

Board of Selectmen and Finance Committee Joint Meeting
Schedule for Saturday, March 3, 2018
Capital Budget Review for Fiscal Year 2019
Fuller Meadow School – Nathan Media Center

AGENDA

8:30 AM Approval of February 3, 2018 minutes of the joint meeting of the Board of Selectmen and Finance Committee Fiscal Year 2019 Budget meeting

8:35 AM Joint meeting of the Board of Selectmen and Finance Committee to discuss the Fiscal Year 2019 proposed capital budget and affiliated warrant articles for the May 2018 Town Meeting - Operating Budget Status Update

9:00 AM Police Department

9:20 AM Information Technology

9:40 AM Elementary Schools – Warrant article requests and operating budget update

10:10 AM DPW and Recreation Park Development

10:30 AM Fire Department

10:50 AM Masconomet Regional School – Warrant article requests and operating budget update

11:20 AM General Government and Administration

11:40 AM Debt Service schedule

12:00 PM Other Citizen Petitions (if any) and Other Projects

12:20 PM Review and joint vote on proposed municipal financial policies

12:40 PM Review of outstanding supplemental budget request items from the February 3, 2018 Operating Budget Meeting

1:00 PM Meeting ends

**Minutes of the Joint meeting of the
Middleton Board of Selectmen and Finance Committee
Fuller Meadow School
Nathan Media Room
143 South Main Street, Middleton, MA 01949
February 3, 2018 8:30AM**

BOS Present: Chair Brian Cresta, Kosta Prentakis, Timothy Houten, Todd Moreschi, Rick Kassiotis

Finance Committee Present: John Erickson, Michelle Cresta, George Dow, Steve Coccia and Richard Gregorio

Others Present: Town Administrator Andrew Sheehan, Assistant Town Administrator Ryan Ferrara, Public Works Superintendent Bob LaBossiere, Council on Aging Susan Gannon, Town Planner Katrina O'Leary, Flint Public Library Director Melissa Gaspar, Fire Chief Tom Martinuk, Police Chief James DiGianvittorio, Tri-Town Schools Superintendent Scott Morrison, Steve Greenberg and Matthew LaCava, Masconomet Superintendent Kevin Lyons, Masconomet School Committee members Hagan Rivers and Tasha Cooper

Board of Selectman Chairman Brian Cresta called the meeting to order at 8:37AM.

Fiscal Year 2019 Town Operating Budget Overview

Assistant Town Administrator, Ryan Ferrara, kicked off the joint meeting of the Operating Budget Review meeting by providing an overview of the Fiscal Year 2019 budget projection. Budgeted expenses are currently \$25,269 over budgeted revenue, inclusive of unused levy capacity.

Town Accountant/Chief Financial Officer, Sarah Wood, provided an overview of the current five-year operating budget projection. Members recommended some adjustments which will be incorporated into the next draft of the projection.

Town Administrator, Andy Sheehan, presented an overview of the budget guidance issued in his December 18, 2017 memorandum to staff. Department heads were requested to submit budgets with salary increases consistent with settled union agreements and 2.5% for non-union staff. All other appropriations included with in the operating and maintenance budget should be budgeted at Fiscal Year 2018 levels with the exception of any new initiatives which provide the Town with long term savings or service efficiencies. All schools were provided with a budget target increase of no greater than 5%.

Public Works

DPW Superintendent, Bob LaBossiere, provided an overview of the proposed Fiscal Year 2019 DPW budget. Notable changes to the budget include nearly a \$20,000 increase to the recycling budget due to recent changes within the international market for recycling material and potential changes in the Danvers water agreement.

Kosta Prentakis asked whether more could be committed from the Athletic Fees Fund to improve field conditions. Mr. LaBossiere indicated that the Athletic Fees Fund is already regularly utilized for field maintenance needs, but he committed to work with Ms. Wood to determine if there were additional opportunities to utilize the fund further.

The group went on to discuss the possibility of charging for the disposal of recyclable material. Mr. LaBossiere recommended that the charge be no lower than \$20. Since the current \$100 trash sticker fee only covers about 50% of our actual cost to provide the service, the group agreed that they may need to consider a fee for the recyclables disposal, there is currently no charge for this service, and an increase in the current \$100 fee for trash stickers.

Town Planner

Town Planner Katrina O'Leary encouraged all BOS and Finance Committee members to participate in upcoming stakeholder meetings in support of the development of the Town's Master Plan. Ms. O'Leary also advocated for an increase in hours for the Administrative Aide to the Town Planner and Director of Public Health from 19 to 30 hours. With the additional hours, the position would be benefit eligible.

Council on Aging

Council on Aging Director, Susan Gannon, provided an update on activities at the Council on Aging. Due to the increase in activity at the COA, Ms. Gannon is requesting an additional 11 hours spread among various COA staff.

Flint Public Library

Flint Public Library Director, Melissa Gaspar, expressed her appreciation to both committees for supporting the increase in the Fiscal Year 2018 budget for additional staff hours. Ms. Gaspar is requesting an additional 19-hour part-time Circulation Assistant and an additional \$5,000 for substitute shifts when staff are unavailable due to illness or vacations.

Fire Department

Fire Chief, Thomas Martinuk, addressed the group and highlighted his request for a part-time administrative assistant. Chief Martinuk explained that he is the only large department in Town without substantive administrative support and would like to have someone regularly available to assist the Fire Department in processing plan submittals, payroll and accounts payable.

Police Department

Police Chief, James DiGianvittorio, outlined two major changes to the Proposed Fiscal Year 2019 budget: a new full-time police officer and one new patrol vehicle. The full-time officer is part of a multi-year plan to increase full-time staffing at the Fire and Police Departments. The purchase of the patrol vehicle is necessary with the discontinuation of the agreement of the Essex County Sheriff's Office to provide vehicles to the Middleton Police Department. The Chief also plans to request two separate patrol vehicles as a separate capital budget request to ensure the operating integrity of the vehicle fleet.

Elementary Schools

Tri-Town Schools Superintendent Scott Morrison, Assistant Superintendent of Operations, Steve Greenberg and Assistant Superintendent of Student Support Services, Matthew LaCava presented the Proposed Fiscal Year elementary school 2019 budget. The initial budget increase proposal was 6.7% while the updated increase is 5.8%. Mr. Greenberg indicated that the finance team is looking at all discretionary spending and plan on working closely with the school committee to come up with a final proposal in mid-March.

School Start Times

Masconomet School Superintendent, Kevin Lyons, along with Masconomet School Committee members Hagan Rivers of Boxford and Tasha Cooper of Middleton presented the recommendations from the Start Time Advisory Committee (STAC). The proposed changes to start times would move forward the elementary school start time from 8:30 AM to 8:00 AM while the Masconomet start time would be pushed back from 7:30 AM to 8:30 AM. The Middleton elementary schools have not included funding to support the change while the Masconomet school budget includes funding within their proposed Fiscal Year 2019 budget. The projected net impact on the annual budget for the additional buses is estimated to be about \$186,000 for Middleton.

Masconomet

Superintendent Lyons indicated there has been a good deal of work on the budget since the release of the thumbnail budget projection in January. The current Middleton Masconomet Fiscal Year 2019 assessment increase is now at 4.5%. Notable increases to the Masconomet budget include:

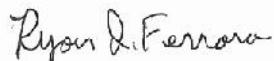
- _) \$233,000 for implementation of a new unified health services model including three new medical staff.
- _) A new Human Resources Director position
- _) A new HVAC position
- _) Additional stipends for curriculum development

On February 9th the budget will be released on the Masconomet website. There will be a budget hearing on February 26th. On February 28th, the School Committee will begin deliberations on the Fiscal Year 2019 budget.

Superintendent Lyons also indicated that Masconomet will be presenting a \$549,000 warrant article. Middleton's portion of the warrant article will be about \$193,000.

The group went on to discuss next steps in the budget process. Mr. Sheehan indicated there may be other areas which might be added to the final Fiscal Year 2019 operating budget including additional funding for legal services, compensation reserve and funding for an assessment center to hire a replacement for Chief DiGianvittorio who plans to retire within the next two years. The group agreed to discuss the supplemental requests at the March 3rd capital budget meeting. The meeting adjourned at 3:43 PM.

Respectfully submitted,



Ryan Ferrara, Assistant Town Administrator

Kosta Prentakis, BOS Clerk

John Erickson, Finance Committee Co-Chair

Richard Gregorio, Finance Committee Co-Chair



OFFICE OF THE TOWN ADMINISTRATOR

Town of Middleton
Memorial Hall
48 South Main Street
Middleton, MA 01949-2253
978-777-3617
www.townofmiddleton.org

MEMORANDUM

TO: Board of Selectmen and Finance Committee

FROM: Andrew J. Sheehan, Town Administrator

DATE: March 3, 2018

RE: FY2019 Capital Budget, Five-Year Capital Improvement Plan, and Update on FY19 Operating Budget

In accordance with Section 5 of the Town Charter, I herewith submit the Fiscal Year 2019 (FY19) Capital Budget. This memorandum also includes an update on the operating budget as well as upcoming meetings associated with the Annual Town Meeting and the completion of the operating and capital budgets.

During the past year we began a rewrite of our financial management policies to reflect current practices while providing clear guidance and flexibility. This effort, recommended by our independent auditors, has been a worthwhile effort and will serve us well in the future. It is our hope to formally adopt these before Annual Town Meeting. We have used the agreed upon parameters of these policies to guide us in building both the operating and capital budgets. An updated draft of the financial management policies is included in the binder. It is our hope that these policies can be reviewed and formally adopted at this meeting.

FIVE-YEAR CAPITAL PLAN

The purpose of the five-year capital plan is to inform municipal officials and residents of the probable replacement schedule for components of the Town's capital assets. Capital assets include all municipal buildings, schools, parks, roads, water and drainage systems, vehicles, cemeteries, and departmental equipment valued at more than \$5,000 and having a useful life of five years. Year 1 of the five-year capital plan is the coming year's (FY19) capital budget.

A wide array of vehicles, equipment, buildings, and other infrastructure support the operations of local government. Taxpayers use municipal buildings, roads, parks, cemeteries, playing fields, and playgrounds on a daily basis. We have a duty to keep the Town's physical assets in good condition and not allow it to fall into disrepair. It requires discipline to maintain capital investments. We have seen numerous examples in Massachusetts and the country as a whole where maintenance and replacement of capital facilities was deferred. Although deferral does not cause an immediate decline in the quality of services, the cost of catching up only increases over time.

As decision-makers have noted and residents acknowledged at the November 2017 Special Town Meeting, a number of public building projects must be addressed in the coming years. These include the

Fire Station, Police Station, Council on Aging, and Memorial Hall. Careful financial management is required to program these projects without overburdening taxpayers.

Five-year plans are summarized by department or function through FY23 and contain descriptions and budget estimates. Funding for projects and equipment in year one, FY19, will be sought at the May 8, 2018 Annual Town Meeting. Cost estimates for years two through five of the capital plan are approximate as we cannot precisely predict inflation, changes in markets and industries, and other influencing factors.

The list of proposed expenditures is organized by function and by funding source. The capital budget shows each proposed expenditure and the recommended funding source. In most cases, these are funded from reserve accounts such as Free Cash or Overlay Reserve, Community Preservation Fund, or receipts reserved for appropriation accounts such as the Ambulance Fund. We do not recommend use of the tax levy as a funding source for the FY19 capital budget. As will be discussed below, we recommend consideration of a debt exclusion or capital outlay exclusion for one item.

In total, departments submitted capital requests totaling \$2,895,003. The Chief Financial Officer, Assistant Town Administrator, and I pared these requests down to the enclosed capital budget. The capital budget proposes an appropriation of \$2,406,003; \$489,000 in spending requests have been omitted from the FY19 capital budget. Last year's capital plan was \$5,506,032 which included almost \$3.6 million for the Natsue Way Recreation Project. Minus the Natsue Way project the FY18 capital plan was \$1,927,032. The FY17 capital budget was \$1,883,959.

The largest item on the FY19 capital budget is replacement of the Fire Department pumper (Engine 1) at \$622,000. Historically we have drawn from Stabilization to fund such purchases. Funding Engine 1 from stabilization would reduce the balance to about \$1,304,000. Our draft financial policies establish a general stabilization fund target of 5-7% of current year operating expenditures. This would put the balance below 5% of operating expenditures. If this item is brought to Town Meeting for funding we recommend consideration of a capital outlay exclusion or debt exclusion to fund the acquisition.

We did not arrive at the proposed capital plan appropriation by chance. The draft financial management policies set a Free Cash target of at least 3% of the prior year general fund operating appropriation. On November 8, 2017, following the Special Town Meeting, Free Cash stood at \$1,949,799. Our FY18 operating appropriation was \$33,813,867; 3% of that equals \$1,014,416. This leaves \$935,383 in Free Cash available for use for capital and warrant articles. Other funding sources include \$192,765 from Overlay Reserve, \$141,750 from the Ambulance Fund, and \$518,000 from other sources such as Community Preservation Fund, Water Fund, PEG, and Chapter 90. We also have identified \$50,000 from prior year appropriations that can be repurposed as a funding source.

We expect that you will scrutinize all of our assumptions and each funding request based on need, justification, cost effectiveness, and how each purchase, if deferred, will affect future budgets.

FY2019 OPERATING BUDGET

CHANGES SINCE FEBRUARY 3, 2018

The operating budget summit was held on February 3, 2018. At that time, we were looking at a budget of \$36,071,362. Since then a number of things have changed. At this time, the budget is \$35,656,628, an improvement of \$414,734. Highlights of these changes include:

- _) The 2/3/18 budget was based on Masconomet's "Thumbnail" budget. That has since been reduced by \$89,260. Start time changes remain unsettled; depending on the outcome of those discussions Masco's assessment may drop further;
- _) The Middleton Elementary Schools budget has been reduced by \$315,500;

- J As we did last year, we propose to fund the Essex Tech Capital Improvement Assessment from Free Cash as a capital item, shifting \$21,693 away from the operating budget;
- J A number of modest adjustments were made to various departments;

Balances remain in a number of warrant articles from prior years. Following the lead of the Board of Selectmen and Finance Committee, departments have worked to close out these appropriations. As noted above, \$50,000 is proposed to be repurposed to fund FY19 capital acquisitions. Other projects will wrap up in FY18 with balances closing to Free Cash while some will remain active into FY19.

Use of excess levy capacity: The Town's draft financial management policies call for maintaining excess levy capacity of at least 1% of the general fund operating appropriation. One percent of the FY19 budget is \$356,566. We project excess levy at \$406,465 or 1.14%.

ADDITIONAL ACTION ITEMS

- J A number of supplemental budget requests were discussed on February 3. We have additional backup material and are prepared to continue discussions on these requests. Ideally, we will come to final decisions on them;
- J The snow and ice budget is level funded at \$249,500 and we are currently in a positive position. Our five-year average expenditure is \$303,927. Modestly underfunding snow and ice is a reasonable practice. As the five year average creeps higher I will recommend increasing snow and ice funding. This does not need to happen in FY19.

WARRANT ARTICLES AND PETITIONS OF INTEREST

As we have been doing during the past several years, the Moderator and I have been working to streamline Town Meeting. I expect this to continue in 2018. Articles traditionally presented in a Special Town Meeting have been incorporated into the Annual Town Meeting. We are also incorporating a consent agenda where routine, non-controversial articles can be addressed in a single motion. Finally, we have put forth a consolidated capital budget. As we do with the operating budget, the capital budget will be presented as a single article with the various funding sources identified. Exceptions are made for larger acquisitions that require borrowing or a ballot vote, or that are simply easier to explain as standalone articles.

REMAINING FISCAL YEAR 2019 BUDGET SCHEDULE

Tuesday, March 13th at 7:00 p.m.	Selectmen Review Draft Town Meeting Warrant
Thursday, March 22nd at 7:00 p.m.	Joint Board of Selectmen & Finance Committee FY2019 Budget Hearing at Flint Public Library
Tuesday, May 8 th at 7 p.m.	Annual Town Meeting at Howe Manning School Gymnasium

Last year we held an additional joint meeting of the Board of Selectmen and Finance Committee to put the final touches on our spending plan. Depending on how the rest of the process evolves this may be a worthwhile consideration this year.

Please feel free to contact this office if you have questions or comments, or would like additional information to understand any part of this important financial plan.

<p style="text-align: center;">Town of Middleton Summary of Fiscal Year 2018 and Proposed 2019 Operating Budget Totals</p>						
Final Fiscal Year 2018 and Proposed Fiscal Year 2019						
	Fiscal Year 2018	Fiscal Year 2019	(Decrease) Increase In Dollars \$	Percent + or - Change	Percent of Operating Budget	Percent of Budget Increase
Part I Town Operating Budget						
<u>Schools</u>						
Local School Budget	\$11,466,881	\$11,915,149	\$448,268	3.9%	33.7%	24.4%
Masconomet Budget	\$9,241,983	\$9,674,768	\$432,785	4.7%	27.4%	23.6%
Masconomet School Debt Service	\$384,138	\$379,817	(\$4,321)	-1.1%	1.1%	-0.2%
Fuller Meadow School/Natsue Way Land Debt Service	\$137,202	\$137,750	\$548		0.4%	0.0%
Howe Manning School Debt Service	\$940,380	\$937,905	(\$2,475)	-0.3%	2.7%	-0.1%
Essex Technical High School Budget	\$619,951	\$822,713	\$202,762	32.7%	2.3%	11.0%
All School Totals	\$22,790,535	\$23,868,102	\$1,077,567	4.7%	67.5%	58.7%
Town Operating Budgets	\$7,979,677	\$8,577,861	\$598,184	7.5%	24.3%	32.6%
Health Insurance, Retirement, Unclassified	\$2,455,912	\$2,632,490	\$176,578	7.2%	7.4%	9.6%
Flint Library Debt Service (Reduced by CPA Offset)	\$279,345	\$262,943	(\$16,402)	-5.9%	0.7%	-0.9%
Bond Paying Fee/Other Debt Expenses	\$2,000	\$2,000	\$0	0.0%	0.0%	0.0%
<i>Howe Manning School Debt Service (Bond Premium Offset)</i>	<i>\$25,844</i>	<i>\$25,844</i>	<i>\$0</i>			
<i>11 South Main Street Debt Service (All Debt Service Paid via CPA Fund)</i>	<i>\$42,425</i>	<i>\$41,375</i>	<i>(\$1,050)</i>			
Town General Government Totals	\$10,716,934	\$11,475,294	\$758,360	7.1%	32.5%	41.3%
Part I Operating Budget Totals	\$33,507,469	\$35,343,396	\$1,835,927	5.5%	100%	100%
Part II Water Operating Budget						
Water Operating Budget	\$174,649	\$179,649	\$5,000	2.9%	93.8%	
Water Line Debt Service	\$12,265	\$11,775	(\$490)	-4.0%	6.2%	
Part II Water Budget Totals	\$186,914	\$191,424	\$4,510	2.4%	100.0%	
Part I & II Operating Budget Totals	\$33,694,383	\$35,534,820	\$1,840,437	5.5%		

Draft I Budget (Local Appropriation)	12,230,649		
Approved FY2018 Budget (Local Appropriation)	<u>11,466,881</u>		
Draft I Increase \$ and %	763,768	6.66%	
Less: Adjustment	-		
Current Proposed Budget Increase	763,768	6.66%	
5% Guideline Scenario	<u>573,344</u>	5.00%	

Number	Budget Item	Adjustment Amount	Budget Increase Change	Percentage Change	Comments - Program Impact	School Committee Action
1	Increase Applied Income from Pre-School Revolving	65,000.00	698,768.00	6.09%		Approved by MSC on 1/27
2	Reduce Insurance Budget	35,000.00	663,768.00	5.79%		Approved by MSC on 1/27
OTHER AREAS OF DISCUSSION (RECOMMENDED)						
3	GRADE 3 SECTION	50,000.00	613,768.00	5.35%	Administration's Recommended Adjustments Appropriate reduction. Class sizes will be 18, 18, 18, 19 (73 projected students)	Approved by MSC on 2/7
4	ABA STIPENDS	4,500.00	609,268.00	5.31%	Not needed	Approved by MSC on 2/7
5	ED EVAL \$\$	10,000.00	599,268.00	5.23%	Not needed	Approved by MSC on 2/7
6	ESTIMATED ADJUSTMENT IN LEVELS	65,000.00	534,268.00	4.66%	Admin has audited the proposed level movement	Approved by MSC on 2/7
PROGRAM ENHANCEMENTS						
7	GLOBAL CHILD	10,000.00	544,268.00	4.75%	Budget amount may change via MSC	Tentative Approval by MSC 2/7
8	INSTRUMENTAL MUSIC SUPPORT	15,000.00	559,268.00	4.88%	Budget amount may change via MSC	Tentative Approval by MSC 2/7
9	MORE ASST. PRIN TIME	9,000.00	568,268.00	4.96%	Budget amount may change via MSC	Tentative Approval by MSC 2/7
REDUCTION TO SPENDING LINES						
		120,000.00	448,268.00	3.91%	Admin has analyzed supply lines versus the past three years of actuals. Under review and consideration by MSC. Detail to be sent to MSC.	



Proposed Budget Fiscal Year 2019





Superintendent's Introductory Message

Our FY19 budget development process began with the School Committee's approval of FY19 Budget Priorities on October 4, 2017. This is the fourth year of much closer collaboration between the School Committee and School Administration to develop a budget with more School Committee involvement. As a result, Budget Subcommittee members and our School Committee Town Liaisons, have been able to interact earlier and more frequently with Town FinComms and other Town officials.



The budget process was accelerated, as it was last year, to hear department requests in December rather than January. These requests were tightly aligned to the School Committee Budget Goals and the requests were heard directly by the Budget Subcommittee again this year. The Subcommittee members could ask questions and request further information. The Budget Subcommittee met in open sessions bi-weekly throughout the budget development process.

The Superintendent's proposed FY19 School Budget reflects an increase of \$1,700,077 or a 4.9% increase over the FY18 adopted budget. This represents a 5.25% increase in the operating budget (with debt excluded). This increase is required for the District to address compelling increased needs that will be summarized below.

Five Themes Dominate a Discussion of Proposed Increases and the FY19 School Budget

This introductory message will focus on five themes: a.) sharply increasing student' needs in the areas of physical health, mental health, social and emotional adjustment, learning disabilities and other disabilities and also the relationship of sleep deprivation among adolescents; b.) Masconomet Vision 2025; c.) current structural administrative limitations and anticipated personnel changes; d.) the context of declining enrollment and the management of course enrollments and staffing; and, e.) aging facility and repair/maintenance of failing HVAC systems. Proposed increases and reductions to different areas of the budget will be discussed within the context of these five themes.

Sharply Increased Student Needs

The current cohorts of students in grades 7-12 at Masconomet bring unprecedented needs to school in the form of critical physical health issues, mental health issues, social and emotional development deficits, and learning disabilities identified on Individual Education Plans (IEPs), and other physical and emotional impairments identified on §504 Accommodation Plans. The percentage of students on IEPs has grown from 11.2% in 2007 to 17.2% in 2017 mirroring state and national trends. Psychological and developmental counseling needs are rising dramatically



with more students exhibiting disabling anxiety, depression, and mental health issues resulting in sharply increased hospitalizations. Counseling is a required IEP and 504 service and 206 Masco students on IEPs and 504s received counseling in school during the past year. Each school is staffed by one School Nurse. School nurse visits have increased dramatically in the last several years, bringing more complex medical and mental health issues as well

as conditions requiring more time-intensive nursing and mental health interventions.



Superintendent's Introductory Message

Last year, High School nurse office visits totaled 5,337, including 1,810 medical procedures, 1,758 prescription medication administrations, and 2,086 OTC medication administrations. Chronic illnesses included 163 asthma visits, 63 severe allergies visits, 6 seizures, 12 critical diabetes-related interventions, 12 concussions, 59 depression, 154 ADD/ADHD-related, 180 anxiety-related, and 51 other mental health-related visits.



With about half the High School enrollment, Middle School statistics are even more alarming. Middle School nurse visits totaled 5,284, including 1,468 medical procedures, 1,215 prescription medication administrations, and 1,740 OTC medication administrations. Chronic illnesses included 96 asthma visits, 36 severe allergies visits, 4 seizures, 4 critical diabetes-related interventions, 26 concussions, 16 depression-related, 89 ADD/ADHD-related, 69 anxiety-related, and 26 other mental health-related visits.

Recent budgets have added a health aide position to each school office, but needs have quickly out-paced the added assistance. A lack of sufficient nursing capacity has become a safety concern. Simply adding more School Nurses to our existing service model will not sufficiently address a growing problem in the future. A new approach is required.

This budget proposes additional staffing for a Unified Health Center, including two full-time, year-round positions: a Director of Health Services who is licensed as a school nurse and a Medical Secretary. The Unified Center will not reside in the same physical space next year due to the construction costs of remodeling a suite of rooms in the "link" area of the building that will, in a future year, combine the two current separate Nurse's offices along with the medical secretary, a school adjustment counselor, and athletics trainer — the latter two positions already exist. This concept will be a comprehensive approach to multi-faceted health issues where physical health and mental health converge. This new model will allow a cross-discipline team approach to assess, treat, or refer the increasing number health issues of today, and those that we know are moving up through the elementary grades at this time.

The Director of Health Services (DHS) will immediately fill a direct student service gap, a current shortage of School Nurse capacity to adequately and safely meet current needs. The DHS will also supervise School Nurses, Health Aides, the Athletic Trainer, and the Medical Secretary. The position will be the District's liaison with the School Physician and provide year-round administration of the health needs of the District that are currently unmet. There are additional benefits of this position as seen in Appendix A.



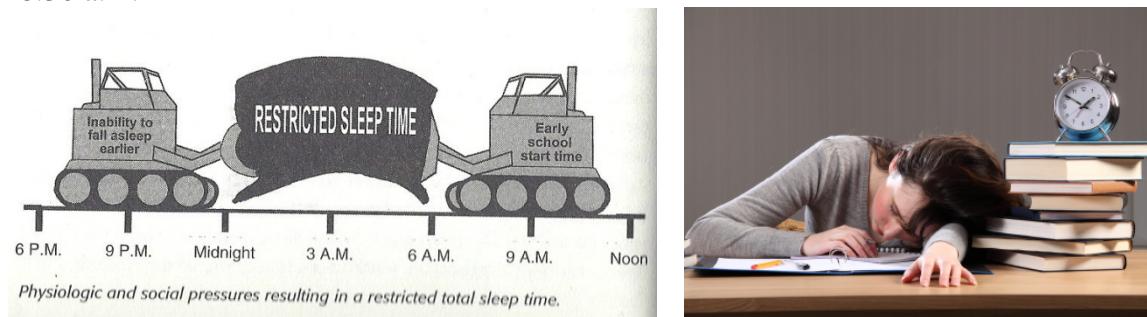
The Medical Secretary will provide management of student health records and data input that supports the District's health records database and compliance reports required by the Department of Public Health and the Department of Elementary and Secondary Education. This function will relieve School Nurses from this time-consuming clerical task that significantly diminishes direct nursing care and pro-active health educator instruction and curriculum leadership. The position will also assist with student scheduling for required health screenings and help to ensure efficient work flows and the most effective use of School Nurses' time.



Superintendent's Introductory Message

A unified health services office will reduce transition impacts on students moving from grade 8 to grade 9, help to ensure adequate health and nursing services, create efficiencies in service delivery, and bring a team approach to bridge the physical health/mental health spectrum of emergencies and daily health care. Appendix A provides a breakdown of costs for implementation of the staffing component and programmatic equipment and supplies of a Unified Health Services Center.

Nearly two years of intense study of the effects of sleep deprivation on the health and well-being of adolescents has led to the conclusion that Masconomet must address this health crisis by having a later start time. Multiple medical boards and societies, including the American Association of Pediatrics, have recommended that secondary schools begin the day no earlier than 8:30 a.m.



In my opinion, shared by many educators and medical professionals, sleep deprivation is a significant root cause of many of the physical health, mental health, and social-emotional illnesses so greatly affecting our current generation of adolescents. While the Masconomet school start time will not, by itself, solve sleep deprivation and sleep issues for our adolescents, it is a necessary first step to address some very complex behaviors and issues. There is a plethora of information on Masconomet web pages and in the general literature on health and wellness that amounts to no less than a compelling reason to make these changes. For this reason, the school administration and the Masconomet School Committee have included \$384,000 in this budget to fund Masconomet's anticipated share of costs for additional transportation and logistics to support implementation of "Option Y" or an alternative in the 2018-2019 school year.

Masconomet Vision 2025

Masconomet has traditionally enjoyed tremendous successes in student outcomes by all measures – test scores, college acceptances, the arts, athletics, etc. – and as a builder of solid citizens. Our faculty is unsurpassed and support from the community has been tremendous. Why call for change now?

A representative committee of staff, parents, students, and community worked together for seven months in 2015 to create a new vision for Masconomet – a vision that reflects our values and articulates what we want for our students and graduates who need different skill sets and different abilities and attributes to meet the challenges of the future work force and society.



Superintendent's Introductory Message

A central tenet of Vision 2025 is:

“Instruction happens in many forms depending upon the teachers’ objectives and the nature of learners in the classroom. A variety of **authentic** learning strategies is common throughout the curriculum and across subject areas. Students and teachers experiment with teaching and learning strategies without fear of failing.”

VISION 2025

A learning environment that provides this vision is necessary to prepare our students for their futures. Over the past year, we have identified priorities for teacher and staff development and specific activities that we believe will lead to the cultural sea change that we seek. A philosophy of authentic learning is even more than making every classroom function like the vision – it requires the school, in all its practices, actions, policies, and programs, to become the embodiment of the vision. Teaching every student well is a mantra that is gaining traction at Masco. We need to close the gap between *wanting* to do this and *actually* doing it.

A new kind of curriculum development and transformational staff development is needed to begin this change and the curriculum and staff development proposals in this budget are designed to begin this transformative rethinking of teaching and learning. Appendix B details specific curriculum activities that support Masconomet Vision 2025. Curriculum redesign is labor and time intensive and will take place incrementally over multiple years; therefore, an ongoing investment to support this work is necessary.

Administrative Structural Limitations and Anticipated Personnel Changes

The District is of sufficient size to require a Human Resources Director. It is difficult to find similar size districts without a dedicated human resources position. Human resources functions are partially met through the sharing of some functions by the Superintendent, Administrative Assistant to the Superintendent, the Assistant Superintendent for Finance and Operations, and the Payroll and Benefits Coordinator. These positions can optimally respond to human resources

needs only partially at best. Much of our human resources management is reactive, and there is no capacity to develop and implement all of the elements of a good human resources program. Such a program would ensure adequate compliance with laws and regulations, introduce proactive initiatives to hire and retain the best staff, and provide good customer relations with respect to benefits, compensation, and personnel administration.

The following list of human resources functions is currently divided between multiple positions and often requires the interaction of multiple persons to execute a task. This list includes many, but not all, of the tasks that can be categorized



Superintendent's Introductory Message

as human resources: coordination of hiring of professional and support staff to ensure that the most highly qualified individuals are hired; oversight and coordination of employee resignations, terminations, and retirements; administration of the Family Medical Leave Act; coordinating employee conduct investigations, assembling and substantiating information, and making recommendations to supervisors in regard to employee discipline and training; maintaining and updating authoritative copies of all union and bargaining related agreements; developing and updating a comprehensive Employee Handbook that includes civil rights notices, important policies and procedures to ensure legal compliance, statement of expectations, benefits, and leaves of absence; administration of EPIMS employee data reporting to the Department of Elementary and Secondary Education; maintenance of union seniority lists; coordination and administration of employee course approvals, contractual course reimbursements and salary scale movement; administration of criminal background checks compliance including required fingerprinting; administration of a wide range of District policies, laws and regulations to ensure employee and District compliance; administration and coordination of tests and training required by Massachusetts Conflict of Interest laws and regulations; administer or coordinate personnel search processes including management of School Spring positions, newspaper advertising, pre-employment testing and internal postings; coordination of new employee on-boarding and orientations; and, coordination of training of new employees and cyclical required training of all personnel.



The necessity to perform these and other HR functions significantly impacts and degrades the performance of the Superintendent, Assistant Superintendent for Finance and Operation, Payroll and Benefits Coordinator, and administrative assistants to the Superintendent and to the Assistant Superintendent for Finance and Operations as well as School Principals and other hiring authorities in their primary functions.

The Superintendent has, in a previous school district, served as an Assistant Superintendent for Personnel. The accrued expertise in labor law, the Family Medical Leave Act, teacher licensure regulations, employee due process rights and other HR skills have been put to necessary use, but consumed an inappropriate amount of time in relation to other responsibilities.

The Value of Retention: Costs of Turnover

- Out-of-pocket expenses to recruit, hire, and train new employees
- Lost productivity:
 - Errors made by inexperienced employees
 - Damaged products
 - Projects or contracts lost
 - Lower morale among remaining employees
 - Lost knowledge and business contacts

The Administrative Assistant to the Superintendent, whose current responsibilities are at least 75% in administration of human resources, will retire in July 2018. The incumbent has 32 years of experience in the District and has been a key human resources coordinator for the past 13 years. The Superintendent, will retire in June 2019.

Known changes in these key personnel will simply magnify the current organizational deficiencies to effectively administer human resources. Speaking from my own experience at

Masconomet, the next Superintendent needs to have a dedicated executive assistant who is not over-tasked with duties other than supporting the goals and work of the Superintendent. This is not a matter of convenience or lessening the Superintendent's (or other administrators') workload. It is a matter of organizational necessity to get the most from the highest paid positions in the District.

More information about the Human Resources Director job proposal is found in Appendix C.



Superintendent's Introductory Message

Aging Facilities and Failing HVAC Systems

The most recent facilities study details needed repair work and future system replacements of major envelope components and mechanical systems. We have experienced multiple HVAC, plumbing, and other facility issues in the past year, including complete failure of several air-conditioning compressors and related air-handling components. Over the last year, the District incurred substantial equipment replacement costs and contractor labor costs related to HVAC issues.



