

NASHUA SCHOOL DISTRICT: INFORMATION TECHNOLOGY BUDGET

FY 2022 Budget

March 3rd, 2021

Greg Rodriguez, MS
Director of Technology



Department of Technology Staff

- Greg Rodriguez – Director
- Jonathan Simberg – Systems Administrator
- Steve Wante – Network Administrator
- Ian Harvey – Programmer/System Administrator
- Donna Latina – System Administrator
- Felicia Naro – i4See Coordinator
- Susan Wilborg – Office Manager
- Bill Stoney – Assistant Systems Administrator
- Cori Hersom - Assistant Systems Administrator
- Gladys Marcano - Assistant Systems Administrator
- Tiago Cardoso - Assistant Systems Administrator
- Bobby Morales - Assistant Systems Administrator
- Don Tessier - Assistant Systems Administrator
- Doug MacKay - Assistant Systems Administrator

Department of Technology

- Offer technology to promote teaching, learning, and productivity through up-to-date infrastructure and computing devices.
- Gain an understanding of building administrator and teachers' technology needs, meet those needs by improving existing systems, and add additional systems.
- Improve ease of use for teachers and staff.
- Assist in the improvement of opportunities for our students to access the latest educational tools, software, devices and programs to maximize their ability to learn and succeed throughout their educational journey.
- Provide a safe digital environment for all users.

Rationale for Budget

Budget Area	Request
Contract Services	Perform high-level system and network support, specialty wiring projects, and E-Rate services
Computer Software	Maintain license cost increase and upgrade to cloud service storage
Computer Equipment	Replace aging computer equipment that includes Chromebooks and desktops
Professional Development	Invest in staff learning to improve skillset and training capabilities

Operating Budget

FY 2021	FY 2022
\$2,286,805	\$2,296,179

APPENDIX

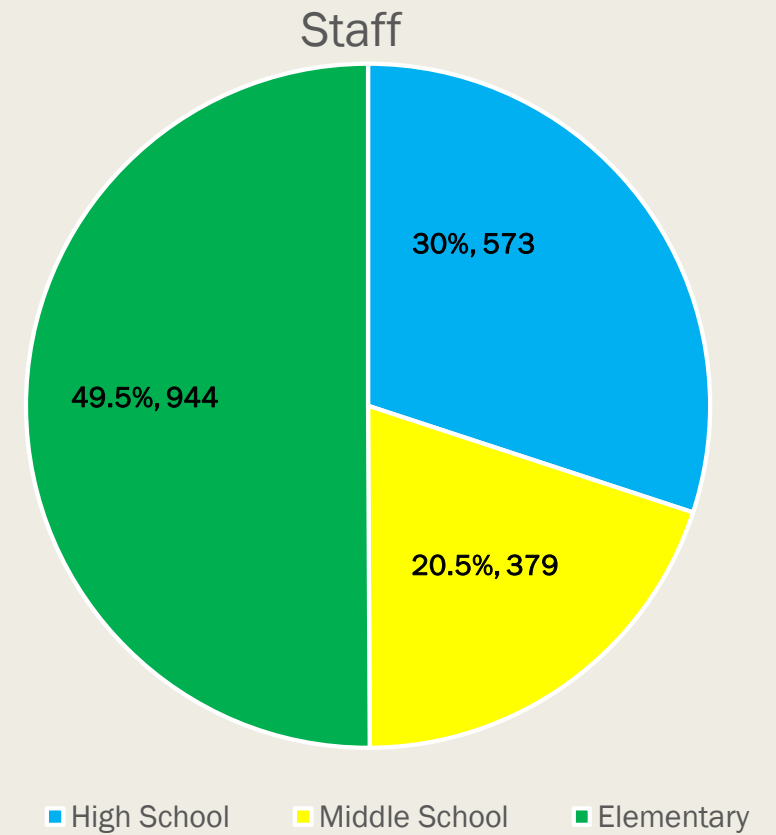
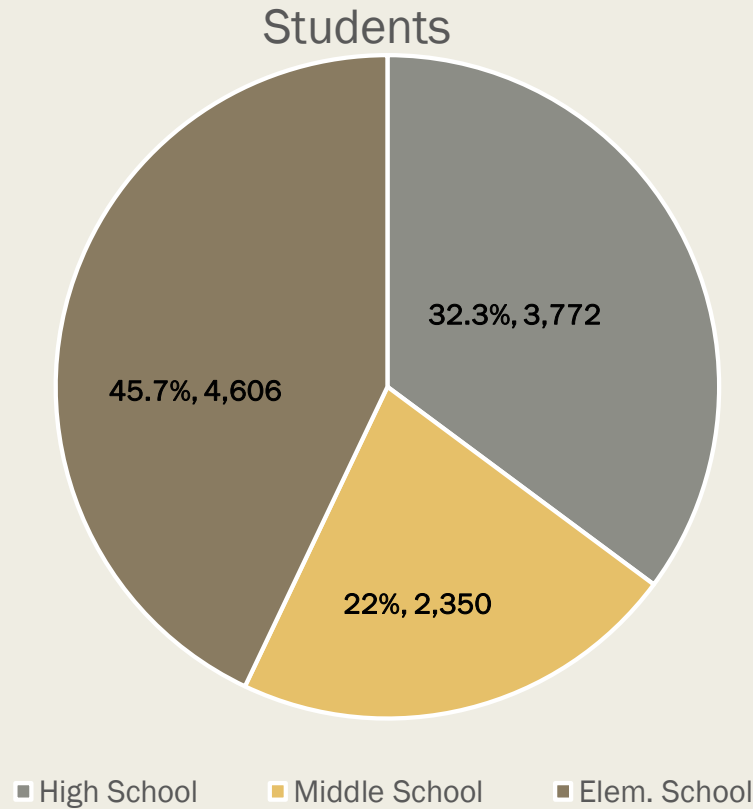
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Users Per Grade Level

