Nashua School District IT Department

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How Does IT Support The District?

- **Sustaining a 1:1 Learning Environment**

  - Supporting nearly 10,000 students and 1,000 staff with dedicated Chromebooks for each student to ensure equitable access to digital learning tools while planning replenishment and lifecycle management.

- **Robust Infrastructure**

  - Maintaining and upgrading critical network components, including recently enhanced fiber connections, core switches, and access points, to support high-speed, reliable connectivity for all schools.

- **Enhancing Digital Safety & Security**

  - Investing in cybersecurity measures, content filtering, and device management solutions to create a safe, secure, and compliant digital learning environment for students and staff.
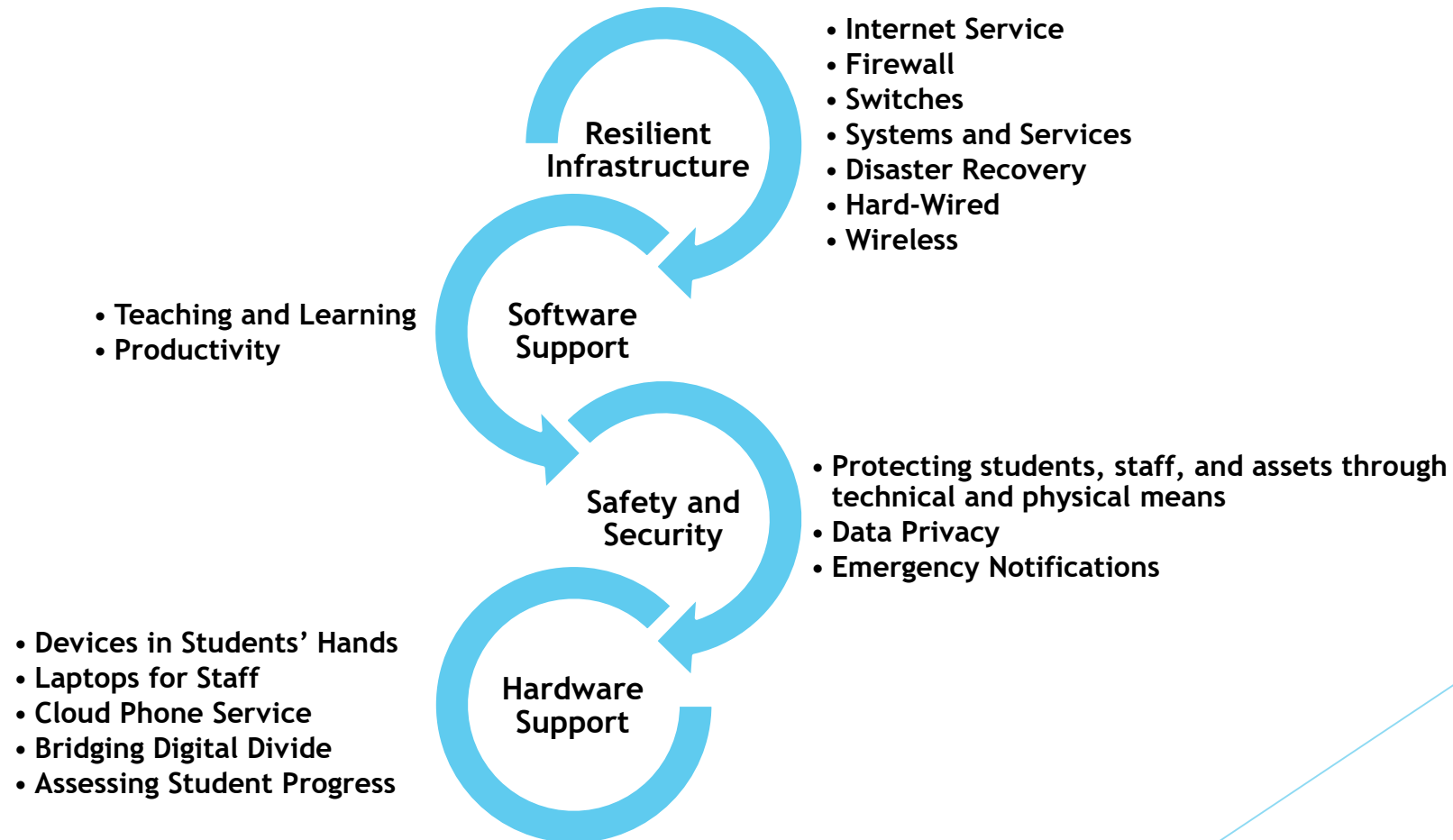
- **Strategic Planning & Collaboration**

  - Working closely with district leadership to identify trends, forecast technology needs, and align IT investments with district initiatives that enhance teaching and learning.

