

# NORTH READING PUBLIC SCHOOLS

## LARGE CAPITAL

### 5 YEAR REQUEST SUMMARY

CATEGORY	FY'20 REQUEST	FY'21 REQUEST	FY'22 REQUEST	FY'23 REQUEST	FY'23 REQUEST	TOTAL
VEHICLES	45,000	55,000	0	45,000	55,000	200,000
TECHNOLOGY	60,000	105,000	60,000	105,000	60,000	495,000
FACILITIES	265,000	125,000	605,000	830,000	695,000	2,520,000
TOTAL	370,000	285,000	665,000	980,000	810,000	2,440,000

### 5 YEAR APPROVAL HISTORY

CATEGORY	FY'15 APPROVED	FY'16 APPROVED	FY'17 APPROVED	FY'18 APPROVED	FY'19 APPROVED	TOTAL
VEHICLES		35,000	45,000	0	35,000	115,000
TECHNOLOGY	100,000	60,000	60,000	105,000	105,000	430,000
FACILITIES		50,000	50,000	40,000	40,000	180,000
TOTAL	100,000	145,000	155,000	145,000	180,000	725,000

Notes	SPECIAL EDUCATION	YEAR IN SERVICE	USEFUL LIFE (YRS)	MILEAGE AS OF AUG, 2018	CONDITION	PURCHASE PRICE	FY'20 REQUEST	FY'21 REQUEST	FY'22 REQUEST	FY'23 REQUEST	FY'24 REQUEST	TOTAL
1	Ford Transit 350	2015	10	32,036	Excellent	39,993						
	Ford E-250 (Wheelchair Van)	2016	10	10,815	Excellent	39,521						
	Ford E-250	2007	10	121,351	Good	27,589	45,000					45,000
	Ford E-250	2011	10	78,813	Good	26,514				45,000		45,000
	SUBTOTAL- SPECIAL EDUCATION						45,000	0	0	45,000	0	90,000
2	ATHLETICS	YEAR IN SERVICE	USEFUL LIFE (YRS)	MILEAGE AS OF AUG, 2018	CONDITION	PURCHASE PRICE	FY'20 REQUEST	FY'21 REQUEST	FY'22 REQUEST	FY'23 REQUEST	FY'24 REQUEST	TOTAL
	Multi-Function Activity Vehicle	2019	12	N/A	New	\$53,526					55,000	55,000
	SUBTOTAL- ATHLETICS						0	0	0	0	55,000	55,000
3	FOOD SERVICES	YEAR IN SERVICE	USEFUL LIFE (YRS)	MILEAGE AS OF AUG, 2018	CONDITION	PURCHASE PRICE	FY'20 REQUEST	FY'21 REQUEST	FY'22 REQUEST	FY'23 REQUEST	FY'24 REQUEST	TOTAL
	Ford E-250	2005	10	108,269	Fair	\$22,102						0
	SUBTOTAL- FOOD SERVICES						0	0	0	0	0	0
4	BUILDINGS & GROUNDS	YEAR IN SERVICE	USEFUL LIFE (YRS)	MILEAGE AS OF AUG, 2018	CONDITION	PURCHASE PRICE	FY'20 REQUEST	FY'21 REQUEST	FY'22 REQUEST	FY'23 REQUEST	FY'24 REQUEST	TOTAL
	Trailer	1985	25+	N/A	Fair	\$0						
	Kubota Tractor/Loader	2002	20+	1,584 Hours	Good	\$34,700						
	Trailer Leaf Vacuum	1998	25	N/A	Poor	\$4,500						
	Ford F-450 (Utility Rack Truck)	2014	10	41,816	Good	\$58,088						
	F-150 Pick-Up (Transferred to Town)	2014	10	11,742	Transferred	\$24,095						
	Flat Bed Trailer	2008	25	N/A	Good	\$7,000						
	Ford F-350	2009	10	41,930	Good	\$35,162		55,000				55,000
	SUBTOTAL- B & G						0	55,000	0	0	0	55,000
TOTAL VEHICLES							45,000	55,000	0	45,000	55,000	200,000