This budget proposes the addition of a Licensed Facility Systems Mechanic position to reduce the costs of contracted labor. The requested addition of a part-time Multi-Purpose

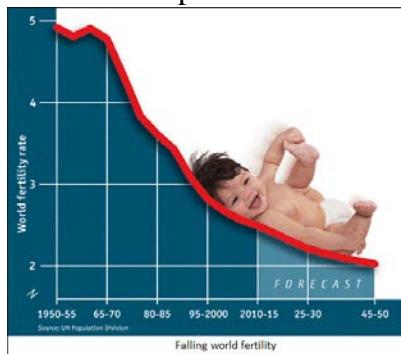
Facilities Technician was cut from budget requests. Although the need is recognized and justified by the aging of the facility and mechanical systems, we believe that the additional Mechanic position will free time of current MPFTs who spend many hours maintaining HVAC systems (filter changes, lubrication, etc.). This time can be reallocated to other needed maintenance and repairs. The cost of the Mechanic position is estimated to be \$100,000, including benefits costs. For more information on this proposal, see Appendix E.

Declining Enrollment and Management of Course Enrollments and Staffing

The Masconomet Administration undertook a staffing analysis study in the fall of 2016 at the request of the School Committee. As a result of conclusions reached through this study, 6.2 FTE of classroom teacher was reduced in the FY18 budget.

During the 2017-2018 school year we have found a number of core classes at the High School exceeding desired numbers and a number of elective courses that are below, at, or near minimum desired sizes. The High School Administration conducted an in-depth analysis of course enrollments and has set goals for 2018-2019 enrollments to adjust the variation in class sizes to be within the parameters of the School Committee's policy. These goals include a reduction in

the number of offered electives in any semester and a reallocation of teacher time to reduce targeted core course enrollments.



Despite a small expected change in enrollment at the High School next year, this budget reduces classroom teacher FTE by 2.5 FTE for a total of 8.7 positions over this 2-year period. Between the 2014-2015 school year and expected enrollment for 2018-2019, we see an enrollment decline of 181 students.

Needs Not Included in this Budget Proposal

As is usually the case, many needs identified by our administrative staff and faculty are not included in this proposed budget. Some of these needs will be deferred and others may not be met.



Superintendent's Introductory Message

New curriculum and professional development activities to support Vision 2025 were pared back during initial budget discussions in order to more closely approximate the target budget maximum increase of 3% requested by the Budget Subcommittee. These reductions were significant and will impact the District's trajectory to reach Vision 2025. However, there are sufficient resources to launch Vision 2025 training next year and to support a change process that is meaningful and sustainable.

The administration proposed three additional teacher work days that would have been used for targeted and intensive curriculum and professional development. Masconomet has no full professional days that occur during the school year. There is one day before school begins and one day after school ends for students. Most districts have at least one mid-year full professional day and many districts have multiple days. These full-day opportunities are needed to do the work of transformation — to achieve Masconomet Vision 2025. These proposed days will be brought forward in future years because of their foundational importance to a high-quality professional development program. The proposed days were subtracted from the proposed budget draft due to cost in a difficult financial environment and the fact that teacher union negotiations are required to implement additional days and the next teacher agreement does not expire until August 2019.

For many years, the High School and Middle School have produced great theater through after-school clubs, unsupported by classroom instruction. Many schools of similar size have robust drama programs supported by at least one full-time teacher. These schools are able to compete locally and regionally in recognized drama competitions and to provide academic credit for the serious study of the theatrical arts. Masco Vision 2025 calls strongly for more personalized education, and there is a mandate within the Vision to "Teach All Students Well." A drama program would be in the true spirit of personalizing education at Masconomet.

We have not been able to build enrollment sufficient to support additional drama classes at this point in time. The District will have a consultant's report prior to the next budget cycle to consider steps that can be undertaken to build a program base that will, over time, produce a pipeline of students through Middle School and into High School that will support a four-year High School academic offering.

I strongly believe that this FY19 Proposed School Budget is needed in full to address the several major and important challenges described earlier in this summary. I recommend this budget to the Masconomet School Committee with assurance that we will be able to maintain programs and quality in FY19 and that this is the most fiscally responsible budget proposal that can be produced that is able to address our challenges and the goals of the School Committee.

A handwritten signature in black ink that reads "Kevin M. Lyons".

Kevin M. Lyons
Superintendent of Schools



General Fund Summary

General Fund Income	Received 14-15	Received 15-16	Received 16-17	Adopted 17-18*	Proposed 18-19	Change (Decrease)
State Aid						
Chapter 70	\$4,875,399	\$4,925,724	\$5,034,459	\$5,072,099	\$5,127,759	\$55,660
Transportation Reimbursement	455,501	451,004	620,765	574,809	569,053	(\$5,756)
Other State Aid	12,840	30	11,157	-	-	\$0
Local Receipts						
Community Contributions	22,657,664	25,636,540	25,390,626	25,937,062	27,647,877	\$1,710,815
Interest Income	6,495	6,447	12,845	7,500	20,000	\$12,500
Fees Collected	46,120	46,637	43,948	46,000	43,000	(\$3,000)
Miscellaneous Receipts	20,348	22,143	32,905	20,000	20,000	\$0
Excess and Deficiency*	0	43,642	78,467	0	0	\$0
Fund Transfers	550,000	544,000	704,420	704,420	645,278	(\$59,142)
Federal Aid						
Medicaid Reimbursement	36,318	33,286	21,975	33,000	22,000	(\$11,000)
E Rate Reimbursement	9,357	2,607	0	2,000	2,000	\$0
Total Income	\$28,670,043	\$31,712,060	\$31,951,566	\$32,396,890	\$34,096,967	\$1,700,077
General O&M Expenses						
General O&M Expenses	Expended 14-15	Expended 15-16	Expended 16-17	Adopted 17-18*	Proposed 17-19	Change (Decrease)
Masconomet Middle School	5,354,952	5,722,168	5,988,160	6,150,167	6,497,782	\$347,615
Masconomet High School*	10,858,367	11,351,237	11,823,576	12,023,313	12,266,962	\$243,649
Other Instructional Services	418,696	558,461	620,915	662,767	692,078	\$29,311
Student Services	3,417,187	3,715,083	3,255,383	3,512,624	3,572,769	\$60,145
Campus Maintenance and Security	1,707,517	1,685,809	1,835,730	1,945,219	1,951,321	\$6,102
Business & Support Services	6,285,784	7,026,503	7,470,665	7,775,324	8,777,023	\$1,001,699
General Administration*	308,572	327,464	328,102	327,476	339,032	\$11,556
Total Expense	\$28,351,076	\$30,386,724	\$31,322,532	\$32,396,890	\$34,096,967	\$1,700,077
* In June, the SC appropriated \$30,000 from E&D to fund the AED maintenance contract in the HS budget and consulting services to further explore potential impacts of bell time changes. These appropriations, and associated funding, are excluded from this budget presentation.						
Debt Service						
Debt Service	Expended 14-15	Expended 15-16	Adopted 16-17	Adopted 17-18	Adopted 17-19	Change (Decrease)
Community Contribution	\$1,080,297	\$1,088,247	\$1,081,727	\$1,082,517	\$1,082,567	\$50
State Aid	1,291,498	1,291,498	1,291,498	1,291,498	1,291,498	\$0
Total Income	\$2,371,795	\$2,379,745	\$2,373,225	\$2,374,015	\$2,374,065	\$50
Principal	\$1,700,000	\$1,780,000	\$1,845,000	\$1,920,000	\$2,000,000	\$80,000
Interest	671,795	599,745	528,225	454,015	374,065	(\$79,950)
Total Expense	\$2,371,795	\$2,379,745	\$2,373,225	\$2,374,015	\$2,374,065	\$50
Total General Fund Expenses	\$30,722,871	\$32,766,469	\$33,695,757	\$34,770,905	\$36,471,032	\$1,700,127
Increase in General Fund Expenses	3.6%	6.7%	2.8%	3.2%	4.9%	
Total Community Contributions	\$23,737,961	\$26,724,787	\$26,472,353	\$27,019,579	\$28,730,444	\$1,710,865
Increase in Community Contributions	5.5%	12.6%	-0.9%	2.1%	6.3%	
Enrollment	2011	1972	1874	1831	1788	-43
Increase in Enrollment	-3.7%	-1.9%	-5.0%	-2.3%	-2.3%	



Enrollment History & Projection

TABLE 1 – Enrollment History by Grade

School Year Beginning	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Kindergarten	294	302	281	251	260	246	209	244	238	237	244	233	
Grade 1	304	307	312	288	277	274	255	218	264	244	255	256	
Grade 2	337	315	317	312	310	281	291	263	236	288	249	267	
Grade 3	370	352	326	322	306	311	292	295	280	249	293	263	
Grade 4	328	371	356	333	330	306	319	301	308	290	259	294	
Grade 5	391	333	385	358	339	331	316	329	315	317	292	265	
Grade 6	328	390	336	389	360	329	335	319	328	311	330	288	
Elementary Total	2352	2370	2313	2253	2182	2078	2017	1969	1969	1936	1922	1866	0
Grade 7	372	337	391	351	401	367	339	336	330	332	316	335	293
Grade 8	376	372	344	391	355	397	374	344	332	326	335	322	338
Grade 9	377	351	350	315	358	332	375	343	309	289	289	302	284
Grade 10	378	380	348	343	314	349	327	378	338	305	284	284	299
Grade 11	332	371	373	339	345	309	352	332	372	341	302	275	283
Grade 12	340	317	370	373	339	338	315	349	325	369	343	304	279
SP-Beyond 12	5	4	8	9	9	6	5	6	5	10	10	9	12
Masconomet Total	2180	2132	2184	2121	2121	2098	2087	2088	2011	1972	1879	1831	1788
Percentage Change	0.5%	-2.2%	2.4%	-2.9%	0.0%	-1.1%	-0.5%	0.0%	-3.7%	-1.9%	-4.7%	-2.6%	-2.3%

Footnote: Table 1 above includes all students enrolled at Masconomet and reported to DESE.

TABLE 2 – Enrollment History by Town

October 1 Enrollments by Town

Town	Oct 11	Oct 12	Oct 13	Oct 14	Oct 15	Oct 16	Oct 17
	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Boxford	804	777	792	768	742	708	692
Middleton	707	733	739	706	706	665	641
Topsfield	586	577	557	537	521	501	494
Total	2097	2087	2088	2011	1969	1874	1827

Assessments Percentages by Town

Town	FY13	FY14	FY15	FY16	FY17	FY18	FY19	Shift
Boxford	38.34%	37.23%	37.93%	38.19%	37.68%	37.78%	37.88%	0.10%
Middleton	33.71%	35.12%	35.39%	35.11%	35.86%	35.49%	35.08%	-0.40%
Topsfield	27.94%	27.65%	26.68%	26.70%	26.46%	26.73%	27.04%	0.30%

Enrollment percentages that will be used to calculate the FY19 assessments.

Footnote: Table 2 above excludes 4 students enrolled at Masconomet who reside in other communities.



District Staffing Analysis

Staffing Analysis by F.T.E.	2017-18	2018-19	Change	Retirement*	Reduction*	Transfer	New	Change	Comments
-----------------------------	---------	---------	--------	-------------	------------	----------	-----	--------	----------

Building Specific Personnel:									
Administrative Staff									
Principals & Assistant Principals	5.00	5.00	0.00					0.00	
Department Heads	6.20	6.20	0.00					0.00	
Administrative Support Staff	10.05	9.82	(0.23)			(0.23)		(0.23)	Transfer to Business and Finance, Business Support Asst.
Professional Staff									
Art	6.60	7.60	1.00			1.00		1.00	Transfer Tech education (wood shop) program from Science
Business & Computer Education	5.00	4.00	(1.00)			(1.00)		(1.00)	Reduction in Force
English	19.55	19.20	(0.35)			(0.35)		(0.35)	Transfer to Student Services, Language Based Learning Program Specialist
Foreign Language	16.40	15.40	(1.00)			(1.00)		(1.00)	Reduction in Force
Guidance	9.40	9.40	0.00			0.00		0.00	
Health, Cons. Ed. & P. E.	8.50	8.50	0.00			0.00		0.00	
Math	19.30	19.00	(0.30)			(0.30)		(0.30)	FY18 unfilled sections
Music	3.60	3.60	0.00			(0.10)		0.10	FY18 unfilled section and add MS Jazz Band
Science/Tech. Ed./Engineering	21.30	20.20	(1.10)			(0.10)		(1.00)	FY18 unfilled section & transfer Tech education (wood shop) to Art
Social Studies	18.20	18.20	0.00			0.00		0.00	
Special Education	21.00	21.00	0.00			0.00		0.00	
Library	2.00	2.00	0.00			0.00		0.00	
Health Services	2.05	2.05	0.00			0.00		0.00	
Paraprofessionals									
Regular Education	9.51	9.51	0.00					0.00	
Special Education	34.31	34.31	0.00					0.00	
Total Building Specific Personnel	217.97	214.99	(2.98)	(1.00)	(1.50)	(0.58)	0.10	(2.98)	
District Program & Support Personnel									
Student Services	12.00	13.95	1.95			(0.40)	0.35	2.00	1.95 Reduce Sped Secretaries, transfer LBL specialist, add Health Services
Other Instructional Services	2.40	2.40	0.00						0.00
General Administration	2.00	2.00	0.00						0.00
Business & Other Support Services	11.60	13.40	1.80				0.80	1.00	1.80 Transfer in Business Support Asst. & add Human Resources Director
Campus Maintenance and Security	7.50	8.00	0.50				(0.50)	1.00	0.50 Transfer to Business & Finance (Bus. Support Asst.), add Facility Mechanic
Total District & Support Personnel	35.50	39.75	4.25	0.00	(0.40)	0.65	4.00	4.25	

Total School District Staffing

253.47 **254.74** **1.27**

*Only 2.0 FTE resulted in an actual reduction in personnel.



Middle School Council & Class Size Data

MIDDLE SCHOOL COUNCIL

Dorothy Flaherty - PRINCIPAL

Jessica Grigg, PARENT
 Leonina Russo, PARENT
 Tracy Stevenson, PARENT
 Dave Walls, PARENT

James Dillon, FACULTY
 Lois Afrow, FACULTY
 Gavin Monagle, FACULTY
 Courtney Monaco, FACULTY

Program Enrollment and Class Size Summary Table

HOURS OF OPERATION	7:35-2:15	DEPARTMENT	COURSES	SECTIONS	PROGRAM POPULATION	AVG. CLASS SIZE
Number of Grades	2	ART	2	10	209	20.9
Student Body	626	ENGLISH	4	35	697	19.9
Number of Teachers	52.5	FOREIGN LANGUAGE	6	27	540	20.0
Number of Courses	33	GUIDANCE	N/A	N/A	N/A	N/A
Number of Sections	204	HEALTH	2	10	209	20.9
Periods/Day	7	MATH	5	35.5	724	20.4
Students/Faculty	11.8/1	MUSIC	6	9.5	241	25.4
		PHYSICAL EDUCATION	3	12.5	313	25.0
		SCIENCE & STEM ED	3	35	737	21.1
		SOCIAL STUDIES	2	30	626	20.9
Average Class Size	21.1	TOTAL	33	204	4296	21.1

NOTE: The guidance counselors, librarian, behavioral specialist, and nurse are not included in the student/faculty ratio.



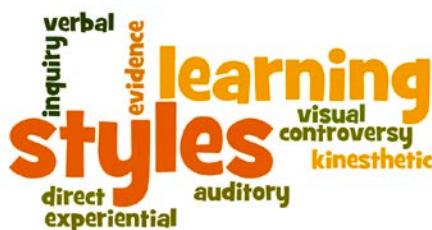


Middle School Principal's Budget Commentary

The Middle School budget preserves the team structure, which comprises the single most critical priority in delivering a strong Middle School experience. A team structure consists of much more than an organizational formation. It addresses the academic, physical, social and emotional growth of young adolescents, while fostering strong home-school communication and permitting teachers to develop and implement an interdisciplinary curriculum. Furthermore, each of these aspects promotes a safe atmosphere that encourages a positive environment for instruction and the attainment of individual student potential to ensure that every student succeeds. Our Middle School mission and vision incorporates supporting the Whole Child and thus aligns strongly with the value and beliefs statements outlined in Vision 2025. The FY19 budget continues to allow the implementation of an already robust program that focuses on the needs of the Whole Child and builds our commitment towards personalized learning that honors each student's unique needs, strengths, interests and learning styles. This year's budget requests predominantly focus in one of three areas: 1) resources to support interdisciplinary and or personalized learning, 2) professional development to grow the capacity of our faculty and staff to implement the foundational shifts necessary to achieve Vision 2025, and 3) reallocation or new funds to address financial compliance issues identified over the past year. Furthermore, while not requiring any additional funding, our efforts will continue to build a Culture of Kindness, teach students to interact within a diverse world, and to meet both the academic and social/emotional needs of students.

Over the past several years, our school was incredibly fortunate to have our communities' support several new initiatives that have proven to yield positive benefits for students, especially those in sub-populations that were identified as struggling. Last year, the Committee and community supported replacing the paraprofessional in the Student Support Center with a certified teacher. This change yielded positive results by supporting emotionally and trauma sensitive students to attend school and to maintain academic progress while utilizing the Support Center. Furthermore, it increased smooth communication between the Support Center personnel and the broader school faculty, thus increasing the awareness of the Support Center as a viable and valuable resource for all students.

The most significant new initiative proposed for the Middle School next year is in the area of professional development. The actual funding request will not be found in the Middle School budget but rather the district's professional development requests. However, this is a new approach for our school that warrants being highlighted as it may become a model for the future. The plan allows us to deliver targeted professional development to a broader spectrum of faculty, and holds promise to promote more active change within the school. The proposal delivers both school-wide professional development in a large group presentation to all faculty, and then provides smaller workshops with groups of teachers from the Humanities and STEM areas. The consultant will spend several hours observing our classrooms and teachers prior to the workshops so that the consultant's training and messages will target specific observations made in our classrooms and school. The consultant would present to the entire faculty and staff at an Early Release Day, and then spend a full day with two sessions, meeting with all Humanities teachers in the morning and all STEM area teachers in the afternoon. The \$5,000 dollar funding request includes the training, as well as, one day of substitute teacher coverage to permit teachers to attend the half- day sessions.





Middle School Principal's Budget Commentary - Continued

The Mind-Set-Go workshop connects directly with Vision 2025 and builds capacity for our faculty in three key areas: 1) Building Empathy, 2) Social Emotional Learning and 3) Growth Mind Set.

The Middle School enrollment is projected to decrease by 28 students next year with a projected enrollment of 626 students. Projected average class size will decrease from 22.0 to 21.1.

Staffing:

The FY19 Staffing Budget reflects an overall increase of \$ 326,547.00

- The main factor in increases to the FY19 Salaries Budget reflects contractual increases.
- There are two staffing changes that result on paper as a .3 reduction in staff at the Middle School.
 - A .35 reduction is depicted in English to reflect a reallocation of a Title I staff position. This funding was moved from the Middle School to the Language-Based Learning Program in the District Student Services budget. The teacher will continue to provide services and teach in the Middle School.
 - A .1 increase in the performing arts staff includes a section of Jazz Band. This is a financial compliance issue as the position, which has existed for many years, was being funded through the Music Parents Organization. It is incorporated into our operating budget for FY19.
- The Middle School continues to provide 15 sections in each of the core academic subjects (Math, English, Science and Social Studies) per grade. In addition, we continue to offer three foreign languages and exploratory courses in STEM, literacy, geo-lab, art, music, health, and physical education.

Operational Costs:

The FY19 Operations Budget reflects an overall increase of \$21,068

Textbooks:

This line reflects an increase of \$307 dollars. Funded requests include materials for the performing arts programs and 15 additional Chinese 8 textbooks to support a larger class size.





Middle School Principal's Budget Commentary - Continued

Other Published Materials:

This line reflects an increase of \$5,418. Five areas drive this increase:

- In order to continue to update our resources, address varied reader learning styles and support curricular units there is a small increase of \$311 in the request to purchase fiction and non-fiction book titles for the library. Additionally there are increases to vendor charges and renewal rates for on-line databases.
- The Social Studies department requires a \$500 increase to continue the replacement of worn paperback Crispin books, which is a book read as part of an 8th grade interdisciplinary unit. The request replaces the paperback books with perma-bound books that are more durable. This is the final year of phased replacement.
- The Foreign Language department requests \$600 to rebind worn and damaged resource materials.
- The two most significant increases to this line item come from English and Wellness.
 - The 8th grade teachers have compiled a group of short stories that they teach yearly and therefore have become part of their core titles. Teachers want to create their own resource by binding these stories into one book for students. The copying and binding costs are \$3,000 and will provide increased consistency and easier accessibility for all students.
 - The Wellness Department requests \$1,452 to purchase workbooks from the Botvin Life Skills Training Program. This is a substance-abuse program that brings us into compliance with state mandates to use an evidence-based substance abuse prevention program. Additionally, it covers requirements from the state to address the Opioid epidemic. The program comes with a web-based program which will be used on Chromebooks. Teachers were able to procure free resources this year to pilot the program. Teachers provided very positive feedback on the curriculum and students' responses to the lessons.

Consumables:

This line reflects an increase of \$3,967 to meet vendor rate increases in art supplies, agenda books, paper and general supplies. Several increases reflect items previously purchased through the Student Activities Account that now must be funded in the operating budget. The request from the Social Studies department supports interdisciplinary projects and personalized learning. The key areas driving the increased request include:

- The Social Studies department requests \$1,430 to purchase supplies for the 8th grade Renaissance project and 75 Trifolds for the 7th grade Innovation Fair.
- The Art department requests a \$2,000 increase to purchase art supplies. Vendor rates increase each year, but this is the first budget line request in at least ten years.



Middle School Principal's Budget Commentary - Continued

- The Interdepartmental costs are the most significant expenses in the Consumables line. This is a level-funded request. However, in order to address a financial compliance issue, reductions were made to the general supplies and copy paper funding levels to increase funding for team activities that were previously being funded through the Student Activities Account.

Durables:

This line reflects a decrease of \$2,056. The most significant purchases include: annual equipment replacement for wellness; micropipettes that are needed in 7th grade science as the curriculum is vertically aligned with integrating molecular biology techniques that support students' understanding of genomics; necessary equipment for health services that include batteries for the AED machines, a second blood pressure cuff and the replacement of another broken cuff, as well as, a thermometer probe replacement.

Consultants & Other Services:

This line reflects a level funded request.

Maintenance, Rentals & Fees:

This line reflects an increase of \$13,577 dollars. The main drivers of this increase include:

- A 7.7% increase for transportation.
- \$2,283 in contractual increases for copy machines.
- \$1,200 for table rental fees to support an all school science fair and grade 7 Innovation Fair.
- \$180 math team fee increase to field two teams instead of one as a result of increased student interest.
- \$10,200 to support core curriculum related field experiences that include the entire 7th grade attending a live drama performance. It also provides bus transportation for the grade 8 students in Literacy Workshop to visit the Cole School to read their original written books to students. This is a financial compliance issue as any field experiences that are tied to core content must be incorporated into the operating budget.

Administrative Services:

This line reflects a decrease of \$145

Athletics and Co-Curricular:

The small increases to Co-Curricular reflects increases from vendor rates and a 7.7% increase in transportation rates.



Middle School Enrollment & Staffing

Staffing Analysis by F.T.E.

	2014-15	2015-16	2016-17	2017-18	2018-19	18-vs-19 (Decrease)
--	---------	---------	---------	---------	---------	------------------------

Administrative Staff

Principals/Assistant Principals

2.00	2.00	2.00	2.00	2.00	0.00
1.80	1.80	1.90	1.90	1.90	0.00
1.84	2.00	2.00	2.00	2.00	0.00

Administrative Support Staff

Professional Staff

Art

2.00	2.00	2.00	2.00	2.00	0.00
7.34	7.35	7.35	7.35	7.00	(0.35)
5.60	5.60	5.60	5.40	5.40	0.00

English*

3.00	3.00	3.00	3.00	3.00	0.00
4.30	4.50	4.50	4.50	4.50	0.00
7.45	8.10	8.10	8.00	8.00	0.00

Foreign Language

5.60	5.60	5.60	5.40	5.40	0.00
3.00	3.00	3.00	3.00	3.00	0.00
4.30	4.50	4.50	4.50	4.50	0.00

Guidance

3.00	3.00	3.00	3.00	3.00	0.00
4.30	4.50	4.50	4.50	4.50	0.00
7.45	8.10	8.10	8.00	8.00	0.00

Wellness

1.90	1.90	1.90	1.90	2.00	0.10
7.00	7.00	7.00	7.00	7.00	0.00
6.00	6.00	6.00	6.00	6.00	0.00

Math*

1.90	1.90	1.90	1.90	2.00	0.10
7.00	7.00	7.00	7.00	7.00	0.00
6.00	6.00	6.00	6.00	6.00	0.00

Performing Arts

1.90	1.90	1.90	1.90	2.00	0.10
7.00	7.00	7.00	7.00	7.00	0.00
6.00	6.00	6.00	6.00	6.00	0.00

Science, Technology & Engineering

1.90	1.90	1.90	1.90	2.00	0.10
7.00	7.00	7.00	7.00	7.00	0.00
6.00	6.00	6.00	6.00	6.00	0.00

Social Studies

1.90	1.90	1.90	1.90	2.00	0.10
7.00	7.00	7.00	7.00	7.00	0.00
6.00	6.00	6.00	6.00	6.00	0.00

Special Education*

1.90	1.90	1.90	1.90	2.00	0.10
7.00	7.00	7.00	7.00	7.00	0.00
6.00	6.00	6.00	6.00	6.00	0.00

Library

1.90	1.90	1.90	1.90	2.00	0.10
7.00	7.00	7.00	7.00	7.00	0.00
6.00	6.00	6.00	6.00	6.00	0.00

Health Services

1.90	1.90	1.90	1.90	2.00	0.10
7.00	7.00	7.00	7.00	7.00	0.00
6.00	6.00	6.00	6.00	6.00	0.00

Paraprofessionals & Aides

Regular Education

1.90	1.90	1.90	1.90	2.00	0.10
7.00	7.00	7.00	7.00	7.00	0.00
6.00	6.00	6.00	6.00	6.00	0.00

Special Education

1.90	1.90	1.90	1.90	2.00	0.10
7.00	7.00	7.00	7.00	7.00	0.00
6.00	6.00	6.00	6.00	6.00	0.00

TOTALS

82.03 87.31 85.74 85.37 85.12 (0.25)

Enrollment Data*

	2014-15	2015-16	2016-17	2017-18	2018-19
--	---------	---------	---------	---------	---------

Grade 7

327 330 316 337 292

Grade 8

331 323 333 317 334

Total

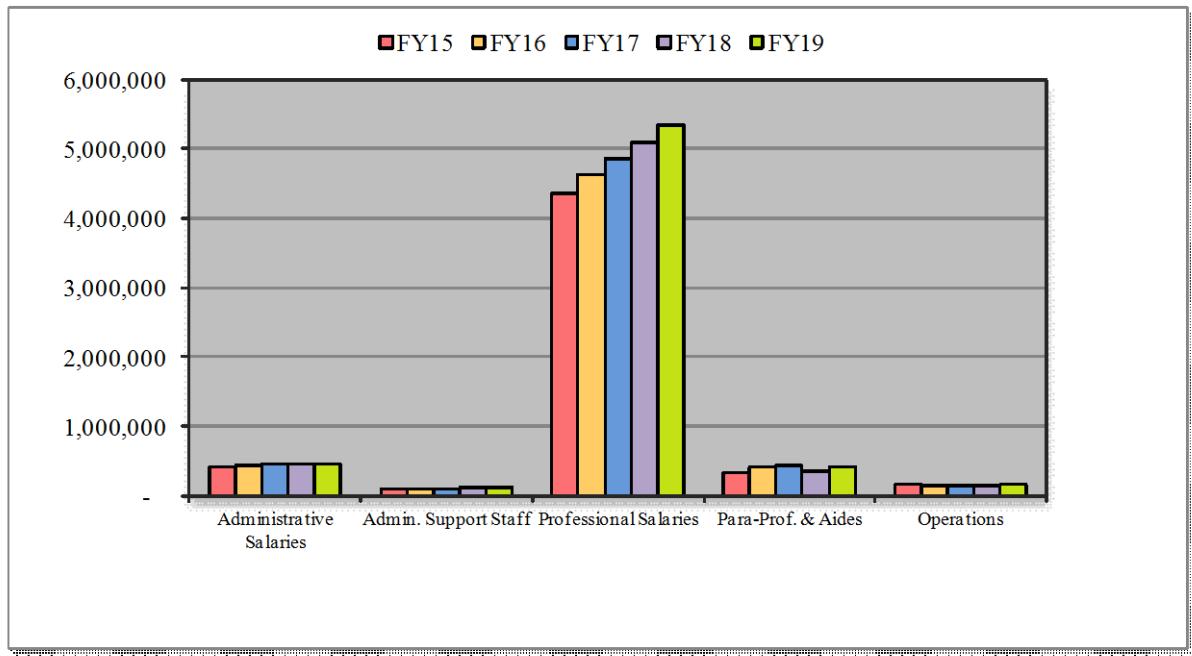
658 653 649 654 626



Middle School Expenses Displayed by Line Item

Masconomet Middle School	Expended 2014-15	Expended 2015-16	Expended 2016-17	Adopted 2017-18	Proposed 2018-19
SALARIES - STAFF					
Administrative Salaries	404,396	431,063	452,748	454,167	463,667
Administrative Support Staff	97,250	107,680	109,369	111,991	113,904
Professional Salaries	4,354,018	4,639,023	4,859,148	5,084,239	5,334,090
Paraprofessionals & Aides	332,900	406,664	430,599	354,678	419,961
Subtotal SALARIES	5,188,564	5,584,430	5,851,865	6,005,075	6,331,622
OPERATIONS					
Textbooks	41,407	5,510	3,522	4,393	4,700
Other Published Material	27,722	22,095	24,903	30,073	35,491
Consumable Supplies	44,410	47,452	46,029	52,553	56,520
Durable Goods	9,566	23,639	19,472	7,989	5,933
Consultants & Other Serv. Prov.	13,093	9,400	15,805	18,200	18,200
Maintenance, Rentals & Fees	23,457	23,431	20,884	25,234	38,811
Administrative Services	6,733	6,210	5,679	6,650	6,505
Subtotal OPERATIONS	\$166,388	\$137,737	\$136,295	\$145,092	\$166,160
TOTAL	\$5,354,952	\$5,722,168	\$5,988,160	\$6,150,167	\$6,497,782

Middle School Expenditure History

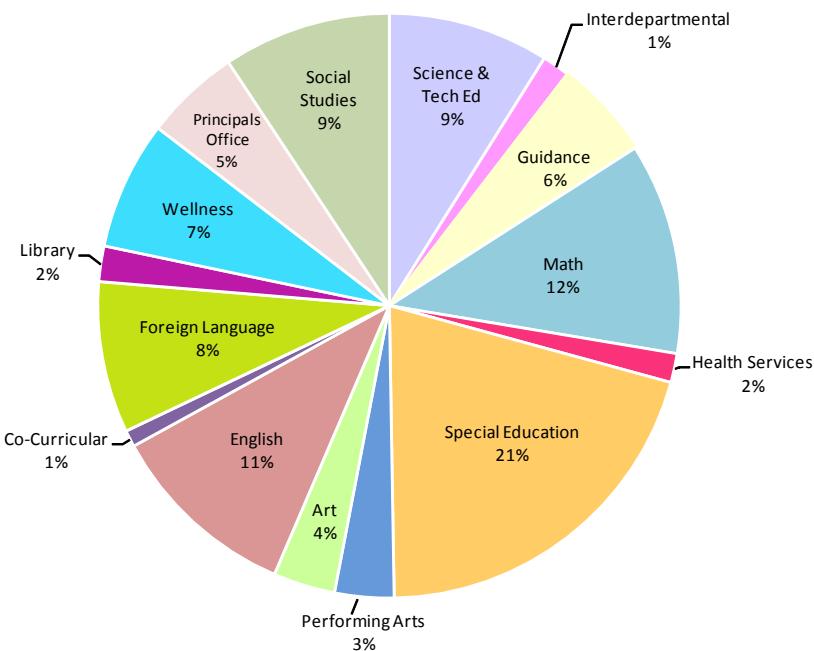




Middle School Expenses Displayed by Program

Middle School Costs by Program	Expended 2014-15	Expended 2015-16	Expended 2016-17	Adopted 2017-18	Proposed 2018-19
Principals Office	309,203	323,019	330,541	336,619	343,394
Guidance Services	305,977	330,319	340,193	344,516	357,289
Special Education	867,764	1,121,863	1,189,546	1,215,807	1,333,434
Art	216,252	210,050	215,342	216,922	222,487
English	550,532	555,006	597,578	639,125	687,357
Foreign Language	500,110	475,892	509,223	536,680	543,986
Wellness	394,697	427,972	441,524	452,967	463,460
Interdepartmental	83,309	94,879	102,024	85,257	94,440
Math	690,094	724,887	725,804	712,953	762,095
Performing Arts	184,634	189,659	204,871	206,777	213,382
Science & Technology Ed.	539,584	498,179	520,746	544,520	580,117
Social Studies	473,191	508,379	537,937	574,044	605,156
Library	113,637	118,819	121,680	125,089	128,111
Health Services	83,169	93,822	96,086	100,304	104,258
Co-Curricular	42,800	49,423	55,065	58,587	58,816
Total	5,354,952	5,722,168	5,988,160	6,150,167	6,497,782

Middle School Costs by Program





Middle School Line Item, Program Cost Matrix

Program/Department	Salaries				Operating Requests							Totals
	Admin.	Admin. Support	Professional	Para-Prof.	Textbooks	Other Publ.	Consumables	Durables	Consultants	Maintenance	Admin. Serv.	
Art	10,813	0	199,274	0	0	0	12,000	0	0	400	0	\$222,487
English	29,692	0	621,063	19,402	0	7,000	0	0	0	10,200	0	\$687,357
Foreign Language	23,403	0	517,948	0	300	1,725	610	0	0	0	0	\$543,986
Guidance	23,714	27,976	304,109	0	0	300	590	0	500	100	0	\$357,289
Wellness	11,638	0	448,706	0	0	1,452	960	704	0	0	0	\$463,460
Health Services	0	0	77,936	21,301	0	0	2,255	986	1,700	80	0	\$104,258
Interdepartmental	0	0	47,800	0	0	7,540	24,000	900	0	14,200	0	\$94,440
Library	0	0	96,323	22,685	0	7,874	330	268	0	631	0	\$128,111
Math	35,105	0	719,990	0	0	7,000	0	0	0	0	0	\$762,095
Performing Arts	11,342	0	175,140	0	4,400	0	2,000	0	12,000	8,500	0	\$213,382
Principal's Office	250,461	85,928		0	0	0	500	0	0	0	6,505	\$343,394
Science, Technology & Engineering	34,027	0	533,715	0	0	200	8,000	2,575	0	1,600	0	\$580,117
Social Studies	33,472	0	567,854	0	0	2,400	1,430	0	0	0	0	\$605,156
Special Education	0	0	972,161	356,573	0	0	700	0	4,000	0	0	\$1,333,434
Co-Curricular *	0	0	52,071	0	0	0	3,145	500	0	3,100	0	\$58,816
TOTAL	\$463,667	\$113,904	\$5,334,090	\$419,961	\$4,700	\$35,491	\$56,520	\$5,933	\$18,200	\$38,811	\$6,505	\$6,497,782



High School Council & Class Size Data

HIGH SCHOOL COUNCIL

Peter Delani - PRINCIPAL

Julianne O'Day, FACULTY
Deidra Boucher, FACULTY
James Donahue, FACULTY
Kristin Duffy, FACULTY
David Mitchell, FACULTY

Christina Eckert, PARENT
Dianne McGaunn, PARENT
Lisa Novack, PARENT
Vidula Plante, PARENT
Jenny Bankes, STUDENT
Austin Paul, STUDENT



Program Enrollment and Class Size Summary Table

HOURS OF OPERATION	7:35-2:15	DEPARTMENT	PROGRAM		AVG. CLASS SIZE
			COURSES	SECTIONS	
Number of Grades	4	ART	20	28	472
Student Body	1132	BUS. & COMPUTER ED	19	20	378
Number of Teachers	74.5	ENGLISH	20	61	1183
Number of Sections	372.5	FOREIGN LANGUAGE	27	50	975
Periods/Day	6	GUIDANCE	N/A	N/A	N/A
Students/Faculty	14/1	MATH	18	56.5	1176
		MUSIC	10	9.5	198
		WELLNESS	10	20	450
		SCIENCE, TECH, & ENGINEERING	23	66.5	1313
Average Class Size	19.9	SOCIAL STUDIES	24	61	1234
		TOTAL	171	372.5	8511
					19.9*

*excludes Guidance population



High School Principal's Budget Commentary

The projected enrollment for Grades 9 - 12 for 2018/19 (FY19), excluding out of district special education students, is 1132, representing a decrease of .07% from the current student population of 1140. This decrease is part of a nationwide trend that began in 2013 and is expected to continue to 2022. It is important to understand that our decline is not an aberration, but rather part of an anticipated 9 year cycle. Hence, our planning, as it relates to budget implications, needs to be strategic, creative and forward-thinking. Beginning with an evaluation of High School class sizes; teaching course loads; under-enrolled classes (under 14 students) and over-enrolled classes (over 24 students) we have worked to calibrate our staffing projections; course offerings (sequencing); and course registration calendar/cycle. Our intent is to ensure the work reflects both a declining student population, while at the same time affords us the best opportunity to develop and deliver programming to our students that aligns with Masco's Vision 2025.

