Office of Technology and Information Systems

Program Overview

The Office of Technology functions across all areas of the organization including Instruction, Operations, Maintenance, and Administration. The diverse responsibilities include: providing technology hardware and software for instruction and operational support; developing techniques for infusing technology tools into curriculum and effective delivery; providing and maintaining the Wide Area Network (WAN) and Local Area Networks (LANs and WLANs); installing and maintaining communications systems (email, voice, public address, etc.); deploying interactive multi-media systems (interactive whiteboards and real-time feedback responders, document cameras, projectors, etc.); complex auditorium theatrical lighting and sound systems; technical TV studios; maintain information security safeguards; development of application programs/data analysis reports; maintain operational and system support for administrative/business systems; and provide professional staff development/support across all functional areas of the organization.

The Office of Technology recognizes the necessity for continuous instructional technology training as a part of professional development. In addition, the goal of developing technology-rich, authentic and relevant learning environments is a crucial part of the instructional program to help to engage the learner and provide students with 21st Century work skills. Digital transformation of HCPS' classroom, curriculum, and delivery will become the center focus of the Office of Technology.

Highly skilled and trained network administrators, engineers and technicians are responsible for the design, installation, operation, and maintenance of the enterprise infrastructure including the wide and local area networks; virtualized environments and storage area networks; instructional and administrative support systems such as email messaging, Student Information System, Enterprise Resource Planning and SharePoint; telephony and public address communications; and multi-media systems. Additionally, a team of regionally based computer technicians provide just in time support for all end user computers, printers, and related peripherals. Outside contractors are used to augment the existing staff's ability to service and support the wide variety and highly technical equipment/systems.

The Office of Technology is responsible for the processing of all student data, including federal and MSDE reporting; financial records, payroll, requisitions, purchase orders, warehouse, inventory, accounts payable, budgeting, e-mail, and wide area network (WAN) while maintaining a secure computing environment.

Board of Education Goals – FY 2019

- Board Goal 1:   Prepare every student for success in postsecondary education and career
- Board Goal 2:   Engage families and the community to be partners in the education of our students
- Board Goal 3:   Hire and support highly effective staff who are committed to building their own professional capacity in order to increase student achievement
- Board Goal 4:   Provide safe, secure, and healthy learning environments that are conducive to effective teaching and learning, creativity and innovation

Departmental Objectives – FY 2019

- Implement Year 2 of 1:1 initiative (Board Goal 1)
  - Provide professional learning opportunities for grades 4 and 6 to support meaningful use of technology in the classroom
- Develop technologies that utilize the network infrastructure to eliminate antiquated systems and improve the effectiveness of delivering content to students, parents and the community (Board Goals 2 and 4)
  - Identify a cost effective, sustainable interactive video display(s) that promote engaged and collaborative learning in the classroom
  - Implement a streaming video over IP system to replace antiquated CATV/media retrieval systems, eliminating the need for classroom TVs and maintaining old infrastructure
  - Collaborate with Safety and Security Office to develop an integration path for building access control into a single system solution
  - Develop migration plan to replace current analog phone/PA systems with a single voice over IP communication system
  - Install wireless technologies to promote the use of technology in all portable classrooms where wired infrastructure is difficult or not cost effective
- Develop a marketing strategy, through advertising and training, to increase print shop volume by 10% over FY 2018 (Board Goal 4)

- Modernize HCPS' student information system (Board Goals 1 and 2)
  - Implement a secure internet portal integrated into a homogeneous grading and reporting process across all grade levels to engage parents, students and teachers
  - Provide instructional staff with modern grade book capabilities integrated to the student information system
  - Replace all public facing school web sites to achieve ADA compliance and provide ubiquitous access for the school community
- Continue refinement of imaging process to allow real-time update to image for patching (Board Goal 1)
- Automate creation of network accounts for new staff (Board Goal 3)
- Develop a migration plan in collaboration with county government to utilize Emergency Operations Center (EOC) for off-site disaster recovery (Board Goal 4)
- Implement IMS Global interoperability standard "Common Cartridge" within itslearning, HCPS' learning management system, to facilitate seamless integration of content for all digital curriculum (Board Goal 1)

