

**NORTH READING PUBLIC SCHOOLS
LARGE CAPITAL
5 YEAR REQUEST SUMMARY**

CATEGORY	FY'24 REQUEST	FY'25 REQUEST	FY'26 REQUEST	FY'27 REQUEST	FY'28 REQUEST	TOTAL
VEHICLES	0	85,000	40,000	65,000	55,000	245,000
TECHNOLOGY	180,000	160,000	160,000	120,000	210,000	830,000
FACILITIES	325,000	925,000	820,000	690,000	565,000	3,325,000
TOTAL	505,000	1,170,000	1,020,000	875,000	830,000	4,400,000

5 YEAR APPROVAL HISTORY

CATEGORY	FY'19 APPROVED	FY'20 APPROVED	FY'21 APPROVED	FY'22 APPROVED	FY'23 APPROVED	TOTAL
VEHICLES	35,000	45,000	50,000	105,000	0	235,000
TECHNOLOGY	105,000	60,000	0	165,000	135,000	465,000
FACILITIES	40,000	30,000	100,000	165,000	200,000	535,000
TOTAL	180,000	135,000	150,000	435,000	335,000	1,235,000

SCHOOL DEPARTMENT

FY 24-28

CAPITAL PLAN

Notes	SPECIAL EDUCATION											
	YEAR IN SERVICE	USEFUL LIFE (YRS)	MILEAGE AS OF AUG 2022	CONDITION	PURCHASE PRICE	FY'24 REQUEST	FY'25 REQUEST	FY'26 REQUEST	FY'27 REQUEST	FY'28 REQUEST	TOTAL	
1	Ford Transit 350	2015	12	79,278	Excellent	39,993				65,000	65,000	
	Ford E-250 (Wheelchair Van)	2016	12	56,486	Excellent	39,521					0	
	Ford E-250	2019	12	30,746	NEW	40,576					0	
	Ford E-250 (Spare Van)	2011	12	105,157	Good	26,514					0	
	SUBTOTAL- SPECIAL ED.						0	0	0	65,000	0	65,000
2	ATHLETICS											
	YEAR IN SERVICE	USEFUL LIFE (YRS)	MILEAGE AS OF AUG 2022	CONDITION	PURCHASE PRICE	FY'24 REQUEST	FY'25 REQUEST	FY'26 REQUEST	FY'27 REQUEST	FY'28 REQUEST	TOTAL	
	Multi-Function Activity Vehicle	2019	12	14,151	Excellent	\$53,526					0	
	Multi-Function Activity Vehicle (#2)	2021	12	5,783	New	\$54,815					0	
	SUBTOTAL- ATHLETICS					0	0	0	0	0	0	
3	FOOD SERVICES											
	YEAR IN SERVICE	USEFUL LIFE (YRS)	MILEAGE AS OF AUG 2022	CONDITION	PURCHASE PRICE	FY'24 REQUEST	FY'25 REQUEST	FY'26 REQUEST	FY'27 REQUEST	FY'28 REQUEST	TOTAL	
	Ford Transit Connect	2019	15	8,375	Excellent	\$20,694					0	
	SUBTOTAL- FOOD SERV.					0	0	0	0	0	0	
4	BUILDINGS & GROUNDS											
	YEAR IN SERVICE	USEFUL LIFE (YRS)	MILEAGE AS OF AUG 2022	CONDITION	PURCHASE PRICE	FY'24 REQUEST	FY'25 REQUEST	FY'26 REQUEST	FY'27 REQUEST	FY'28 REQUEST	TOTAL	
	Kubota Tractor/Loader	2002	20+	1,584 Hours	Fair	\$34,700			40,000		40,000	
	Ford F-450 (Utility Rack Truck)	2014	10	83,384	Good	\$69,000		85,000			85,000	
	Ford F-350	2009	10	57,639	Fair	\$35,162				55,000	55,000	
	Ford F-350	2021	10	7,028	Excellent	\$50,041					0	
	Tool cat 5600	2021	12		New	\$65,000					0	
	SUBTOTAL- B & G					0	85,000	40,000	0	55,000	180,000	
	TOTAL VEHICLES					0	85,000	40,000	65,000	55,000	245,000	