In September of 2017 we conducted an in depth review of our current staffing, class sizes, and teacher loads (total student load per teacher). We concluded in this review that our average class size (19) and average teacher load (mid 90s) were quite healthy and conducive to continuing the excellent education that Masconomet High School has traditionally delivered. The review also revealed that we had too many class sections that were under 14 and too many over the School Committee recommended number of 24. This analysis set in motion our goal to come as close as possible to eliminating class offerings below/above those two benchmarks.

At the present time, we project for FY19, an anticipated student enrollment of 1132. We will have 74.5 Teachers teaching 372.5 sections with an average class size of 19.9 students. We are confident that with very few possible exceptions (courses that require populations less than 14) we will reach our goal of eliminating class sections under 14 and over 24 students.

Our District's Vision 2025 recognizes that:

- Student learning is highly interdisciplinary, and students are connecting learning to the real world and real-world problem solving. Curriculum and instruction is focused on this value, students are making connections between subjects because they are experiencing them as unified or related concepts, and;
- Strong adult-student relationships are a hallmark at Masconomet. Teachers and others seek to understand each student as an individual with a unique background, life situation, and unique strengths and interests. They strive to recognize each students' desire to find their place in the school and larger community, and;
- All classrooms and curricula are learner-centered. All students are achieving the same standards in multiple ways based on their learning styles, strengths, interests, and unique needs; they are learning in multiple ways and can demonstrate their learning through a variety of different assessments, and;
- Instruction happens in many forms depending on the teachers' objectives and the nature of learners in the classroom. A variety of authentic learning strategies is common throughout the curriculum and across subject areas. Students and teachers experiment with teaching and learning strategies without fear of failing, and;
- Our graduates are culturally sensitive, aware of global interdependency, and act confidently with understanding of their impact on the world. Intellectual and experiential learning takes place through a diverse curriculum, as well as in school, in the community, and with global experiences that stretch their cultural comfort zones.



High School Principal's Budget Commentary - Continued

In line with this vision, part of our continuing efforts is to maintain a wide variety of course offerings and experiences that prepare Masconomet High School graduates with the essential skill sets to undertake higher education, and enter an ever increasingly competitive and changing global economy. Towards that end, we continue to develop our Pathways programming; Global Diploma option; and areas that offer natural and necessary interdisciplinary opportunities. FY19 sees the Wood Tech courses move from the Science Department to the Art Department where there are more natural connections with the Art programming.

Our High School Improvement Plan looks to continue developing E-Portfolios, Social & Emotional Learning, and the aforementioned Pathways programming. While at the same time, we recognize that in a period of declining student populations, we have to work smarter and more efficiently in developing course programming and offerings.

The overall proposed High School Budget (Salaries/Staffing & Operations) for FY19 of \$12,245,445 is an increase of \$217,132. We are proposing a reduction of 2.5 FTEs. 1 FTE is a retiring World Language teacher who we will not be replacing, and another FTE is a proposed reduction of a Business & Computer Education Teacher. Business/Tech course enrollments have declined over the past three years. With this staff reduction we anticipate that the average Business & Computer Education course will have 18.9 students per class, up from 14.9 in 2017/18, which is more in line with Masco's overall average class size of 19.

We are proposing a staffing increase of 10 assistant athletic coaches who had previously been compensated by outside sources such as Athletic Boosters. To be in compliance with state and federal law, this will be an increase of \$42,800.

The biggest increase in Operations comes in proposed textbook purchases at \$85,650 (up from \$47,930 in FY18), as we need to replace math textbooks for Algebra 2 College Prep and Honors Precalculus courses to bring our texts in line with ongoing state framework changes. In addition, there are proposed purchases for texts and digital materials for Social Studies (also in order to align with new state framework changes). Our consumables comprised primarily of Art, Science, and General Supplies, will be level-funded.

We feel this proposed budget is fiscally responsible in light of a declining population trend; while at the same time, allowing us to continue to develop programming that is aligned with the goals of Masco's Vision 2025.





Enrollment & Staffing Data

Staffing Analysis by F.T.E.

	2014-15	2015-16	2016-17	2017-18	2018-19	18-vs-19 (Decrease)
Administrative Staff						
Principals/Assistant Principals	3.00	3.00	3.00	3.00	3.00	0.00
Department Heads*	4.20	4.20	4.30	4.30	4.30	0.00
Administrative Support Staff	9.08	9.05	9.05	8.05	7.82	(0.23)
Professional Staff						
Art	5.60	5.60	5.60	4.60	5.60	1.00
Business & Computer Education	4.80	5.20	5.20	5.00	4.00	(1.00)
English	13.30	13.30	13.30	12.20	12.20	0.00
Foreign Language	11.40	11.40	11.40	11.00	10.00	(1.00)
Guidance	6.40	6.40	6.40	6.40	6.40	0.00
Wellness	4.00	4.00	4.00	4.00	4.00	0.00
Math	12.50	12.40	12.40	11.30	11.00	(0.30)
Performing Arts	1.50	1.70	1.70	1.70	1.60	(0.10)
Science, Technology, & Engineering	15.40	15.40	15.40	14.30	13.20	(1.10)
Social Studies	13.20	13.20	13.20	12.20	12.20	0.00
Special Education*	10.50	10.50	10.50	10.00	10.00	0.00
Library	1.00	1.00	1.00	1.00	1.00	0.00
Health Services	1.00	1.00	1.00	1.00	1.00	0.00
Paraprofessionals & Aides						
Regular Education*	7.05	7.55	6.55	6.55	6.55	0.00
Special Education	14.46	11.00	13.00	16.00	16.00	0.00
TOTALS	138.39	135.90	137.00	132.60	129.87	-2.73

*Enrollment Data**

	2014-15	2015-16	2016-17	2017-18	2018-19
Grade 9	298	284	283	295	284
Grade 10	330	292	279	279	292
Grade 11	363	331	290	277	272
Grade 12	321	362	332	287	272
Ungraded	1	2	3	2	12
Total	1313	1271	1187	1140	1132

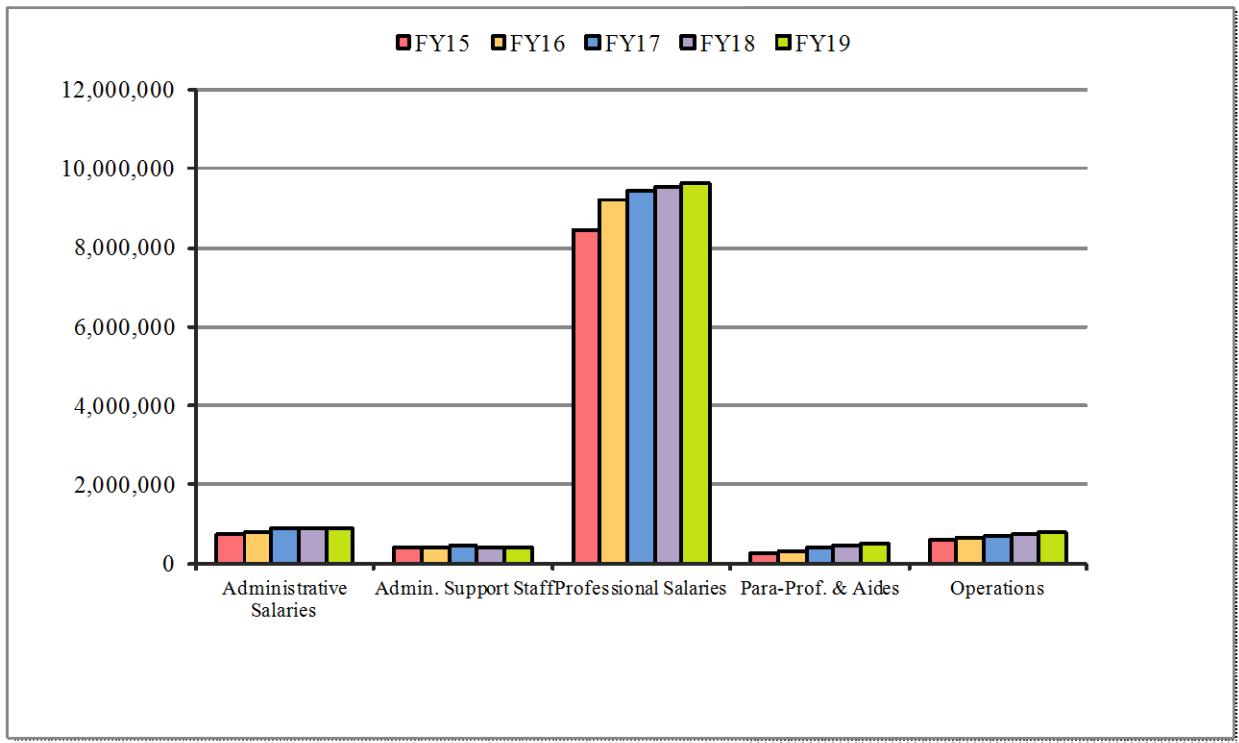
**Excludes out of district special education students.*



High School Expenses Displayed by Line Item

Masconomet High School	Expended 2014-15	Expended 2015-16	Expended 2016-17	Adopted 2017-18	Proposed 2018-19
SALARIES - STAFF					
Administrative Salaries	745,279	776,929	869,181	878,366	892,151
Administrative Support Staff	412,376	428,268	437,257	405,763	408,768
Professional Salaries	8,849,420	9,207,253	9,423,312	9,522,304	9,666,213
Paraprofessionals & Aides	286,400	306,233	410,334	469,960	498,456
Subtotal SALARIES	\$10,293,475	\$10,718,682	11,140,085	11,276,393	11,465,588
OPERATIONS					
Textbooks	6,762	29,596	57,783	47,930	85,650
Other Published Material	25,272	30,972	35,330	52,715	52,084
Consumable Supplies	149,172	152,137	154,316	171,284	175,082
Durable Goods	49,152	69,091	54,647	57,546	61,631
Consultants & Other Serv. Prov.	103,422	113,250	120,402	136,900	138,716
Maintenance, Rentals & Fees	206,452	213,272	238,010	254,345	264,011
Administrative Services	24,660	24,237	23,004	26,200	24,200
Subtotal OPERATIONS	\$564,892	\$632,555	\$683,492	\$746,920	\$801,374
TOTALS	\$10,858,367	\$11,351,237	\$11,823,576	\$12,023,313	\$12,266,962

High School Expenditure History



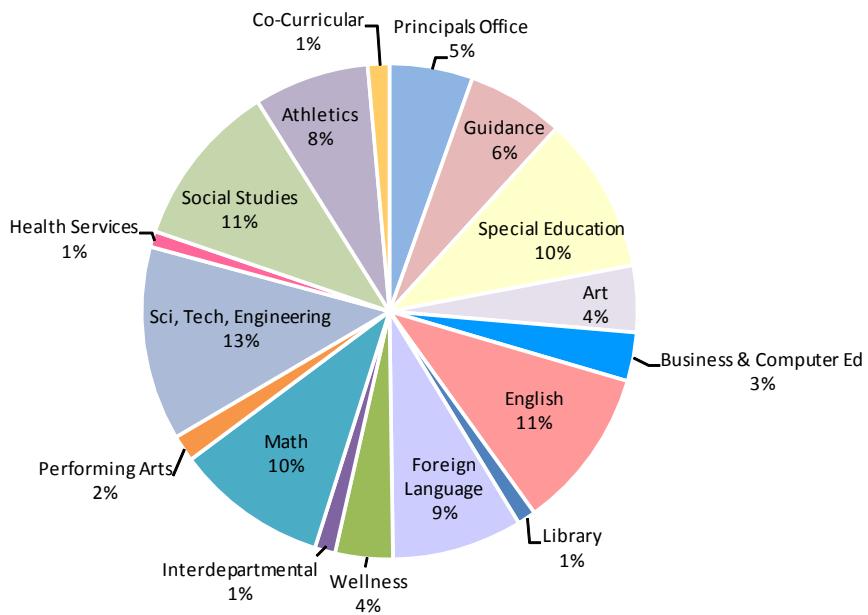


High School Expenses Displayed by Program

High School Costs by Program

	Expended 2014-15	Expended 2015-16	Expended 2016-17	Adopted 2017-18	Proposed 2018-19
Principals Office	641,197	664,252	681,762	654,174	659,943
Guidance Services	737,101	690,476	734,314	749,219	774,891
Special Education	958,009	1,031,847	1,162,068	1,201,555	1,283,161
Art	514,441	549,727	494,918	510,065	610,970
Business & Computer Ed	424,345	440,657	445,867	471,907	388,923
English	1,066,140	1,164,704	1,219,104	1,209,808	1,291,002
Foreign Language	1,006,747	1,031,749	1,054,913	1,114,387	1,041,502
Wellness	377,951	407,122	423,007	444,717	461,224
Interdepartmental	152,551	144,153	155,524	162,706	162,691
Math	1,049,633	1,123,766	1,203,178	1,194,201	1,217,117
Performing Arts	181,874	207,368	201,668	221,367	212,080
Science & Tech. Ed.	1,459,910	1,527,632	1,556,348	1,507,584	1,471,513
Social Studies	1,218,564	1,267,204	1,270,215	1,277,878	1,325,136
Athletics	703,719	715,899	805,519	856,888	920,437
Library	97,344	107,617	139,378	143,298	146,931
Health Services	111,912	116,357	119,841	123,589	125,417
Co-Curricular	156,931	160,708	155,953	179,970	174,024
Total	10,858,367	11,351,237	11,823,576	12,023,313	12,266,962

High School Costs by Program





High School Line Item, Program Cost Matrix

Program/Department	Salaries				Operating							TOTALS
	Admin.	Support	Professional	Paras	Textbooks	Other Publ.	Consumables	Durables	Consultants	Maintenance	Admin. Serv.	
Art	34,706	0	507,548	0	0	0	58,000	8,466	0	2,250	0	\$610,970
Business & Computer Ed	23,403	0	363,695	0	1,625	0	200	0	0	0	0	\$388,923
English	51,754	0	1,201,806	21,742	0	10,000	0	1,500	0	4,200	0	\$1,291,002
Foreign Language	49,074	0	986,453	0	2,100	225	75	75	0	3,500	0	\$1,041,502
Guidance	50,317	97,910	605,809	0	0	5,270	14,235	250	500	600	0	\$774,891
Wellness	34,915	0	391,847	24,242	300	0	1,000	4,075	0	4,845	0	\$461,224
Health Services	0	0	91,549	26,373	0	165	2,700	1,250	3,300	80	0	\$125,417
Interdepartmental	1,157	0	62,000	39,384	0	350	32,750	450	3,600	23,000	0	\$162,691
Library	0	0	106,270	21,411	0	14,200	900	2,750	0	1,400	0	\$146,931
Math	61,533	0	1,082,805	13,154	52,625	7,000	0	0	0	0	0	\$1,217,117
Performing Arts	11,342	0	166,788	0	0	5,500	2,950	0	19,000	6,500	0	\$212,080
Principal's Office	386,708	247,210	0	0	0	0	1,500	325	0	0	24,200	\$659,943
Science, Tech. & Engineering	59,358	0	1,360,839	0	18,500	764	24,412	6,440	0	1,200	0	\$1,471,513
Social Studies	58,055	0	1,249,531	0	10,500	7,050	0	0	0	0	0	\$1,325,136
Special Education	0	0	946,111	320,150	0	0	900	0	16,000	0	0	\$1,283,161
Athletics *	69,829	63,648	397,324	32,000	0	210	29,460	36,050	94,816	197,100	0	\$920,437
Co-Curricular *	0	0	145,838	0	0	1,350	6,000	0	1,500	19,336	0	\$174,024
TOTAL	\$892,151	\$408,768	\$9,666,213	\$498,456	\$85,650	\$52,084	\$175,082	\$61,631	\$138,716	\$264,011	\$24,200	\$12,266,962

* Transportation is also included on Maintenance Line



Asst. Superintendent for Student Services Budget Commentary

The Student Services Department continues to focus on the goal that ALL students at Masconomet do well. That every student regardless of ability, or in some cases disability, engage in a Middle School and High School experience that provides them with the academic and social experience that allows him/her to become a successful and independent adult. Our vision continues to align with the District's Vision 2025 where: *All classrooms and curricula are Learner-centered and where all students are achieving the same standards in multiple ways based upon their learning styles, strengths, interests, and unique needs; they are learning in multiple ways and can demonstrate their learning through a variety of different assessments.* We continue to center on building our capacity to teach every student by providing the services and programming that enables even our most struggling students to succeed academically, socially, emotionally, and behaviorally.



Over the past few years, we have been fortunate to fund additional positions that have allowed us to build our Language Based Learning Disabilities (LBLD) Programming. We continue to strengthen our ability to service students with LBLD by ensuring consistency across classes, grades, departments, and schools. Additionally, we have seen over the past several years, and continue to project for FY19, that the number of students requiring social, emotional, behavioral and medical or mental health services will continue to increase. Understanding that these needs continue to rise, our Student Support Centers at both the Middle School and High School have improved and strengthened our capacity to service students with social, emotional, behavioral and medical or mental health needs. Increases in the medical and mental health needs of our students continue to be an area of concern for all of us; and that is why we are proposing to take the first steps in creating a Unified Health Center (See Appendix A) by adding two positions: a Health Director and a Medical Secretary.

While we continue to build our capacity to service students in-district, 2.13% of our special needs students are placed out of district in public day schools (collaboratives), private day schools, or residential programs. These students typically have very intensive complex needs that cannot be met in district. Although the number of students requiring a higher level of need, especially those with social, emotional, and behavioral needs continues to increase, our tuition and transportation lines are projected to be slightly decreased for FY19. The Operations section of the Student Services budget is projected to have only a slight increase. Finally, please note that the Circuit Breaker reimbursement in the FY18 Budget was \$754,505. The Circuit Breaker reimbursement in the FY19 Budget will be \$831,366, representing a \$76,861 increase that will be applied to the tuition line to reduce the overall costs.





Asst. Superintendent for Student Services Budget Commentary

Staffing:

- Middle School paraprofessional staff will remain at 18.0 FTE (*One 1:1 paraprofessional will move with a student transitioning from grade 8 to grade 9 while one 1:1 paraprofessional will be needed for a student transitioning from grade 6 to grade 7*). Please note that 2.0 FTE paraprofessionals were added after the FY18 Budget and during the 2017-2018 school-year to support two students who required 1:1 support and were likely to go out of district.
- High School paraprofessional staff will increase by 1.0 FTE. (*One paraprofessional will move with a student transitioning from grade 8 to grade 9*).
- District staff is increased by 0.4 FTE with the addition of the Literacy Specialist which is .35 FTE Title I and .65 FTE operating budget.
- District support staff is increased by .7 FTE with the addition of the Medical Secretary (1.0) FTE and the decrease in .4 FTE Special Education Secretary.
- District Administrators increased by 1.0 FTE with the addition of the Health Director.



to

District, Operating:

- Consumables: (*testing protocols, office supplies*) are level funded.
- Durable Goods: Decreased.
- Other Published Materials (*WISC-Interactive Assessment System*), level funded.
- Other Published (*ESped, Reading A-Z, Modified instructional materials*) level funded.
- Maintenance/Fees remains level funded.
- Psychological Services, (*risk assessments*) is level funded.
- District Consultants (*Increase in OT, Vision, Reading, SAC Consultants*) slight increase.

Out-of-District Tuitions and Transportation Projections:

- Transportation, Private, Collaborative In-state together are projected to be slight decrease.
- Circuit Breaker reimbursement in the FY18 Budget was \$754,505. In FY19 reimbursement will be \$831,366.



Asst. Superintendent for Student Services Budget Commentary

High School, Operating:

- Consultants (*includes Graduation Alliance: online courses, and Vocational Assessments*), level-funded.
- Consumables (*Skill Development supplies and materials, Life Skills training supplies*) is level-funded.

Middle School, Operating:

- Consumables (*Skill Development supplies and materials, Life Skills training Supplies*) is level funded.
- Consultants: level-funded.

Summary:

The Student Services Department's FY19 budget recognizes the connection between a student's well-being and achievement. With the School Committee's support and guidance we continue to work with all stakeholders including; parents, administrators, teachers, and support staff to ensure that every student succeeds.





Special Education Enrollment & Data Trends

The total percentage of students requiring special education services grades 7-12+ has increased. As can be seen in the table below, the percentage of students district-wide with special education needs has increased and is consistent with the FY19 budgetary requests. The trend of students requiring more services across all grades continues. Not reflected in the chart below, but relevant to an understanding of the costs associated with special education services, is the increase in intensity of services required for students with special needs. In both the Middle School and the High School there are students who require services from multiple service providers and increasing supports for academic, social, emotional, behavioral, and transitional needs. Beginning in 2008, we have seen an increase in intensity of service needs. The needs experienced are for academic support services and services such as therapies, adjustment counseling, behavioral interventions, mental health supports and social skills training. At the High School, an additional level of intensity of services focuses on post secondary transition planning including vocational assessments, transition skills from High School to post secondary schooling or employment, social skills training and psychological and counseling services, including evaluation and crisis management.

In District Special Education Enrollment History and Trends

	7th Grade	8th Grade	9th Grade	10th Grade	11th Grade	12th Grade	Total Masco	Total Spec Ed	% SPED Students
2007-2008	45	57	38	39	39	21	2132	239	11.21%
2008-2009	65	45	57	38	39	39	2184	283	12.96%
2009-2010	66	57	29	43	27	28	2121	280	13.20%
2010-2011	60	54	45	28	36	24	2121	247	11.64%
2011-2012	62	56	38	45	31	36	2098	268	12.80%
2012-2013	65	61	55	37	42	31	2087	291	13.94%
2013-2014	56	62	47	47	37	42	2088	291	14.00%
2014-2015	44	56	49	39	46	39	2011	273	13.57%
2015-2016	58	42	37	47	37	52	1972	273	13.84%
2016-2017	56	61	40	36	46	41	1879	280	14.90%
2017-2018	77	55	52	37	37	48	1831	306	16.71%
2018-2019	59	77	55	52	37	37	1788	317	17.73%

Out-of-District Special Education Enrollment History and Trends

	7th Grade	8th Grade	9th Grade	10th Grade	11th Grade	12th/SP Grade	Total Masco	Total Spec Ed	% SPED Students
2007-2008	1	8	4	8	5	9	2132	35	1.65%
2008-2009	3	2	8	5	7	14	2184	39	1.79%
2009-2010	3	3	1	8	4	17	2121	36	1.69%
2010-2011	4	2	1	3	8	15	2121	33	1.55%
2011-2012	1	6	1	3	5	16	2098	32	1.53%
2012-2013	3	5	8	0	5	11	2087	32	1.53%
2013-2014	2	9	5	8	3	10	2088	37	1.77%
2014-2015	3	1	11	8	9	8	2011	40	1.98%
2015-2016	2	3	3	13	9	15	1972	40	2.03%
2016-2017	0	2	4	3	12	17	1879	38	2.02%
2017-2018	2	0	5	5	3	22	1831	37	2.02%
2018-2019	1	3	0	7	8	19	1788	38	2.13%

Masconomet Enrollment Based on October 1 data



District-Level Student Services - Budget

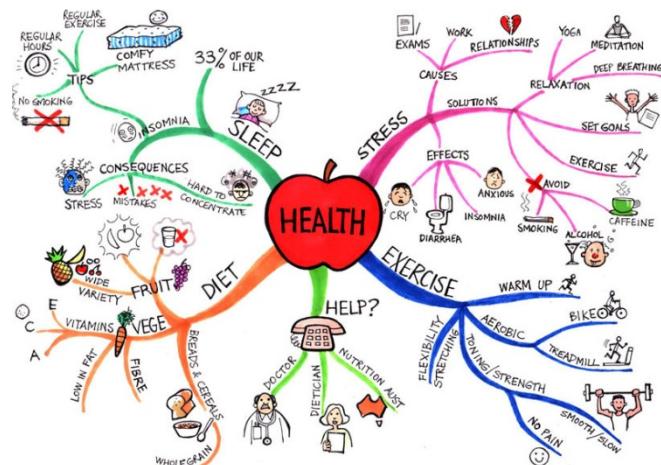
Student Services	Expended 2014-15	Expended 2015-16	Expended 2016-17	Adopted 2017-18	Proposed 2018-19
SALARIES					
Administrative Salaries	0	0	0	126,039	128,237
Administrative Support Salaries	0	0	0	56,098	57,075
Subtotal- Salaries	\$0	\$0	\$0	\$182,137	\$185,312
OPERATIONS					
Supplies & Materials	11,048	16,956	13,122	19,600	15,600
Consultants & Service Providers	1,663	1,640	1,640	1,763	1,640
Legal Services	46,486	39,995	38,936	45,000	45,000
Subtotal - Operations	\$59,197	\$58,591	\$53,698	\$66,363	\$62,240
TOTAL	\$59,197	\$58,591	\$53,698	\$248,500	\$247,552
District Special Education	Expended 2014-15	Expended 2015-16	Expended 2016-17	Adopted 2017-18	Proposed 2018-19
SALARIES					
Administrative Salaries	117,398	177,137	183,046	216,344	226,705
Administrative Support Salaries	97,848	112,629	116,264	62,200	49,234
Professional Salaries	77,759	259,836	228,723	190,889	249,683
Para-Professionals & Aides	89,243	122,626	97,779	109,103	112,815
Subtotal- Salaries	\$382,248	\$672,228	\$625,813	\$578,536	\$638,437
OPERATIONS					
Consultants	174,578	117,561	131,702	139,540	179,640
Tuition	1,573,028	1,789,686	1,279,477	1,391,011	1,319,644
Collaboratives	621,179	788,644	928,740	927,982	686,475
Transportation	506,227	79,054	19,833	6,095	100,065
Subtotal - Operations	\$2,875,011	\$2,774,945	\$2,359,752	\$2,464,628	\$2,285,824
TOTAL	\$3,257,259	\$3,447,173	\$2,985,564	\$3,043,164	\$2,924,261
Psychological Services - SPED	Expended 2014-15	Expended 2015-16	Expended 2016-17	Adopted 2017-18	Proposed 2018-19
SALARIES					
Professional Salaries	94,376	199,601	204,968	209,335	215,622
Subtotal- Salaries	\$94,376	\$199,601	\$204,968	\$209,335	\$215,622
OPERATIONS					
Testing	5,035	3,549	7,260	8,025	8,025
Consultants & Service Providers	1,320	6,169	3,893	3,600	3,600
Subtotal - Operations	\$6,355	\$9,718	\$11,152	\$11,625	\$11,625
TOTAL	\$100,731	\$209,319	\$216,121	\$220,960	\$227,247



District-Level Student Services – Budget Continued

Unified Health Services	Expended 2014-15	Expended 2015-16	Expended 2016-17	Adopted 2017-18	Proposed 2018-19
SALARIES					
Administrative Salaries	0	0	0	0	110,380
Administrative Support Salaries	0	0	0	0	52,180
Subtotal- Salaries	\$0	\$0	\$0	\$0	\$162,560
OPERATIONS					
Other Published Material	0	0	0	0	3,149
Maintenance, Rentals, and Fees	0	0	0	0	7,000
Supplies and Materials	0	0	0	0	1,000
Subtotal - Operations	\$0	\$0	\$0	\$0	\$11,149
TOTAL	\$0	\$0	\$0	\$0	\$173,709
Total Pupil Personnel Services	\$3,417,187	\$3,715,083	\$3,255,383	\$3,512,624	\$3,572,769

Staffing Analysis	FY15-16	FY16-17	FY17-18	FY18-19	Change
Administrative Staff*	1.5	1.5	3.0	4.0	1.00
Administrative Support Staff*	2.4	2.4	2.4	3.0	0.65
Professional Staff*	5.0	5.0	4.7	5.0	0.35
Paraprofessionals and Aides	1.0	1.0	2.0	2.0	0.00
TOTALS	9.85	9.85	12.00	14.00	2.00





Budget Commentary on District Other Instructional Services

The *Other Instructional Cost Center* is comprised of Instructional Services and Professional Development delivered at the District level.

Instructional Services

This group of budget lines represent District-wide activities including teaching ELL students, curriculum coordination, and educator mentoring as required by the state. Also included are annual instructional technology infrastructure. In FY19 this allocation will be used to upgrade WiFi, live-streaming equipment and service, Google Expedition, and printer replacements.

There is a significant increase in funding for curriculum development projects that support Vision 2025. For more detailed information about these projects, please refer to Appendix B at the back of the budget. There is also an increase in the assessment for School Choice, Charter & Other Tuitions in FY19. Funding for the learning management system, video editing software, digital content resources and Google Read and Write are anticipated to be slightly lower in FY19. Resources are also requested for testing supplies and materials (ear buds, mice, tri-fold privacy barriers, etc.) related to the next generation, online MCAS assessments.



Professional Development

The FY19 budget includes professional development resources for the two professional positions requested and several association memberships requested by department chairs. These memberships are a rich resource for departments and enable them to access media that can be circulated among faculty. The reduction in tuition reimbursement offsets the increase in other lines within the department.



Other Instructional Services - Budget

Instructional Services	Expended 2014-15	Expended 2015-16	Expended 2016-17	Adopted 2017-18	Proposed 2018-19
SALARIES					
Administrative Salaries (ELL)	0	22,203	68,409	23,403	23,403
Professional Salaries (ELL)	36,309	34,285	20,293	41,816	42,548
Stipends	14,994	18,644	18,960	24,994	23,480
504 Salaries	13,417	10,039	11,625	22,200	22,500
Curriculum Development	0	0	0	1,300	12,300
Para-Professionals & Aides	6,687	4,860	5,885	0	0
Subtotal- Salaries	\$71,407	\$90,031	\$125,173	\$113,713	\$124,231
OPERATIONS					
Other Published Mat'l (Software)	39,000	47,800	44,242	54,000	52,825
Durable Goods (Instructional Tech)	119,984	153,080	143,806	140,000	140,850
Consultants & Other Service Providers	0	0	0	15,000	0
School Choice, Charter & Other Tuition	13,311	17,352	54,645	55,700	64,093
Curriculum Development	0	0	0	0	20,500
Testing & Assessments	0	3,058	1,652	1,500	1,700
504 Plan	918	7,045	503	2,800	3,000
Subtotal - Operations	\$173,212	\$228,334	\$244,848	\$269,000	\$282,968
TOTAL	\$244,619	\$318,365	\$370,021	\$382,713	\$407,199
Professional Development	Expended 2014-15	Expended 2015-16	Expended 2016-17	Adopted 2017-18	Proposed 2018-19
SALARIES					
Administrative Salaries	20,561	86,338	90,993	93,480	95,880
Professional Salaries	80,707	82,799	87,027	84,869	86,349
Substitutes	16,360	15,316	9,365	15,000	15,000
Subtotal- Salaries	\$117,628	\$184,453	\$187,385	\$193,349	\$197,229
OPERATIONS					
Memberships & Subscriptions	24,408	23,837	26,944	27,200	32,945
Conferences & Accommodations	13,518	15,344	18,395	33,105	33,105
Tuition Reimbursement	10,750	14,250	14,332	21,400	16,600
Other Published Material	3,425	1,387	0	2,000	2,000
Consumable Supplies	2,348	825	3,792	2,000	2,000
Consultants & Other Service Providers	2,000	0	46	1,000	1,000
Subtotal - Operations	\$56,449	\$55,643	\$63,509	\$86,705	\$87,650
TOTAL	\$174,077	\$240,096	\$250,894	\$280,054	\$284,879
Total Other Instructional Services	\$418,696	\$558,461	\$620,915	\$662,767	\$692,078

Staffing Analysis	FY15-16	FY16-17	FY17-18	FY18-19	Change
Administrative Staff*	1.0	1.6	1.0	1.0	0.0
Admin. Support Staff	0.0	1.0	0.0	0.0	0.0
Professional Staff	1.4	1.4	1.4	1.4	0.0
Totals	2.4	4.0	2.4	2.4	0.0



District General Administration

General Administration is comprised of two departments: the School Committee and the Superintendent's Office. The most significant change in this cost center is a \$5,000 request in FY19 to pay for a transcription service for School Committee meetings. There is also a slight increase in supplies for the Human Resource Director position.