Accomplishments – FY 2017

- Redesigned the composition of the Print Shop equipment to reduce costs by roughly $55,000 annually and improve efficiency (Board Goal 4)
- Implemented customer satisfaction survey, which determined that 94% of respondents indicated that their experience with the Print Shop was excellent while 98% received their orders on time and as requested (Board Goals 3 and 4)
- Provided technical support for graduations, new hire orientations, board meetings, professional developments and multiple other events (Board Goals 2, 3 and 4)
- Provided engineering and technical support in the development of an IMAX styled theatre system in the planetarium at Southampton Middle School (Board Goal 4)
- Developed software to create and maintain MSDE student record cards in electronic form (Board Goal 2)
- Developed software to collect Special Education service provider logs and facilitate electronic recovery of Medical Assistance billing claims (Board Goal 2)
- Developed software to evaluate the performance of certificated Instructional, Administrative and Supervisory staff (Board Goal 3)
- Upgraded the account management system for students (Board Goals 1 and 4)
- Improved the operating system imaging process for quicker deployment of computers (Board Goal 1 and 4)
- Implemented a log management system for greater security (Board Goal 4)
- Implemented 2-factor network authentication for enhanced security (Board Goal 4)
- Streamlined the BYOT authentication process (Board Goal 1)
- Facilitated a total of 758 hours of technology professional development to 3,513 teachers representing 53 school (Board Goal 1)
  - Facilitated 303 hours of professional development focused on the implementation of itslearning to 1,488 teachers representing 53 schools
  - Developed a two credit continuing professional development course to support teachers implementing itslearning in the classroom
  - Collaborated with Curriculum, Instruction, and Assessment to implement the Department of Defense's $1.5 million Digital Conversion Technology Grant for Reading, Writing, and English Language Arts for RWES, CVES, MVES, ABMS, and ABHS, including planning for hardware purchases; developing a professional development plan; and delivering 300 hours of professional development focused on implementing itslearning in the classroom to support reading instruction
  - Facilitated 91 days of job-embedded professional development for grade levels and content areas focused on digital transformation
- Recorded and resolved 19,610 work orders (Board Goals 1, 2, 3, and 4)

FY 2019 Funding Adjustments

Wage and Benefits Adjustments of $168,727:
- Proposed salary/wage adjustments of $168,727
- Transfer from professional staff development to professional substitutes staff development, ($20,000)
- Transfer to OTIS professional substitutes staff development from professional staff development, $20,000

Base Budget Adjustments of ($163,961):
- Add 2.0 FTE Computer Technicians from base budget reductions, $89,706
- Reduce other contracted services, ($180,000)
- Reduce OTIS professional development, ($43,348)
- Reduce copier/machine rental expense, ($45,000)
- Reduce printing supplies, ($5,000)
- Transfer from contracted software maintenance to other contracted service, ($30,000)
- Transfer to other contracted service from contracted software maintenance, $30,000
- Reduce consultant expense, ($20,000)
- Increase temporary help, $20,000
- Reduce contracted service for computer repairs, ($11,000)
- Increase computer repair supplies, $11,000
- Transfer from staff development conferences to professional development conferences, ($7,500)
- Transfer to professional development conferences from staff development conferences, $7,500
- Reduce telecommunications equipment, ($10,000)
- Eliminate software equipment expense, ($3,786)
- Reduce telecommunications supplies expense, ($2,000)
- Increase other equipment, $14,000
- Increase audiovisual equipment, $12,000
- Increase software maintenance contracted service, $9,467

The increase in expenditures from the fiscal 2018 budget for the Office of Technology is $4,766.