Notes:

1	<p><u>Special Education</u> The District currently utilizes three special education vans daily to transport students between in-town special education programs. Currently, the 2011 van is used as a spare van. This van is also used to transport athletic teams and activities when appropriate, which has helped reduce athletic transportation costs. The 2011 van has 104,000 miles on it and is in need of replacement. The District received state earmark grant funding in FY'23 and will use these grant funds to replace this van during the current fiscal year. Once received the new van will become part of the regular daily transportation program and the 2015 van will become the spare van and when needed used for other extra-curricular activities. This van is in much better condition has 69,000 miles on it and is a more reliable means of transportation. This van would need to be replaced by FY'27 when it would be 12 years old. A newer van model would also allow the District to better serve and meet student needs that required daily transportation to and from school.</p>
2	<p><u>Athletics & Extra-Curricular Activities</u> The District currently contracts with an outside vendor to meet its athletic and extra-curricular activity transportation needs. The contractual rates have steadily increased and the program is currently spending \$80,000 on an annual basis, on average \$300 each athletic run per bus. The District received a Multi-Function School Activity Vehicle (MFSAB) in December of 2018. The District received a second Multi-Function vehicle in July 2021. Having access to two 14-passenger MFSAB's has enabled the District to transfer between 60-70 athletic runs annually in-house, approximately 20 runs per season. This has saved the District between \$18,000 - \$20,000 annually. During the 2021-22 school year the District spent only \$55,000 on athletic transportation costs. The second vehicle has also provided much greater flexibility to allow the District to meet the needs of other extra-curricular activities including the performing arts program.</p>
3	<p><u>Food Services</u> The District replaced the 2005 food service van in the summer of 2019, with funds available in the food service revolving account. The food services department uses the new transit van to satellite food between the high school and the elementary schools that don't have a full size kitchen. The van purchased in 2019, is a smaller cargo transit-van and is much better suited to serve the needs of this department and will serve the food service program well for the next fifteen years.</p>
4	<p><u>Building & Grounds</u> The District received funding for a new tool cat/bobcat for snow removal and landscaping purposes in FY'22. The vehicle has been used to maintain the MS/HS campus and all other schools. It is able to snow plow, sweep, front load, sand, spread and is equipped with many more attachments that has increased productivity and provided the versatility needed to properly maintain the schools year round. The 2002 Kubota Tractor should be considered for replacement in the future. The next vehicle in line for replacement is the 2014 F-450 Utility truck. This vehicle is ten years old with over 65,000 miles on it but has been breaking down costing the District more in repairs each year, including costly engine and truck bed repairs in recent years costing over \$10,000. All other Buildings and Grounds vehicles and equipment remain in good condition and are maintained by the DPW on a regular basis.</p>

Notes	INSTRUCTIONAL TECHNOLOGY	SCHOOL / DEPT	FY'24 REQUEST	FY'25 REQUEST	FY'26 REQUEST	FY'27 REQUEST	FY'28 REQUEST	TOTAL
1	Student Device Replacement Plan	District wide		60,000	60,000	60,000	60,000	240,000
2	Instructional Staff Devices Replacements	District wide				60,000		60,000
3	Technology Instructional Equipment	Middle / High	100,000	100,000	100,000			300,000
4	WIFI Infrastructure Upgrades	District wide	80,000				150,000	230,000
	TOTAL-INSTRUCT'L TECHNOLOGY		180,000	160,000	160,000	120,000	210,000	965,000
	TOTAL TECHNOLOGY		180,000	160,000	160,000	120,000	210,000	965,000

Notes:

1/2	<p>The district has used a combination of large capital and operating funds to replace aging devices in the past. These devices include student devices i.e. personalized chrome books and HP laptop devices for instructional staff. This District was able to leverage COVID-19 funding to secure enough devices to last through FY' 24. This funding is no longer available and the District will need to resume their annual allotment of needed funds for device replacement in fiscal year 2025. This will be through a combination of capital and operating funds. The cost to replace students devices includes about 2 grades per year or 400 devices at \$300 per device and teacher laptops about (40-50 devices) annually at \$800 per device. The annual funding needs for these student and staff replacement is about \$150,000 annually. Through a combination of general fund dollars \$90,000 added to operating budget in fiscal year 2022 and capital funds the district will be able to meet this need. The District may periodically need additional large capital funds to replace aging staff laptop devices every few years, which is anticipated to occur in FY'27 of the plan.</p>
3	<p>The classroom interactive and projection setups within the elementary classrooms across all 3 elementary schools were fully replaced the past three years through a combination of capital, grant, gift and operating funds. The project involved the replacement of the existing classroom set-up (desktops, SMART boards, projectors) with one-stop solution involving an interactive display board that met all of these needs and included the latest technology which enhanced the interactive experience for students and educators. The next objective will be to begin to address the Middle / High School and bring a similar technology and solution to these classrooms as well. These smart-boards were installed with the building project in 2013 and 2014 and are approaching 10 years old and reaching the end of their useful life. The plan involves addressing this need with a phased-in approach beginning in FY'24 with a goal of completing all classrooms by the end of FY'26. There is a total of 100 rooms between the Middle/High School and the estimated cost for this one-stop solution is \$3,000 per room for a total investment of \$300,000.</p>
4	<p>The WIFI Network Infrastructure at the Middle / High School including the wireless access points and switches needs to be upgraded. The High School network infrastructure was installed in 2013 and will be over 10 years old. The Middle School was installed in 2014 and will be over 10 years old at this time. The Elementary Schools wireless network infrastructure was installed in 2017. The District would like to begin to upgrade this network in fiscal year 2024 at the Middle/High School and then the Elementary School in FY'28. The cost includes upgrades for wireless access points and switches that will be at the end of their useful life and no longer supported in fiscal year 2025. Proposals have been received from State contract vendors that have done an assessment of the Districts WIFI Network and infrastructure. The District would pursue e-rate category II funding that could assist with receiving a reimbursement which would help offset this cost by up to 40%. The funding request is \$80,000 whereas the actual cost of the project is \$130,000.</p>

CAPITAL REQUESTS HISTORY

INSTRUCTIONAL TECHNOLOGY	SCHOOL / DEPT	FY'19 APPROV	FY'20 APPROV	FY'21 APPROV	FY'22 APPROV	FY'23 APPROV	TOTAL
Computer Replacement / Devices	All Schools	\$60,000	\$60,000	\$0	\$120,000	\$0	\$300,000
Technology Instructional Equipment	Elementary	\$45,000		\$0	\$45,000	\$135,000	\$225,000
WIFI Infrastructure Upgrade	Elementary			\$0	\$0	\$0	\$107,357
TOTAL INSTRUCTIONAL TECHNOLOGY		\$105,000	\$60,000	\$0	\$165,000	\$135,000	\$632,357
TOTAL TECHNOLOGY		\$105,000	\$60,000	\$0	\$165,000	\$135,000	\$632,357