<i>School Committee</i>	Expended	Expended	Expended	Adopted	Proposed
	2014-15	2015-16	2016-17	2017-18	2018-19
SALARIES					
Administrative Support Salary	14,805	15,601	16,391	16,391	16,000
Subtotal- Salaries	\$14,805	\$15,601	\$16,391	\$16,391	\$16,000
OPERATIONS					
Supplies and Materials	16	908	1,469	300	1,000
Consultants & Other Service Providers	0	0	8,843	0	5,000
Legal Services	13,128	20,851	10,934	15,000	15,000
Legal Settlements	0	10,000	0	0	0
Staff Development	5,701	5,602	6,126	5,700	6,200
Subtotal - Operations	\$18,846	\$37,361	\$27,372	\$21,000	\$27,200
TOTAL	\$33,651	\$52,962	\$43,763	\$37,391	\$43,200
<i>Superintendent's Office</i>	Expended	Expended	Expended	Adopted	Proposed
	2014-15	2015-16	2016-17	2017-18	2018-19
SALARIES					
Administrative Salaries	196,235	192,768	196,615	200,539	206,563
Administrative Support Salary	59,489	62,673	65,846	65,846	64,283
Subtotal- Salaries	\$255,724	\$255,440	\$262,461	\$266,385	\$270,846
OPERATIONS					
Supplies & Materials	11,273	9,466	11,757	11,500	13,000
Maintenance, Rentals & Fees	3,285	3,701	4,584	4,400	4,586
Staff Development	1,994	3,141	3,591	5,000	5,000
Travel	0	930	0	0	0
Printing	832	77	425	400	400
Postage	1,814	1,747	1,522	2,400	2,000
Subtotal - Operations	\$19,198	\$19,062	\$21,879	\$23,700	\$24,986
TOTAL	\$274,922	\$274,502	\$284,340	\$290,085	\$295,832
Total General Administration	\$308,572	\$327,464	\$328,102	\$327,476	\$339,032

Staffing Analysis

	FY15-16	FY16-17	FY17-18	FY18-19	Change
Administrative Staff	1.0	1.0	1.0	1.0	0.0
Administrative Support Staff	1.0	1.0	1.0	1.0	0.0
Totals	2.0	2.0	2.0	2.0	0.0



Budget Commentary

Business and Other Support Services

The Business and Support Services cost center is comprised of four distinct programs: Business and Finance, Human Resources and Benefits, Management Information Services, and Regular Education Transportation. The overall increase in this section of the budget is \$1,001,699 or 12.9%. The greatest cost driver in this area of the budget is for benefits.

Business and Finance

The Business Support Assistant that was allocated and funded through a variety of departments has been moved into the Business and Finance department. Though the salary line item has increased, it is strictly due to this reallocation. The payments for the copier leases will increase next year as we enter into a new agreement for our copiers.

Human Resources and Benefits

The Administration is requesting approval of a Human Resources Director. Detailed information about this position is provided in Appendix C at the end of this document. The rates used to calculate health insurance increases in the budget are as follows: HMO and PPO plans – 10%, Dental - 0%, and Medex – 5%. The projections are based on January plan participation. The increase in the retirement contribution account of 11.3% is predominantly for the change in the Essex County Retirement assessment.

Transportation

The District entered into a five-year contract for transportation in FY16. FY19 represents year four of the contract and calls for a slight increase in the base contract price. In addition, \$384,000 has been added to the transportation budget in anticipation of school bell time changes approved by the School Committee at the end of last year.

Management Information Systems

The FY19 Information Technology budget has been adjusted slightly to reflect new applications and increases in our annual service agreements. In the Software line, the Abila accounting software and Microix purchasing application pricing reflect contractual increases. The Blackboard Connect 5i is a new communication platform we will be utilizing. Requests for replacement hardware and equipment for key locations throughout the District (such as projector screens, podiums, and tech workstations) have been added to the Durables line. An E-Rate consultant fee is new and has been added to the Consultant line. We have the ability to benefit from the Schools and Library E-Rate program and would like to have a professional assist with necessary contracts and filing. In Maintenance, Rentals and Fees there is one addition which is for the second Verizon Fios internet connection. This works in tandem with our other ISP connections to increase bandwidth for the growing number of devices we are adding to the network.



Budget Commentary

Business & Other Support Services - Budget

Business & Finance	Expended	Expended	Expended	Adopted	Proposed
	2014-15	2015-16	2016-17	2017-18	2018-19
SALARIES					
Administrative Salaries	170,896	154,895	158,757	158,757	161,528
Administrative Support Salary	141,087	169,842	172,206	182,905	216,208
Subtotal- Salaries	\$311,984	\$324,736	\$330,962	\$341,662	\$377,736
OPERATIONS					
Consultants & Other Serv. Prov.	14,225	15,271	31,732	17,000	17,000
Staff Development/Travel	6,024	7,538	11,312	12,000	12,000
Auditing	22,000	22,000	22,000	22,000	22,000
Banking & Other Fees	2,966	3,057	2,534	3,000	3,000
Advertising	1,785	5,508	3,207	2,500	2,500
Durable Goods	0	0	0	3,500	0
Fixed Assets (Copiers)	0	67,478	134,513	67,478	84,309
Property & Liability Insurance	64,872	71,615	76,194	79,634	78,612
Subtotal - Operations	\$111,872	\$192,468	\$281,492	\$207,112	\$219,421
TOTAL	\$423,856	\$517,204	\$612,454	\$548,774	\$597,157

Human Resource & Benefits	Expended	Expended	Expended	Adopted	Proposed
	2014-15	2015-16	2016-17	2017-18	2018-19
SALARIES					
Administrative Salary	0	0	0	0	115,390
Administrative Support Salaries	72,089	59,204	60,684	60,684	61,742
Salary Reserve	106,464	139,958	77,171	177,322	205,901
Subtotal- Salaries	\$178,553	\$199,162	\$137,855	\$238,006	\$383,033
OPERATIONS					
Advertising	13,070	11,932	14,479	13,000	15,000
Consultants & Other Serv. Prov.	0	3,000	16,197	13,100	11,700
Workers Compensation	51,539	53,375	70,677	73,500	67,000
Unemployment	45,517	7,250	22,456	69,000	30,600
Active Employee Benefits	2,560,815	2,822,395	2,993,418	3,113,393	3,411,207
Retired Employee Benefits	1,010,194	1,113,193	1,167,990	1,217,385	1,245,103
Retirement Contributions	742,257	786,528	799,518	846,957	942,268
Subtotal - Operations	\$4,423,392	\$4,797,672	\$5,084,736	\$5,346,335	\$5,722,878
TOTAL	\$4,601,945	\$4,996,834	\$5,222,591	\$5,584,341	\$6,105,911

Staffing Analysis	FY15-16	FY16-17	FY17-18	FY18-19	Change	
	Administrative Staff*	1.0	1.0	1.0	2.0	1.0
Administrative Support Staff	4.0	4.0	4.0	4.8	0.8	
Totals	5.0	5.0	5.0	6.8	1.8	



Business & Other Support Services Budget

<i>Transportation</i>	Expended 2014-15	Expended 2015-16	Expended 2016-17	Adopted 2017-18	Proposed 2018-19
SALARIES					
Transportation Coordinator	5,856	5,856	5,856	5,856	5,856
Regular Ed. Transportation	701,918	904,965	912,443	929,295	1,333,162
Subtotal - Operations	\$707,774	\$910,821	\$918,299	\$935,151	\$1,339,018
TOTAL	\$707,774	\$910,821	\$918,299	\$935,151	\$1,339,018

<i>Management Information Sys.</i>	Expended 2014-15	Expended 2015-16	Expended 2016-17	Adopted 2017-18	Proposed 2018-19
SALARIES					
Administrative Salaries	100,656	103,142	106,153	106,153	108,366
Professional Salaries	53,101	48,799	111,262	139,405	143,219
Administrative Support Salaries	35,492	48,341	46,816	50,135	48,845
Computer Technicians	153,350	171,692	155,081	143,687	148,773
Subtotal- Salaries	\$342,599	\$371,974	\$419,312	\$439,380	\$449,203
OPERATIONS					
Other Published Material (Software)	49,511	61,830	99,179	93,327	105,543
Consumable Supplies	36,586	34,901	36,731	42,800	31,800
Durable Goods (Computers, Parts, etc.)	45,053	45,954	84,469	36,600	40,000
Consultants & Other Service Providers	20,362	22,040	10,375	18,835	19,835
Staff Development	0	1,937	3,223	5,500	5,500
Telephones	28,830	29,206	29,265	32,750	37,050
Maintenance, Rentals, Fees	29,267	33,802	34,768	37,866	46,006
Subtotal - Operations	\$209,610	\$229,668	\$298,009	\$267,678	\$285,734
TOTAL	\$552,209	\$601,642	\$717,321	\$707,058	\$734,937

<i>Staffing Analysis</i>	FY15-16	FY16-17	FY17-18	FY18-19	Change
Administrative Staff	1.0	1.0	1.0	1.0	0.0
Professional Staff	1.0	2.0	2.0	2.0	0.0
Administrative Support Staff	1.0	1.0	1.0	1.0	0.0
Computer Technicians	3.0	2.6	2.6	2.6	0.0
Totals	6.0	6.6	6.6	6.6	0.0

Total Business & Other Support Services	\$6,285,784	\$7,026,503	\$7,470,665	\$7,775,324	\$8,777,023
--	-------------	-------------	-------------	-------------	-------------



Campus Maintenance and Security Budget Commentary

The *Campus Maintenance and Security Cost Center* is comprised of two departments: Safety, Security and Crisis Response and Buildings and Grounds.

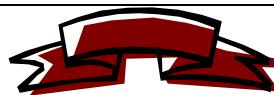
Safety, Security and Crisis Response

This budget outlines the departmental costs associated with the salary of one full-time, year-round District position for the Director of Security & Crisis Response and two part-time, after-school monitors that are school-day and school-year positions. Operating costs detailed are to cover professional memberships and the professional development of the Director, departmental supplies and equipment necessary for emergency preparedness and crisis response. Also included are the costs associated with the annual inspection, maintenance and repair to our security systems which include our cameras, alarm, and access control systems. This budget is in its second year and operating costs reflect adjustments and minor increases due to some costs previously residing in either the High School or Buildings & Grounds budgets. New items included are for the professional development and memberships for the Director, resuming subscription to the BeSafe program which is essential for public safety access to our emergency plans and information, radio maintenance and calibration to ensure proper operation of aging equipment, continuation of the COPSync911 program and several key projects to enhance campus safety and school building security. The budget as proposed reflects a \$5,005 increase for FY19.

Buildings and Grounds

This year there are some staffing changes within the proposed FY19 budget. The salary for the Business Support position has been transferred over to the Business and Finance Department. The FY19 budget also includes a salary for a full-time, Facility System Mechanic position (including anticipated estimated overtime). The largest operational expenditure is for the janitorial contract with a slight increase in the contract price scheduled for the 4th year of a 5-year contract. There have been a few slight increases in the electrical line item (for emergency lighting installation), maintenance fees & rentals (for an increase in fire alarm inspection costs) and snow removal (increase in salt/sand). There have been some decreases within the budget as well, specifically within the HVAC line item. Contract and Repair costs will decrease by conducting preventive maintenance work internally. The Durable Goods line includes funding requests to replace a snow plow blade, to purchase a storage container for storage needs, additional portable security barricades for events, and needed maintenance tools. Other minor adjustments have been made to other accounts where warranted.

We continually seek to reduce overall energy consumption wherever possible and take part in opportunities to reduce overall utility costs. With this in mind, the district has signed 3-year contracts for gas & electric. The rates were very favorable resulting in cost savings of a little over \$50,000.



Campus Maintenance and Security Budgets

Crisis Response and Security		Expended 2014-15	Expended 2015-16	Expended 2016-17	Adopted 2017-18	Proposed 2018-19
SALARIES						
Professional Salaries*		0	0	0	60,200	62,200
After School Hall Monitors		0	0	0	7,560	7,020
Subtotal- Salaries		\$0	\$0	\$0	\$67,760	69,220
Operating						
Other Published Materials		0	0	0	0	695
Supplies*		0	0	0	2,250	3,700
Durables		0	0	0	7,000	7,500
Maintenance, Rentals, and Fees		0	0	0	8,640	9,540
Subtotal- Utilities		\$0	\$0	\$0	\$17,890	21,435
TOTAL		\$0	\$0	\$0	\$85,650	90,655

* Previously accounted for in high school or buildings and grounds budgets

Buildings & Grounds		Expended 2014-15	Expended 2015-16	Expended 2016-17	Adopted 2017-18	Proposed 2018-19
SALARIES						
Administrative Salaries		79,157	92,318	100,346	100,346	102,096
Facilities Support Staff*		243,547	243,063	303,781	301,400	356,914
Subtotal- Salaries		\$322,705	\$335,381	\$404,127	\$401,746	459,010
OPERATIONS						
Consumable Supplies		20,067	25,196	24,281	27,810	27,810
Durable Goods		6,133	13,497	16,487	15,000	14,250
Maintenance, Fees & Rentals		8,481	8,044	15,766	13,950	15,250
Uniform Allowance		1,816	2,156	1,914	2,400	2,400
Staff Development		1,294	3,780	845	5,500	5,500
Landscaping		66,743	61,944	63,989	69,500	69,500
Snow Removal		27,009	14,843	39,793	33,850	34,850
Vehicle O & M		11,066	8,853	8,246	13,500	13,500
Engineers/ Architects		0	0	3,000	5,000	5,000
Janitorial Contract/ Contract Serv.		450,381	432,068	438,668	451,700	475,262
Electrical		27,096	33,215	11,847	29,000	34,000
General Repair		30,472	36,565	37,475	42,300	36,500
HVAC		54,616	61,814	117,434	73,229	46,278
Plumbing		7,576	6,313	13,902	12,500	12,500
Hazardous Removal		8,311	11,045	11,525	10,500	10,500
Security		12,065	21,662	17,779	-	-
Trash Removal		26,235	17,950	20,500	22,000	22,000
Subtotal- Operations		\$759,362	\$758,945	\$843,451	\$827,739	825,100
UTILITIES						
Septic/Sewage		66,880	70,641	68,373	75,084	72,056
Water		18,245	19,555	20,406	21,000	27,500
Electric		367,043	358,591	346,527	362,000	327,000
Heating		173,282	142,695	152,847	172,000	150,000
Subtotal- Utilities		\$625,451	\$591,482	\$588,153	\$630,084	576,556
TOTAL		\$1,707,517	\$1,685,809	\$1,835,730	\$1,859,569	1,860,666

Staffing Analysis	FY15-16	FY16-17	FY17-18	FY18-19	Change
Administrative Staff	1.0	1.0	1.0	1.0	0.0
Facilities Support Staff*	5.5	5.5	5.5	6.0	0.5
Professional Staff*	0.0	0.0	1.0	1.0	0.0
	6.5	6.5	7.5	8.0	0.5
Total Campus Maintenance and Security	\$1,707,517	\$1,685,809	\$1,835,730	\$1,945,219	1,951,321



FY19 Capital Improvement Update

In FY16, the School Committee commissioned Habeeb Associates to conduct a comprehensive capital facility assessment to better understand the current condition of our facilities and systems and help plan for capital costs moving forward. The final report is available online in the Budget and Finance section of the website under *Other Reports*. The report identified a number of imminent life-safety and security systems issues that the School Committee would like to bring forth to the towns for funding consideration in FY19. Also, there are a number of safety and preservation projects that are not mentioned in the report that require immediate attention. These critical upgrades and interim repairs are presented as a bundle for funding consideration for the upcoming FY19 budget cycle as a warrant article in the amount of \$549,500. Details of the capital budget appear on the following page.

Last year, after town meetings, the District experienced several unanticipated critical system failures that required immediate attention. These capital projects, totaling \$197,000, were not part of the FY18 Capital Budget and were funded by the District using the stabilization fund.

Table 1: Additional District Funded Capital Projects between May 2017 and January 2018

Date	Project	Amount
May 2017	Waste Water Treatment Plant Axel Replacement	\$80,000
June 2017	Exterior Entryway Replacement	\$25,000
July 2017	HVAC Compressors & Generator Switch	\$76,000
Jan. 2018	Exterior Entryway Replacement Supplemental Funding	\$16,400
Total Additional District Capital Project Funding		\$197,400

Masconomet's Contribution. The \$197,400 in capital expenses were in addition to the District's contribution of \$150,000 to the FY18 Capital Budget. To further reduce the cost to taxpayers for FY19 capital funding requests, the District has solicited and received a donation of \$15,000 for AEDs, will use an additional \$83,500 of District reserves, and is recommending that the towns approve the re-allocation of \$30,000 from the FY18 capital budget warrant article. **The total cash contribution for capital projects from Masconomet is \$280,900** (\$197,000 + \$83,500). This excludes the District's portion of the \$30,000 reallocation from the FY18 Capital budget since these resources are already committed.

Table 2: Approved Capital Projects Current Spending Status

Capital Funds	Budget	YTD Exp.	Balance
Waste Water Treatment Plant	\$205,000	\$170,452	\$34,548
Irrigation Project	\$162,759	\$143,864	\$18,895
Field House Dome Painting	\$14,000	\$8,400	\$5,600
Tech – SIS/LMS	\$165,000	\$156,406	\$8,594
Tech - Infrastructure	\$245,000	\$224,277	\$20,723
Art Lab & Special Ed. Space Reno	\$26,000	\$24,667	\$1,333
FY18 Safety & Security Capital Budget	\$656,000	\$242,677	\$413,323
Exterior Entryway Replacement	\$41,400	\$41,400	\$0
HVAC & Generator Switch Replacements	\$76,000	\$63,649	\$12,351



FY19 Capital Budget

Item	Amount	Notes
A/C for data closets	\$92,000	Preservation: Specialized Liebert air conditioning (A/C) systems are required to protect electronics in data centers. The Middle School A/C does not work and the High School A/C is 12 years old. An A/C failure in these areas on a warm day could cause serious damage to tech equipment.
AED (defibrillator)	\$31,000	Safety: Replace 5 AEDs, add 5 AEDs to meet state requirements for minimum distance to an AED, add maintenance contract for all 10 AEDs.
Central office generator tie-in	\$30,000	Safety: Connect central office / command center to generator so that systems, including phones, will operate during power failures. Preservation: Connect the data centers to generator, as well, to preserve electronic systems.
Door rekey	\$30,000	Safety: Replace all locksets and rekey using best practices. Last rekeyed 16 years ago. Propose to fund from \$32,168 remaining from “fire suppression system upgrade” from May, 2017 warrant article. (Possible Funding: existing Warrant Article Reallocation)
Electrical alterations	\$70,000	Preservation: Before the Electrical alterations for the warrant article can take place, we must finish diagnosing the electrical problem. Propose funding from district stabilization fund. (Funding: Stabilization Fund)
Increase gas piping size	\$98,000	Preservation: Small gas pipe size is causing low flow, intermittent firing problems with our HVAC units (Habeeb report: G.1.1, G.4.1, and I.10.1).
Mobile bleachers	\$13,500	Safety: Replace 8 portable bleachers that are not code compliant. (Funding: Athletic Revolving)
Auditorium speakers	\$10,000	Preservation: replace two auditorium speakers which are broken and add a center speaker.
Roof repairs	\$140,000	Preservation and Safety: Parts of the roof have been compromised. There are leaks and areas that are unsafe to walk on. This work is intended to preserve the roof until a bond measure and potential School Building Authority (SBA) funds can fund a full roof replacement (no earlier than 2021).
Security cameras	\$38,000	Safety: Replace our last four end-of-life analog cameras. Add seven cameras in targeted areas to increase security, as recommended by local law enforcement and our security team.
Skid steer	\$55,000	Safety: Replace skid steer loader (e.g. a bobcat), used for snow removal on paths and grounds maintenance work.
Tennis courts	\$35,000	Preservation: Repair cracks in courts; new surface will be added as part of bond measure. Propose to fund from athletic revolving account. (Funding: Athletic Revolving Fund)
Wood shop	\$35,500	Safety: non-skid flooring, dust inhalation, and minor utility upgrades
TOTAL	\$678,000	



FY19 Capital Budget Town Assessment Calculation

The following sources reduce the FY19 capital budget funding request to the towns from \$678,000 to \$549,500.

Table 3: FY19 Capital Budget Funding Offsets

Item	Amount	Notes
AED (defibrillator)	-\$15,000	Discounts and donation from Ernie Whiton & Zoll, Inc (maker of defibrillators).
Door rekey	-\$30,000	Repurposing of funds from last year's article
Electrical alterations	-\$35,000	From Stabilization Fund
Tennis courts/ Mobile bleachers	-\$48,500	From Athletic Revolving Fund
TOTAL	-\$128,500	

Net Impact	\$549,500	Town Warrant Article Funding
-------------------	------------------	-------------------------------------

Warrant Article Assessment. Funding of warrant articles for Masconomet require the approval of the School Committee and all three towns. Below is the assessment allocation for Masconomet's FY19 Capital budget based on the current October 1 enrollments.

Town	Percent	Warrant Article
Boxford	37.88%	\$208,151
Middleton	35.08%	\$192,765
Topsfield	27.04%	<u>\$148,584</u>
		<u>\$549,500</u>

Information related to capital project debt service payments appear on the following page.

Earlier this year, the School Committee created the District Capital Investment Task Force, which is charged with creating a responsible long-term strategic capital improvement plan that ensures the Masconomet campus meets the evolving instructional needs of students and preserves the taxpayers investment. The taskforce is comprised of the following members:

Hagan Rivers of Boxford (Chair)
John Spencer (Topsfield)
Kosta Prentakis (Middleton)
Susan Givens (Assistant Superintendent for Finance and Operations)
Dorothy Flaherty (Middle School Principal)
Douglas Batchelder (Director of Operations)

For more information, please visit the website at: <https://www.masconomet.org/Page/557>



Debt Service Schedule

The District issued bonds for \$30,125,000 for the construction of the High School, waste water treatment plant, and renovation of the Middle School and field house in 2001. The total appropriation for principal and interest on these bonds for FY19 is \$2,374,065. The District will also receive \$1,291,498 in funding from the state to pay for a portion of these costs.

Masconomet Regional School District			
<i>Debt Amortization Schedule - Summary</i>			
<i>Ch. 71 Sec. 16(d), voted on 10/6/97 and 3/17/99</i>			
Fiscal Year	Principal	Interest	Total
2000-01	270,000	550,503	820,503
2001-02	290,000	532,278	822,278
2002-03	615,000	985,153	1,600,153
2003-04	650,000	953,030	1,603,030
2004-05	890,000	1,567,353	2,457,353
2005-06	1,125,000	1,308,914	2,433,914
2006-07	1,170,000	1,253,970	2,423,970
2007-08	1,220,000	1,196,851	2,416,851
2008-09	1,275,000	1,146,151	2,421,151
2009-10	1,465,000	917,331	2,382,331
2010-11	1,470,000	900,151	2,370,151
2011-12	1,515,000	850,051	2,365,051
2012-13	1,575,000	793,989	2,368,989
2013-14	1,635,000	734,364	2,369,364
2014-15	1,700,000	671,795	2,371,795
2015-16	1,780,000	599,745	2,379,745
2016-17	1,845,000	528,225	2,373,225
2017-18	1,920,000	454,015	2,374,015
2018-19	2,000,000	374,065	2,374,065
2019-20	2,085,000	283,200	2,368,200
2020-21	1,405,000	182,250	1,587,250
2021-22	1,470,000	112,000	1,582,000
2022-23	755,000	37,750	792,750
	<hr/> 30,125,000	<hr/> 16,933,132	



Special Revenue & Grant Funds

Revolving Funds

Masconomet generates income by charging fees for ancillary services that occur outside of normal school hours. During the 2018-19 school year, the District will maintain the following revolving funds for this purpose. Several of these funds will supplement the operating budget with transfers to help defray expenses associated with those funds which are charged to the operating budget. Transfers from these funds total \$645,278. Estimated receipts from all funds for FY19 are \$2,389,726.

Grants

Masconomet also receives funding from Federal entitlement grants for regular and special education. The Federal contribution for special education only covers a portion of the costs for mandated special education programs. In FY19 the District is eligible for four (4) grants estimated to total \$491,599.

<i>Revolving Funds</i>	Expenditures			Transfers	
	Revenue	Salary	Operating	Out	Total Expense
School Store	22,500	0	22,500	0	22,500
College Testing	50,375	2,700	47,130	0	49,830
Circuit Breaker	831,366	0	831,366	0	831,366
Athletics & Co-Curricular	566,490	0	0	566,000	566,000
Non-Resident Tuition - SPED	0	0	0	0	0
Non-Resident Tuition - International	0	0	0	20,278	20,278
Food Service	843,000	415,000	401,000	59,000	875,000
Use Of Facilities	50,000	27,500	0	0	27,500
Summer School SPED	11,520				
Summer School	14,475	14,300	0	0	14,300
Total Revolving Funds	2,389,726	459,500	1,301,996	645,278	2,406,774

<i>Grant Funds</i>	Expenditures			Transfers	
	Revenue	Salary	Operating	Out	Total Expense
SPED IDEA	420,004	0	420,004	0	420,004
Title I	42,744	42,744	0	0	42,744
Title IIA Teacher Quality	27,563	6,400	21,163	0	27,563
Title IV	1,288	0	1,288	0	1,288
Total Grant Funds	491,599	49,144	442,455	0	491,599



FY19 Appendix A – Unified Health Services Center

Summary:

Addressing the social and emotional needs of our student population remains a high priority for the school district. Creating an optimal learning environment requires that students feel safe physically, intellectually, and emotionally. This can be increasingly challenging because mental health issues among students have risen exponentially over the past decade and yet the model of delivery has remained the same. This proposal provides a comprehensive health services solution to meet the current and future needs of our student population.

Vision 2025, Value 2:

We believe that when students feel physically safe, emotionally secure, and happy, they are in the best position to benefit from opportunities for intellectual growth and learning, development of character, self discovery, and to find their unique place in the community

History and Problem:

Student mental health needs have increased significantly over the past decade. A greater number of students entering school at Masconomet have complex social, emotional challenges that are exacerbated by the more demanding curricular requirements of secondary education. To support these students and the broader needs of all adolescents in a high stakes, high performing environment, a unified solution is necessary.

Though the District has added staff to support these increasing needs, there are more challenges that remain unaddressed by the current service delivery model. The current decentralized model presents a number of challenges;

- coverage when a nurse is out sick or attending to issues outside of the area
- students are not receiving continuity of care grades 7-12 with two separate health offices
- students present increased social-emotional issues and nurses spend increased time addressing these and coordinating with other resources
- maintenance of confidential medical records consumes a significant portion of clinical staff time

Proposal/Solution:

The proposal is to renovate an area in a central location to house a unified health clinic to support all students from one location. The model would add a director, a medical secretary and a part-time adjustment counselor. One of the current health aide positions would be eliminated. In addition, all health service functions would fall within the unified health services director's oversight, including coverage after school and during the summer, as well as athletic training services for athletes.

Estimated Costs:

Recurring = \$ 202,560 (salary, benefits, supplies and services) - These costs are included in this proposal

One Time = \$ 28,000 (furniture and equipment) – This is not included in the FY19 proposed budget

Capital - Renovations = \$450,000-\$500,000 - This is not included in the FY19 proposed budget



Appendix B – FY19 Vision 2025 Curriculum Development

Summary:

To build the capacity of Masconomet staff to personalize learning for our students, significant curriculum and professional development is required. Capacity must be built to support a transformative shift in instructional culture and to redefine the teacher-student relationship in regard to curriculum design, classroom organization, pedagogy, and formative assessments that align with Vision 2025. To do this, staff need time and support to do the work. A new kind of curriculum development and transformational staff development is needed to begin this change and the curriculum proposals in this budget are designed to begin this process.

Vision 2025, All goals:

Student learning is highly interdisciplinary and students are connecting learning to the real world and real-world problem solving. Curriculum and instruction is focused on this value; students are making connections between subjects because they are experiencing them as unified or related concepts, *and*

Strong adult-student relationships are a hallmark at Masconomet. Teachers and others seek to understand each student as an individual with a unique background, life situation, and unique strengths and interests. They strive to recognize each student's desire to find their place in the school and larger community, *and*

All classrooms and curricula are learner-centered. All students are achieving the same standards in multiple ways based upon their learning styles, strengths, interests, and unique needs; they are learning in multiple ways and can demonstrate their learning through a variety of different assessments, *and*

Instruction happens in many forms depending upon the teachers' objectives and the nature of learners in the classroom. A variety of authentic learning strategies is common throughout the curriculum and across subject areas. Students and teachers experiment with teaching and learning strategies without fear of failing, *and*

Our graduates are culturally sensitive, aware of global interdependency, and act confidently with understanding of their impact on the world. Intellectual and experiential learning takes place through a diverse curriculum, as well as school, community, and global experiences that stretch their cultural comfort zones.

History and Problem:

Masconomet has traditionally enjoyed tremendous successes in student outcomes by all measures – test scores, college acceptances, the arts, athletics, etc. – and as a builder of solid citizens. A central tenet of Vision 2025 is to shift our focus to a more holistic approach to educating students that seamlessly integrates nonacademic skill development into all learning experiences. Modifying curriculum, instructional activities and assessments to include this skill development using more authentic, student-centered teaching and learning methods is central to making this shift. This proposal supports funding to begin to develop the capacity and skills of our educators to mindfully design learning experiences that not only align to standards, but also develop social, emotional, civic, and career readiness skills to ensure every student becomes a successful, contributing member of our society.

Proposal/Solution: The proposal supports five curriculum design projects. The first project is a district-wide curriculum and instructional redesign inquiry for members of the advisory council. To lead interdisciplinary curriculum and instructional redesign, a common vision and understanding of an instructional model is essential. This inquiry is designed to build a common understanding of an



FY19 Vision 2025 Curriculum Development – Continued

instructional design model and also a framework for future work with faculty at the high school. The second project is a curriculum and instructional inquiry into the next generation Science Standards (NGSS) that are the basis for the new science frameworks. The existing frameworks are focused on content coverage. The new standards designed around an inquiry-based approach to learning science that incorporates cross cutting skill and knowledge development. This requires a very different method of instruction than one would see in a curriculum designed around content coverage. Therefore, understanding the new standards, observing inquiry based science instruction that align to these standards, and examining curricula in service to curriculum and instructional redesign is an important building block for staff. The third project represents the last leg in a curriculum re-alignment project in Math to comport with the 2017 MA Curriculum Frameworks for Mathematics. Project 4 is to develop a science course for students who need a lab science but are not interested in chemistry or engineering. Project five is an MCAS prep course for biology for students who need additional support to prepare for the science MCAS exam. This proposal includes resources for staff to participate in site visits, attend learning academies, purchase supporting materials, and access instructional coaches to help inquiry groups re-design curriculum, instruction, and assessment to address Masco Vision 2025. Specific details related to each project follow.

Project 1	
Title:	Project -Based Learning Curriculum and Instructional Redesign Inquiry - District-Wide AC members
Program Design:	This is a district-wide inquiry into redesigning instructional programming to align with Vision 2025. Participants will engage in a year long inquiry that is structured and supported through a leadership academy program offered by High Tech High School. Participants will work collaboratively to design an interdisciplinary HS instructional model based on the authentic pedagogical practice of Project-Based learning. Participants will meet monthly to work on specific elements of a 21st century instructional design that embeds SEL, trauma sensitive practices, culturally relevant pedagogy, UDL principles, and standards based learning outcomes in all academic areas. Costs include attendance at two sessions in San Diego to work with PBL curriculum designers and instructors, local site visit travel expenses, curricular resources, and instructional design coaching.
Cost:	\$20,000
Project 2	
Title:	NGSS Inquiry-Based Learning Curriculum and Instructional Redesign Inquiry - Science Department
Program Design:	These mini-PD Institutes hosted at Masconomet would begin the process of creating a learning community within the science department. The institutes would begin in the summer of 2018 and work would continue throughout the 2018-19 academic year. In May 2019 the PD institute would be completed with an exhibition of curriculum generated by teachers as it relates to their year long experience. Research has shown that professional development is most effective when it is active, intensive and sustained over time. This model of PD would move away from the "sit and git" models that are episodic and often not related to teachers' specific content or curriculum. The work being done would focus on unpacking the NGSS. Throughout the year educators would be provided with opportunities to collaborate with colleagues in a manner that allows them to ask questions and take risks while reflecting on their own practice. Teachers' will examine curricula as it relates to NGSS and develop their own working knowledge of NGSS based on collaborative analysis and reflection. Teachers will be engaged in educational research and participate in site visits to assess implementation of NGSS. Though MA did not officially adopt NGSS the new state standards are closely aligned and include the 7 science skills and practices NGSS supports. This structured PD would provide a framework that allows educators to be engaged in a meaningful PD opportunity where they have ownership that impacts teaching and learning. During the Institute educators will actively engage in problem based learning as a model for inquiry based learning. An instructional coach will assist in the design of the experience in order to provide feedback and reflection throughout the PD. (VS1): To provide students with interdisciplinary learning experiences that connect them to the real world through problem solving. To provide a student centered learning environment where learning is measured using various assessment styles. (VS4): To provide instruction that utilizes a variety of learning strategies.
Cost:	\$6,500



FY19 Vision 2025 Curriculum Development – Continued

Project 3	
Title:	Math - Curriculum alignment project
Program Design:	As the curriculum redesign moves to the upper house I am requesting that the department have 5 PD days throughout the year. 6 Substitutes would be needed for this to take place as department members would be split into 2 cross grade groups and would meet 3 periods each of the 5 days so the substitutes would cover the half-day schedules of 2 teachers. The structure would be similar to the used in FY15. To complete the curriculum redesign that implements the 2017 MA Curriculum Framework for Mathematics. The cross grade nature of the working groups would allow for vertical as well as horizontal alignment. Some of the work would focus on new courses such as mathematical modeling and discrete mathematics that support Pathways. Much of the work would revolve around incorporating collaborative problem solving, technology integration and hopefully lead to more project based learning.
Cost:	\$5,000
Project 4	
Title:	STEM Course at HS
Program Design:	The STE Dept will be creating a new semester long STEM course that is taught in a thematic manner. This course will provide students that need a lab science an opportunity other than chemistry as well as include students that have an interest in current STEM topics that are outside the specific engineering annotation. The items requested ensure that students will be actively engaged in the learning process. (VS1): To provide students with interdisciplinary learning experiences that connect them to the real world through problem solving. (VS3): To provide instruction that utilizes a variety of learning strategies.
Cost:	\$650
Project 5	
Title:	Biology Prep course at HS
Program Design:	A biology MCAS prep course offered after school and taught by a Masconomet educator will help prepare students taking the MCAS out of sequence. We have not had these monies put aside for a few years but it is very important that we provide students with an opportunity to prepare for an exam they must pass in order to graduate. The items requested ensure that students will be actively engaged in the learning process. (VS1): To provide students with interdisciplinary learning experiences that connect them to the real world through problem solving. (VS3): To provide instruction that utilizes a variety of learning strategies.
Cost:	\$650

Estimated Costs:

Curriculum Projects = \$32,800



Appendix C – Human Resources Director

Summary:

The addition of this position would allow us to manage what now is an unmanageable problem, at least to the extent that it cannot be managed without other critical system roles being diminished. We operate from a reactive position rather than being able to be proactive.

