Merrimack School District Technology and Library Media Services continues its work of supporting the teaching, learning, and operational functions of the Merrimack School District. The budget reflects some multi-year software renewals of several infrastructure systems including wireless management licensing, firewall application renewals as well as the continued increase in online learning tools and systems to support tracking data privacy. Additionally, efforts have been underway to ensure business continuity, resulting in maintaining active licenses on devices previously reserved as backups. Systems are being implemented to demonstrate compliance with the new data security and privacy law, such as Single Sign On, improved content filtering, and additional network security controls. As the number of devices for students increases, the annual costs for replacements continues to increase, particularly because mobile devices generally have a shorter life span than desktop computers.

The budget also reflects ongoing support for the Merrimack District Library Program and the continued update and replacement of information resources and reading materials. Instructional technology has reached all identified instructional spaces and the next phase will be to upgrade older audiovisual connections to HDMI as well as the continued replacement of projectors that fail. Finally, the continued support for additional equipment provides flexibility as schools begin identifying universal design for learning (UDL) supports that can be provided using technology.

Submitted by,

Director of Technology and Library Media Services

OBJECT - Purchased Property Services - (8400)

100-2222-36-8430-07 - Instructional Equipment Repairs/AV/Library

2018-2019 Budgeted	\$ 4,000.00
2018-2019 Expended	\$ 4,472.71
2019-2020 Budgeted	\$ 4,500.00
2020-2021 Proposed	\$ 4,500.00

To pay for repairs of instructional technology equipment such as iPad screens, laptops, data projectors, interactive equipment, and document cameras; and to cover service contracts for laminators.

OBJECT - Other Purchased Services - (8500)

<u>100-2221-36-8531-07</u> - <u>Telephone/Library</u>

2018-2019 Budgeted	\$ 587.00
2018-2019 Expended	\$ 516.39
2019-2020 Budgeted	\$ 420.00
2020-2021 Proposed	\$ 332.00

To provide telephone service to the office of the Director of Technology and Library Media Services. This account represents a three-year average.

<u>100-2221-36-8534-07</u> - <u>Postage/Library</u>

2018-2019 Budgeted	\$ 340.00
2018-2019 Expended	\$ 325.49
2019-2020 Budgeted	\$ 307.00
2020-2021 Proposed	\$ 235.00

To provide postage for correspondence including letters to parents/guardians regarding library materials or to ship equipment out for repairs. This represents a three-year average.

100-2222-36-8551-07 - Binding of Books/Library

2018-2019 Budgeted	\$ 2,000.00
2018-2019 Expended	\$ 1,049.18
2019-2020 Budgeted	\$ 1,500.00
2020-2021 Proposed	\$ 1,500.00

To provide for rebinding of books when the binding has worn out, especially when a title is used but no longer in print. To identify and bind highest-use materials that are difficult or prohibitive to replace. Maintaining this amount ensures we can meet the fluctuation in demand for this service.

100-2221-36-8580-07 - Travel/Library

2018-2019 Budgeted	\$ 300.00
2018-2019 Expended	\$ 350.07
2019-2020 Budgeted	\$ 300.00
2020-2021 Proposed	\$ 300.00

To reimburse the Director of Technology and Library Media Services and staff for district-related travel.

OBJECT - Supplies and Materials - (8600)

<u>100-2221-36-8610-07</u> - <u>Office Supplies/Library</u>

2018-2019 Budgeted	\$ 300.00
2018-2019 Expended	\$ 618.43
2019-2020 Budgeted	\$ 300.00
2020-2021 Proposed	\$ 300.00

To purchase items such as letterhead stationery, envelopes, and printer paper used in the Technology and Library Media Services office. The increase in expenditure reflects the purchase of new reading promotional materials for libraries.

100-2222-36-8610-07 - Supplies/Library

2018-2019 Budgeted	\$ 15,000.00
2018-2019 Expended	\$ 14,314.48
2019-2020 Budgeted	\$ 16,000.00
2020-2021 Proposed	\$ 16,000.00

To purchase supplies used to provide technology and library media services to students and staff. Items include adaptors, cables, projector lamps and filters, technology supplies, tablet covers, book covering materials, bar codes and batteries. As devices increase so does the need for adaptors, cables and covers. Newer laptops do not always have audiovisual ports required for different instructional spaces, which requires different types of adaptors and cables.

<u>100-2222-36-8641-07</u> - <u>Books/Library</u>

2018-2019 Budgeted	\$ 40,000.00
2018-2019 Expended	\$ 40,358.65
2019-2020 Budgeted	\$ 40,000.00
2020-2021 Proposed	\$ 40,000.00

To purchase new and replacement titles for the general, reference and professional library collections serving the literacy, instructional and research needs of the students and staff of the entire district.

OBJECT - Supplies and Materials - (8600) continued

<u>100-2222-36-8646-07</u> - <u>Periodicals/Library</u>

2018-2019 Budgeted	\$ 3,000.00
2018-2019 Expended	\$ 2,648.34
2019-2020 Budgeted	\$ 2,500.00
2020-2021 Proposed	\$ 2,500.00

To purchase newspapers and periodicals for the students and staff served by the Merrimack School Library Program in support of the district's literacy initiatives, classroom instruction and professional development.