High School:
Students: 3,772
Staff: 573*

Middle Schools:
Students: 2,350
Staff: 379*

Elementary Schools:
Students: 4,606
Staff: 944*

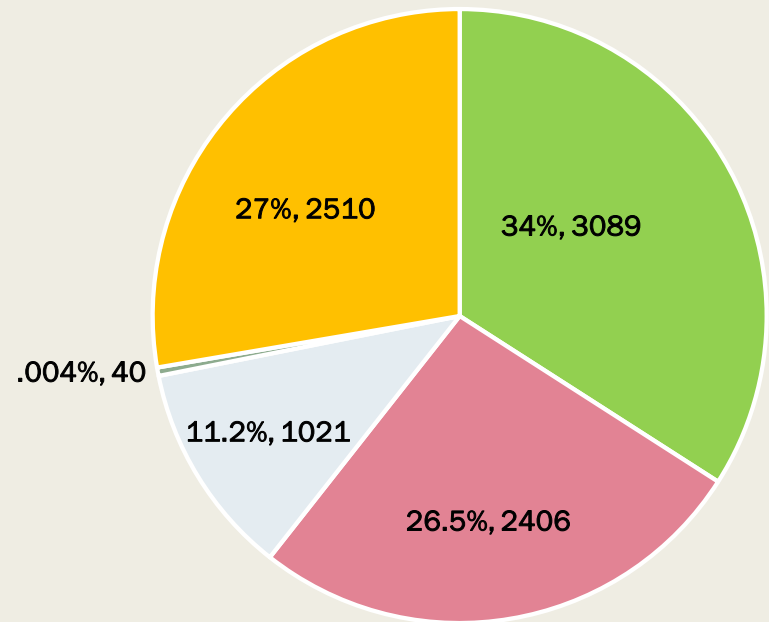


*These included floating staff between schools and levels

Chromebooks

- 3,500 Chromebooks ordered in Aug 2020
 - Purchased with CARES Act grant
 - Assist with remote and hybrid instruction
 - Restore inventory of damaged and lost Chromebooks
 - No delivery date yet because of shortage
- \$360,000 - \$380,939 budgeted for Chromebooks
 - Approximately 1,500 Chromebooks and licenses
 - Google is increasing licensing by 25%
 - \$24 to \$30 per license
 - This will directly affect how many Chromebooks we can purchase
- We experienced roughly a 15% loss from remote learning 2020
 - A much higher percentage is expected for SY 2020-2021

Chromebook by Expiration
Expiration Totals by Year



■ Sept 2021 ■ June 2022 ■ June 2024 ■ June 2025 ■ June 2026

Aging Chromebooks

- Every Chromebook has an Auto Update Policy (AUP = End of Life Support)
 - Our HP 11 G3/G4 has an AUP date of September 2021 (formally June 2020)
- What happens when AUP ends?
 - Automatic software updates will no longer be provided
 - No longer receive technical support from Google
 - Devices may not work as expected because the hardware can't support software
 - With no updates, no new security updates or bug fixes

Aging Chromebooks Continued

- Will Chromebooks still be functional?
 - Short-term
 - According to Google, they may still work. However, there will be functional limitations
 - Existing Chrome or Android apps will still continue to work until they require higher Chrome OS versions that the devices can't receive
 - Long-term
 - Devices will become less and less functional
 - Security may be compromised because no bug fixes or patches will be installed on devices – leaves district vulnerable
- Device durability after four years of use
 - Will look to refresh devices every four years
 - Leasing options to make Chromebooks a more sustainable purchase

Desktops

- 8-10-year-old models
 - Less than 100 remain in district
 - Will replace remaining older desktops and leave approximately 20-25 spares
- Improvements
 - Computer labs at all three levels are up-to-date
 - Hardware improvements lead to faster computers overall
 - Middle School STEM Labs
 - Industry specifications to support resource intensive programs
 - Most classroom computers up-to-date hardware
 - 120GB Solid State Drive
 - 8GB of memory
 - District Office will be upgraded in summer 2021