Vision 2025 Goal:

Infrastructure to support all aspects of Masconomet Vision 2025

History and Problem:

The necessity of non-dedicated personnel to perform important Human Resource functions significantly impacts and degrades the performance of the Superintendent, Assistant Superintendent for Finance and Operations, and their administrative assistants, as well as School Principals and other hiring authorities in their primary functions.

Potential benefits include both efficiencies and cost savings that would result in improved overall system performance, higher employee satisfaction, better compliance with policies, laws, and regulations, and potentially better hiring, better employee retention, and a more highly trained workforce. We could benefit internally as an organization and our public, including students, would benefit as a result.

Proposal/Solution:

The current organizational chart does not include a position dedicated to human resources management. The following list of human resource functions is currently divided between multiple positions and often requires the interaction of multiple persons to execute a task. This list is many, but not all, of the tasks that can be categorized as human resources.

- Coordination of hiring of professional and support staff to ensure that the most highly qualified individuals are hired
- Oversight and coordination of employee resignations, terminations, and retirements
- Administration of the Family Medical Leave Act
- Coordinating employee conduct investigations, assembling and substantiating information, and making recommendation to supervisors in regard to employee discipline and training
- Coordinating union negotiations and providing administrative participation in School Committee/Union negotiations
- Maintaining a database of wages and compensation to multiple groups and individuals as well as comparative data for use in group and non-represented employee compensation negotiations
- Maintaining and updating authoritative copies of all union and bargaining related agreements
- Developing and updating a comprehensive Employee Handbook that includes civil rights notices, important policies and procedures to ensure legal compliance, statement of expectations, and information on wages, benefits, leaves of absence
- Administration of EPIMS employee data reporting to the Department of Elementary and Secondary Education
- Maintenance of union seniority lists
- Coordination and administration of employee course approvals, contractual course reimbursements and salary scale movement
- Administration of criminal background checks compliance including required fingerprinting



Appendix C – Human Resources Director- Continued

- Administration of a wide variety of District policies, laws and regulations to ensure employee and District compliance
- Administration and coordination of tests and training required by Massachusetts Conflict of Interest laws and regulations
- Administer or coordinate personnel search processes including management of School Spring positions, newspaper advertising, and internal postings
- Coordination of new employee onboarding, orientations, induction, and mentoring programs
- Cyclical required training of all personnel

Estimated Costs:

Recurring = \$ 139,500 (salary, benefits, supplies and services) - These costs are included in this proposal

One Time = \$ 10,000 (furniture and equipment) – This is not included in the FY19 proposed budget



Appendix D – Bell Time Change Implementation Costs

Summary:

Following 18 months of study and community process, the collective wisdom and authority of the Masconomet, Boxford, Middleton, and Topsfield School Committees resulted in the production of a new school schedule for Masconomet and for the elementary schools to be tested for feasibility by the two Superintendents.

The plan being tested was named *Option Y* by the STAC Committee. If this option is deemed to be feasible, there are a number of costs that could be associated with implementation, including but not limited to the need for additional buses, the need for additional personnel hours to supervise students before school and after dismissal, schedule changes within the schools that may require additional personnel hours or substitute teacher hours to conduct required IEP and Section 504 meetings and other meeting or reporting requirements.

Vision 2025, Value # 2:

We believe that when students feel physically safe, emotionally secure, and happy, they are in the best position to benefit from opportunities for intellectual growth and learning, development of character, self-discovery, and to find their unique place in the community.

History and Problem:

Masconomet has had a start time of 7:35 a.m. for many years. The research on the benefits of a later start time for secondary students is clear and these benefits have been documented in multiple reports produced by the School Start Times Advisory Committee (STAC) and numerous medical societies and organizations have taken positions on the importance of later start times for secondary students.

The [American Academy of Pediatrics](#), the [Centers for Disease Control](#), the [American Medical Association](#), the [American Academy of Sleep Medicine](#), the [American Academy of Child & Adolescent Psychiatry](#), the [American Psychological Association](#), and the [Massachusetts Medical Society](#) have all examined the research and have recommend that middle and high schools start no earlier than 8:30 a.m., writing that the evidence strongly suggests that a too-early start to the school day is a critical contributor to chronic sleep deprivation among American adolescents resulting in many adverse effects to health, well-being, and learning.

Proposal/Solution:

Option Y is a separate document for reference and is attached.

Estimated Costs:

\$384,000



Appendix E – Facility System Mechanic

Summary: To provide a Facility Systems Mechanic to our current staff in order to respond to an increasing number of Facility Systems issues. With aging equipment, service requests and issues have increased over the years and outsourcing has not only become expensive, but response time has decreased due to the availability of contracted labor & parts, as well as outsourced service lag time. Hiring a full time Facility Systems Mechanic may result in some overall savings and at the same time would provide more immediate attention to mechanical issues.

Vision 2025 Goal, Value #2:

We believe that when students feel physically safe, emotionally secure, and happy, they are in the best position to benefit from opportunities for intellectual growth and learning, development of character, self-discovery, and to find their unique place in the community.

History and Problem:

Masconomet has historically outsourced a majority of its system work such as Heating, Ventilation and Air Conditioning (HVAC) and/or plumbing. When the District was renovated back in 2001, district equipment was brand new and only required a good preventive maintenance (PM) plan. Outsourcing this PM work was a very good option as it ensured that all equipment would be taken care of and repairs would be performed by licensed mechanical specialists. Now, 17 years later, even though the equipment has received annual preventive maintenance and regularly scheduled filter and belt changes, boiler inspections, etc. the equipment as a whole has become aged and is reaching the end of its useful life.

Proposal/Solution:

With performance issues and repairs increasing, it has become evident that the district would benefit by having a Facility Systems Mechanic on staff to perform the PM work and to provide faster and more efficient service to units when they fail. Other benefits we would see include increased efficiency of the equipment and better overall management of the systems. Further, we would have a dedicated person to perform mechanical checks for alarms, abnormalities, etc. and tasks such as replacing belts and filters.

Our annual expense in FY17 was \$147,000 (this is up from a reported actual expense in FY 16 of only 71,000). Generally speaking, labor costs equate to about 2/3rds of the total invoice. Parts & materials take up the other 1/3rd of the cost. Labor costs last year were roughly \$98,000 and parts and material costs were roughly \$49,000 this past year. There were a few “large jobs” that attributed to the overall increase from FY16 to FY17; however, larger repairs are likely to increase as we continue to maintain our aging systems. Some larger and/or more complex projects will still need to be performed by a qualified licensed outside contractor. Therefore, some resources for labor remain in the operating budget.

Estimated Cost:

Currently we are paying our outsourced contractor at the Prevailing Wage rates of \$118 per hour for repairs and a set fee for the preventive maintenance portion of the contract. If the District hired its own Facility Systems Mechanic at a rate of \$32 - \$38 per hour plus overtime and benefits, the estimated cost would be approximately \$100,000 annually. To offset these costs, the HVAC line has been reduced by \$30,000 for a net increase to the budget of \$70,000.



Appendix F - FY19 Preliminary Assessment Information

Masconomet RSD FY18 vs. FY19 Preliminary Town Assessments- February 2018

BOXFORD	FY18	FY19	Change	Percent
Operating Assessment	\$ 9,784,969	\$ 10,486,533	\$ 701,564	7.2%
Debt Assessment	\$ 408,977	\$ 410,036	\$ 1,060	0.3%
Total Assessment	\$ 10,193,946	\$ 10,896,570	\$ 702,624	

MIDDLETON	FY18	FY19	Change	Percent
Operating Assessment	\$ 9,241,983	\$ 9,674,768	\$ 432,785	4.7%
Debt Assessment	\$ 384,138	\$ 379,817	\$ (4,321)	-1.1%
Total Assessment	\$ 9,626,120	\$ 10,054,585	\$ 428,465	

TOPSFIELD	FY18	FY19	Change	Percent
Operating Assessment	\$ 6,910,110	\$ 7,486,575	\$ 576,466	8.3%
Debt Assessment	\$ 289,403	\$ 292,714	\$ 3,311	1.1%
Total Assessment	\$ 7,199,513	\$ 7,779,289	\$ 579,776	

O&M Community Contribution Change	\$ 1,710,815.01	6.60%
Debt Community Contribution Change	\$ 50.00	
	\$ 1,710,865.01	

Essex North Shore Agricultural and Technical School District FY2019 Budget Proposal

Narrative Summary Monday, February 5, 2018

Overall Budget

- This proposal calls for a total increase of approximately \$1.3m, representing an increase of 4.82% over the FY2018 budget.
- The majority of this increase is in people. Approximately \$1m of the proposed increase in expenditures deals with salary increases (mainly collective bargaining), benefits (an assumed 5% increase in health insurance), and new positions.

Staffing

- The proposed budget includes a new program in engineering technology, which will allow us to take an additional 15 member district students per year in an area of high employment demand on the North Shore. The costs for a new teacher in FY2019 and another program instructor in FY2021 will be included in our Perkins funding, therefore representing no addition to the operating budget in those years.
- The budget proposal includes two (2) new English teaching positions and one (1) additional mathematics teacher. These recommendations will serve to reduce the overall number of students assigned to teachers in these subject areas, a situation that is exacerbated by our “split” schedule.
- This spending plan includes one (1) additional school adjustment counselor, which will allow the creation of a student support program. This program, which is modeled after the Assabet Valley Technical High School “CARES” (Coordinated At-Risk Education Support) program, will provide mental health and academic support for at-risk students transitioning back to their academic and vocational placements from short and/or long-term hospitalizations, placements, and/or similar out of school settings.
- The FY2019 budget proposal also includes two (2) CTE teaching assistant positions, designed to support our carpentry and plumbing programs. These positions will also be taken from Perkins funding in FY2019. These positions will assist the primary teachers on outside projects, as there are state guidelines for teacher to student ratios.

- The spending plan calls for the addition of a School Resource Officer in cooperation with the Danvers Police Department.

Technology

- The FY2019 budget does include funding increases for technology. However, given a number of programmatic factors regarding the iPad, we are recommending discontinuing the use of this device for our student 1:1 program. Mr. Morgan has been charged with creating a group to bring us recommendations regarding the future of our technology initiatives (staff and students) by May 2018.

Student Activities

- This spending plan calls for the purchase of an additional forty (40) hours of ice time for our hockey program(s).
- The FY2019 budget includes substantial increases in funding to better support our co-curricular FFA and SkillsUSA programs.

Facilities

- We are recommending that the District begin to include funding to support the stabilization fund, which can be used for capital expenditures. Specifically, we have included \$75k from the FY2019 plan for this purpose.
- The FY2019 plan assumes that the current stabilization fund will support additional paving in our parking lots, the creation of a softball field, and a school district sign at a total cost of approximately \$80k.

Retirement

- This proposed spending plan assumes that we can prepay at least \$500k in retirement contributions (Salem and/or Essex) from our FY2018 budget.

Transportation

- The FY2019 proposal assumes continuing our leasing program for school buses. Specifically, we will replace another four (4) vehicles in this plan. In addition, the budget includes the purchase of a rack truck for transporting equipment.

Revenues

- We have also included proposals to increase athletic fees (from \$25 per sport to \$100 per sport) and parking fees (from \$100 per year to \$180 per year).
- In addition, we have budgeted \$1m from our E&D accounts, representing an increase of \$100k over FY2018.

Not Included

- Unfortunately, this spending plan does not include the other three (3) new programs that we have explored (Medical Assisting, Business/Marketing, and Agricultural Mechanics).
- This spending plan does not include any funding for expenses associated with changing the name of the school.

Essex North Shore Agricultural and Technical School District
FY 2019 Budget Summary

		<u>\$ Inc(Decr)</u>	<u>% Incr(Decr)</u>
<u>FOUNDATION BUDGET</u>	\$24,510,770	\$1,214,569	5.21%
Chapter 70 Aid	4,100,186	\$314,366	8.30%
Local Receipts	6,115,828	(\$294,260)	-4.59%
Foundation Budget Assessment	14,294,756	\$1,194,463	9.12%
<u>TRANSPORTATION BUDGET</u>	1,804,836	\$39,535	2.24%
Regional Transportation Reimbursement	968,642	\$3,658	0.38%
Local Receipts	553,800	\$35,100	6.77%
Transportation Assessment	282,394	\$777	0.28%
<u>DEBT SERVICE</u>	1,829,192	(\$2,000)	-0.11%
MSBA/DCAM Reimbursement	0		
Local Receipts	0		
Debt Service Assessment	1,829,192	(\$2,000)	-0.11%
<u>CAPITAL IMPROVEMENTS</u>	343,593	\$57,157	19.95%
Local Receipts	0		
Capital Improvements Assessment	343,593	\$57,157	19.95%
<u>GROSS BUDGET</u>	\$28,488,391	\$1,309,261	4.82%
Total Estimated State Aid	5,068,828	\$318,024	6.69%
Total Assessment to Communities	16,749,935	\$1,250,397	8.07%
Local Receipts	6,669,628	(\$259,160)	-3.74%
Gross Budget	<u>28,488,391</u>	<u>\$1,309,261</u>	4.82%

Essex North Shore Agricultural and Technical School District
FY 2019 Preliminary Revenue Detail

	<u>Budget</u>	<u>\$ Inc(Decr)</u>	<u>% Incr(Decr)</u>
<u>Revenues:</u>			
State Aid			
Chapter 70	\$4,100,186	\$314,366	8.30%
Transportation Reimbursement	968,642	\$3,658	0.38%
Total State Aid	\$5,068,828	\$318,024	6.69%
<u>Local Revenue Source</u>			
Ch 74 Tuition in (300 x \$15,250)	\$4,575,000	(\$418,800)	-8.39%
Medicaid	50,000	(20,000)	-28.57%
Interest	45,000	8,000	21.62%
E & D	1,000,000	100,000	11.11%
Sports Complex Rent	111,000	1,000	0.91%
Parking fees	45,540	25,540	127.70%
Athletic fees	80,000	60,000	300.00%
Facilities rental revolving fund	184,288	0	0.00%
Tuition revolving fund	0	(50,000)	-100.00%
Career (shop) Revolving fund	0	0	
Athletic gate receipts revolving fund	0	0	
Adult Education revolving fund	25,000	0	0.00%
Foundation budget local receipts	\$6,115,828	(\$294,260)	-4.59%
Out of District Transportation	553,800	35,100	6.77%
Regional Transportation Reimbursement Fund	0		
Transportation Budget Local Receipts	\$553,800	\$35,100	6.77%
BAN Premium	\$0	0	
Bond Premium	0	0	
Debt Service Budget Local Receipts	0	0	
Total Local Receipts	\$6,669,628	(\$259,160)	-3.74%
Grand Total Revenues	\$11,738,456	\$58,864	0.50%

Essex North Shore Agricultural and Technical School District
FY 2019 Preliminary Budget

GL Account	Description	FY 17	FY 18	FY 19	\$	%	
		Actual	Final Budget	Preliminary Budget	Change	Change	
DISTRICT LEADERSHIP AND ADMINISTRATION							
SCHOOL COMMITTEE:							
1-5-1100-000	TREASURER	10,975.46	11,094.00	11,094.00	0.00	0.00%	
1-5-1110-302	RECORDING SECRETARY	0.00	5,000.00	5,000.00	0.00	0.00%	
1-5-1110-402	COMMUNITY FUNCTIONS	25.00	0.00	0.00	0.00	0.00%	
1-5-1110-403	PRINTING	0.00	0.00	0.00	0.00	0.00%	
1-5-1110-404	MISCELLANEOUS	6,925.80	10,000.00	10,000.00	0.00	0.00%	
1-5-1110-406	N.E. ASSOC. OF SCH & COLLEGE	3,460.00	19,615.00	4,000.00	(15,615.00)	-79.61%	
1-5-1110-408	BANK SERVICES	1,800.00	1,800.00	1,800.00	0.00	0.00%	
1-5-1110-409	CONSULTANTS	5,375.00	0.00	0.00	0.00	0.00%	
1-5-1110-411	MERGER	0.00	0.00	0.00	0.00	0.00%	
1-5-1110-501	STATIONERY	0.00	1,500.00	1,500.00	0.00	0.00%	
1-5-1110-502	PETTY CASH	0.00	300.00	300.00	0.00	0.00%	
1-5-1110-601	POSTAGE	0.00	5,500.00	4,500.00	(1,000.00)	-18.18%	
1-5-1110-602	TRAVEL	1,931.59	3,500.00	3,500.00	0.00	0.00%	
TOTAL SCHOOL COMMITTEE SERVICES		30,492.85	58,309.00	41,694.00	(16,615.00)	-28.49%	
1-5-1200000 SUPERINTENDENT:							
1-5-1210-101	SUPERINTENDENT-DIRECTOR	194,091.72	199,089.00	199,089.00	0.00	0.00%	
1-5-1210-201	EXECUTIVE SECRETARY	82,745.62	83,645.00	83,645.00	0.00	0.00%	
1-5-1210-302	OFFICE SECRETARY	21,734.06	16,392.00	0.00	(16,392.00)	-100.00%	
1-5-1210-401	ADVERTISING	683.68	1,700.00	1,700.00	0.00	0.00%	
1-5-1210-402	CONTRACTED SERVICES	650.00	650.00	650.00	0.00	0.00%	
1-5-1210-501	OFFICE SUPPLIES	117.97	750.00	750.00	0.00	0.00%	
1-5-1210-502	ADVISORY COMMITTEE MEET	3,275.00	7,800.00	8,000.00	200.00	2.56%	
1-5-1210-504	COMMUNITY/DISTRICT FUNCTIONS	1,105.96	2,500.00	2,500.00	0.00	0.00%	
1-5-1210-505	PROF. BOOKS/PERIODICALS	408.80	1,200.00	1,200.00	0.00	0.00%	
1-5-1210-601	TRAVEL	2,015.50	3,000.00	3,000.00	0.00	0.00%	
1-5-1210-602	POSTAGE	0.00	2,500.00	2,500.00	0.00	0.00%	
1-5-1220-101	COMMUNITY RELATIONS COORD	20,307.65	0.00	0.00	0.00		
TOTAL SUPERINTENDENT'S OFFICE		327,135.96	319,226.00	303,034.00	(16,192.00)	-5.07%	
1-5-1400-000 FINANCE AND ADMINISTRATIVE SERVICES							
1-5-1410-101	BUSINESS MANAGER	139,484.19	142,368.00	148,333.00	5,965.00	4.19%	
1-5-1410-301	ADMINISTRATIVE ASST	0.00	27,500.00	27,500.00			
1-5-1410-302	ASSISTANT PROCUREMENT OFFICER	58,784.17	60,099.00	61,308.00	1,209.00	2.01%	
1-5-1410-303	ACCOUNTING CLERK	58,562.00	60,099.00	61,308.00	1,209.00	2.01%	
1-5-1410-305	SUPPORT STAFF	55,224.65	61,014.00	62,990.00	1,976.00	3.24%	
1-5-1410-401	EQUIPMENT SERVICE	0.00	0.00	2,500.00	2,500.00		
1-5-1410-403	COMPUTER SERVICES	1,271.00	0.00	1,000.00	1,000.00		
1-5-1410-404	CONSULTANTS	0.00	500.00	750.00	250.00	50.00%	
1-5-1410-405	AUDIT	23,660.00	22,500.00	30,000.00	7,500.00	33.33%	
1-5-1410-501	OFFICE SUPPLIES	3,034.06	4,279.00	4,479.00	200.00	4.67%	

Essex North Shore Agricultural and Technical School District
FY 2019 Preliminary Budget

GL Account	Description	FY 18		FY 19		% Change
		FY 17	Final Budget	Preliminary Budget	\$ Change	
1-5-1410-502	PROF. BOOKS/PERIODICALS	0.00	250.00	250.00	0.00	0.00%
1-5-1410-503	COMPUTER EQUIP	0.00	1,200.00	1,200.00	0.00	0.00%
1-5-1410-504	SOFTWARE	2,885.00	66,911.00	14,243.00	(52,668.00)	-78.71%
1-5-1410-601	TRAVEL	122.37	500.00	500.00	0.00	0.00%
1-5-1420-101	HUMAN RESOURCE DIR	70,219.00	143,891.00	127,000.00	(16,891.00)	-11.74%
1-5-1420-201	ADMINISTRATIVE ASST	27,581.00	68,952.00	27,500.00	(41,452.00)	-60.12%
1-5-1420-401	CONTRACTED SERVICES	1,088.60	2,050.00	0.00	(2,050.00)	-100.00%
1-5-1420-402	ADVERTISING	0.00	1,500.00	2,500.00	1,000.00	66.67%
1-5-1420-501	OFFICE SUPPLIES	(34.62)	250.00	300.00	50.00	20.00%
1-5-1420-502	PROFESSIONAL PERIODICALS	0.00	225.00	130.00	(95.00)	-42.22%
1-5-1420-601	POSTAGE	0.00	450.00	450.00	0.00	0.00%
1-5-1420-602	TRAVEL	0.00	400.00	300.00	(100.00)	-25.00%
1-5-1430-401	LEGAL FEES	60,719.56	50,000.00	50,000.00	0.00	0.00%
TOTAL FINANCE AND ADMINISTRATIVE SERVICES		502,600.98	687,438.00	624,541.00	(62,897.00)	-9.15%
1-5-1450-000	DISTRICTWIDE INFORMATION MGT. AND TECH.					
1-5-1450-101	TECHNOLOGY DIRECTOR	121,831.18	122,554.00	128,156.00	5,602.00	4.57%
1-5-1450-201	REGISTRAR	53,319.84	55,517.00	58,325.00	2,808.00	5.06%
1-5-1450-301	TECHNOLOGY SUPPORT STAFF	143,276.13	151,091.00	155,626.00	4,535.00	3.00%
1-5-1450-302	OTHER SALARIES	13,280.85	14,040.00	14,040.00	0.00	0.00%
1-5-1450-401	CONTRACTED SERVICES	95,505.53	66,794.00	90,200.00	23,406.00	35.04%
1-5-1450-501	HARDWARE	14,457.06	114,992.00	47,000.00	(67,992.00)	-59.13%
1-5-1450-502	SOFTWARE	42,944.99	59,087.00	83,646.00	24,559.00	41.56%
1-5-1450-601	TRAVEL	2,859.45	7,400.00	9,400.00	2,000.00	27.03%
TOTAL DISTRICT WIDE INFO. MGT. AND TECHNOLOGY		487,475.03	591,475.00	586,393.00	(5,082.00)	-0.86%
1-5-2000-000	INSTRUCTION					
1-5-2100-000	DISTRICTWIDE ACADEMIC LEADERSHIP					
1-5-2110-000	SUPERVISORY SERVICES:					
1-5-2110-101	DIRECTOR OF CURRICULUM	0.00	0.00	0.00	0.00	
1-5-2110-102	SPECIAL EDUCATION ADMIN AND ASST ADMIN	213,791.15	217,316.00	222,632.00	5,316.00	2.45%
1-5-2110-103	VOCATIONAL DIRECTOR	17,925.54	0.00	0.00	0.00	
1-5-2110-104	SPECIAL POP/PUPIL PERSONNEL	72,865.08	0.00	0.00	0.00	
1-5-2110-107	GRANT COORDINATOR	30,565.49	30,907.00	33,907.00	3,000.00	9.71%
1-5-2110-108	COOPERATIVE EDUC COORD	44,574.07	76,087.00	89,129.00	13,042.00	17.14%
1-5-2110-201	SECRETARIES - SPECIAL EDUCATION	51,506.75	53,645.00	56,628.00	2,983.00	5.56%
1-5-2110-202	SECRETARY - CURR	65,386.24	0.00	0.00	0.00	
1-5-2110-401	PASSENGER ELEVATOR	1,610.50	0.00	0.00	0.00	
1-5-2110-402	BEHAVIORAL CONSULTANTS	60,662.50	63,000.00	63,000.00	0.00	0.00%
1-5-2110-404	COPIER MAINTENANCE	0.00	500.00	500.00	0.00	0.00%

Essex North Shore Agricultural and Technical School District
FY 2019 Preliminary Budget

GL Account	Description	FY 17	FY 18	FY 19	\$	%
		Actual	Final Budget	Preliminary Budget	Change	Change
1-5-2110-405	CONTRACTED SERVICES - SPEC EDUCATION	11,126.77	23,440.00	28,550.00	5,110.00	21.80%
1-5-2110-406	CONTRACTED SERVICES - REG EDUCATION	0.00	4,200.00	4,200.00	0.00	0.00%
1-5-2110-502	OFFICE SUPPLIES/EQUIP	956.54	4,200.00	3,700.00	(500.00)	-11.90%
1-5-2110-504	CURRICULUM MATERIALS AND SUPPLIES	2,692.77	3,000.00	3,000.00	0.00	0.00%
1-5-2110-506	CURRICULUM PROF. BOOKS	0.00	1,500.00	1,500.00	0.00	0.00%
1-5-2110-601	TRAVEL	515.32	750.00	250.00	(500.00)	-66.67%
1-5-2110-602	POSTAGE	0.00	2,500.00	1,500.00	(1,000.00)	-40.00%
TOTAL DISTRICT WIDE ACADEMIC LEADERSHIP		574,178.72	481,045.00	508,496.00	27,451.00	5.71%
1-5-2200-000	SCHOOL BUILDING LEADERSHIP					
1-5-2210-101	PRINCIPAL	147,570.10	147,013.00	148,022.00	1,009.00	0.69%
1-5-2210-102	ASSISTANT PRINCIPALS	428,161.40	324,140.00	336,285.00	12,145.00	3.75%
1-5-2210-201	EXECUTIVE SECRETARY	42,690.10	65,135.00	56,628.00	(8,507.00)	-13.06%
1-5-2210-202	OFFICE SECRETARY	44,905.79	46,742.00	49,355.00	2,613.00	5.59%
1-5-2210-203	ACADEMY SECRETARIES	240,605.87	185,897.00	188,371.00	2,474.00	1.33%
1-5-2210-401	PRINTING	637.35	7,000.00	7,000.00	0.00	0.00%
1-5-2210-402	SERVICE CONTRACTS	0.00	0.00	0.00	0.00	0.00%
1-5-2210-501	AWARDS ASSEMBLY	0.00	2,000.00	2,000.00	0.00	0.00%
1-5-2210-502	GRADUATION	1,424.84	1,600.00	1,000.00	(600.00)	-37.50%
1-5-2210-503	DIPLOMAS	3,227.58	5,625.00	5,625.00	0.00	0.00%
1-5-2210-505	FIELD DAY/SENIOR LUNCHEON	4,036.50	5,000.00	5,000.00	0.00	0.00%
1-5-2210-506	OFFICE SUPPLIES	5,228.95	15,000.00	15,000.00	0.00	0.00%
1-5-2210-507	IN-SCHOOL MEETINGS/ACTIVITIES	10,206.84	14,575.00	14,575.00	0.00	0.00%
1-5-2210-508	PROF. BOOKS AND PERIODICALS	486.31	1,800.00	1,800.00	0.00	0.00%
1-5-2210-509	STUDENT ACTIVITIES	273.84	3,000.00	4,978.00	1,978.00	65.93%
1-5-2210-601	POSTAGE	0.00	4,800.00	3,500.00	(1,300.00)	-27.08%
1-5-2210-602	TRAVEL	510.05	500.00	500.00	0.00	0.00%
1-5-2220-102	CAREER & TECH COORDS	178,592.04	209,636.00	260,831.00	51,195.00	24.42%
1-5-2220-103	STEM/HUMANITIES DIRECTORS	224,146.22	128,199.00	119,457.00	(8,742.00)	-6.82%
1-5-2220-104	COMMUNITY REL/PARTNERSHIPS	0.00	10,000.00	95,769.00	85,769.00	857.69%
1-5-2220-105	CONTENT AREA FACILITATORS			14,000.00	14,000.00	
1-5-2220-201	ADMINISTRATIVE ASST			52,865.00	52,865.00	
1-5-2220-601	TRAVEL			2,000.00	2,000.00	
TOTAL SCHOOL BUILDING LEADERSHIP		1,332,703.78	1,177,662.00	1,384,561.00	206,899.00	17.57%
1-5-2250-000	BUILDING TECHNOLOGY:					
1-5-2250-501	COMPUTER HARDWARE	4,890.00	6,000.00	6,000.00	0.00	0.00%
1-5-2250-502	COMPUTER SOFTWARE	22,000.00	26,000.00	26,000.00	0.00	0.00%
TOTAL BUILDING TECHNOLOGY		26,890.00	32,000.00	32,000.00	0.00	0.00%

Essex North Shore Agricultural and Technical School District
FY 2019 Preliminary Budget

<u>GL Account</u>	<u>Description</u>	FY 17	FY 18	FY 19	\$	%
		Actual	Final Budget	Preliminary Budget	Change	Change
1-5-2300-000	INSTRUCTION - TEACHING SERVICES:					
1-5-2305-101	TEACHERS' SALARIES	7,421,884.76	8,248,306.00	8,564,020.00	315,714.00	3.83%
1-5-2310-101	TEACHERS' SALARIES - SPECIAL EDUC.	1,070,324.53	1,128,419.00	1,165,069.00	36,650.00	3.25%
1-5-2320-101	SPEECH LANGUAGE SPECIALIST	89,711.04	90,832.00	92,649.00	1,817.00	2.00%
1-5-2325-301	SUBSTITUTE TEACHERS	107,409.72	90,000.00	115,000.00	25,000.00	27.78%
1-5-2330-301	PARAPROFESSIONALS/AIDES - CTE	53,299.88	50,750.00	62,849.00	12,099.00	23.84%
1-5-2330-302	PARAPROFESSIONALS/AIDES - SPEC EDUC	94,302.45	95,157.00	33,312.00	(61,845.00)	-64.99%
1-5-2330-303	HOME TUTORING & EVALUATIONS	9,414.25	20,000.00	20,750.00	750.00	3.75%
1-5-2330-305	HOMEWORK CENTER	0.00	0.00	0.00	0.00	
1-5-2330-401	CONSULTANTS	20,100.00	0.00	0.00	0.00	
1-5-2330-402	CONTRACTED SERVICES	1,250.00	2,000.00	1,875.00	(125.00)	-6.25%
1-5-2330-403	EARLY COLLEGE HS	10,300.00	15,000.00	15,000.00	0.00	0.00%
1-5-2340-101	LIBRARIAN	86,675.00	89,051.00	89,255.00	204.00	0.23%
1-5-2340-201	CLERICAL	38,801.88	38,720.00	0.00	(38,720.00)	-100.00%
TOTAL INSTRUCTION - TEACHING SERVICES		9,003,473.51	9,868,235.00	10,159,779.00	291,544.00	2.95%
1-5-23500000	PROFESSIONAL DEVELOPMENT:					
1-5-2351-601	TRAVEL	20.87				
1-5-2353-101	STAFF PROF DAYS(BEYOND SCH DAY)	31,552.71	30,000.00	23,500.00	(6,500.00)	-21.67%
1-5-2355-301	SUBSTITUTES	(240.00)	0.00	0.00	0.00	
1-5-2357-101	SALARIES	0.00	0.00	0.00	0.00	
1-5-2357-401	CONTRACTED SERVICES	3,549.11	0.00	0.00	0.00	
1-5-2357-402	DUES/CONFERENCES	63,304.83	113,275.00	136,047.00	22,772.00	20.10%
1-5-2357-403	TUITION REIMB	32,794.40	30,000.00	30,000.00	0.00	0.00%
1-5-2357-501	SUPPLIES	216.56	1,000.00	3,000.00	2,000.00	200.00%
1-5-2357-601	TRAVEL	4,440.04	5,000.00	5,000.00	0.00	0.00%
TOTAL PROFESSIONAL DEVELOPMENT		135,638.52	179,275.00	197,547.00	18,272.00	10.19%
1-5-2400-000	INSTRUCTIONAL MAT. AND EQUIPMENT:					
1-5-2410-501	TEXTBOOKS	137,465.54	140,365.00	124,968.00	(15,397.00)	-10.97%
1-5-2410-502	WORKBOOKS	4,865.38	13,106.00	13,436.00	330.00	2.52%
1-5-2410-503	A/V MATERIALS	3,320.98	5,136.00	885.00	(4,251.00)	-82.77%
1-5-2410-506	WRKBKS AND TEXT BKS-SPEC EDUCATION	0.00	3,750.00	1,750.00	(2,000.00)	-53.33%
1-5-2415-000	OTHER INSTRUCTIONAL MATERIALS:					