<u>100-2222-36-8649-07</u> - <u>Other Inst. Media/Library</u>

2018-2019 Budgeted	\$ 3,000.00
2018-2019 Expended	\$ 2,982.15
2019-2020 Budgeted	\$ 3,000.00
2020-2021 Proposed	\$ 3,000.00

To purchase and license non-print instructional materials used by students and staff in the Merrimack School District.

<u>100-2222-36-8650-07</u> - <u>Software & Licensing/Library</u>

2018-2019 Budgeted	\$ 185,000.00
2018-2019 Expended	\$ 182,552.04
2019-2020 Budgeted	\$ 200,000.00
2020-2021 Proposed	\$ 228,000.00

This line item covers licensed and purchased instructional software, research databases, school and classroom websites, classroom management, credit recovery, electronic transcript services, software in support of technology and library media services, and software selected to support specific content area instructional goals. The increase is due to growing reliance on digital learning tool, multi-year renewals of infrastructure systems, as well as the ongoing licensing of systems added in support of data security and vetting of applications in support of student data privacy.

OBJECT - Property/Library - (8700)

100-2222-36-8730-07 - Additional Equipment/Library

2018-2019 Budgeted	\$ 30,000.00
2018-2019 Expended	\$ 29,417.63
2019-2020 Budgeted	\$ 21,000.00
2020-2021 Proposed	\$ 21,000.00

To continue to build technology integration capacity by acquiring interactive technologies and supporting equipment as determined by each building such as document cameras, interactive projection equipment, and tablets. Integrated technologies foster engagement and support flexible learning environments responsive to different student learning needs. Keeping this account level funded ensures ongoing innovation in the identification of new instructional technologies as the district explores learning supports for universal design for learning (UDL).

Account to be distributed according to grades served:

Mastricola Elementary, Reeds Ferry and Thorntons Ferry Mastricola Upper Elementary and Merrimack Middle Merrimack High	@ \$ 2,333@ \$ 3,500@ \$ 7,000	\$ 7,000 \$ 7,000 <u>\$ 7,000</u>
	Total	\$21,000

OBJECT - Property/Library - (8700) continued

100-1148-48-8738-07 — Technology Infrastructure Improvement

2018-2019 Budgeted\$ 291,920.002018-2019 Expended\$ 292,814.792019-2020 Budgeted\$ 332,170.002020-2021 Proposed\$ 349,000.00

1	Additional Network Cabling	\$10,000.00
2	Network switch upgrades	\$6,000.00
3	Security infrastructure	\$20,000.00
4	Server upgrades	\$10,000.00
5	WiFi refresh	\$7,000.00
6	Expand/update computers	\$260,000.00
7	Classroom projector installs and replacements	\$15,000.00
8	STEAM education equipment	\$10,000.00
9	VOIP phone system maintenance	\$5,000.00
10	Paging system upgrades	\$5,000.00
11	Network/Telecom contracting	\$1,000.00
TOTAL		\$349,000.00

The Technology Infrastructure Improvement account provides ongoing, proactive and sustainable improvement of instructional and operational technology solutions. Annual planning occurs in collaboration with district and building administration, instructional leaders and technology and library staff and seeks to establish a regular and predictable budget process. The Technology CIP is divided into categories, which are further explained below:

- 1. Cabling upgrades continue to achieve increased district bandwidth (10/100/1000 mbps), to shorten toolong cable runs, replace aging cables, increase the bandwidth capability of wireless access points, and add more devices.
- 2. Replacement and addition of network switches continues to ensure all network jacks support gigabit connections and provide Power over Ethernet (PoE).
- 3. Security infrastructure includes replacement and additional equipment to ensure high availability and business continuity.
- 4. Server upgrades ensure schools have access to local storage and print services that are backed up centrally to the district-hosted SAN. Recent focus has been on providing hosts for virtualized services, improving ability to maintain uptime and ensure business continuity.
- 5. Having achieved saturation of wireless service, the next phase will be to begin replacing the oldest access points.
- 6. Demand for student mobile computing continues to rise and older devices need to be replaced. Recent focus has been on identifying where less expensive Chromebooks can be used in place of full featured laptops, and standardizing on iPads for the youngest learners. Staff computers are replaced on roughly a 6-year cycle.

- 7. Oldest projectors are replaced as they fail and there is a continued need to upgrade older connections to HDMI. The district continues to install integrated soundfield systems.
- 8. STEAM education initiatives are growing and will continue to need technology supports such as robotics equipment, consumables and makerspace equipment.
- 9. The replacement of VoIP phones as they fail and to continue upgrading handsets to support gigabit speeds when they provide network passthrough for computers.
- 10. Ongoing replacement of components in older school paging systems to prevent outages and downtime.
- 11. Ongoing contract support for operations such as network upgrades and major server projects.

OBJECT - Other Object (8800)

<u>100-2221-36-8810-07</u> - <u>Membership/Library</u>

2018-2019 Budgeted	\$ 1,350.00
2018-2019 Expended	\$ 1,399.00
2019-2020 Budgeted	\$ 1,350.00
2020-2021 Proposed	\$ 1,350.00

To maintain memberships in national and regional chapters of library and technology associations in support of school district goals and objectives including legal support for student data privacy.

<u>100-2221-36-8815-07</u> - <u>Professional Meetings/Library</u>

2018-2019 Budgeted	\$ 500.00
2018-2019Expended	\$ 75.00
2019-2020 Budgeted	\$ 500.00
2020-2021 Proposed	\$ 500.00

To provide funding for registration fees and other expenses associated with attending state, regional and national conferences related to school district goals and objectives.