**Notes:**

1	<b><u>Special Education</u></b> The district currently utilizes three special education vans daily to transport students between in town special education programs. The 2007 special education van is currently used as a spare and is also used to transport athletic teams and activities when appropriate, which has helped reduce athletic transportation costs. The district capital request called for a replacement plan to replace the 2005, 2006 and 2007 vans over a three year period. The 2005 and 2006 vans have been replaced; the next van in need of replacement is the 2007 spare van. This van has over 120,000 miles on it and the district would be looking to replace this van in FY' 20 when the van will be thirteen years old. Once replaced, the plan would be to transfer this vehicle to the food services department and take the current 2005 food services van offline.
2	<b><u>Athletics &amp; Extra-Curricular Activities</u></b> 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 \$75,000 on an annual basis. The District will receive a Multi-Function vehicle in December of 2018, and will assess the effectiveness and savings of implementing this vehicle into the daily athletic transportation operation. Research indicates that purchasing a multi-function, 15 passenger activity vehicle would allow the program to handle numerous athletic runs and extra-curricular field trips annually. The District could be interested in expanding its fleet of this type of vehicle in the future if the optimum level of savings is able to be realized.
3	<b><u>Food Services</u></b> The district transferred the 2005 special education van, which was replaced in 2015, to the food services department. The food services currently use a van to satellite food between the high school and the elementary schools that don't have a full size kitchen. This van is 12 years old and is maintained by the DPW. The van is in fair condition but has over 105,000 miles on it and will need to be replaced in the near future. If the 2007 spare Special Education van is replaced in FY'20, that van will be transferred to the Food Service Department at that time thus delaying the need to replace this vehicle.
4	<b><u>Building &amp; Grounds</u></b> The next vehicle in line for replacement is the 2009 F-350, and is used by the Building and Grounds Department. This is a high usage vehicle, which is used for snow removal and sanding in the winter months. The district would be looking to replace this vehicle in FY'21 when it will be over twelve years old. All Buildings and Grounds vehicles and equipment remain in good condition and are maintained by the DPW on a regular basis.

Notes		SCHOOL / DEPT	FY'20 REQUEST	FY'21 REQUEST	FY'22 REQUEST	FY'23 REQUEST	FY'24 REQUEST	TOTAL
	<b>INSTRUCTIONAL TECHNOLOGY</b>							
1	1:1 Initiative, Year 3	District wide	60,000	60,000	60,000	60,000	60,000	<b>300,000</b>
2	Technology Instructional Equipment	Elementary		45,000		45,000		<b>90,000</b>
	<b>TOTAL-INSTRUCT'L TECHNOLOGY</b>		<b>60,000</b>	<b>105,000</b>	<b>60,000</b>	<b>105,000</b>	<b>60,000</b>	<b>390,000</b>
<b>TOTAL TECHNOLOGY</b>			<b>60,000</b>	<b>105,000</b>	<b>60,000</b>	<b>105,000</b>	<b>60,000</b>	<b>435,000</b>

**Notes:**

1	Since 2013 the district has been able to increase the number of mobile devices in the educational program. Each device has a benefit to enhancing the educational experience and functioning as a tool for learning. In order to meet the goals of the district's strategic plan, "NRPS 2021," and digital learning goals, there is a need to continually enhance the mobile device availability. The district has worked on an on-going computer/device replacement plan which includes replacing devices as they reach the end of their useful life and continuing to add devices to enhance the student-to-computer ratio. The district has received \$60,000 each of the last four fiscal years thus enabling the purchase of additional devices. The need for on-going computer replacement and the addition of devices is ever increasing as the school district strives to meet the demands of computer-based state standardized testing, advance a 1:1 initiative, and provide all students with a comprehensive 21st century learning experience.
2	The district has a need to begin to replace the technology tools in the classrooms at all three elementary schools, including SMART boards, projectors, and iPads. Many of these devices are over ten years old and are not functioning or are functioning poorly and have reached the end of their useful life. Many of these items were purchased in the past with large capital funds and there is currently no line item in the Schools general fund to assist with replacing this equipment. The District has identified the need to begin a long-term plan to support the replacement of these items that have become an vital component of the elementary classroom and each student's educational experience.