Essex North Shore Agricultural and Technical School District
FY 2019 Preliminary Budget

GL Account	Description	FY 17	FY 18	FY 19	\$	%
		Actual	Final Budget	Preliminary Budget	Change	Change
1-5-2415-501	LIBRARY BOOKS	6,704.62	9,000.00	9,000.00	0.00	0.00%
1-5-2415-502	PERIODICALS	1,290.00	1,925.00	1,204.00	(721.00)	-37.45%
1-5-2415-503	AUTO TECHNOLOGY	5,585.11	7,714.00	10,501.00	2,787.00	36.13%
1-5-2415-505	CARPENTRY	14,485.05	22,733.00	25,000.00	2,267.00	9.97%
1-5-2415-506	COLLISION REPAIR	12,646.51	17,817.00	12,590.00	(5,227.00)	-29.34%
1-5-2415-507	DESIGN & VISUAL COMMUNICATION	1,343.82	6,191.00	7,412.00	1,221.00	19.72%
1-5-2415-509	COSMETOLOGY	7,089.00	8,500.00	8,500.00	0.00	0.00%
1-5-2415-510	CULINARY ARTS	2,759.41	10,600.00	12,750.00	2,150.00	20.28%
1-5-2415-511	INFORMATION TECHNOLOGY SERVICES	565.43	1,701.00	980.00	(721.00)	-42.39%
1-5-2415-512	ELECTRICAL	16,678.51	33,961.00	33,400.00	(561.00)	-1.65%
1-5-2415-513	HEALTH ASSISTING	2,473.00	4,950.00	4,950.00	0.00	0.00%
1-5-2415-514	ADVANCED MANUFACTURING	4,643.67	20,000.00	15,830.00	(4,170.00)	-20.85%
1-5-2415-516	MASONRY	14,354.96	19,222.00	20,000.00	778.00	4.05%
1-5-2415-518	ENGLISH	0.00	2,259.00	2,219.00	(40.00)	-1.77%
1-5-2415-519	MATHEMATICS	3,897.82	3,074.00	2,022.00	(1,052.00)	-34.22%
1-5-2415-520	WELLNESS	729.69	1,895.00	2,568.00	673.00	35.51%
1-5-2415-521	SCIENCE	30,311.37	28,242.00	26,887.00	(1,355.00)	-4.80%
1-5-2415-523	SOCIAL STUDIES	0.00	1,518.00	1,728.00	210.00	13.83%
1-5-2415-524	GRAPHICS	4,980.54	10,701.00	9,308.00	(1,393.00)	-13.02%
1-5-2415-525	FOREIGN LANGUAGE	174.38	600.00	600.00	0.00	0.00%
1-5-2415-526	LIBRARY PERIODICALS	3,573.90	3,950.00	3,950.00	0.00	0.00%
1-5-2415-527	INSTRUCTIONAL MATERIALS-SPEC EDUCATION	809.20	4,600.00	4,050.00	(550.00)	-11.96%
1-5-2415-528	LIBRARY SUPPLIES	575.98	1,000.00	1,000.00	0.00	0.00%
1-5-2415-531	ENVIRONMENTAL TECHNOLOGY	6,694.18	11,983.00	9,942.00	(2,041.00)	-17.03%
1-5-2415-532	NATURAL RESOURCES MANAGEMENT	5,537.08	10,412.00	13,635.00	3,223.00	30.95%
1-5-2415-534	COMPANION ANIMAL	3,299.55	6,654.00	10,215.00	3,561.00	53.52%
1-5-2415-535	EQUINE SCIENCE	2,139.77	5,255.00	8,897.00	3,642.00	69.31%
1-5-2415-536	VETERINARY TECHNOLOGY	3,620.61	5,899.00	6,235.00	336.00	5.70%
1-5-2415-538	ARBORCULTURE	5,271.69	9,100.00	9,100.00	0.00	0.00%
1-5-2415-539	SUSTAINABLE HORTICULTURE	5,964.32	16,736.00	10,450.00	(6,286.00)	-37.56%
1-5-2415-540	LANDSCAPING & TURF	9,291.71	21,096.00	15,000.00	(6,096.00)	-28.90%
1-5-2415-541	PLUMBING	29,416.62	30,000.00	30,000.00	0.00	0.00%
1-5-2415-542	HVAC	24,465.21	28,512.00	29,625.00	1,113.00	3.90%
1-5-2415-543	BIO TECHNOLOGY	33,580.31	60,000.00	45,000.00	(15,000.00)	-25.00%
1-5-2415-544	DENTAL ASSISTING	21,198.51	35,611.00	25,000.00	(10,611.00)	-29.80%
1-5-2420-501	INSTRUCTIONAL EQUIPMENT	59,715.28	21,777.00	100,425.00	78,648.00	361.15%
1-5-2430-501	GENERAL SCHOOL SUPPLIES	73,052.32	75,000.00	83,000.00	8,000.00	10.67%
1-5-2440-301	FIELD TRIPS & OUTSIDE PROJEC TRAVEL	16,438.97	20,000.00	20,000.00	0.00	0.00%
1-5-2440-401	REPAIR/MAINT OF INSTRUCTIONAL EQUIP	27,707.99	58,854.00	42,817.00	(16,037.00)	-27.25%
1-5-2440-402	MASONRY DUMPSTER	0.00	2,500.00	0.00	(2,500.00)	-100.00%
1-5-2440-403	SERVICE CONTRACTS	29,948.45	101,816.00	109,242.00	7,426.00	7.29%
1-5-2440-404	ADVERTISING	0.00	800.00	0.00	(800.00)	-100.00%
1-5-2440-601	TRAVEL	31.03	2,200.00	500.00	(1,700.00)	-77.27%
1-5-2440-602	POSTAGE	0.00	4,500.00	2,750.00	(1,750.00)	-38.89%

Essex North Shore Agricultural and Technical School District
FY 2019 Preliminary Budget

GL Account	Description	FY 17	FY 18	FY 19	\$	%
		Actual	Final Budget	Preliminary Budget	Change	Change
TOTAL INSTRUCTIONAL MATERIALS AND EQUIPMENT		638,697.47	913,215.00	929,321.00	16,106.00	1.76%
1-5-2450-000	INSTRUCTIONAL TECHNOLOGY:					
1-5-2451-501	HARDWARE	57,956.18	134,149.00	266,950.00	132,801.00	99.00%
1-5-2453-401	CONTRACTED SERVICES	6,637.00	7,950.00	7,950.00	0.00	0.00%
1-5-2453-501	HARDWARE - LIBRARY/MEDIA	0.00	5,000.00	10,800.00	5,800.00	116.00%
1-5-2455-501	INSTRUCTIONAL SOFTWARE	41,436.85	68,508.00	84,120.00	15,612.00	22.79%
1-5-2455-502	LIBRARY SOFTWARE	0.00	0.00	0.00	0.00	
TOTAL INSTRUCTIONAL TECHNOLOGY		106,030.03	215,607.00	369,820.00	154,213.00	71.53%
1-5-2700-000	GUIDANCE, COUNSELING AND TESTING:					
1-5-2710-101	GUIDANCE COUNSELORS	473,739.56	504,697.00	493,110.00	(11,587.00)	-2.30%
1-5-2710-102	DIRECTOR OF GUIDANCE	109,720.93	114,199.00	119,457.00	5,258.00	4.60%
1-5-2710-103	ADJUSTMENT COUNSELORS	205,530.41	231,556.00	218,950.00	(12,606.00)	-5.44%
1-5-2710-104	ADMISSIONS COUNSELORS			81,485.00	81,485.00	
1-5-2710-201	SECRETARIES	52,343.62	55,517.00	58,325.00	2,808.00	5.06%
1-5-2710-401	PRINTING	2,731.80	6,400.00	12,700.00	6,300.00	98.44%
1-5-2710-402	ADVERTISING	6,976.99	7,000.00	11,800.00	4,800.00	68.57%
1-5-2710-403	COPIER MAINTENANCE	416.09	1,600.00	1,780.00	180.00	11.25%
1-5-2710-404	CONTRACTED SERVICES	6,500.00	21,000.00	27,000.00	6,000.00	28.57%
1-5-2710-501	OFFICE SUPPLIES	2,932.89	3,000.00	8,150.00	5,150.00	171.67%
1-5-2710-502	OFFICE EQUIPMENT	3,251.02	4,975.00	4,520.00	(455.00)	-9.15%
1-5-2710-503	REFERENCE BOOKS	120.00	500.00	700.00	200.00	40.00%
1-5-2710-506	RECRUITMENT SUPPLIES	12,663.33	10,600.00	18,900.00	8,300.00	78.30%
1-5-2710-507	A/V MATERIALS	2,132.00	8,300.00	12,900.00	4,600.00	55.42%
1-5-2710-601	TRAVEL	407.96	2,000.00	2,800.00	800.00	40.00%
1-5-2710-602	POSTAGE	0.00	2,300.00	2,300.00	0.00	0.00%
1-5-2720-405	TESTING PROCTORS	3,952.50	5,460.00	10,560.00	5,100.00	93.41%
1-5-2720-501	TESTING SUPPLIES	1,149.98	3,700.00	5,260.00	1,560.00	42.16%
1-5-2720-502	SPEC EDUCATION FORMS/TESTS	2,783.12	3,480.00	6,390.00	2,910.00	83.62%
TOTAL GUIDANCE, COUNSELING AND TESTING		887,352.20	986,284.00	1,097,087.00	110,803.00	11.23%
1-5-2800-000	PSYCHOLOGICAL SERVICES:					
1-5-2800-101	PSYCH. SERVICES	86,675.00	89,051.00	143,340.00	54,289.00	60.96%
1-5-2800-401	PSYCH. SERVICES - C/S	19,955.67	12,000.00	12,000.00	0.00	0.00%
TOTAL PSYCHOLOGICAL SERVICES		106,630.67	101,051.00	155,340.00	54,289.00	53.72%

GL Account	Description	FY 17	FY 18	FY 19	\$	%
		Actual	Final Budget	Preliminary Budget	Change	Change
1-5-3000-000	STUDENT SERVICES					
1-5-3100-000	OTHER SCHOOL SERVICES:					
1-5-3100-601	POSTAGE	0.00	5,000.00	2,500.00	(2,500.00)	-50.00%
TOTAL ATTENDANCE SERVICES		0.00	5,000.00	2,500.00	(2,500.00)	-50.00%
1-5-3200-000	HEALTH SERVICES:					
1-5-3200-101	SCHOOL NURSES	149,479.70	154,376.00	160,464.00	6,088.00	3.94%
1-5-3200-301	HEALTH ASSISTANT	7,725.00	12,941.00	26,665.00	13,724.00	106.05%
1-5-3200-401	SCHOOL DOCTOR	157.72	1,500.00	1,800.00	300.00	20.00%
1-5-3200-402	EQUIPMENT SERVICE	0.00	1,000.00	2,200.00	1,200.00	120.00%
1-5-3200-501	SUPPLIES	7,046.44	7,500.00	11,000.00	3,500.00	46.67%
1-5-3200-502	PERIODICALS	0.00	480.00	690.00	210.00	43.75%
1-5-3200-504	STUDENT HEALTH A/V	0.00	50.00	50.00	0.00	0.00%
1-5-3200-505	OFFICE EQUIPMENT	966.71	505.00	505.00	0.00	0.00%
TOTAL HEALTH SERVICES		165,375.57	178,352.00	203,374.00	25,022.00	14.03%
1-5-3400-000	FOOD SERVICES:					
1-5-3400-101	FOOD SERVICE DIRECTOR	74,850.72	77,445.00	81,540.00	4,095.00	5.29%
1-5-3400-201	FOOD SERVICE SALARY	53,829.36	53,829.00	58,510.00	4,681.00	8.70%
1-5-3400-501	EQUIPMENT	190.00				
TOTAL FOOD SERVICE		128,870.08	131,274.00	140,050.00	8,776.00	6.69%
1-5-3510-000	ATHLETIC PROGRAM:					
1-5-3510-101	ATHLETIC DIRECTOR	40,076.97	17,719.00	18,073.00	354.00	2.00%
1-5-3510-301	INTRAMURAL COACHES	8,540.50	11,843.00	12,077.00	234.00	1.98%
1-5-3510-302	INTERSCHOLASTIC COACHES	226,998.00	252,344.00	259,762.00	7,418.00	2.94%
1-5-3510-303	ATHLETIC TRAINER	25,000.00	25,313.00	25,819.00	506.00	2.00%
1-5-3510-304	SCORERS	14,465.00	15,000.00	16,000.00	1,000.00	6.67%
1-5-3510-305	EQUIPMENT INVENTORY/SITE SUPER/ASST AD	19,692.29	20,000.00	20,000.00	0.00	0.00%
1-5-3510-306	AWAY GAMES	34,441.98	35,000.00	36,000.00	1,000.00	2.86%
1-5-3510-401	OFFICIALS	38,801.43	41,500.00	42,500.00	1,000.00	2.41%
1-5-3510-402	CLINICS	3,195.00	1,500.00	2,000.00	500.00	33.33%
1-5-3510-403	LEAGUE DUES	13,759.75	15,250.00	16,100.00	850.00	5.57%
1-5-3510-405	TOURNAMENT FEES	610.00	850.00	1,250.00	400.00	47.06%
1-5-3510-406	AWARDS BANQUET	1,345.87	2,000.00	2,000.00	0.00	0.00%
1-5-3510-407	EQUIPMENT RECONDITIONING	12,709.16	20,000.00	21,000.00	1,000.00	5.00%
1-5-3510-408	TELEPHONE	0.00	0.00	0.00	0.00	
1-5-3510-409	PORTABLE FACILITIES	1,074.09	1,600.00	1,800.00	200.00	12.50%
1-5-3510-502	SOCER	1,013.15	4,420.00	1,684.00	(2,736.00)	-61.90%
1-5-3510-503	BASKETBALL (BOYS)	763.80	2,450.00	2,710.00	260.00	10.61%
1-5-3510-504	BASEBALL	1,747.26	3,550.00	4,720.00	1,170.00	32.96%
1-5-3510-505	SOFTBALL	1,208.16	1,260.00	2,264.00	1,004.00	79.68%
1-5-3510-506	BASKETBALL (GIRLS)	509.21	1,260.00	2,520.00	1,260.00	100.00%
1-5-3510-507	CHEERLEADING	288.59	634.00	750.00	116.00	18.30%
1-5-3510-508	VOLLEYBALL	1,255.58	720.00	1,020.00	300.00	41.67%

Essex North Shore Agricultural and Technical School District
FY 2019 Preliminary Budget

GL Account	Description	FY 17	FY 18	FY 19	\$	%
		Actual	Final Budget	Preliminary Budget	Change	Change
1-5-3510-509	MEDICAL SUPPLIES	4,095.91	6,200.00	10,500.00	4,300.00	69.35%
1-5-3510-510	SCOREBOOKS	334.12	300.00	300.00	0.00	0.00%
1-5-3510-511	AWARDS	1,577.45	4,200.00	4,410.00	210.00	5.00%
1-5-3510-512	FOOTBALL	3,271.00	4,892.00	4,152.00	(740.00)	-15.13%
1-5-3510-513	REFERENCE BOOKS	235.00	400.00	420.00	20.00	5.00%
1-5-3510-514	POLICE DETAIL	2,385.06	3,200.00	3,360.00	160.00	5.00%
1-5-3510-515	AMBULANCE	1,800.00	3,200.00	3,360.00	160.00	5.00%
1-5-3510-516	ATHLETIC EQUIP/SUPPLIES	942.00	2,000.00	5,500.00	3,500.00	175.00%
1-5-3510-517	WINTER TRACK	660.00	1,940.00	1,160.00	(780.00)	-40.21%
1-5-3510-518	GIRLS SOCCER	0.00	2,440.00	1,882.00	(558.00)	-22.87%
1-5-3510-519	BOYS LACROSSE	1,759.00	1,600.00	1,706.00	106.00	6.63%
1-5-3510-520	GIRLS LACROSSE	683.00	1,496.00	712.00	(784.00)	-52.41%
1-5-3510-521	WRESTLING	899.19	900.00	235.00	(665.00)	-73.89%
1-5-3510-522	SPRING TRACK	999.00	2,158.00	2,200.00	42.00	1.95%
1-5-3510-523	HOCKEY	14,594.00	26,400.00	35,300.00	8,900.00	33.71%
1-5-3510-524	FIELD HOCKEY		0.00	4,185.00	4,185.00	
1-5-3510-525	GOLF	800.00	2,100.00	1,620.00	(480.00)	-22.86%
1-5-3510-526	GYMNASICS	10,285.00	12,650.00	1,500.00	(11,150.00)	-88.14%
1-5-3510-527	SWIMMING		0.00	0.00	0.00	
1-5-3510-601	TRAVEL	743.56	1,500.00	1,500.00	0.00	0.00%
TOTAL ATHLETIC SERVICES		493,559.08	551,789.00	574,051.00	22,262.00	4.03%
1-5-3520-000 OTHER STUDENT BODY ACTIVITIES:						
1-5-3520-301	ADVISORS - CLASS	8,829.00	8,940.00	9,119.00	179.00	2.00%
1-5-3520-302	ADVISORS - OTHER	76,467.46	88,817.00	90,593.00	1,776.00	2.00%
1-5-3520-401	CONTRACTED SERVICES	2,510.00	5,000.00	10,000.00	5,000.00	100.00%
1-5-3520-402 DUES/CONFERENCES/MEMBERSHIPS						
1-5-3520-501	SUPPLIES & MATERIALS	2,244.50	10,000.00	5,000.00	(5,000.00)	-50.00%
1-5-3520-602	TRAVEL	264.02	10,000.00	10,000.00	0.00	0.00%
1-5-3600-301 PARA PROFESSIONALS (STUDENT SUPER)						
1-5-3600-402	SECURITY	92,328.57	60,900.00	71,842.00	10,942.00	17.97%
1-5-3600-402		58,267.75	188,019.00	215,548.00	27,529.00	14.64%
TOTAL OTHER STUDENT BODY ACTIVITIES		259,171.30	397,126.00	463,882.00	66,756.00	16.81%
GRAND TOTAL STUDENT SERVICES		1,046,976.03	1,263,541.00	1,383,857.00	120,316.00	9.52%
1-5-4110-000 OPERATION & MAINT. OF PLANT:						
1-5-4110-100 CUSTODIAL SERVICES:						
1-5-4110-301	CUSTODIAN	206,585.15	204,859.00	220,987.00	16,128.00	7.87%
1-5-4110-302	CUSTODIANS - NIGHTS	355,518.07	438,216.00	444,803.00	6,587.00	1.50%
1-5-4110-303	CUSTODIAL OVERTIME	11,137.06	20,000.00	23,000.00	3,000.00	15.00%

Essex North Shore Agricultural and Technical School District
FY 2019 Preliminary Budget

GL Account	Description	FY 17	FY 18	FY 19	\$	%
		Actual	Final Budget	Preliminary Budget	Change	Change
1-5-4110-405	TRASH REMOVAL	37,294.58	38,992.00	39,000.00	8.00	0.02%
1-5-4110-409	MAINT/REPAIR OF EQUIPMENT	20,134.17	37,470.00	32,640.00	(4,830.00)	-12.89%
1-5-4110-410	CONTRACTED SERVICES	44,751.31	43,350.00	46,640.00	3,290.00	7.59%
1-5-4110-501	CUSTODIAL SUPPLIES	48,932.11	36,841.00	41,871.00	5,030.00	13.65%
1-5-4110-502	PAINTS	69.15	9,000.00	3,103.00	(5,897.00)	-65.52%
1-5-4110-503	ELECTRIC SUPPLIES	13,178.01	17,170.00	19,580.00	2,410.00	14.04%
1-5-4110-504	PLUMBING SUPPLIES	8,056.24	8,000.00	6,500.00	(1,500.00)	-18.75%
1-5-4110-505	HARDWARE	8,073.66	5,150.00	8,750.00	3,600.00	69.90%
1-5-4110-506	EXTERIOR MAINTENANCE	4,644.24	13,000.00	22,700.00	9,700.00	74.62%
1-5-4110-507	INTERIOR MAINTENANCE	12,363.04	24,900.00	47,000.00	22,100.00	88.76%
1-5-4110-510	SAND & SALT	7,281.72	2,500.00	1,300.00	(1,200.00)	-48.00%
1-5-4110-511	TOOLS	2,831.13	3,000.00	3,000.00	0.00	0.00%
1-5-4110-512	FIELD MAINTENANCE	13,119.83	18,880.00	11,430.00	(7,450.00)	-39.46%
TOTAL CUSTODIAL SERVICES		793,969.47	921,328.00	972,304.00	50,976.00	5.53%
1-5-4120	HEATING OF BUILDING:					
1-5-4120-401	HEAT	269,782.36	297,630.00	297,630.00	0.00	0.00%
TOTAL HEATING OF BUILDING		269,782.36	297,630.00	297,630.00	0.00	0.00%
1-5-4130	UTILITIES:					
1-5-4130-401	ELECTRICITY	442,419.92	556,307.00	525,000.00	(31,307.00)	-5.63%
1-5-4130-402	WATER/SEWER	70,637.65	117,301.00	100,000.00	(17,301.00)	-14.75%
1-5-4130-403	TELEPHONE	69,647.08	77,000.00	80,622.00	3,622.00	4.70%
TOTAL UTILITIES		582,704.65	750,608.00	705,622.00	(44,986.00)	-5.99%
1-5-4210	MAINTENANCE OF GROUNDS:					
1-5-4210-101	AGRICULTURAL MGMT	94,355.74	97,563.00	102,722.00	5,159.00	5.29%
1-5-4210-301	FARM SALARIES	153,170.17	209,893.00	236,459.00	26,566.00	12.66%
1-5-4210-302	FARM OVERTIME	9,957.13	14,340.00	15,900.00	1,560.00	10.88%
1-5-4210-303	BUILDING AND GROUNDS	167,006.29	130,190.00	166,171.00	35,981.00	27.64%
1-5-4210-304	FARM HELP	50,809.90	62,330.00	58,830.00	(3,500.00)	-5.62%
1-5-4210-401	FARM CONTRACTED SERVICES	20,887.69	15,520.00	18,070.00	2,550.00	16.43%
1-5-4210-402	BLD AND GROUNDS CONTRACTED SERVICES	0.00	0.00	0.00	0.00	
1-5-4210-501	FARM SUPPLIES	37,701.45	39,840.00	53,740.00	13,900.00	34.89%
1-5-4210-502	SUPPLIES AND MATERIALS	32,537.98	35,800.00	22,500.00	(13,300.00)	-37.15%
1-5-4210-503	FARM TOOLS	2,950.36	5,100.00	12,925.00	7,825.00	153.43%
1-5-4210-504	BLD AND GROUNDS TOOLS	0.00	2,850.00	0.00	(2,850.00)	-100.00%
1-5-4210-505	Sand and Salt			8,420.00	8,420.00	
1-5-4210-601	TRAVEL	0.00	250.00	250.00	0.00	0.00%
1-5-4210-602	LICENSES, DUES AND PERMITS	2,098.00	5,050.00	5,295.00	245.00	4.85%
TOTAL FARM, BUILDING AND GROUNDS		571,474.71	618,726.00	701,282.00	82,556.00	13.34%

Essex North Shore Agricultural and Technical School District
FY 2019 Preliminary Budget

GL Account	Description	FY 17	FY 18	FY 19	\$	%
		Actual	Final Budget	Preliminary Budget	Change	Change
1-5-4220-000 MAINTENANCE OF BUILDING:						
1-5-4220-101	FACILITY MANAGER	100,564.16	103,203.00	108,493.00	5,290.00	5.13%
1-5-4220-301	SUMMER MAINTENANCE	12,681.75	12,000.00	10,000.00	(2,000.00)	-16.67%
1-5-4220-302	MAINTENANCE	48,740.81	74,797.00	79,472.00	4,675.00	6.25%
1-5-4220-303	BUILDINGS AND GROUNDS	0.00	0.00	0.00	0.00	
1-5-4220-402	REFRIG/STORAGE/TRAPS EQ. REP/MAINT	5,339.20	17,000.00	20,600.00	3,600.00	21.18%
1-5-4220-403	GLASS REPLACEMENT	3,007.96	5,000.00	5,000.00	0.00	0.00%
1-5-4220-404	FIRE EXTINGUISHERS	0.00	5,838.00	5,950.00	112.00	1.92%
1-5-4220-406	FIRE ALARM SYSTEM	27,504.65	27,500.00	25,000.00	(2,500.00)	-9.09%
1-5-4220-407	HAZARDOUS WASTE	4,171.01	1,000.00	12,465.00	11,465.00	1146.50%
1-5-4220-408	PEST CONTROL	3,105.00	3,510.00	3,640.00	130.00	3.70%
1-5-4220-409	PLUMBING MAINTENANCE	2,281.88	8,150.00	13,400.00	5,250.00	64.42%
1-5-4220-410	UNIFORM SERVICE	434.35	2,250.00	9,000.00	6,750.00	300.00%
1-5-4220-411	HVAC MAINTENANCE	27,863.57	61,980.00	48,000.00	(13,980.00)	-22.56%
1-5-4220-412	BURGLAR ALARM	0.00	1,500.00	0.00	(1,500.00)	-100.00%
1-5-4220-413	ENVIRONMENTAL WASTE	0.00	0.00	0.00	0.00	
1-5-4220-414	PERMITS AND FEES	1,250.00	3,700.00	5,050.00	1,350.00	36.49%
TOTAL MAINTENANCE OF BUILDING		236,944.34	327,428.00	346,070.00	18,642.00	5.69%
1-5-4225-000 BUILDING SECURITY (UNDER \$5000)						
1-5-4400-000 NETWORKING & TELECOMMUNICATION						
1-5-4300 EXTRAORDINARY MAINTENANCE						
1-5-4300-401	CONTRACTED SERVICES	0.00	127,500.00	55,000.00	(72,500.00)	-56.86%
1-5-4300-501	SUPPLIES AND MATERIALS	0.00	0.00	0.00	0.00	
1-5-4300-502	CONTINGENCIES	0.00	59,710.00	50,000.00	(9,710.00)	-16.26%
1-5-4300-503	STABILIZATION FUND	0.00	75,000.00	75,000.00	75,000.00	
TOTAL EXTRAORDINARY MAINTENANCE		0.00	187,210.00	180,000.00	(7,210.00)	-3.85%
1-5-5100-000 EMP.BENEFITS & FIXED CHARGES:						
1-5-5100-401	EMPLOYEE RETIREMENT	1,018,248.00	551,926.00	583,274.00	31,348.00	5.68%
1-5-5150-401	EMPLOYEE BUYBACKS/SEPARATION COST	71,236.05	44,830.00	44,830.00	0.00	0.00%
1-5-5200-401	HEALTH INSURANCE	1,831,824.15	2,038,437.00	2,212,359.00	173,922.00	8.53%
1-5-5200-402	GROUP LIFE	0.00	0.00	0.00	0.00	
1-5-5200-403	UNEMPLOYMENT INSURANCE	29,734.64	29,500.00	49,000.00	19,500.00	66.10%
1-5-5200-404	PACKAGE POLICY/PROPERTY INSURANCE	117,608.00	123,288.00	126,987.00	3,699.00	3.00%

Essex North Shore Agricultural and Technical School District
FY 2019 Preliminary Budget

GL Account	Description	FY 17	FY 18	FY 19	\$	%
		Actual	Final Budget	Preliminary Budget	Change	Change
1-5-5200-405	CATASTROPHE/EXCESS LIABILITY	9,934.00	10,000.00	10,470.00	470.00	4.70%
1-5-5200-406	SCH BD/ERRORS AND OMISSIONS/EMP PRACTICES	7,308.00	7,450.00	7,869.00	419.00	5.62%
1-5-5200-407	WORKERS COMPENSATION	126,267.00	154,098.00	154,098.00	0.00	0.00%
1-5-5200-409	TREASURER'S/PUBLIC EMP BOND	2,080.00	0.00	0.00	0.00	
1-5-5200-410	INDIVIDUAL LIFE INSURANCE	5,500.00	5,500.00	5,500.00	0.00	0.00%
1-5-5200-411	STUDENT ACCIDENT LEGAL	10,593.00	11,123.00	11,123.00	0.00	0.00%
1-5-5200-412	EXTENDED LIABILITY	5,321.00	19,431.00	7,500.00	(11,931.00)	-61.40%
1-5-5200-413	MEDICARE - EMPLOYER'S SHARE	227,166.13	246,122.00	251,044.00	4,922.00	2.00%
1-5-5200-414	RETIREE HEALTH INS	7,672.60	0.00	0.00	0.00	
1-5-5200-417	OTHER EMPLOYEE BENEFITS	21,811.00	40,000.00	20,000.00	(20,000.00)	-50.00%
1-5-5200-418	RETIREE DENTAL	0.00	0.00	0.00	0.00	
1-5-5200-419	AUTO INSURANCE	389.03	5,000.00	5,000.00	0.00	0.00%
TOTAL EMPLOYEE BENEFITS		3,492,692.60	3,286,705.00	3,489,054.00	202,349.00	6.16%
1-5-5300-800	RENTALS & OTHER FIXED CHARGES:					
1-5-5300-901	POSTAGE MACHINE/METER	4,270.09	4,302.00	4,178.00	(124.00)	-2.88%
1-5-5300-903	COPIER LEASES	20,172.12	23,901.00	27,160.00	3,259.00	13.64%
TOTAL OTHER FIXED CHARGES		24,442.21	28,203.00	31,338.00	3,135.00	11.12%
1-5-5400-700	SHORT-TERM INTEREST:					
1-5-5400-701	INTEREST ON REVENUE LOANS	0.00	4,000.00	4,000.00	0.00	0.00%
1-5-5450-701	INTEREST ON BANS	36,969.51	0.00	0.00	0.00	
TOTAL SHORT TERM INTEREST		36,969.51	4,000.00	4,000.00	0.00	0.00%
	NON ASSOC SALARY INCR	0.00	0.00	10,000.00	10,000.00	
		0.00	0.00	10,000.00	10,000.00	
TOTAL FOUNDATION BUDGET		21,215,255.60	23,296,201.00	24,510,770.00	1,214,569.00	5.21%
1-5-7000-000	CAPITAL IMPROVEMENTS:					
1-5-7300-501	EQUIPMENT	0.00	40,000.00	25,000.00	(15,000.00)	-37.50%
1-5-7300-502	FURNITURE & FIXTURES	38,265.56	73,410.00	35,907.00	(37,503.00)	-51.09%
1-5-7300-503	VEHICLES	437,039.20	173,026.00	282,686.00	109,660.00	63.38%
TOTAL CAPITAL IMPROVEMENTS		475,304.76	286,436.00	343,593.00	57,157.00	19.95%

Essex North Shore Agricultural and Technical School District
FY 2019 Preliminary Budget

<u>GL Account</u>	<u>Description</u>	FY 17	FY 18	FY 19	\$	%
		Actual	Final Budget	Preliminary Budget	Change	Change
1-5-8800-000	TRANSPORTATION:					
1-5-8800-101	TRANS. MANAGER	67,569.14	69,928.00	73,866.00	3,938.00	5.63%
1-5-8800-301	REGULAR DAY DRIVERS	644,698.60	797,935.00	797,935.00	0.00	0.00%
1-5-8800-302	LATE BUSES	97,397.01	131,951.00	131,951.00	0.00	0.00%
1-5-8800-306	GARAGE PERSONNEL	109,115.88	113,298.00	170,103.00	56,805.00	50.14%
1-5-8800-307	OVERTIME	11,711.21	7,500.00	7,500.00	0.00	0.00%
1-5-8800-309	DISPATCHER/ASST	50,888.66	52,145.00	55,079.00	2,934.00	5.63%
1-5-8800-401	IN-SERVICE TRAINING	25.00	1,500.00	7,728.00	6,228.00	415.20%
1-5-8800-402	PRE-SERVICE TRAINING	39.95	3,000.00	1,000.00	(2,000.00)	-66.67%
1-5-8800-403	MACHINE WORK	75.90	0.00	0.00	0.00	
1-5-8800-404	UNIFORMS & RAGS	928.17	1,020.00	2,300.00	1,280.00	125.49%
1-5-8800-405	CONTRACTED SERVICES	(109.06)	0.00	0.00	0.00	
1-5-8800-406	ADVERTISING	1,198.00	2,000.00	2,000.00	0.00	0.00%
1-5-8800-407	STICKERS	6,105.00	6,380.00	6,900.00	520.00	8.15%
1-5-8800-408	TOWING	7,767.89	3,000.00	7,000.00	4,000.00	133.33%
1-5-8800-409	COMMUNICATIONS	2,480.68	3,000.00	3,000.00	0.00	0.00%
1-5-8800-412	DRUG TESTING	2,260.00	3,400.00	4,000.00	600.00	17.65%
1-5-8800-413	UPHOLSTERY	0.00	1,800.00	1,800.00	0.00	0.00%
1-5-8800-414	GARAGE HEAT	0.00	0.00	0.00	0.00	
1-5-8800-415	VEHICLE INSURANCE	46,430.00	50,000.00	50,000.00	0.00	0.00%
1-5-8800-416	EMPLOYEE BENEFITS	76,868.64	95,174.00	100,774.00	5,600.00	5.88%
1-5-8800-417	ELECTRICITY	1,764.85	0.00	0.00	0.00	
1-5-8800-418	DUE/CONFERENCES	300.00	2,500.00	2,500.00	0.00	0.00%
1-5-8800-420	CONTRACTED SERVICES	36,914.96	39,750.00	45,000.00	5,250.00	13.21%
1-5-8800-501	FUEL	151,259.94	259,920.00	210,000.00	(49,920.00)	-19.21%
1-5-8800-502	OIL	7,196.00	10,000.00	10,000.00	0.00	0.00%
1-5-8800-503	SHOP SUPPLIES	13,220.97	12,000.00	13,500.00	1,500.00	12.50%
1-5-8800-504	TIRES & TUBES	21,769.28	18,000.00	21,000.00	3,000.00	16.67%
1-5-8800-505	PARTS	55,209.21	78,000.00	75,000.00	(3,000.00)	-3.85%
1-5-8800-506	ANTI-FREEZE	0.00	1,400.00	1,400.00	0.00	0.00%
1-5-8800-507	CLEANING SOLVENT	2,279.69	700.00	3,500.00	2,800.00	400.00%
TOTAL TRANSPORTATION		1,415,365.57	1,765,301.00	1,804,836.00	39,535.00	2.24%
1-5-9900-000	DEBT SERVICE:					
1-5-9900-100	PRINCIPAL & INTEREST ON SEPTIC SYS	35,997.50	0.00	0.00	0.00	
1-5-9900-101	PRIN & INT ON BOND FOR SCH BLDG	1,828,991.26	1,831,192.00	1,829,192.00	(2,000.00)	-0.11%
TOTAL DEBT SERVICE		1,864,988.76	1,831,192.00	1,829,192.00	(2,000.00)	-0.11%
GRAND TOTAL		24,970,914.69	27,179,130.00	28,488,391.00	1,309,261.00	4.82%