- **Maximizing Funding & Cost Efficiency**

  - Leveraging E-Rate reimbursements, bulk purchasing, grants, and other alternative funding sources to optimize technology investments and ensure long-term sustainability.

Technology Providing Equity and Opportunity

Resilient Infrastructure
- Internet Service
- Firewall
- Switches
- Systems and Services
- Disaster Recovery
- Hard-Wired
- Wireless

- Teaching and Learning
- Productivity

Software Support

Safety and Security
- Protecting students, staff, and assets through technical and physical means
- Data Privacy
- Emergency Notifications

- Devices in Students' Hands
- Laptops for Staff
- Cloud Phone Service
- Bridging Digital Divide
- Assessing Student Progress

Hardware Support

Teaching and Learning

- **The Ideal Classroom**
  - **Interactive panels throughout the District**
    - Amherst St, Birch Hill, Charlotte Ave, Dr. Norman Crisp, Ledge St, Main Dunstable, Mount Pleasant, McCarthy Middle School – **Full Implementation**
    - Fairgrounds Elementary and Sunset Heights – **Partial Implementation**
    - Fairgrounds Middle School and Pennichuck Middle School – **Projectors in All Classrooms**
  - **1:1 Chromebooks for all students in all grade levels**
    - Secondary students bring home Chromebooks
    - Elementary classrooms to have a Chromebook cart to charge and safely store 20-25 Chromebooks
      - Increases student engagement and motivation according to a 2023 study by the *International Journal of Technology in Education and Sciences*
  - **Teacher laptop to promote flexible, mobile instruction**
  - **Wireless access point in each classroom for a seamless, wireless use**

Albataineh, M., Warren, B., & Al-Bataineh, A. (2024). The effects of Chromebook use on student engagement. International Journal of Technology in Education and Science (IJTES), 8(1), 138-151. https://doi.org/10.46328/ijtes.530

What is E-Rate and What is the Return on Investment?

- **What is E-Rate?**
  - A federal program managed by the FCC that provides discounts on internet access, network infrastructure, and related services to schools and libraries, ensuring equitable access to technology.

- **How Much Do We Get?**
  - Our district qualifies for a 60% discount, meaning if we apply for $100,000 in eligible services, we only pay $40,000, with the remaining $60,000 covered by E-Rate funds.

- **What Does It Cover?**
  - E-Rate funds Category 1 services (internet access, fiber connections) and Category 2 services (Wi-Fi, internal network upgrades, cybersecurity measures like firewalls). It does not cover computers, teacher devices, phones, or software.

- **Why Is It Important?**
  - With increasing digital learning needs, E-Rate funding helps maintain high-speed internet, improve security, and expand student access without overburdening the local budget.

- **What's Next?**
  - We apply annually through qualifying free and reduced lunch students (60%), ensuring compliance with federal guidelines. Maximizing E-Rate funding requires strategic planning to prioritize infrastructure upgrades while meeting program requirements. 30-day open bidding process through an RFP to meet the qualifying bid criteria, with 60% of the project cost being reimbursed.

What are the Funding Priorities for this Year?

- **Chromebook Purchases to Support 1:1 for Secondary**

- **Maintain Current Networking and Systems Infrastructure**

- **Computer Software**

  - Productivity, safety, and security

  - Core Switches and Next Generation Firewall

- **Computer Equipment and Supplies**

  - Break/fix parts

Technology Budget for the District

▶ Computer Equipment

    ▶ 91.1.992225-71221

Chromebooks for Secondary (1,748)	$461,472.00
Laptops (10)	$7,000.00
Desktops (23)	$14,950.00
Total	**$483,422.00**