SCHOOL DEPARTMENT

FY 24-28

CAPITAL PLAN

Notes	FACILITIES	SCHOOL / DEPT	DESCRIPTION	FY'24 REQUEST	FY'25 REQUEST	FY'26 REQUEST	FY'27 REQUEST	FY'28 REQUEST	TOTAL
1	Boilers	Hood	Replacement of Hood School boilers	225,000					225,000
2	Modular Unit Removal and Replacement	Hood	Removal and replacement of modular classroom units due to their age and condition			660,000			660,000
3	Modular Unit Removal and Replacement	Little	Removal and replacement of modular classroom units due to their age and condition				490,000		490,000
4	Hood Roof Restoration Project	Hood	The Hood School roof was installed in 1999 and its approaching the end of its useful life of 25 years		850,000				850,000
5	Asbestos Mitigation	Little	Continuation of Asbestos Mitigation to remove asbestos floor tiles.					75,000	75,000
6	Athletic Field Lighting	MS \ HS	Continuation of Athletic Field Lighting Project: Phase 3					280,000	280,000
7	Energy Management System & HVAC Upgrades	Hood	Upgrades to energy management system to allow for remote controls of heating and cooling				200,000		200,000
8	Electronic System/Security System Upgrades	Elementary / MS/HS	Upgrades to the wireless clocks at elementary schools and other systems including the alarm and access control systems	50,000		60,000		160,000	270,000
9	WWTP Membranes & Turbines	MS \ HS	The MS/HS Waste Water Treatment Facility's membranes and turbines have a 5 to 7 year lifespan and need to be on a replacement cycle			50,000			50,000
10	Solar Power - Parking Canopy and Car Charging Stations	MS \ HS	Small 8 parking spot solar canopy, which would include car charging units		75,000				75,000
11	Window Replacements	Hood / Little	Replacement of classrooms windows and screens at various locations in need of repair	50,000		50,000		50,000	150,000
TOTAL- FACILITIES				325,000	925,000	820,000	690,000	565,000	3,325,000

Notes:

1	<p>The two Hood School boilers were installed in 1999, and are presently 23 years old. This request includes replacing both boilers with high efficiency condensing boilers and redesigning the boiler room similar to the project at the Little Elementary School in 2012. The Little School boilers were installed in FY' 12 and have led to approximately \$10,000 to \$15,000 of savings annually. The current boilers are in fair condition but are beginning to break down due to their age and condition. The District has had several costly repairs over the past two years. This request is called for in FY'24 when the boilers will be 24 years old and at the end of their useful life of 20-25 years to provide efficient and effective heating. The project could be eligible for the Massachusetts School Building Authorities (MSBA) accelerate repair grant program, which now requires both a vote of approval of School Committee and Select Board prior to submitting a statement of interest. In addition, the project could also result in a rebate from RMLD of up to \$30,000 for supplying high efficiency equipment. The boilers would be connected to the school's energy management system with Automated Logic for enhanced controls of the heating system.</p>
2	<p>The four Hood Elementary School modular classroom units were installed in 2003 and are showing signs of significant age and deterioration. The expected useful life of these units is generally up to 15 - 20 years with proper maintenance and upkeep. The units have been well maintained and past annual inspections but are reaching the end of their useful life. The units are approaching 20 years old and the time has come to develop a timeline to address the removal and replacement cost. The District is in the process of having these modular units structurally evaluated, and is pursuing the cost of removal, replacement including the utility reconnection. One solution could include demolition and removal of existing 70'x70' foot modular classrooms, and replacing with a smaller size unit about half the size, to include a two classroom structure. The cost proposed is an estimate received from likely bidders for the design, installation, and utility connection of the new two new units and the removal of existing units. The project would need to be put out to bid and would need to include cost of a consultant/engineering/design firm to assist with the preparation of the bidding documents. The District is open to considering leasing to reduce the initial acquisition cost and spread this cost over a three to five year period. Leasing estimated for such a structure from prospective bidders for a five year term range between \$6,500 and \$7,000 per month or approximately \$78,000-\$84,000 annually, after up-front building costs. Current enrollment projections illustrate a steady but moderate increase in elementary enrollment. Also the need for specialized programs, and anticipation of a continued increase in demand of the District's Full Day Kindergarten and early childhood programs over the next ten years, a two unit structure will be needed at this school location in the faceable future. This project is currently being proposed for replacement in FY'26.</p>
3	<p>The Little School expanded modular classroom floor was installed in 2003 and is showing signs of significant deterioration and is beyond the it's useful life. The expected useful life of these units is 12 to 15 years. The unit has been well maintained and passes annual inspections but the time has come to consider replacement. These classrooms house the schools early childhood program and will be needed into the future. The work includes the full cost of demolition and removal of the old unit and the cost of a new unit including installation and utility connections. The cost includes an approximate estimate from Triumph Modular Company, this project is being proposed for FY'27.</p>
4	<p>The Hood Elementary School Roof was installed in 1999 and has reached the end of its useful life of twenty (20) years, the current roof is a welded seam Sarnafil roofing system. The District contracted with Tremco, Inc. to perform an infra-red moisture scan in the summer of 2018, which at the time showed little moisture penetration, approximately 1% of the 55,000 sq. ft. roof area, however offer the past five years their has been several leaks and costly repair and maintenance work to maintain the structure and integrity of the roof. Tremco Inc. concluded that the roof could be a good candidate for a roof restoration project, which would extend the life expectancy for an additional 20 years. The estimated cost is between \$10 and \$13 per sq. ft. which would have an estimated total cost of \$850,000. The project would include a 20 year warranty if done by Tremco per their specification. The project could also be a candidate for MSBA's accelerated repair program similar to that of the Little School Roof project. If the MSBA program is pursued the scope and cost of this project would most likely change and include additional overhead and indirect costs for project management, design, and oversight. The reimbursement rate could be as high as 48% if approved by the MSBA. This project is being proposed for funding consideration in FY'25 when the roof will be 25 years old.</p>
5	<p>The District received \$50,000 to begin asbestos abatement work at the Hood and Little Schools in the summer of 2013. The Hood School kitchen and storage room and the Little School nurse's office and ceiling in the storage room and B-wing boys' lavatory were addressed. Additional abatement work from the original \$50,000 request continued in the summer of 2015. This additional \$120,000 request which includes, \$60,000 in FY'20 and the remaining \$60,000 in FY'23 would remove all remaining asbestos floor tile from the Little Elementary School. The proposal involves 12,000 square feet of floor tile to be removed. Contractors use an estimated pricing that ranges from \$5.50 to \$7.50 per square foot based on the complexities and current market conditions at the time of bid. The only other school with remaining asbestos is the Hood Elementary School and the plan would be to address this in the future; there is no immediate abatement need at this time.</p>