Essex North Shore Agricultural and Technical School District
FY 2019 Preliminary Assessments

				\----- Foundation -----/							
		Enrollment	Participation	Required	Above			Debt	Capital	FY 2019	Inr(decr)
Community	Enrollment	Enrollment	Participation	Minimum	Minimum	Transportation	Service	Improve.	Preliminary	from FY 2018	
	1-Oct-16	1-Oct-17	Percentage	Contribution	Assessment	Assessment	Assessment	Assessment	Assessment	Assessment	Inr(decr)
Beverly	123	127	11.684%	1,703,732	95,025	32,995	213,723	40,145	2,085,620	64,422	
Boxford	16	18	1.656%	241,918	13,468	4,676	30,291	5,690	296,043	6,380	
Danvers	130	147	13.523%	1,963,264	109,981	38,188	247,362	46,464	2,405,259	240,344	
Essex	21	20	1.840%	266,330	14,965	5,196	33,657	6,322	326,470	(34,126)	
Gloucester	98	107	9.844%	1,459,584	80,060	27,799	180,066	33,823	1,781,332	170,020	
Hamilton	14	13	1.196%	173,866	9,727	3,377	21,877	4,109	212,956	(18,193)	
Lynnfield	19	23	2.116%	307,199	17,209	5,975	38,706	7,270	376,359	38,171	
Manchester	5	6	0.552%	80,522	4,489	1,559	10,097	1,897	98,564	29,353	
Marblehead	20	28	2.576%	375,151	20,950	7,274	47,120	8,851	459,346	130,353	
Middleton	38	51	4.692%	685,477	38,160	13,250	85,826	16,121	838,834	208,347	
Nahant	6	10	0.920%	145,690	7,482	2,598	16,829	3,161	175,760	77,196	
Peabody	269	284	26.127%	3,291,335	212,489	73,781	477,913	89,771	4,145,289	171,435	
Rockport	14	23	2.116%	336,418	17,209	5,975	38,706	7,270	405,578	161,087	
Salem	181	183	16.834%	1,825,618	136,910	47,540	307,924	57,840	2,375,834	(36,566)	
Swampscott	20	21	1.932%	281,059	15,713	5,456	35,340	6,638	344,206	14,644	
Topsfield	14	16	1.472%	214,326	11,972	4,157	26,926	5,058	262,439	31,633	
Wenham	10	10	0.920%	129,976	7,482	2,598	16,829	3,161	160,046	(4,103)	
Total	998	1,087	100.000%	13,481,465	813,291	282,394	1,829,192	343,593	16,749,935	1,250,397	

Impact of Proposed Adoption of FY 2019 Operating Budget

Middleton's Financial Management Policies

Item #4: Stabilization Funds

General Stabilization Fund

Goal: Balance in the General Stabilization Fund of 5%-7% of the current year budgeted general fund operating appropriation

General Stabilization Fund Balance as of 12/31/2017	1,936,380
Fiscal Year 2019 Proposed general fund operating appropriation	35,656,628
General Stabilization Fund balance as a % of GF operating	5.4%

Capital Stabilization Fund (Established at November 7, 2017 Special Town Meeting)

Goal: Balance in the Capital Stabilization Fund of 3%-5% of the current year budgeted general fund operating appropriation

Capital Stabilization Fund Balance as of 12/31/2017	0
Fiscal Year 2019 Proposed general fund operating appropriation	35,656,628
Capital Stabilization Fund balance as a % of GF operating	0.0%

Item #5: Free Cash

Goal: Maintain Free Cash at a target range of at least 3% of the prior year general fund operating appropriation

Free Cash Certification as of 7/1/2017	1,949,799
Fiscal Year 2018 operating appropriation	33,813,867
Free Cash Certification as a % of prior year operating appropriation	5.8%

Item #6 Excess Levy Capacity

Goal: Maintain Excess Levy Capacity of at least 1% of current year budgeted general fund operating appropriation

Excess Levy Capacity from Fiscal Year 2018 Recapitulation	843,816
Fiscal Year 2019 Proposed general fund operating appropriation	35,656,628
General Stabilization Fund balance as a % of GF operating	2.4%

Item #7 Reserve Funds

General Reserve Fund

Goal: Annual appropriation shall be 1% of general fund expenditures excluding schools

Proposed Fiscal Year 2019 General Reserve Fund	100,000
Fiscal Year 2019 Proposed general fund operating appropriation (excluding schools)	11,523,583
General Reserve Fund as a % of general fund operating appropriation (excluding schools)	0.9%

Item #8 Debt Management

Annual Debt Service - Exclusive of Exempt Debt

Goal: Annual debt service exclusive of exempt debt shall be no less than 2% not more than 10% of current year budgeted general fund operating appropriation

Fiscal Year 2019 annual debt service exclusive of exempt debt	46,375
Fiscal Year 2019 Proposed general fund operating appropriation	35,656,628
Annual debt service exclusive of exempt debt as a % of current year general fund appropriation	0.1%

Annual Debt Service - Inclusive of Exempt Debt

Goal: Annual debt service inclusive of exempt debt shall be no more than 15% of current year budgeted general fund operating appropriation

Fiscal Year 2019 annual debt service inclusive of exempt debt	\$1,720,415
Fiscal Year 2019 Proposed general fund operating appropriation	\$35,656,628
Annual debt service exclusive of exempt debt as a % of current year general fund appropriation	4.8%

Municipal and Reserve Fund Balances

Free Cash Certification as of 12/31/17	\$1,949,799
General Stabilization Fund as of 12/31/17	\$1,936,380
Capital Stabilization Fund as of 12/31/17	\$0
Ambulance Fund as of 12/31/17	\$684,611
Water Fund Balance as of 12/31/17	\$704,616
PEG Fund Balance as of 12/31/17	\$391,102
OPEB Fund Balance as of 12/31/17	\$1,129,050
Special Education Stabilization Fund Balance as of 12/31/17	\$100,000

**Adjustments Made to FY19 Operating Budget Projection Since
February 3, 2018 Operating Budget Meeting**

Item #	Description	Increase/ (Decrease)
1	Masconomet - February 9, 2018 preliminary assessment - operating assessment	(84,766)
2	Masconomet - February 9, 2018 preliminary assessment - debt assessment	(4,494)
3	Essex Tech -February 5, 2018 preliminary assessment net of \$16,121 Capital Improvement Assessment to be raised as a separate capital warrant article	(21,693)
4	Elementary Schools - February 8, 2018 Budget Update	(315,500)
5	Police Department - Add \$2,400 to Telephone line item to add two new lines for radio system upgrade in partnership with Fire Department	2,400
6	Fire Department - Add \$1,704 to Telephone line item to add two new lines for radio system upgrade in partnership with Police Department (partial line costs already accounted for in FY18 operating budget)	1,704
7	Council on Aging - Addition to Building Maintenance line item for organic garden maintenance/purchase of plants and planting materials	800
8	Council on Aging - Reduction in Travel line item	(300)
9	Health Insurance - 2/27/18 update from MIIA; Need to increase preliminary 10% budget increase to 11.1% based primarily on the town's experience rating	7,115
<hr/>		
Revenue		
10	Middleton Electric Light Department - Update to MELD in lieu of taxes contribution; Note increase in revenue depicted as a negative figure	(17,000)
<hr/>		
Total Increase/(Decrease) - From 2/3/18 to 3/3/18 Budget Projection		(431,734)

Town of Middleton **Update as of 3/3/2018**
Fiscal Year 2019 Summary of Projected Revenues and Expenditures

Part I - Property Tax Revenues

Fiscal Year 2019 Tax Levy Limit Calculation

Fiscal Year 2018 Tax Levy		27,647,509	
Fiscal Year 2018 Debt Exclusions		(1,726,490)	
Fiscal Year 2018 Actual Levy Without Debt Exclusions	\$	25,921,019	
2.5% of Fiscal Year 2018 Levy Without Debt Exclusion		648,025	
 FY18 Unused Levy Capacity		843,816	
2.5% of FY18 Unused Levy Capacity		21,095	
 Projected Growth in Fiscal Year 2019			
Property Tax Base (New Growth)		400,000	
2018 Proposition 2.5% Override		0	
 Total Projected Fiscal Year 2019 Levy Limit	A \$	26,990,140	
Fiscal Year 2018 Debt Exclusions (from above)		1,726,490	
 Projected Change in Debt Exclusions:	FY 2018	FY 2019	Change
Masconomet Regional School Addition	384,138	384,311	173
Flint Library Addition Renovation	332,705	320,705	(12,000)
FM Local School Roof Repair	95,111	91,375	(3,736)
HM School Construction	940,380	937,905	(2,475)
HM Bond Premium Offset	(25,844)	(25,844)	0
Total	1,726,490	1,708,452	(18,038)
Less Change in Debt Exclusions			(18,038)
Total Projected Debt Exclusions	B \$	1,708,452	
Total Projected FY 2019 Allowable Levy (without using excess levy)	A+B \$	28,698,592	
 Change from Fiscal Year 2018 to Fiscal Year 2019 in Available Property Tax Revenue:			
Projected Fiscal 2019 Allowable Levy (from above)		28,698,592	
Less: Fiscal 2018 Tax Levy (from above)		27,647,509	
 Change from Fiscal Year 2018 to Fiscal Year 2019 in Available Property Tax Revenue:	\$	1,051,083	

Town of Middleton FY 2019 Operating Budget State Revenue (Cherry Sheet) and Local Assumptions				
Revenue Category	FY 2018	FY 2019 Estimate*	Difference In \$	Percent + or -
1. Gen. Gov. Local Aid (lottery, additional asst., tax exemptions etc.)	686,884	694,846	7,962	1.2%
1A. Chapter 70 Educational Aid	1,626,461	1,639,521	13,060	0.8%
2. State Cherry Sheet Charges	(422,654)	(432,908)	(10,254)	2.4%
3. Offset Items	(11,649)	(11,304)	345	-3.0%
Subtotals All State Aid Categories	\$1,879,042	\$1,890,155	\$11,113	0.6%
4. Local Receipts	3,524,344	3,588,344	64,000	1.8%
5. Free Cash Transfer	200,000	100,000	(100,000)	-50.0%
6. MELD In Lieu of Taxes	204,000	221,000	17,000	8.3%
7. Other Financing Sources (see detail below)	668,975	721,186	52,211	7.8%
TOTALS	\$6,476,361	\$6,520,685	\$44,324	0.7%
Other Financing Sources Applied Against Omnibus Budget (detail of line #7 above)				
	FY 2018	FY 2019	\$ Difference	% Incr. (Decr.)
Fire Alarm Fees	15,000	15,000	0	0.0%
Ambulance Fund Transfer	380,000	425,000	45,000	11.8%
Cellular Tower Lease Receipts	50,000	60,000	10,000	20.0%
PEG Cable Fund Transfer	208,975	211,186	2,211	1.1%
Weights and Measures Transfer	15,000	10,000	(5,000)	-33.3%
Total #7 Offset Receipts	668,975	721,186	\$52,211	7.8%
Masconomet Regional School District State Education Aid (for informational purposes)				
	FY 2018	FY 2019	\$ Difference	% Incr. (Decr.)
1. Chapter 70	5,090,919	5,127,759	36,840	0.7%
2. Regional School Transportation	574,809	569,053	(5,756)	-1.0%
3. Charter Tuition Reimbursement	13,310	0	(13,310)	-100.0%
4. Sch. Choice & Sending Tuition Charges	(66,632)	(64,093)	2,539	-3.8%
Totals	\$5,612,406	\$5,632,719	\$20,313	0.4%
Middleton's Share Chp. 70 Masco Aid (=35.49% in FY 2018 of total)	\$1,991,843	\$1,999,052	\$7,209	0.4%
FY 2019 Projected Increase (Decrease) in Revenues				
Total Change in Available Property Tax Revenue (pg. 1)				1,051,083
Total Change in State Aid and Local Revenue (from above)				44,324
Total FY 2019 Projected Increase (Decrease) in Revenues				\$1,095,407

Part II - Projected Tax Levy Budget Expenditures By Function

(Note: Does not include capital appropriations from other funding sources)

Expenditure Classification	FY 2018	FY 2019 Proposed	FY 2019 Tax Levy Increase (Decrease)	Percentage Change
Town Personal Services	5,880,323	6,218,859	338,536	5.8%
Town Contractual Services	2,060,854	2,320,502	259,648	12.6%
Town Retirement, Health Insurance and Unclassified	2,455,912	2,632,490	176,578	7.2%
Social Agency Funds	38,500	38,500	0	0.0%
Elementary Schools	11,466,881	11,915,149	448,268	3.9%
Debt Service				
Howe Manning School Debt Service	940,380	937,905	(2,475)	
Fuller Meadow School Roof Rehabilitation	95,111	91,375	(3,736)	-3.9%
Natsue Way Land Purchase	42,092	46,375	4,283	10.2%
Bond Fee/Other Debt Expense	2,000	2,000	0	0.0%
Library Debt Service	332,705	320,705		
CPA Offset	(53,360)	(57,762)		
Total Library Debt Service	279,345	262,943	(16,402)	-5.9%
11 South Main Street Debt	42,425	41,375		
CPA Offset	(42,425)	(41,375)		
Total 11 South Main Street Debt	0	0	0	0.0%
Total Middleton Debt Service	\$1,358,928	\$1,340,598	(\$18,330)	-1.3%
Masconomet Building Debt Service	384,138	379,817	(4,321)	-1.1%
Masconomet Regional School Budget	9,241,983	9,674,768	432,785	4.7%
	9,626,121	10,054,585	428,464	4.5%
Essex Technical School (includes debt)	630,858	838,834	207,976	33.0%
Capital Improvement Assessment - To be paid as warrant article	(10,907)	(16,121)	(5,214)	47.8%
	619,951	822,713	202,762	32.7%
Overlay for Tax Abatements/Refunds	273,397	280,232	6,835	2.5%
Tax Title (raised on Tax Recap)	33,000	33,000	0	0.0%
TOTALS	\$33,813,867	\$35,656,628	\$1,842,761	5.4%

Total FY 2019 Project Increase (Decrease) in Expenditures

1,842,761

FY 2019 Proposed Revenue	35,219,277
FY 2019 Proposed Budget	(35,656,628)
Prop. 2-1/2 Operating Bud Override	0
FY 2018 unused levy capacity to FY 2019 Budget	843,816
Net Change	\$406,465
Subtract Capital Expenses charged against the Tax Levy	0
Total	\$406,465

Item #5: Free Cash

Goal: Maintain Free Cash at a target range of at least 3% of the prior year general fund operating appropriation

Free Cash Available as of November 8, 2017	1,949,799
Fiscal Year 2018 operating appropriation	33,813,867
Free Cash Certification as a % of prior year operating appropriation	5.8%

Free Cash Available as of November 8, 2017	1,949,799	A
Fiscal Year 2018 operating appropriation	33,813,867	
Free Cash at a target range of at least 3% of the prior year general fund operating appropriation	1,014,416	B
Available amount from Free Cash to fund Fiscal Year 2019 capital projects/warrant articles	935,383	A-B

Item #6 Excess Levy Capacity

Goal: Maintain Excess Levy Capacity of at least 1% of current year budgeted general fund operating appropriation

Excess Levy Capacity from Fiscal Year 2018 Recapitulation	843,816
Fiscal Year 2019 Proposed general fund operating appropriation	35,656,628
Excess Levy Capacity as a percentage of Fiscal Year 2019 budgeted General Fund operating appropriation	2.4%

Excess Levy Capacity from Fiscal Year 2018 Recapitulation	843,816	A
Fiscal Year 2019 Proposed General Fund operating appropriation	35,656,628	
Maintain Excess Levy Capacity of at least 1% of current year budgeted general fund operating appropriation	356,566	B
Fiscal Year 2018 Unused Levy Capacity which can be applied to the Fiscal Year 2019 Operating Budget	487,250	A-B=C
Projected Fiscal Year 2019 Allowable Levy	28,698,592	A
Total State Aid and Local Revenue	6,520,685	B
Fiscal Year 2018 Unused Levy Capacity which can be applied to the Fiscal Year 2019 Operating Budget	487,250	C
Projected Fiscal Year 2019 Operating Budget Spending Limit	35,706,527	A+B+C
Fiscal Year 2019 Operating Budget	35,656,628	
Fiscal Year 2019 Operating Budget surplus/(deficit)	49,899	

Fiscal Year 2019 Supplemental Budget Requests and Adjustments

Items included in the Fiscal Year 2019 Proposed Budget

Department	Request	Wages	Benefits	Expenses	Subtotal	Offset	Total
Health/Planning	Increase the hours for the Health/Planning Multi-Departmental Clerk from 19 to 30 Hours per week	13,292	27,662	0	40,954	0	40,954
Police	New full-time police patrolman	53,761	32,638	0	86,399	0	86,399
Fire	New part-time administrative position	14,400	0	0	14,400	0	14,400
Public Works	New full-time DPW Equipment Operator position	44,063	30,242	0	74,305	0	74,305
Council on Aging	Additional 11 hours spread among various COA staff	14,181	0	0	14,181	0	14,181
							Subtotal \$230,239

Items excluded in the Fiscal Year 2019 Proposed Budget

Flint Public Library	Part-time Circulation Assistant; Note - Not included in the Proposed Fiscal Year 2019 budget	19,529	0	0	19,529	0	19,529
Flint Public Library	Part-time substitute to cover as-needed shifts	5,000	0	0	5,000	0	5,000
Information Technology	Shift from current as-needed hourly service to a managed service model with 24X7 server and network monitoring, unlimited business hour help desk services, 24X7 engineering service availability, maintenance and support of anti-virus and anti-malware systems, maintain asset management system and IT related support services at \$60,000 annually.		42,000	42,000	0	42,000	
							Subtotal \$66,529
							Total \$296,768



MIDDLETON FIRE DEPARTMENT IN TRANSITION

2017



This document is a brief explanation of the current state of the Middleton Fire Department, its operation, staffing and future needs. It is by no means comprehensive but a brief synopsis to better inform the decisions of boards and committees. This document will also compare similar towns (there was no one town that was an exact match to Middleton, but I tried to choose ones close in population and operation). At a later time, a more in depth analysis could be completed internally or by an outside firm.

The Middleton Fire Department has always been on the forefront of innovation and forward thinking. Area departments have always looked to the Middleton Fire Department as a leader in the industry and as a progressive department. The Middleton Fire Department has always tried to have the most up to date equipment and training for its personnel. Middleton was one of the first departments in the area to offer advanced life support services for its ambulance service. This could not have been accomplished without the forward-thinking men and woman of the department and the support of the town and state.

The staffing over the years has changed and the fire department has used innovative ways to address the growth issues of the town and the increased demand on the department. Prior to 1987 the department was staffed with one person and relied on call back of part time members to staff the station and apparatus on calls. In 1987 the department added two full time members to work days because of the increasing difficulty in the availability of available part time members. At the same time the department added part time members to work nights in order to have 24/7 coverage of on duty personnel and to reduce the time it was taking for apparatus to respond. In 1998 the department added a day position to cover the lack of available off duty members. In 2005 the department added an additional full-time member to make it possible for the department to have two full time members 24/7. In 2015 a day position was again added to help with the lack of available off duty personnel.

The current staffing of the department is comprised of a Chief, Captain, three Lieutenants and five firefighters, all are full-time. The schedule is made up of four groups who work 24 hour shifts on an eight-day cycle. Each group is made up of two full-time members and one member who works four days Monday thru Thursday. There is one part time member on seven days a week and two at night. Currently Friday, Saturday and Sunday only have three members on during the day. There is a current proposal to add another full-time member and to shift the staffing around to have four members on 24/7/365 (Attachment A).

The reason to add more full-time members is not unique to Middleton, it is a regional and national problem. The hectic pace of modern society does not allow people the extra time and freedom to be available to respond to the station for calls on their time off. Many households are dual income families. When one of the parents are at work, the other may need to stay home to watch the children to save money on day care. During the time off that the family has together they may be involved in sports, dance or other activities. The towns on this list have already shifted the burden to full-time staff or are in the process of doing so.

At the present time, the Middleton Fire Department has no clerk or administrative staff other than the Chief. All the full-time members have multiple responsibilities (such as fire prevention, EMS, training, car seat technician, fire alarm technician) over and above responding to calls and taking care of the everyday operations of their shift and of the department. Over the years these responsibilities could be handled by these individuals, but with the increase in the number of calls and the demand on the department, some of these responsibilities should be a task on their own. Administration and Fire Prevention are two areas that could use supplemental staff. Many functions, in both areas, take a great amount of time and sometimes do not get accomplished because of the lack of staff.

In the next five to ten years the staffing model that would be the most efficient for the department is to have a Chief, Deputy Chief, Full time fire prevention officer, Administrative assistant and a minimum of four full time members per shift. This obviously would need to be phased in, but it serves as a template for the town to follow and have a plan for the future.

The following is a brief description of each town, a spread sheet can be found in attachment B.

Middleton:

The town of Middleton has a population of 9,419¹ and covers 14.2 square miles. The fire department consists of ten full time members including the Chief and twenty-one-part time members. The department has offered advanced life support since 1995, with all full-time members being paramedics. The department protects a mostly residential community that includes five high rises (all six stories or higher), a chemical plant, water treatment facility, a 65,000-square foot water park, a 96,000-square foot sports complex/ice arena, county jail and a juvenile detention center to name some of the hazards. There is a brief article on high rise operations and crew size in attachment C. The department responded to 2016 calls last year, this does not include inspections, car seat installations, or public education, this would add another 1000 incidents. The budget for FY 17 was \$1.7 million.

North Reading:

The town of North Reading has a population of 15,377² and covers 13.5 square miles. The fire department consists of twenty-two full time employees including the Chief and Deputy Chief with an administrative assistant. The department has offered advanced life support since 2012, with at least three members per shift being paramedics. The department runs four shifts of five full-time firefighters. The department protects a mostly residential community with light industrial along route 28 and Concord street by route 93 and a large postal facility, they have no

¹ Massachusetts department of revenue

² Massachusetts department of revenue

high rises. The department responded to 2350 calls in 2016. The fire department budget for FY17 was \$3,046,041.

Littleton:

The town of Littleton has a population of 9,246³ and covers 17.6 square miles. The fire department consists of twelve full time employees including the Chief and Deputy Chief with an administrative assistant. The department will be hiring six full-time paramedics this year so that the town can offer advanced life support to the community, this will give the department a total of eighteen full-time members with four full-time members per shift. The department protects a mostly residential community with some light industrial properties such as IBM. A retail complex and a hydrogen fueling depot are currently being built. They also cover a short section of 495 and they have no high rises. The department responded to 1824 calls in 2016. The budget for FY 17 was \$1.2 million.

Manchester By the Sea:

The town of Manchester by The Sea has a population of 5,249⁴ and covers 7.73 square miles. The fire department consists of thirteen full-time employees including the Chief and an administrative assistant. The department offers advanced life support with the fire department ambulance. The department runs four shifts with three full-time firefighters per shift. This year the Chief will be asking for additional full-time firefighters. The department protects a mostly residential community with ten miles of seashore and some retail stores in the downtown area. They also cover a short section of route 128 and there are no high rises in the community. The department responded to 900 calls last year. The budget for FY 17 was \$ 1.2 million.

As you can see each town is similar in size and population. North Reading was chosen because its operation is very similar to Middleton's. Even though their population is larger the number of runs they do is very close to Middleton's (2350 to 2016) .

Littleton is very similar, they are a rapidly growing town with a similar population. They are just getting into the advanced life support business, but they are doing it because all the towns

³ Massachusetts department of revenue

⁴ Massachusetts department of revenue

around them have gone ALS and the private ALS provider takes too long to respond. They are doing this with an all full-time staff.

Manchester By the Sea is similar in size, yet they have a large full-time staff and a much smaller area to cover.

All three of these towns are largely residential like Middleton, yet they do not have the large hazards such as five high rises, a chemical plant, two large recreational facilities and two jails, to name a few. They are all going to or have gone to rely heavily on full-time personnel.

Attachment A
Schedule
Middleton Fire Department current schedule

Four groups operate on an eight day cycle to average 42 hours per week for full timers

<u>Sunday</u>	<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>	<u>Saturday</u>	<u>Sunday</u>
<u>Group 1</u>	<u>Group 2</u>	<u>Group 1</u>	<u>Group 2</u>	<u>Group 3</u>	<u>Group 4</u>	<u>Group 3</u>	<u>Group 4</u>
0700-1700							
Full time							
Full time							
Part time	Full time	Full time	Full time	Full Time	Part time	Part time	Part time
	Part time	Part time	Part time	Part time			
1700-0700							
Full time							
Full time							
Part time							
Part time							

Present schedule: Two full timers work 24 hours on each group. One full timer works 4 ten hour days Mon-Thu (every 5th Friday)

Part timers:There is one part timer on each day and 2 at night

Currently Friday, Saturday and Sunday day only have 3 members working.

Attachment A

Schedule

Middleton Fire Department proposed schedule with proposed new member

<u>Sunday</u>	<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>	<u>Saturday</u>	<u>Sunday</u>
<u>Group 1</u>	<u>Group 2</u>	<u>Group 1</u>	<u>Group 2</u>	<u>Group 3</u>	<u>Group 4</u>	<u>Group 3</u>	<u>Group 4</u>
<u>0700-1700</u>							
Full time							
Full time							
Full time	Full Time	Full Time	Full Time	Part time	Part time	Part time	Part time
Part time	Part time	Part time	Part time	Part time	Part time	Part time	Part time
<u>1700-0700</u>							
Full time							
Full time							
Full time	Full time	Full time	Full time	Part time	Part time	Part time	Part time
Part time							

This will take the current day person and a proposed new person and put them on a group.

Proposed schedule- 3 full timers work 2 groups/24 hours (covering 4 days per cycle)

2 full timers work the other 2 groups/24 hours (covering the other 4 days in the cycle)

This will take a part timer off of 4 nights and relocate them to 4 days.

By doing this we will have 4 members on duty 24/7 while also retaining the full timer (that was originally on days) and giving them a schedule similar to other departments. It also creates a more cohesive work group.

The difference of 16 part time hours between the day and night = \$17,472 which can be applied to the fulltime position.

16 hoursx21.00x52 weeks = \$17,472

Attachment B
Town comparisons

	<u>Middleton</u>	<u>North Reading</u>	<u>Littleton</u>	<u>Manchester by The Sea</u>
<u>Population</u>	9,419	15,377	9,246	5,249
<u>Area</u> (Sq Miles)	14.4	13.5	17.6	7.73
<u>F/T Staff</u>	10	22	12*	13
<u>P/T staff</u>	21	5	25	8
<u>Runs-2016</u>	2016	2350	1824	900
<u>ALS</u>	Yes	Yes	2017	Yes

* Littleton staffing will be 18 in FY 18

Attachment C

Landmark High-Rise Fire Study Evaluates Effectiveness of Crew Sizes, Elevator Use

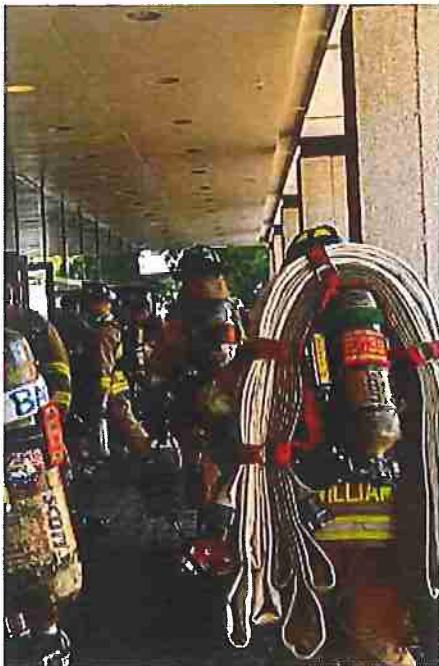
NIST www.nist.gov/fire/sshrl.cfm

*

[\(Return to Staffing Studies\)](#)

Released April 10, 2013

Contact: [Mark Bello](#)
301-975-3776



Firefighters respond to fire in 13-story high rise.
Credit: International Association of Fire Fighters

PHOENIX – When responding to fires in high-rise buildings, firefighting crews of five or six members—instead of three or four—are significantly faster in putting out fires and completing search-and-rescue operations, concludes a major new study* carried out by the National Institute of Standards and Technology (NIST), in cooperation with five other organizations.

Results of the study, conducted with 13 Washington, D.C.-area fire departments, were presented today at the 2013 Metropolitan Fire Chiefs Conference in Phoenix.

"Unlike most house fires, high-rise fires are high-hazard situations that pose unique operational challenges to fire service response. How big a fire gets and how much danger it poses to occupants and firefighters are largely

determined by crew size and how personnel are deployed at the scene," says lead researcher Jason Averill, a NIST fire protection engineer. "It's not simply that larger crews have more people. Larger crews are deployed differently and, as a result, are able to perform required tasks more quickly."

An analysis of 14 "critical tasks"—those undertaken when potential risks to building occupants and firefighters are greatest—found that three-member crews took almost 12 minutes longer than crews of four, 21 minutes longer than crews of five, and 23 minutes longer than crews of six to complete all tasks. Four-person crews took nine minutes and 11 minutes longer than five- and six-member crews, respectively.

The study also looked at the effect of using fire service access elevators to move firefighters and equipment up to the staging floor and concluded that most tasks were started two to four minutes faster when using the elevators compared with using the stairs.

The study, funded by the Federal Emergency Management Agency (FEMA) Assistance to Firefighters Grants Program and conducted in a 13-story vacant high-rise office building in Crystal City, Va., involved **48 separate controlled experiments**, plus 48 corresponding computer-modeling simulations, which evaluated three types of representative fires, from slow to fast growing.

"This study will result in better-informed policy and operational decisions influencing levels of staffing and other resources available for responding to high-rise fires," says Dennis Compton, former chief of the Mesa, Ariz., fire department and chairman of the board of the National Fallen Firefighter Foundation. "These are decisions now confronting hundreds of communities across the country."

On the basis of the results of computer modeling, which incorporate data from live experimental burns, the study team concluded that smaller crews end up facing larger fires because of the additional time required to complete tasks.

A three-person crew, for example, would battle a medium-growing blaze that is almost 60 percent larger than the fire faced by a six-member crew, which would start extinguishing a fire roughly three-and-one-half minutes earlier. In an office building, this difference is equivalent to four employee cubicles on fire for a three-person crew versus two cubicles for a six-person crew.



Firefighting crew carries out search- and-rescue operation.

Credit: IAFF



Rescued "victim" is removed from the high rise.

Credit: IAFF

Comparing the performances of different-sized crews, the researchers found that adding two members to three- and four-person teams would result in the largest improvements in starting and completing critical tasks, such as advancing the water hose to the fire location and beginning search and rescue. Improvements ranged from one minute to 25 minutes, depending on the task.

The research team also evaluated whether dispatching more three or four-member crews to a high rise fire—accomplished by sounding a higher initial alarm—would be as effective as sending a low first alarm contingent of engines and trucks staffed by more firefighters. They found that a "low-alarm response with crews of size four or five outperforms a high-alarm response with crew sizes smaller by one firefighter."

"Prior to this experiment, some fire departments attempted to deploy with smaller crews on each piece of apparatus," explains Lori Moore-Merrell of the International Association of Fire Fighters, a co-principal investigator for the study. "The logic suggested that, if the fire is big enough, just send more units, but it ignores the fact that larger crews have tactical advantages that reduce risk exposure to people and firefighters. Crews of six and even five can carry out crucial tasks in parallel rather than in series. Saving time can save occupant lives and prevent firefighter injuries and property damage."

The National Fire Protection Association (NFPA) defines high-rises as buildings that are seven stories or taller, the height that exceeds most types of fire service ladders. In most U.S. communities, new high- rises are required to have automated sprinkler systems, which are designed to control the spread of fires, not to extinguish them.

But according to the NFPA, 41 percent of U.S. high-rise office buildings, 45 percent of high-rise hotels, and 54 percent of high-rise apartment buildings are not equipped with sprinklers, as compared with 25 percent of hospitals and related facilities. Moreover, sprinkler systems fail in about one in 14 fires.

As a result, Averill says, "fire departments should be prepared to manage the risks associated with unsprinklered high-rise fires regardless of whether a building is actually sprinklered."

High-rise buildings now dot the U.S. urban, suburban and even rural landscapes. While concentrated in large cities, such as New York with 6,543 skyscrapers and buildings seven stories or taller, Chicago with more than 2,300, and Phoenix with about 175, high-rises are also common in smaller metropolitan areas, according to the building inventory maintained by Emporis. For example, Omaha has about 70 buildings seven stories or taller, Fargo, N.D., has 22, and Gulf Shores, Ala., has about 65.

While much less frequent than house fires, about 43 high-rise fires occur in the United States every day. Between 2005 and 2009, according to the NFPA, high-rise structure fires averaged 15,700 annually. Average annual losses totaled 53 civilian deaths, 546 civilian injuries and \$235 million in property damage.

The new study on responding to high-rise fires complements a 2010 study from the same research team that looked at staffing levels and arrival times in the context of fighting residential fires.**

"Rather than providing a one-size-fits-all answer, our study provides a scientific basis for discussions in communities as they consider matching resources deployed to their particular risk levels," says Averill.

"Until now, high-rise staffing, deployment and even operational decisions have been based on decades of applying trial and error strategy and tactics," says NFPA's Russell Sanders, a retired Louisville, Ky., fire chief. "Tragically, the fire department standard operating procedures and industry standards that we have today have, in many cases, been established at the high cost of civilian and firefighter lives: the science to prove these policies, procedures and standards as the best practice has been absent."