**CAPITAL REQUESTS HISTORY**

	SCHOOL / DEPT	FY'14 APPROVED	FY'15 APPROVED	FY'16 APPROVED	FY'17 APPROVED	FY'18 APPROVED	FY'19 APPROVED
<b>INSTRUCTIONAL TECHNOLOGY</b>							
Computer Replacement / Devices	All Schools		\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
Technology Instructional Equipment	Elementary						\$45,000
Upgrade Phone Systems	Elementary		\$40,000				
WIFI Infrastructure Upgrade	Elementary					\$107,357	
<b>TOTAL-INSTRUCT'L TECHNOLOGY</b>		<b>\$0</b>	<b>\$100,000</b>	<b>\$60,000</b>	<b>\$60,000</b>	<b>\$167,357</b>	<b>\$105,000</b>
<b>TOTAL TECHNOLOGY</b>		<b>\$0</b>	<b>\$100,000</b>	<b>\$60,000</b>	<b>\$60,000</b>	<b>\$167,357</b>	<b>\$105,000</b>

Notes	FACILITIES	SCHOOL / DEPT	DESCRIPTION	FY'20 REQUEST	FY'21 REQUEST	FY'22 REQUEST	FY'23 REQUEST	FY'24 REQUEST	TOTAL
1	Boilers	Hood	Replacement of Hood School boilers to High Efficiency Condensing Boilers installed in 1999.			545,000			545,000
2	HVAC Roof Top Units	Batchelder	Replacement of Batchelder School Roof Top units installed in 2006.				80,000	80,000	160,000
3	Electronic Systems Upgrade	Elementary Schools	The three elementary schools are in need of an electronics systems upgrade based on the age and condition of the equipment.	30,000	65,000				95,000
4	Modular Demolition/Removal	Hood	Removal of 4 modular classroom units due too their age and condition and restoring the area to its original condition.		60,000				60,000
5	Modular Removal & Replacement	Little	Removal and replacement of modular classroom unit due to its age and condition.					405,000	405,000
6	School Security Upgrades	District	Upgrades to exterior cameras / new alarm panels / interior door locks / security screens						0
7	Little School Paving Project	Little	Paving of identified sections of the Little School parking lot. This project would both expand and repair sections of the existing parking lot.	85,000					85,000
8	Lighting Upgrades (Energy Efficiency Measures)	Hood \ Little	Upgrades to the existing lighting systems in identified areas. Upgrades would include LED lighting to increase energy efficiency savings.	50,000					50,000



3	<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 fire and burglar alarm, intercom, paging, bell and clock 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 for 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. The plan would be to address the most critical system first which would include the fire and burglar alarm systems (FY20) and then follow-up with a request to replace the intercom, paging, bell and clock system. (FY21).</p>
4	<p>The four Hood Elementary School modular classroom units were installed in 2003 and are showing signs of age and deterioration. The expected useful life of these units is 12 years. The units have been well maintained but are reaching the end of their useful life. The time has come to consider removing the modular units and taking these classrooms offline. The work would include demolition and removal of existing 70'x70' foot modular classrooms, including removal of concrete and backfill to carry the existing slope grade. The proposal also includes loaming and hydroseeding the site once modulars are removed. Once taken offline the plan would be to return the site to its original condition. The District would need to take ownership again of the three classrooms currently being leased in the existing school by SEEM Collaborative to ensure enough classroom space exists once the modulars are offline.</p>
5	<p>The Little School expanded modular classroom Floor was installed in 2003 and is showing signs of deterioration as it reaches the end of its useful life. The expected useful life of these units is 15 years. The unit has been well maintained but will need to be replaced in the near future. The classrooms house the schools early childhood program and will be needed into the future. The work will include 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 Triump Modular Company.</p>
6	<p>Funds are needed to upgrade safety and security measures at all five schools including (interior classroom door locks, exterior door alarms, roll down doors to isolate areas of the middle/high school during off hours, additional controlled access at the second door of the gym entrance at the middle/high school, additional alarm panel at the gym entrance at the middle/high, additional security cameras at the elementary schools as needed, enhanced technology based alert system, and other enhancements as recommended. There is no funding attached ot this request because the District is receiving \$175,000 through the state budget as a result of lobbying efforts from State Representative Brad Jones.</p>
7	<p>Paving of identified sections of the Little School parking lot is needed. This project would both expand and repair sections of the existing parking lot. The old playground was removed in the summer of 2016, and gravel was placed in this area as a temporary solution. This area could be paved which would expand the parking lot and a doxen parking spaces at the school. There are also other sections of the parking lot that are showing signs of deterioration and are in need of repair. The plan would be to work cooperatively with the DPW and the Town's contractor to identify the needed areas and achieve economies of scale. The \$85,000 request would include paving the main parking lot, old playground area, and front bus loop.</p>
8	<p>The Little and Hood Elementary Schools are in need of lighting upgrades to enhance energy efficiency measures. The District has identified several areas at both the Little and Hood Elementary Schools, mainly common areas that would include the gymnasium, cafeteria, main hallways, library, etc., and replace the lighting fixtures with LED lighting. This project would improve the lighting and enable the school to be more energy efficient thus, leading to a reduction in electricity costs. LED Lighting systems can reduce energy lighting consumption by up to 70%, which translates directly into substantially lower utility costs. The project would include the installation of light sensors which will shut off lights during unoccupied periods thus leading to additional energy savings. The durability of LED lighting systems thus reduces maintenance and repair costs as well. The District anticipates that we could receive substantial rebates from RMLD by partnering with them, it could result in as much as 25-50% of the cost of the project by working within their parameters and Rebate program.</p>