Office of Technology and Information

By Object Code

	FY16 Actual	FY17 Actual	FY17 Budget	FY18 Budget	18-19 Change	FY19 Budget
Salaries	$3,645,554	$3,539,695	$3,659,243	$3,820,252	$235,085	$4,055,337
Contracted Services	$1,882,118	$1,933,038	$2,169,365	$2,618,815	($246,533)	$2,372,282
Supplies	$1,691,316	$1,760,194	$2,017,647	$1,962,647	$4,000	$1,966,647
Other Charges	$1,549,285	$1,161,744	$1,256,936	$793,945	$0	$793,945
Equipment	$267,049	$187,552	$321,045	$306,079	$12,214	$318,293
Total:	**$9,035,322**	**$8,582,224**	**$9,424,236**	**$9,501,738**	**$4,766**	**$9,506,504**

Budgeted Full Time Equivalent Positions

	FY16	FY17	FY18	18-19	FY19
Administrator	1.0	1.0	1.0	0.0	1.0
Assistant Supervisor	3.0	3.0	4.0	0.0	4.0
Clerical 12 Month	1.0	1.0	1.0	0.0	1.0
Director	1.0	1.0	1.0	0.0	1.0
Printer	4.0	4.0	4.0	0.0	4.0
Teacher/Counselor	3.0	3.0	3.0	0.0	3.0
Technology Prog/Analyst/Tech	41.0	40.0	39.0	2.0	41.0
	54.0	**53.0**	**53.0**	**2.0**	**55.0**

By State Category

	FY16 Actual	FY17 Actual	FY17 Budget	FY18 Budget	18-19 Change	FY19 Budget
FTE: 31.0	**ADMINISTRATIVE SERVICES**					
Salaries						
1 MAINTENANCE/MECHANICS/TECHS Printing Services 101-XXX-022-025 51120 FTE: 4.0	$166,347	$176,007	$177,763	$184,058	$9,148	$193,206
2 PROFESSIONAL Office of Technology 101-XXX-023-045 51100 FTE: 7.0	$632,542	$662,325	$663,018	$697,187	$33,368	$730,555
3 CLERICAL Office of Technology 101-XXX-023-045 51110 FTE: 1.0	$51,542	$52,168	$52,190	$35,825	$4,187	$40,012
4 MAINTENANCE/MECHANICS/TECHS Office of Technology 101-XXX-023-045 51120 FTE: 19.0	$1,420,521	$1,332,091	$1,331,884	$1,457,033	$56,919	$1,513,952
5 TEMPORARY HELP Office of Technology 101-XXX-023-045 51140 FTE: 0.0	$16,690	$10,941	$33,722	$0	$20,000	$20,000
6 MAINT./MECH./TECH. - ADDT'L HRS Office of Technology 101-XXX-023-045 51160 FTE: 0.0	$0	$32	$406	$406	$0	$406
Total Salaries	**$2,287,642**	**$2,233,563**	**$2,258,983**	**$2,374,509**	**$123,622**	**$2,498,131**

