R Office Equip	1,909	2,860	2,820	2,820	2,820	2,820
5368	M&R Computer & Network Hdwe	444,399	410,377	544,358	132,237	132,237	132,237
5414	Other Professional Services	50,672	44,120	103,304	18,600	18,600	18,600
5415	Printing	36	47				
5417	Temporary Services	88					
5437	Cable Access	250,056	225,552	229,774	215,470	215,470	215,470
5461	External Training	1,907	3,027	6,595	500	500	500
5462	Travel and Per Diem	1,393	490	4,196	966	966	966
5500	Dues & Subscriptions	1,294	4,172	1,600	450	450	450
5570	Misc Business Exp	102	30	300	300	300	300
	Total Materials & Services	**796,051**	**717,744**	**933,792**	**865,243**	**865,243**	**865,972**
	Total General Fund	**1,807,636**	**1,774,440**	**2,015,790**	**1,978,167**	**1,978,167**	**1,982,810**