6	<p>The District completed phase 1 and phase 2 of the athletic lighting field needs during the Spring and Fall of 2021. These phases provided lighting on the grass multi-purpose practice field, and will expand the use of that field for both the school and the community. Phase 3 of the project involves installing four light poles on the outfield of Carey Park (baseball field) which is used for soccer, field hockey, lacrosse and other activities both at the high school and in-town youth program including pop warner football. This would expand the use of the athletic fields at the Middle/High School campus for the school and the community. These funds are being requested in FY'27.</p>
7	<p>The District upgraded the Little School Elementary HVAC system and was able to expand the HVAC's building management system. The next phase of this project would be to complete the Hood Elementary School and fully automate the HVAC control systems throughout the school similar to that of the Little School. If completed the district would maximize their ability to save energy and regulate occupancy schedules throughout each school. It is anticipated the district would save up to \$12,000 annually with enhanced regulation of the school energy and occupancy schedules. This project would bring the Hood School to the same level as the Batchelder School, Little School and Middle/High School allowing for increased ability to control energy use and reduce cost. This project is being proposed for funding in FY'27 and is anticipated to cost \$200,000 similar to that of the Little Elementary School which was completed in FY'22 and FY'23.</p>
8	<p>The three elementary schools are in need of an electronics systems upgrade based on the age and condition of the equipment. This upgrade would include improvements to the clock, access control, and intrusion alarm systems. The existing systems are between thirteen and twenty-one years old; Batchelder system was installed in 2005, the Hood system was installed in 1999, and the Little system was installed in 1997. These systems are outdated and have become costly to repair and troubleshoot when issues arise. An upgrade would allow for enhanced safety features, uniformity, and allow consistent safety protocols to be implemented at each school. There has been a significant advancement in technology over the last five years related to these systems. An upgrade to these systems would increase safety for staff, students and the public. This project calls for a phased-in approach to address the clock system, followed by the alarm and access control system. Future projects could address the video camera system to upgrade to the latest technology available.</p>
9	<p>The District with the opening of the Middle School/High School in 2013 begin the operation of a Wastewater Treatment Plant. This plant is a bioprocess membrane plant and is highly technical and complicated operation. The plant has three membranes and two air scour blowers which were replaced in 2019, and it is anticipated they will reach the end of their five to seven year useful life in FY'26 are in need of replacement. The anticipated life expectancy for this equipment is seven to ten years. The 2020-2021 school year would represent year 8 for the membranes which have had a hard life due to several factors and the operating conditions of the plant. The membranes died in the summer of 2019 requiring immediate replacement by the School Department. The District anticipates additional costs in the area of upkeep and replacement of parts, to that end we are seeking a large capital request within our five year plan to secure funding to make such upgrades again in FY'26.</p>
10	<p>A small parking lot solar canopy covering about 8 parking spots adjacent to the Tennis court in the back-parking lot could be installed, to also include a two car charging station units for use by North Reading staff members. Not only will this option generate green power, but North Reading employees will appreciate the shade to protect their vehicles, and option to charge their electric cars. The District would partner with RMLD for use of their shared community program and the project would be either a behind the meter proposal which will reduce the Middle / High school energy costs equivalent to the power to light the tennis courts and about half of back-parking lot or a power purchasing agreement in front of the meter proposal, where the District would receive annual lease payments. Both options could be considered. The size is small and would be intended also to provide educational opportunities for Middle and High School students. RMLD Officials due to the small size and scope and supply chain issues don't feel this is an attractive options to prospective firms over the next year but hopefully this will change in the near future.</p>
11	<p>The windows at the Hood and Little Elementary schools are in poor condition in various locations and this needs to be addressed. The windows are over 25 years old in most classroom locations and are difficult to open and close. This would improve energy conservation efforts and reduce energy costs at these school locations. The District has identified various windows and screens at each school in need of replacement. The cost ranges between \$300 and \$900 per window and the District with an allotment of \$50,000 would be able to address about 50 windows at each building, which would be 10 classrooms at each school. This will be a phased in aproach with similar requests in future years to continue to address windows in needs or replacement at these two school locations.</p>