Contracted Services

By State Category	FY16 Actual	FY17 Actual	FY17 Budget	FY18 Budget	18-19 Change	FY19 Budget
ADMINISTRATIVE SERVICES						
Contracted Services						
7 OTHER CONTRACTED SERVICES Printing Services 101-XXX-022-025 52170	$0	$891	$1,000	$1,000	$0	$1,000
8 COPIER / MACHINE RENTAL Printing Services 101-XXX-022-025 52370	$315,431	$296,747	$331,500	$300,000	$(45,000)	$255,000
9 SOFTWARE MAINTENANCE Printing Services 101-XXX-022-025 52380	$7,930	$7,930	$7,930	$7,930	$0	$7,930
10 OTHER CONTRACTED SERVICES Office of Technology 101-XXX-023-045 52170	$150,499	$392	$200	$180,000	$(180,000)	$0
11 CONSULTANTS Office of Technology 101-XXX-023-045 52205	$96,292	$80,497	$115,280	$115,280	$(20,000)	$95,280
12 SECURITY & SAFETY Office of Technology 101-XXX-023-045 52270	$0	$4,415	$5,000	$5,000	$0	$5,000
13 COPIER / MACHINE RENTAL Office of Technology 101-XXX-023-045 52370	$5,811	$1,122	$8,000	$1,150	$0	$1,150
14 SOFTWARE MAINTENANCE Office of Technology 101-XXX-023-045 52380	$385,657	$412,675	$377,533	$410,533	$9,467	$420,000
Total Contracted Services	**$961,621**	**$804,669**	**$846,443**	**$1,020,893**	**$(235,533)**	**$785,360**
Supplies						
15 OFFICE Printing Services 101-XXX-022-025 53440	$0	$0	$500	$500	$0	$500
16 PRINTING Printing Services 101-XXX-022-025 53445	$123,802	$123,920	$135,000	$110,000	$0	$110,000
17 OFFICE Office of Technology 101-XXX-023-045 53440	$2,743	$3,676	$6,000	$6,000	$0	$6,000
18 PRINTING Office of Technology 101-XXX-023-045 53445	$0	$0	$5,000	$5,000	$(5,000)	$0
19 POSTAGE/COURIER SERVICE Office of Technology 101-XXX-023-045 53450	$459	$222	$0	$0	$0	$0
Total Supplies	**$127,003**	**$127,817**	**$146,500**	**$121,500**	**$(5,000)**	**$116,500**
Other Charges						

By State Category	FY16 Actual	FY17 Actual	FY17 Budget	FY18 Budget	18-19 Change	FY19 Budget
ADMINISTRATIVE SERVICES						
Other Charges						
20 INSTITUTES, CONFERENCES, MTGS. Printing Services 101-XXX-022-025 54750	$0	$0	$250	$0	$0	$0
21 MILEAGE, PARKING, TOLLS Office of Technology 101-XXX-023-045 54720	$6,984	$6,921	$0	$7,000	$0	$7,000
22 INSTITUTES, CONFERENCES, MTGS. Office of Technology 101-XXX-023-045 54750	$25,377	$37,817	$25,000	$25,000	$7,500	$32,500
Total Other Charges	**$32,361**	**$44,738**	**$25,250**	**$32,000**	**$7,500**	**$39,500**
Equipment						
23 OTHER EQUIPMENT Printing Services 101-XXX-022-025 55170	$0	$7,284	$7,966	$0	$14,000	$14,000
24 OTHER EQUIPMENT Office of Technology 101-XXX-023-045 55170	$27,379	$43,655	$45,833	$38,833	$0	$38,833
25 SOFTWARE Office of Technology 101-XXX-023-045 55460	$4,214	$1,981	$8,031	$8,031	$0	$8,031
26 COMPUTERS/BUSINESS EQUIPMENT Office of Technology 101-XXX-023-045 55805	$18,831	$0	$20,084	$20,084	$0	$20,084
27 OFFICE FURNITURE/EQUIPMENT Office of Technology 101-XXX-023-045 55810	$0	$83	$3,393	$3,393	$0	$3,393
Total Equipment	**$50,424**	**$53,003**	**$85,307**	**$70,341**	**$14,000**	**$84,341**
Total ADMINISTRATIVE SERVICES	**$3,459,051**	**$3,263,791**	**$3,362,483**	**$3,619,243**	**$(95,411)**	**$3,523,832**
FTE: 0.0 **INSTRUCTIONAL SALARIES**						
Salaries						
28 PROFESSIONAL Staff Dev. - OTIS 103-XXX-009-550 51100 FTE: 0.0	$113,784	$144,245	$193,348	$193,348	$(63,348)	$130,000
29 PROFESSIONAL - SUBSTITUTES Staff Dev. - OTIS 103-XXX-009-550 51101 FTE: 0.0	$10,069	$24,205	$10,000	$10,000	$20,200	$30,200
Total Salaries	**$123,853**	**$168,449**	**$203,348**	**$203,348**	**$(43,148)**	**$160,200**
Total INSTRUCTIONAL SALARIES	**$123,853**	**$168,449**	**$203,348**	**$203,348**	**$(43,148)**	**$160,200**
TEXTBOOKS AND CLASS SUPPLIES						
Supplies						
30 MATERIALS OF INSTR.- SOFTWARE Technology 104-XXX-001-215 53460	$1,326,202	$1,397,597	$1,585,888	$1,555,888	$0	$1,555,888
Total Supplies	**$1,326,202**	**$1,397,597**	**$1,585,888**	**$1,555,888**	**$0**	**$1,555,888**
Total TEXTBOOKS AND CLASS SUPPLIES	**$1,326,202**	**$1,397,597**	**$1,585,888**	**$1,555,888**	**$0**	**$1,555,888**