9	<p>The Hood Elementary School Roof was installed in 1999 and is approaching 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 showed very little moisture penetration, approximately 1% of the 55,000 sq. ft. roof area. Tremco Inc. concluded that the roof is in good condition and is a solid 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 \$750,000. 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 accelerate repair program similar to that of the Little School Roof project. Based on the assessment the District will need to expend \$3,000 to \$5,000 annually for regular preventative roof maintenance.</p>
10	<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>
11	<p>HVAC upgrades are needed at the Little Elementary School in the c-wing. The request involved two projects that were recommended by BLW Engineers who performed an assessment on the system in 2017. The recommended solutions would eliminate the cold air syndrome that currently exists in the c-wing of the school. The projects involve replacing the unit ventilator low limit discharge control, which has an estimated cost of \$45,000.00 and secondly, rebalancing the c-wing unit ventilators, which has an estimated cost of \$20,000.00.</p>
12	<p>The current Hood system was manufactured by Honeywell and was installed in 1999, it is an old modem based system and needs to be replaced. The operating system that controls the classroom unit vent heaters has been lost. The current request is to install an energy management system throughout the Hood and Little Schools which would build on the existing energy management controls at our other schools. The Hood and Little School has an energy management system in the boiler room only. The new High School and Middle School will be on an automated system when the project is completed. 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 \$15,000 annually at each School, which computes to a payback period of less than ten years if completed. This project would bring both the Hood and Little Schools to the same level as the Batchelder School and new HS/MS allowing for increased ability to control energy use and reduce cost.</p>
13	<p>Compliance upgrades to the softball field complex at North Reading Middle/High School are needed to fully complete the project and bring the field's amenities to an appropriate level consistent with other athletic complexes available to students athletes. These upgrades would include the supply and installation of rooftop dugout enclosures and the supply and installation of an electronic scoreboard. These upgrades are needed to adequately equip the Softball Field with the appropriate amenities of other athletic facilities in the District, and to complete the project. The school construction project did not include installation of a scoreboard and dugout enclosures. The District has worked to identify funds and work with their support organizations to fundraise for these needed upgrades. The monies raised to date have been spent on the sod and irrigation project as well as improving the batting cage facility. Currently, there are no funds available for the dugout and scoreboard projects at this facility. The District has funded the installation of an electrical source to accommodate an electronic scoreboard.</p>



**CAPITAL REQUESTS HISTORY**

FACILITIES	SCHOOL / DEPT	DESCRIPTION	PRIOR FY'15	FY'15 APPROVED	FY'16 APPROVED	FY'17 APPROVED	FY'18 APPROVED	FY'19 APPROVED	TOTAL
Window Retrofit	High School	Retrofitted classroom windows. Present windows were bolted shut because the double hung sashes lack springs and are jammed closed.	7,500						7,500
Air Condition NOC and labs	High School	Provided air conditioning to network operations center and library classrooms.	15,000						15,000
Building Security	All Schools	Improved perimeter lighting and installed audible door alarms.	41,500						41,500
Chair Lift	Middle	Installed a chair lift to provide handicapped access to 2nd floor.	31,338						31,338
Roof Repair	High / Middle	Repaired bubbled sections of High and Middle School roof.	150,000						150,000
Boiler	Little	We were down to one boiler, with no backup.	250,000						250,000
Retaining Wall	Little	Repaired retaining wall adjacent to Little School softball fields.	100,000						100,000
Asbestos Mitigation	Hood/Little	Removed asbestos tiles that are wearing away.	50,000						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.			50,000	50,000			100,000
Peabody Street Entranceway Repair	Batchelder	The front stairwell on the Peabody Street side is deteriorating and needs to be repaired.					25,000		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
<b>TOTAL- FACILITIES</b>			<b>645,338</b>	<b>-</b>	<b>50,000</b>	<b>50,000</b>	<b>25,000</b>	<b>40,000</b>	<b>1,405,676</b>