CAPITAL REQUESTS HISTORY

FACILITIES	SCHOOL / DEPT	DESCRIPTION	FY'19 APPROVED	FY'20 APPROVED	FY'21 APPROVED	FY'22 APPROVED	FY'23 APPROVED	TOTAL
Roof Repair	High / Middle	Repaired bubbled sections of High and Middle School roof.						150,000
Boiler	Little	We were down to one boiler, with no backup.						250,000
Retaining Wall	Little	Repaired retaining wall adjacent to Little School softball fields.						100,000
Asbestos Mitigation	Hood/Little	Removed asbestos tiles that are wearing away.						50,000
Repaving Parking Lot	Hood	The school parking lot and playground area needs to be repaved. The hot top is beginning to erode causing a safety issue.						100,000
Peabody Street Entranceway Repair	Batchelder	The front stairwell on the Peabody Street side is deteriorating and needs to be repaired.						25,000
Gymnasium Floor Replacement	Little	The Little School Gym floor is reaching the end of its useful life and is in need of replacement.	40,000					40,000
Hood Fire System Panel	Hood	A replacement of the Hood School Fire System panel was needed due to the age and condition.		30,000				30,000
HVAC Upgrades	Little	HVAC System Upgrade			65,000			65,000
Handicapped Accessible Lift	Hood	Lift Replacement			35,000			35,000
Little School Paving Project	Little	Paving of identified sections of the Little School parking lot.				100,000		100,000
Soffits and Fascia	Little	Replace schools soffits and fascia that are showing significant signs of rot and deterioration.				65,000		65,000
Elementary HVAC Rooftop Unit replacements	Elem	Begin replacement of Elementary School Roof Top HVAC units that are over 20 years old.					100,000	100,000
Energy Management System & HVAC Upgrades	Little	Phase II Upgrades to Little School Energy Management System					100,000	100,000
TOTAL- FACILITIES			40,000	30,000	100,000	165,000	200,000	1,305,338