By State Category	FY16 Actual	FY17 Actual	FY17 Budget	FY18 Budget	18-19 Change	FY19 Budget
OTHER INSTRUCTIONAL COSTS						
Other Charges						
31 INSTITUTES, CONFERENCES, MTGS. Staff Dev. - OTIS 105-XXX-009-550 54750	$0	$317	$7,500	$7,500	$(7,500)	$0
Total Other Charges	**$0**	**$317**	**$7,500**	**$7,500**	**$(7,500)**	**$0**
Equipment						
32 COMPUTERS/BUSINESS EQUIPMENT Other Instructional Costs, Technology 105-XXX-001-840 55805	$113,749	$9,135	$113,941	$113,941	$0	$113,941
Total Equipment	**$113,749**	**$9,135**	**$113,941**	**$113,941**	**$0**	**$113,941**
Total OTHER INSTRUCTIONAL COSTS	**$113,749**	**$9,452**	**$121,441**	**$121,441**	**$(7,500)**	**$113,941**
OPERATION OF PLANT						
Other Charges						
33 COMMUNICATIONS Operations, Technology 110-XXX-031-840 54765	$560,392	$535,960	$549,170	$560,170	$0	$560,170
34 INTERNET ACCESS FEES Operations, Technology 110-XXX-031-840 54766	$174,504	$170,203	$168,400	$174,400	$0	$174,400
35 WAN Operations, Technology 110-XXX-031-840 54767	$770,431	$400,164	$486,741	$0	$0	$0
Total Other Charges	**$1,505,327**	**$1,106,327**	**$1,204,311**	**$734,570**	**$0**	**$734,570**
Total OPERATION OF PLANT	**$1,505,327**	**$1,106,327**	**$1,204,311**	**$734,570**	**$0**	**$734,570**
FTE: 24.0 **MAINTENANCE OF PLANT**						
Salaries						
36 PROFESSIONAL Technology - OTIS 111-XXX-990-840 51100 FTE: 2.0	$125,425	$93,737	$94,506	$192,819	$7,752	$200,571
37 MAINTENANCE/MECHANICS/TECHS Technology - OTIS 111-XXX-990-840 51120 FTE: 22.0	$1,087,325	$1,018,968	$1,047,431	$1,017,361	$146,859	$1,164,220
38 TEMPORARY HELP Technology - OTIS 111-XXX-990-840 51140 FTE: 0.0	$0	$0	$22,760	$0	$0	$0
39 MAINT./MECH./TECH. - ADDT'L HRS Technology - OTIS 111-XXX-990-840 51160 FTE: 0.0	$21,308	$24,978	$32,215	$32,215	$0	$32,215
Total Salaries	**$1,234,058**	**$1,137,682**	**$1,196,912**	**$1,242,395**	**$154,611**	**$1,397,006**
Contracted Services						
40 OTHER CONTRACTED SERVICES Technology - OTIS 111-XXX-990-840 52170	$70,169	$101,296	$80,000	$73,000	$30,000	$103,000
41 SECURITY & SAFETY Technology - OTIS 111-XXX-990-840 52270	$17,725	$20,891	$27,000	$20,000	$0	$20,000