Recent IT Improvements

- Replaced 90% of aging desktops
 - Upgraded all labs
 - In conjunction with curriculum, Title IV funding allowed IT to upgrade all STEM labs at the middle schools to more powerful devices to meet industry needs.
- Rewired existing IT closets throughout the district
 - Eliminated split cabling and upgraded patch panels with industry standards.
 - Middle school rewiring will be part of the **JSSBC** Middle School Project
- Upgraded switches and access points at half of elementary and both high schools (Phase I).
 - The remaining elementary schools and FMS and PMS to be completed this summer.
 - Elm will not be upgraded because of the new middle school.
- Upgraded fiber at middle schools (Phase I)
 - Seven elementary schools to be completed this summer.
- Moved all email infrastructure to Microsoft's O365 Cloud
 - Virtually eliminating email quotas
- Successfully enrolled 1,150 deployed laptops for teachers and some staff through Microsoft InTune
- Increased internet bandwidth from 2Gbps to 8Gbps
- Implemented Online Registration (OLR) through Aspen
- Updated our mass communication system through Blackboard

Upcoming Projects

- Disaster Recovery Redundancy at North High School (One-time funds)
- Phase II of Network Infrastructure Upgrades
 - Fiber upgrades at six elementary schools (One-time & E-Rate)
 - Middle school access points and switches (JSSBC & E-Rate)
 - Six elementary school access points and switches (Operating & E-Rate)
 - Fiber Installation at the new Franklin St. location (One-time funds & E-Rate)
- Internet Service Provider Bids (E-Rate)

Software Budget

Description	FY21-22
AESOP (Substitute) Software Renewal	\$26,000.00
Applitrack Applicant System	\$7,000.00
Follett Aspen (X2)	\$140,000.00
Destiny Library	\$19,000.00
Barracuda Email Filtering	\$14,000.00
Blackboard Website	\$50,000.00
Casper (JAMF) Suite for iPad Inventory	\$12,500.00
DameWare Renewal	\$1,000.00
Domain Name Renewals & SSL Certificates	\$1,000.00
Edulog	\$7,200.00
Energy Cap	\$1,800.00
Deledao Web Filtering	\$33,000.00
Microsoft Renewal	\$75,000.00
ML Schedules	\$8,200.00
Naviance (Grades 6-12)	\$32,000.00
Netop Vision	\$6,000.00
SchoolDude Inventory Software	\$19,000.00
T-Eval Renewal	\$13,600.00
TMA Software	\$7,000.00
Tools4Ever User Management	\$14,000.00
Unitrends Backup Software	\$20,000.00
VMWare	\$6,000.00
MyFlex Learning	\$12,000.00
Aspen Online Registration	\$33,555.00
Professional Development Frontline	\$38,000.00
Workday Adaptive Insights	\$8,500.00
Quickbooks	\$10,000.00
Encyclopedia Britannica	\$4,300.00
TOTAL	\$ 670,010.00

Contract Services

Contract Services	FY21 Budget
HP Support Contracts	\$ 15,000
Cisco Support Contracts	\$ 60,000
Cisco Phone Support	\$ 69,000
Wireless Maintenance	\$ 6,025
Wiring (APs, Phones, Misc)	\$ 9,000
Network Infrastructure Upgrade	\$ 60,000
External Computer Repair	\$ 2,000
Aspen Updates	\$ 10,000
Fiber Repairs	\$ 15,000
Miscellaneous	\$ 5,000
Total	\$ 251,025

Computer equipment

Equipment	Cost	Criticality
New Chromebooks	\$ 380,939	#1
Replace Existing Old Desktops	\$ 60,000	#2
Laptops	\$ 12,680	#3
Total	\$ 463,619	

Summer Help

- Summer work will consist of:
 - Enrolling 5,000+ Chromebooks
 - Restocking Carts
 - Repairing Damaged Chromebooks
- Work 7:30 to 3:30 with ½ hour lunch (7.5 hours/day)
- \$ 11/hour
- Number of Employees: 2
- $8 \text{ weeks} * 5 \text{ days/week} * 7.5 \text{ hours/day} * \$11/\text{hour} * 2 \text{ people} = \$ 6,600$

Priorities Moving Forward

- Finishing up-to-date Technology Plan in line with our Strategic Plan. Items to be included:
 - Technology and its impact on learning
 - Professional Development
 - Technology Refresh Cycle through
 - Budget
 - Digital Citizenship and Social Emotional Learning
- Hire additional support staff
 - *Current ratio of devices per IT tech staff is 2,441:1*
 - *Current ratio of users per IT tech staff is 1,803:1*
 - *District has added over 10,000 computing devices in the past five years with no additional IT tech staff*
 - *Two Assistant System Administrators*
 - One at each middle school
 - *Database Administrator*
 - Oversee, manage, and monitor all data
- Identify strategies to bridge the gap between curriculum and technology

ITEMS NOT BEING FUNDED

- We are not funding requested ceiling mounted projectors
 - Will be part of future capital improvement projects
- We have very limited funds to repair/replace existing aging ceiling mounted projectors or any other A/V requests
- We have no funds to add technology, other than computers or Chromebooks to classrooms

Questions?