▶ Computer Supplies

    ▶ 91.1.992225-61607

Adapters/Cables (HDMI, Ethernet, Adapters, etc.)	$10,000.00
Amplifiers, Flash Drives, Monitor Stands, and Tools	$3,300.00
Phones/ATAs	$3,000.00
Monitors	$3,000.00
Network Parts: Synology Drives/APC Batteries/	$15,000.00
Chromebook Parts: Screens/Keyboards, Cables & Trackpads	$10,000.00
Laptop Parts: Batteries, Screens, Keyboards	$4,700.00
Mice/Keybaords	$1,000.00
Total	**$50,000.00**

▶ Contract Services

    ▶ 91.1.992225-53628

HP Support Contracts	$16,500.00
Cisco Support and Licensing Contracts* **(Erate @ 60% discount)**	$70,000.00
Cisco Phone Licenses (Year 2 of 5: Phone Project)	$48,585.54
Cisco Voice Support	$30,000.00
E-Rate Services	$5,000.00
External Computer Repair	$2,000.00
Fiber Repairs	$25,000.00
Wiring (Access Points, Phones, Misc.) (Originally $9K)	$15,000.00
Aspen Service Requests	$45,000.00
AV Sevices	$10,000.00
Pen Test	$17,000.00
Total	**$284,085.54**

Technology Budget for the District cont.

- Educational and Business-Related Software
  - 91.1.992225-71228

Account Management Software	$6,100.00
Account Tree Software for Student Activity Funds	$4,464.00
Admin Licenses for Microsoft 365	$192.00
Adobe Licenses	$2,000.00
Applitrack Applicant System	$9,000.00
Aspen (X2) SIS	$216,275.00
Awesome Table	$800.00
CBT Nuggets	$1,300.00
FinalSite Website	$54,540.00
COSN	$1,300.00
DameWare Renewal	$1,400.00
Destiny Library	$20,000.00
Tyler Transportation	$17,069.00
Encyclopedia Britannica	$5,000.00
Energy Cap	$5,942.58
Frontline: AESOP	$34,400.00
Frontline: Prof Development	$45,500.00
Help Desk Software	$4,872.00
Incident IQ	$22,355.82
JAMF Suite	$10,387.00
ML Schedules	$7,920.00
My Flex Learning	$12,000.00
Naviance	$33,000.00
Netop Vision	$4,550.00
Simple K renewal for Plant Operations	$919.00
T-Eval Renewal	$13,600.00
TMA Software	$8,200.00
Workday Adaptive Insights Budgeting & Planning Software	$96,075.00
Total	**$639,161.40**

Technology Budget for the District cont.

- Network, Systems, and Security Software
  - 91.1.992225-71228

Barracuda Email Filtering	$51,000.00
Crowdstrike	$86,650.00
Deledao	$44,000.00
Domain Name Renewals & SSL Certificates	$2,500.00
DUO Advantage Software	$37,215.00
Microsoft Renewal	$75,000.00
Paesler Network Monitoring	$1,600.00
FortiNDR - Network Security Monitoring	$31,222.45
FortiNet – Firewall* **(Erate @ 60% discount)**	$128,943.00
VMWare	$10,000.00
Total	**$468,130.45**

- Office Supplies
  - 91.1.992225-61100

Office Supplies	$750
Total	**$750.00**

- Professional Development
  - 91.1.992225-55400

Professional Development	$11,500.00
Total	**$11,500.00**

- Seasonal Help
  - 91.1.992225-51300

NTO Assistance	$1,400.00
Intern - Summer $16/hour	$4,800.00
Total	**$6,200.00**

Necessities, Nice-to-Haves, and Wish List

- **Necessities**
  - **Maintain and Upgrade Infrastructure to Support District for the Next Five Years**
    - Core Switch at South High School for Summer 2026
  - **Equipment Refresh**
    - Chromebooks and Laptops to Support Teaching and Learning
  - **Security and Safety**
    - IT Cybersecurity Awareness Training, Software, Emergency Notifications, and Culture
- **Nice to Have**
  - **Equitable Access to Technology**
    - Fulfill the Ideal Classroom by the End of the School Year
  - **Heat Map Wireless Survey to Enhance the Wi-Fi Experience**
- **Wish List**
  - **Dedicated Technology Integrator for Elementary and Middle Schools**
    - With new technology and software require training and development for staff need to feel supported when new integrations happen