By State Category	FY16 Actual	FY17 Actual	FY17 Budget	FY18 Budget	18-19 Change	FY19 Budget
MAINTENANCE OF PLANT						
Contracted Services						
42 REPAIRS-COMPUTERS Technology - OTIS 111-XXX-990-840 52320	$9,618	$0	$11,000	$11,000	$(11,000)	$0
43 BUSINESS MACHINES Technology - OTIS 111-XXX-990-840 52361	$106,113	$100,520	$92,000	$106,000	$0	$106,000
44 HARDWARE MAINTENANCE Technology - OTIS 111-XXX-990-840 52375	$406,427	$408,093	$485,274	$760,274	$0	$760,274
45 SOFTWARE MAINTENANCE Technology - OTIS 111-XXX-990-840 52380	$310,444	$487,666	$622,648	$622,648	$(30,000)	$592,648
46 AUDIO VISUAL Technology - OTIS 111-XXX-990-840 52495	$0	$9,904	$5,000	$5,000	$0	$5,000
Total Contracted Services	**$920,497**	**$1,128,369**	**$1,322,922**	**$1,597,922**	**$(11,000)**	**$1,586,922**
Supplies						
47 REPAIRS-COMPUTERS Technology - OTIS 111-XXX-990-840 53320	$37,613	$78,141	$82,000	$82,000	$11,000	$93,000
48 BUSINESS MACHINES Technology - OTIS 111-XXX-990-840 53361	$23,081	$10,495	$23,000	$23,000	$0	$23,000
49 OFFICE Technology - OTIS 111-XXX-990-840 53440	$875	$1,726	$1,000	$1,000	$0	$1,000
50 A/V Technology - OTIS 111-XXX-990-840 53495	$130,757	$108,980	$129,259	$129,259	$0	$129,259
51 COMMUNICATIONS Technology - OTIS 111-XXX-990-840 53765	$45,784	$35,438	$50,000	$50,000	$(2,000)	$48,000
Total Supplies	**$238,110**	**$234,780**	**$285,259**	**$285,259**	**$9,000**	**$294,259**
Other Charges						
52 MILEAGE, PARKING, TOLLS Technology - OTIS 111-XXX-990-840 54720	$11,107	$10,218	$19,500	$19,500	$0	$19,500
53 INSTITUTES, CONFERENCES, MTGS. Technology - OTIS 111-XXX-990-840 54750	$490	$144	$375	$375	$0	$375
Total Other Charges	**$11,597**	**$10,362**	**$19,875**	**$19,875**	**$0**	**$19,875**
Equipment						
54 OTHER EQUIPMENT Technology - OTIS 111-XXX-990-840 55170	$0	$6,582	$0	$0	$0	$0

By State Category	FY16 Actual	FY17 Actual	FY17 Budget	FY18 Budget	18-19 Change	FY19 Budget
MAINTENANCE OF PLANT						
Equipment						
55 P. A. SYSTEMS Technology - OTIS 111-XXX-990-840 55272	$0	$4,021	$2,310	$2,310	$0	$2,310
56 SOFTWARE Technology - OTIS 111-XXX-990-840 55460	$0	$0	$3,786	$3,786	$(3,786)	$0
57 A/V EQUIPMENT Technology - OTIS 111-XXX-990-840 55495	$96,819	$112,816	$95,000	$95,000	$12,000	$107,000
58 COMMUNICATIONS Technology - OTIS 111-XXX-990-840 55765	$0	$1,756	$15,155	$15,155	$(10,000)	$5,155
59 COMPUTERS/BUSINESS EQUIPMENT Technology - OTIS 111-XXX-990-840 55805	$925	$240	$5,046	$5,046	$0	$5,046
60 OFFICE FURNITURE/EQUIPMENT Technology - OTIS 111-XXX-990-840 55810	$5,133	$0	$500	$500	$0	$500
Total Equipment	**$102,877**	**$125,414**	**$121,797**	**$121,797**	**$(1,786)**	**$120,011**
Total MAINTENANCE OF PLANT	**$2,507,140**	**$2,636,608**	**$2,946,765**	**$3,267,248**	**$150,825**	**$3,418,073**
Report Total:	**$9,035,322**	**$8,582,224**	**$9,424,236**	**$9,501,738**	**$4,766**	**$9,506,504**