Sanders says NFPA consensus committees will use the results of the new study as they update safety and best-practice standards for firefighters.

[Supplemental Materials: Description of Experiments >>](#)

*J. D. Averill, L. Moore-Merrell, R. T. Ranellone Jr., C. Weinschenk, N. Taylor, R. Goldstein, R. Santos, D. D. Wissoker and K. A. Notarianni, Report on High-Rise Fireground Field Experiment, [NIST Technical Note 1797], April 2013. Available at: www.firereporting.org

**The Report on Residential Fireground Field Experiments [NIST Technical Note 1661] can be downloaded at: http://www.nist.gov/manuscript-publication-search.cfm?pub_id=904607.



The Preferred Approach to Determining Police Staffing

This discussion will focus on the core mission set forth by the Selectmen and Finance committee during the 2018 budget cycle. It was here that police and fire were instructed to formulate a “5 Year Staffing Plan”.

Our goal is to determine long-term staffing needs of the police/fire departments, along with cost implications resulting from the implementing of this respective staffing plan. It is also our hope to educate the Board about emerging trends associated with the need for more full-time staff based on additional demands for education, training and scope of work loads in the field of public safety.

- | This study will touch on comparisons to (3) police departments not only similar in size and scope but similar in workload and organizational structure.
- | Information for this case study was retrieved from data collected from the department’s CAD system “Spillman” in an effort to provide tangible and accurate evidence for this report.
- | Discussion between “Workload & Calls for Service” and how deployment times of calls dictate staffing needs.

The history of the department has changed over the years. We started in the 1950’s with a full-time chief who received his calls by observing a light in Middleton Square. In 1969 we graduated to a Chief, two Sergeants and one patrolman on a budget of \$46,000. In 1999 we were staffed with a Chief, two Sergeants and eight patrolmen. In 2007 when I took over as Chief we employed Chief, 4 Sergeants, 9 patrolmen and 15 Reserve Officers with a budget on \$1,329,934. Today our staffing levels have only increased by one full-time police officer and the FY-2018 budget is 1,712,807.

We take pride in outfitting our officers with the most up to date equipment and training, however, we have lacked in the staffing levels needed to properly secure coverage to the Town. It is the goal of this department to always have three to four officers working on each shift.

Cost analysis for a full-time officer will be on a separate attachment A.

Town comparison chart attachment B.

Current Middleton Police Staffing Chart

The Town of Middleton Police Department employees (15) fulltime officers including a Chief (4) Sergeants (10) Patrol officers and (12) Reserves staff along with (2) civilian employees.

Full-Time Staff	Chief (1)	Sergeant (4)	Patrolmen (10)
12AM-8AM		(1)	(2)
8AM-4PM		(1)	(2)
4PM-12AM		(1)	(2)
Split Shift		(1)	

Patrol reflects Days Off coverage of 10 total officers to cover the 4 off and 2 on work week.

Reserves augment patrol time off for fulltime staff.

We believe that our uniformed patrol is considered the backbone of policing. Officers assigned to this important function are the most visible members of the department and command the largest share of department's resources. Proper allocation of these resources is critical to having officer's readily available to respond to calls for service and to provide law enforcement services to the public.

From an organizational standpoint, it is important to have uniformed patrol resources available at all times of the day to deal with issues such as proactive enforcement and community policing. Patrol is generally the most visible and most available resources in policing and the ability to harness this resource is critical for successful operations.

The size and style of a police department and the types of service that it provides are a reflection of the character and demands of our community. The challenge is to determine the appropriate allocation and deployment of officers to meet that demand. The recommended chart below reflects the 5 year staffing needs plan for the police department.

Recommended Middleton Police Staffing Chart

3-5 Year Recommended Middleton Police Staffing Chart

The Town of Middleton recommended Police Department Staffing levels over the course of the next 5 years. (19) Fulltime employees including a Chief (1) Captain or Lieutenant (5) Sergeants (12) Patrol officers, Reserves Officers to continue

Full-Time Staff	Chief (1)	Captain (1)	Sergeant (5)	Patrolmen (12)
12AM-8AM			(1)	(2)
8AM-4PM		(1)	(1)	(2)
4PM-12AM			(1)	(3)
Split Shift			(2) + Detective	(1) Detective

Patrol reflects Days Off coverage

Patrol Staffing and Deployment

In a 2015 study the Bureau of Justice Statistics indicate that a Town equal to the size of Middleton should employ 21.5 police officers per 10,000 residents.

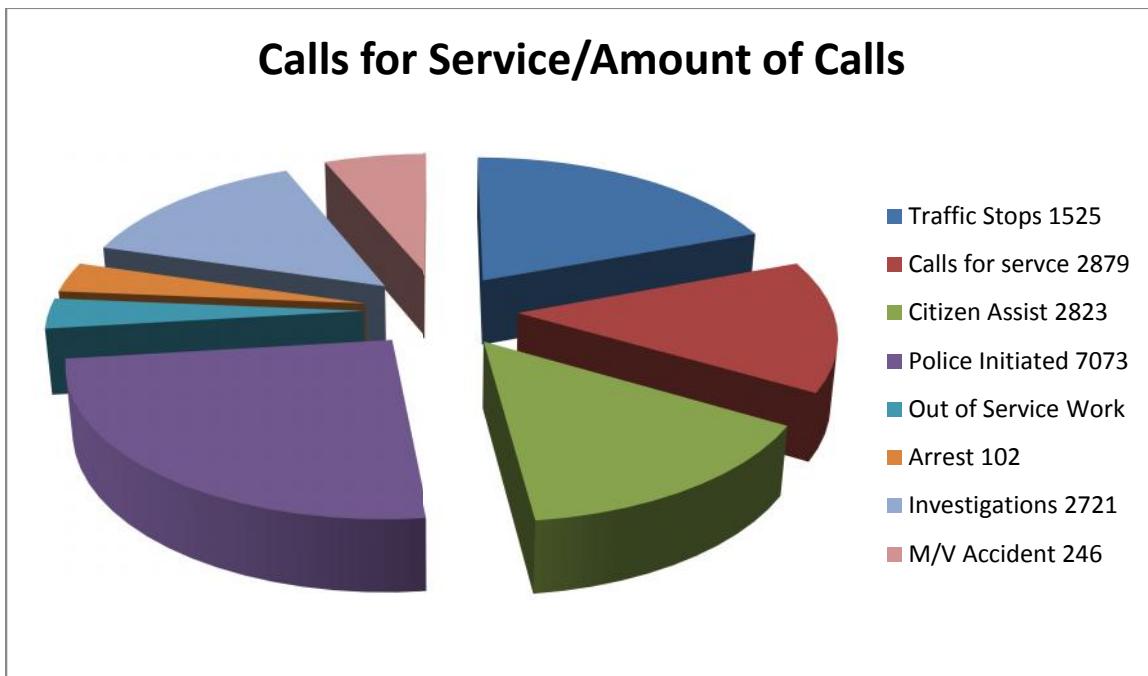
Calls for Service

Police service workload differentiates from calls for service in that calls for service are a number reflecting the incidents recorded. Workload is a time measurement recording the actual amount of police time required to handle calls for service from inception to completion. Various types of police service calls require differing amounts of time (and thus affect staffing requirements). As such, call volume (number of calls) as a percentage of total number of calls could be significantly different than workload in a specific area as a percentage of total workload. The following sample graph demonstrates this difference in units.

Understanding actual workloads requires reviewing total reported events within the context of how the events originated, such as through directed patrol, administrative tasks, officer –initiated activities, and civilian-initiated activities. Performing this analysis allows the activities that are really, “calls” to be differentiated from other types of activities. Understanding the difference between the various types of events and resulting staffing implications are critical to determining deployment needs. In this study we looked at the total deployed hours of the police department with a comparison to the time being spent to currently provide services.

Statistical information from calls generated in a one year cycle from July 1, 2015 to June 30, 2016 indicated that the Middleton Police Department responded to 15,061 calls for service.

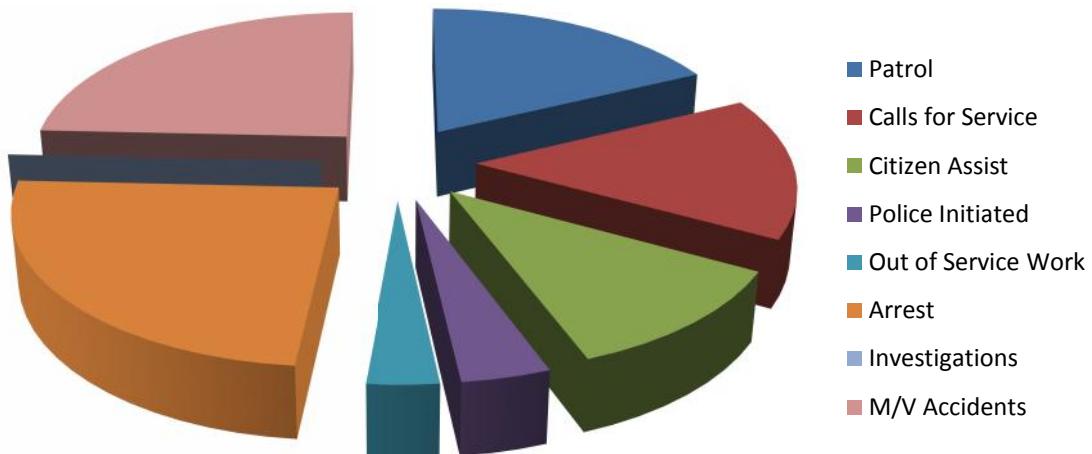
Alarms-	660	Suspicious Activity/Person	737
Animal Complaints-	267	Traffic Crashes-	246
Building Checks-	3276	Traffic Stops-	1525
Citizen Assist-	517	Well Being Checks-	115
Directed Patrols-	3797	Medical Calls-	615
Fraud-	78	Thefts-	95
Traffic Complaints-	312	Misc. Other	2823



Workload vs. deployment analysis sample

I also looked at the total deployed hours of the Middleton Police Department with a comparison to the time being spent to currently provide services. Then I reviewed the response times both cumulative as well as average for all services. Police service workload differentiates from calls for service in that calls for service are a number reflecting the incidents recorded. Workload is a time measurement recording the actual amount of police time required to handle calls for service from inception to completion. Various types of police service calls require differing amounts of time (and thus affect staffing requirements). As such, call volume (number of calls) as a percentage of total number of calls could be significantly different than workload in a specific area as a percentage of total workload. The following sample graph demonstrates this difference in units.

Deployment Times/ Time Spent at Call



As you can see in the two separate pie charts the numbers for calls for service and the various types of police service calls require differing amounts of time (and thus affect staffing requirements). As such, call volume (number of calls) as a percentage of total number of calls could be significantly different than workload in a specific area as a percentage of total workload. The sample graph above demonstrates this difference in units.

During an average motor vehicle stop when an officer writes a citation the average time is approximately 15 minutes per stop; the officer runs the operator's information, waits for responses and then issues the citation. If the incident turns into an arrest the officer then can be out of service for an additional 2 1/2 hours at the very least. In Middleton the officers are required to make the arrest, take the suspect into custody, wait for the tow and then return to the station for booking. Unlike many larger police departments who employ officers to do the booking and monitor the arrested subject which frees up the patrol officer to get back on the street. However, it is the responsibility of our officers to book, fingerprint, and photograph then arrange for bail.

Police Training in the Commonwealth
For Fulltime vs. Part-time officers.

- | The Municipal Police Training Committee (MPTC), an agency of the Executive Office of Public Safety and Security (EOPSS), serves the Commonwealth by establishing standards providing training to full and part-time police officers throughout the Commonwealth. The scope of this training ranges from an intense, 20+-week basic training program or 800+ hours for full-time police officers, to a 345.5-hour training program for Reserve/Intermittent (part-time) police officers.
- | This year the Ma Police Training Council (MPTC) made it “Mandatory” for all Reserve Officers to meet the same in-service training requirements and standards for the 40 hour refresher courses as our Fulltime Officers. Under the current Middleton Police Benevolent Association Contract with the Town, Reserves Officers receive first right of refusal for time off to back fill for a Fulltime Officer. Our reserve staff has been an integral part of our department for many years and we will continue to support this endeavor, however, our concern is the fact that half of the reserve staff (the most experienced and seasoned veterans of this program) will be retiring within the next five years.

Full-time Police Academy -This course is an intense 20 plus week basic training program or 800 + hours for newly hired full-time entry-level municipal police officers.

Reserve/Intermittent Police Academy - This course is a minimum of 345.5 hours administered by regional police training organizations at various locations throughout the Commonwealth. (An additional 20 hours of MPTC-certified firearms training are required if the officer will be armed with a firearm.)

Police Comparison Chart



Middleton Police Department

The Town of Middleton has a population of 9,419 and covers 14.2 square miles. The Police Department consists of (15) fulltime officers including a Chief (4) Sergeants (10) Patrol officers and (12) Reserves staff along with (2) civilian employees. The Middleton police department responded to 15,061 calls for service last year not including, walk in traffic to the police station and numerous special events throughout the year. Our officers patrol and respond to all incidents on Route 114 and Route 62. Route 114 is the gateway from Lynn to Lawrence, traffic on this roadway is at a constant high volume all hours for the day and night.



Lynnfield Police Department

Lynnfield is a town in Essex County, Massachusetts, in the United States. At the 2010 census, the town population was 11,596. Lynnfield initially consisted of two separate villages with a single governing body. The Police Department comes under Civil Service guidelines set forth by the State.

Chief of Police, Captain, (5) Sergeants (14) Patrol Officers

Total 21 Fulltime Officers 10.5 Square miles

Population 11,596



Hanson Police Department

The Town of Hanson is located in the south shore area of Massachusetts, approximately 30 miles south of Boston. The population of Hanson is approximately 10,209 people (census 2010). The Hanson Police Department consists of the Chief of Police, 20 full-time, sworn, personnel, 7 part-time police officers, 4 civilian dispatchers, 4 part-time dispatchers and the Executive Assistant to the Chief of Police

Chief of Police, Lieutenant, (5) Sergeants, (14) Patrolmen

Total 21 Fulltime Officers	Population	10,209
17 Square miles		



Littleton Police Department

Littleton, Massachusetts is located at the intersection of Interstate 495 and Route 2, about twenty-six miles northwest of Boston. Town of Littleton population is 8,900
Founded in 1714; Littleton celebrated its 300th Anniversary in 2014

Chief of Police, Deputy Chief, (4) Sergeants, (2) Detectives, (9) Patrol Officers

17 Total Fulltime Officers	Population	8,900
----------------------------	------------	-------

I had the opportunity to speak to each Chief from the above communities; I was advised that although we were not exact we each had similar structure and call volume along with land area and similar geographic components. Each town is largely residential and has similar businesses. Middleton however is the only one who hosts a large Correctional facility, a DYS Youth detention facility and a chemical plant.

Attachment A

Cost of Full-Time Police Officers

Based on FY-2018 Budget numbers.

	Regular Wages	\$	59,840
	Overtime/Court Appearances	\$	4,572
	Vacation, Sick & Personal Leave	\$	8,200
	Educational Incentive	\$	4,000
	Assoc.	\$	
	Bach	\$	7,000
	Master	\$	9,000
	Annual Training	\$	4,000
	<i>Total Less Education.</i>	\$	<i>76,612</i>

Benefit Package **Salary and Wages** \$ **76,612**

Estimated FY18 full-time

Medicare	\$	723.55
Medicare tax of 1.45% of gross salary for both employer and employee =2.9% total Medicare tax		
Health	\$	17,252.79
Town pays 60% of employee health Insurance for participating employees while employees pay 40% In FY18, HMO Options Enhanced options projected annual cost.		
Dental	\$	1,167.28
FY18, Dental High Option		
Life	\$	46.80
Monthly cost of \$7.80 per employee for \$10,000 benefit is split evenly between Town and employee		
Retirement	\$	12,325.24
Salary for Retirement		

Town's Fiscal Year 2018 Annual Projected Overhead Contribution

\$ 31,515.66

FY18 Total Projected Average cost to the municipality for employee Wages and Benefits

\$ 108,127.66

Attachment B

Town Comparisons

	<u>Middleton</u>	<u>Lynnfield</u>	<u>Hanson</u>	<u>Littleton</u>
<u>Population</u>	9,419	11,596	9,800	8,900
<u>Area</u> (sq Miles)	14.4	10.5	17	17.6
<u>F/T Staff</u>	15	21	21	17
<u>P/T Staff</u>	12	0	7	10



Town of Middleton

Planning Department

Town Planner Katrina O'Leary, AICP

katrina.oleary@middletonma.gov

195 North Main Street, Middleton, MA 01949

Ph: (978)777-8917

Date: January 10, 2018

To: Andrew Sheehan, Ryan Ferrara, Sarah Wood

From: Katrina O'Leary

RE: Increase in hours for part time clerk position

CC: Derek Fullerton

FY19 Planning Board Budget Proposal to Increase Hours for Health/Planning Clerk

In the past, the departments located in the DPW building (Health, Building, Planning Board, Conservation, ZBA, DPW) were serviced by three full time administrative staff. This was reduced to two employees around 8 years ago due to budget constraints. Two years ago we were able to add one part time position to the two full time administrative staff, and it is hoped we can increase this 19 hour per week position to 30 hours per week.

Currently, roughly 75% of the 19 hour/week Health/Planning Clerk's time is taken up with Health/Conservation Commission related tasks; leaving roughly 25% for Planning Board duties.

Detailed Health/Planning Multi Departmental Clerk Current Duties

Health Department:

Input Food, Tobacco, Pool, Septic Installer/Inspector/Hauler, Trash Hauler, and other Health Department licensees into the permitting database

Create renewal letters for Health Department licenses

Generate mass email merge for all Health Department licenses

Manage all Health Department license payments and submission of associated documents

Guide license applicants through the application process

Issue Health Department licenses

Collaborate with Citizenserve to create new Health Department license applications and licenses

Update and Maintain Health Department files and filings

Assemble Conservation Commission Board Monthly Meeting Packets

Update and Maintain Conservation Commission Archives

Update and Maintain Conservation Commission Electronic & Paper Files

Assemble Conservation Commission Mailings

Create Conservation Commission Archives

Update and Maintain Conservation Commission files and filings

Planning Board:

Assemble Planning Board Monthly Meeting Packets

Update and Maintain Planning Department Archives
Update and Maintain Planning Department Subdivision Electronic & Paper Files
Assemble Planning Department Mailings
Update Planning Department Archives
Update and Maintain Planning Department files and filings

All Departments:

Manage telephone inquiries for the Health Department, Conservation Department and Health Department.
Cover telephones and assist with inquiries for the Inspectional Services and/or Public Works Departments
Cover duties for the Inspectional Services and/or Public Works Departments as necessary.

Proposal

For FY19 we are seeking to add eleven (11) additional hours to this position for a total of 30 hours per week. This additional time will be used to:

- _) Keep up with the additional demands of using the Citizenserve online permitting database
- _) Update the Health, Conservation, and Planning files and digitize (all old files are being scanned)
- _) Assist the general public with the application process for Conservation Commission/Planning Board
- _) Assist ZBA Clerk with overflow work demands
- _) Assist the Town Planner with Master Plan process and future Bylaw Committee related work
- _) Vaccine Reimbursement Management Administration
- _) Septic System Management: Scanning of all existing plans into cloud system and future records that come in.

The extra 11 administrative hours will help make the following projects possible:

- _) Blood pressure monitoring program, mental health program, concussion awareness and baseline program.
- _) Health Department Grant Management: Assistance with grant applications for public health. Currently Health Department can't apply and manage the many grants that are available to bring back to the community
- _) Rail Trail - Restart planning work, meeting management, and associated tasks for planning and grants associated with the construction of the rail trail.

01610 LIBRARY

Proposed
FY19 Budget

01610151-511000 SALARIES & WAGES

PT Circulation Assistant	$\$19.69 \times 19 \text{ hrs} \times 52.2 \text{ weeks} = \$19,529$	19,529
--------------------------	--	--------

\$19,529

01610151-512200 PART TIME

Substitute as needed to cover shifts	5,000
--------------------------------------	-------

\$5,000

TOTAL SALARIES	24,529
-----------------------	---------------

MA Elderly 60+ Projections by Town and AAA, 2010-2020

The Research Unit, Executive Office of Elder Affairs, based on MISER 12/2002 projections

City/Town	1990	2000	Change 1990-2000	2010	Change 2000-2010	2020	Change 2000-2020	EOEA 2010 Actual	EOEA 2016/17 30/35hr	EOEA 2016 Dir Sal	EOEA 2017 Dir Sal	Estimated 2018 Dir Sal
Massachusetts	1,080,881	1,096,567	1.5%	1,272,323	16.0%	1,632,168	48.8%					
Boxford	717	1,030	43.7%	1,493	45.0%	2,078	101.7%	1,561	32	56,029	*	57,430
Open 4 days/9~3											*	60,332
Middleton	868	1,018	17.3%	1,439	41.4%	2,231	119.2%	1,557	35	49,574	50,566	53,095
Open 5 days/9~3:30				1,557 *	52.95% *	2,500	145.6% **					* * 60,332
Topsfield	1,103	1,207	9.4%	1,538	27.4%	1,799	49.0%	1,483	35	54,600	*	55,965
4 days/8~3,Fri 9~12											*	56,994
Freetown	951	1,087	14.3%	1,682	54.7%	2,372	118.2%	1,751	32		53,612	54,952
Littleton	1,132	1,276	12.7%	1,699	33.2%	2,326	82.3%	1,746	40	1,746	71,650	73,441
5 days/8:30~4:30												

* estimate based on 2.5%

** Based on Equity/Parity

* Based on actual State records vs. U.S. Census projections (1557 vs. 1439) the change was:

52.95%

** Projecting for 2020 based on estimated 12% inc (reflecting adjusted 2010 %), potentially:

145.60%

PROPOSED INCREASES TO WAGES

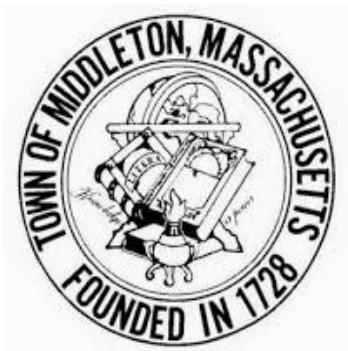
Position	Empl	Yrs	COA FY '17	Other FY '17	COA FY '18	Other FY '18	
Nutrition							
Site Coord	AD	15	19.08	22.01	20.00	22.56	Program Dir
Cook	JA	15	14.90	21.42	15.65	21.96	Program Ass't
Nutrition Aide	EM	3	13.26	14.63	14.00	15.00	Schools
Nutrition Aide	JV	3	13.26	14.63	14.00	15.00	Schools
Van Driver-Primary	TW	10	16.83	19.00	17.67	19.48	Survey
Van Driver -Second	CP	10	14.79	16.00	15.53	16.40	Survey
Van Driver -Second	WR/CDL	6	14.79	23.13	15.53	23.71	Essex Tech
Van Driver - Events	JA/CDL	17	16.83	24.50	17.67	25.11	NRT
Support Staff							
Office Mgr	PH	16	19.13	22.01	20.00	22.56	Admin Ass't
Staff Support	AM	6	13.26	21.42	14.00	21.96	Step V Clerical
Staff Support	VB	6	13.26	21.42	14.00	21.96	Step V Clerical
Staff Support	JM	5	13.26	21.42	14.00	21.96	Step V Clerical
Medical Appt Aides	MS	5	13.26	16.00	14.00	16.40	Survey
Director *							
SG							
18							
50,566							
60,322							
60,322							
56,994							
Topsfield							
35 hrs							
fewer responsibilities, programs no on-site meals program							
73,441							
Littleton							
40 hrs							
Typical comparison for Middleton							

* Info gleaned from Survey, MCOA, EOEA, U.S. Census re population demographics

Town of Middleton

Information Technology Managed Services

Wednesday, January 24, 2018



PREPARED FOR:

Ryan Ferrara
Assistant Town Administrator
ryan.ferrara@middletonma.gov
(978) 777-3617
Town of Middleton
48 S Main Street
Middleton, MA 01949

PREPARED BY:



Ben Sheng
Vice President of Engineering & Services
bsheng@hiq.com
(617) 951-4650, x103
PJ Systems Inc., DBA HiQ Computers
477 Riverside Avenue
Medford, MA 02155

Executive Summary

PJ Systems Inc., DBA HiQ Computers (HiQ) is pleased to submit this proposal to the Town of Middleton for Information Technology Managed Services.

HiQ has extensive experience providing IT services to organizations large and small. In particular, HiQ has built successful service relationships with many cities and towns in the Commonwealth of Massachusetts. We combine more than 20 years of IT service and support experience with an in depth knowledge of current technologies to service our customers. Our unwavering belief that customers deserve individual attention has allowed us to maintain a long and successful history of working with state, local government, school districts and law enforcement agencies.

Since the summer of 2014, HiQ has had the privilege of working with the Town of Middleton as its on-call service provider, and successfully carried out a number of improvement project for the Town. To further strengthen our services to the Town of Middleton, we propose to take an integrated and proactive approach to our services for the Town. In this proposal, we will outline many details that will not only allow Town customers to directly access and interact with their dedicated support team members with high levels of expertise in networking and systems knowledge, we will also setup tools and processes in place to continuously monitor critical systems and services, and address many risks proactively.

HiQ Computers can encompass the Town of Middleton's IT service and support needs. We are confident the service we provide will meet and exceed all your expectations.

Thank you for your consideration. We look forward to continuing our partnership with you.

Sincerely,



Ben Sheng

Vice President of Engineering and Services

Summary of Services

HiQ proposes to provide a set of fully integrated IT services to the Town of Middleton. We consider these IT service components of an inter-dependent and integrated platform and processes that will allow us to help the Town of Middleton to serve its citizens effectively and efficiently.

Our services will include but are not limited to: Server and Network Infrastructure Monitoring and Management, Backup and Disaster Recovery planning and methodology support, Desktop Support and Helpdesk, Security Updates and Risk Mitigation, Asset Management and Lifecycle Management. Each individual area will be addressed in the following sections.

To meet the Town of Middleton requirements, HiQ utilizes two key assets to deliver IT services.

- Tools and Methodology: HiQ will be utilizing PDQ Inventory and Deployment systems, InterMapper Monitoring system, along with KACE Helpdesk to provide asset management, patch management, software distribution, server management and a full-service helpdesk. These tools allows us to tie Town of Middleton customers, systems, and helpdesk together to provide a fully integrated management, monitoring and support platform.
- Expert Staff: What sets HiQ apart from the rest of the field is our dedicated service teams. The vast majority of our engineering and technical service team members have been with HiQ for five years or longer. The HiQ service teams possess the best-in-the-business expertise in both legacy and the newest IT systems knowledge. We are ready and willing to go the extra mile to help our customers, no matter how big or small a challenge he/she might encounter.

Server & Network Infrastructure Monitoring and Management

Maintaining a good IT infrastructure is at the front and center of any organization's IT priorities. HiQ has deep knowledge and a wealth of experience in designing, implementing and maintaining advanced IT infrastructures.

We propose the following approach to help maintaining the Town of Middleton's IT infrastructure to make sure that all its core business functions are reliable and resilient.

- HiQ will utilize InterMapper to continuously monitor all of Town of Middleton's Server and Network components. Alerts will be sent to HiQ support team when there are any outage or systems operating outside of designed parameters. Depending on the severity of the events, corrective actions could be taken immediately or scheduled for the next business day.
- In addition to the automated monitoring and alerting, a weekly engineering review will be performed on Infrastructure components, including servers and network devices. Update and maintenance tasks are scheduled as needed.
- HiQ will provide full support of all Town servers including working with external application developers and support.

Backup & Disaster Recovery (DR)

As Information Technology has become an integral part of all services the Town government provides to its citizens, its reliability and resilience has become increasingly important.

Over the last two years, HiQ has assisted the Town of Middleton to plan and implement DR strategies that would allow the Town to restore critical IT related services in the event of a building-wide outage. Additional analysis and planning will be required to have more granular plans for the restoration of key services in case of disasters of different type and magnitude. Additional planning is also needed for long-term archiving of Town documents and other critical information.

- HiQ will continue to monitor the current DR strategy utilizing VMware replication technology. HiQ will draft documents on steps that need to be taken in case of a disaster, and IT services need to be restored at alternate locations.
- Working with Town staff, HiQ will analyze all critical IT related services and propose contingency and disaster recovery plan
- Working with Town staff, HiQ will analyze all important data that requires archiving and safekeeping, and implement processes and procedures to provide the necessary backup and archive services.

Desktop Support & Helpdesk

HiQ's approach to Helpdesk service is a combination of personal approach and a fully integrated system management and service desk platform.

Under various circumstances, most of us have gone through the experience of calling 1-800-BIG-CORP for service or support, and often the experience is frustrating. We do not want to talk to a cold machine or go through an infinite maze of options and transfers. This is not how we want our helpdesk to operate.

HiQ's helpdesk is located in our office in Medford, Massachusetts; and all support staff are full time HiQ employees. Most of our technical staff and customer service professionals have been with HiQ for five years or longer. We strive to get to know our customer well, make personal connections, understand their daily challenges, and do everything we can to help them meet these challenges.

For Helpdesk Service, HiQ propose the following:

- A dedicated group of experienced service/systems technical staff will be the main points of contacts for Middleton's helpdesk. There will be no "level one" support. Middleton customers will speak to a level two or above technical staff right away.
- A customer web portal will be created to allow Middleton customers to enter service tickets. A helpdesk email will be created to receive support request email and generate service tickets automatically. A local telephone number will be used for all customer service calls, and it will be forwarded directly to the dedicated HiQ helpdesk group; there will be no waiting and no telephone maze.
- The vast majority of support requests can be resolved quickly and effectively via remote support; however, when an onsite visit is required to address a specific service issue, a technical staff will be dispatched to visit the customer by the next business day, or sooner when the matter is urgent.
- Optionally, the Town of Middleton can require that a routinely scheduled technician visit to a Town building on a weekly or monthly basis. HiQ can fully support such requirement. Please be aware that such request is outside of the basic support model, and can result in increased cost to the Town.

Security Updates and Risk Mitigation

Maintaining a solid security posture and mitigating security risks has become a more and more critical requirement for IT operations. There are many layers of protections that can and should be deployed to mitigate risks and protect important information stored on the Town network.

HiQ will provide the following services to the Town of Middleton as part of this proposal:

- Monitor and Manage firewalls in all Town buildings to provide perimeter defenses
- Provide SPAM/Malware filtering and prevention services to all Town email
- Provide content filtering management and updates on all Town firewalls to prevent malware penetration
- Monitor and manage desktop anti-virus and anti-malware system
- Monitor and manage Windows update and other common application security updates
- Provide server level update and backup to prevent information loss
- Regularly review overall Town network and infrastructure security posture and make appropriate adjustments to increase security

Asset and Lifecycle Management

HiQ will work with Town of Middleton to create and maintain a complete IT asset inventory.

HiQ will work with Town of Middleton to plan and execute a 5-year desktop hardware rotation plan, and will provide the resources needed to assist the Town to retire and replace old desktop PCs as needed.

HiQ will also provide advisory services to the Town of Middleton to assess the benefit and ROI on all future IT investments

HiQ Computers References

Organization Name: Town of Boxford
Contact: Susan Inman
Phone: (978) 887-6000 x202
Email: sinman@town.boxford.ma.us
Address: 7A Spofford Road
Boxford, MA 01921
Scope of Work: Full Outsourced IT Provider
Working with HiQ Since: 2012

Organization Name: Boston Police Department
Contact: Jim Fitzpatrick
Phone: (617) 343-5117
Email: jim.fitzpatrick@pd.boston.gov
Address: One Schroeder Plaza
Boston, MA 02120
Scope of Work: IT Consulting, Technical Services
Working with HiQ Since: 2005

Organization Name: Revere Police Department
Contact: Steve Ford
Phone: (781) 286-8335
Email: sford@reverepolice.org
Address: 400 Revere Beach Parkway
Revere, MA 02151
Scope of Work: IT Consulting, Technical Services
Working with HiQ Since: 2011

Organization Name: Boston Public Schools
Contact: Andy Horgan
Phone: (617) 635-9198
Email: ahorgan@bostonpublicschools.org
Address: 2300 Washington Street
Boston, MA 02119
Scope of Work: IT Consulting, Technical Services
Working with HiQ Since: 2000

Organization Name: Cambridge Public Schools
Contact: Steve Smith
Phone: (617) 349-6830
Email: ssmith@cpsd.us
Address: 459 Broadway
Cambridge, MA 02138
Scope of Work: IT Consulting, Technical Services
Working with HiQ Since: 2005

Pricing Sheet

HiQ Computers is proposing the following cost structure:

\$5,000.00 per month

This includes the below services:

- 24x7 Server and Network Monitoring and Alerting Infrastructure risk mitigation during business hours;
- 24x7 engineering service availability (emergency services billed separately)
- Weekly Server and Network review by dedicated engineering staff
- Maintain backup and DR processes/programs
- Provide unlimited business hour helpdesk support, including onsite service when needed
- Implement and Maintain Patch Management System
- Maintain and support anti-virus and anti-malware system
- Maintain an asset management system
- Maintain a licensing inventory system
- Quarterly IT process review and Security posture review
- Participate in Town IT planning
- Repair of all in-warranty PC hardware
- Deploy new PC hardware annually

**Summary of Proposed Fiscal Year 2019
Capital Budget by Funding Sources**

Tax Levy	\$0
Overlay Reserve	192,765
Community Preservation Fund	35,000
Ambulance Fund	141,750
Free Cash (Includes \$200,000 to reduce tax rate, OPEB and Stabilization)	931,488
Stabilization Fund or Capital Expenditure Exclusion	622,000
Debt Service	0
Other Sources*	483,000
Total Proposed Fiscal Year 2019 Appropriation	\$2,406,003

***Other Sources Detail**

Chapter 90 state road grant	\$300,000
Oakdale Cemetery - Garage Repairs to be funded through Cemetery Receipts Reserved Fund	15,000
Fire Department - Replace self-contained breathing apparatus gear (SCBA); To be funded via unused balances in previously approved warrant articles	50,000
Water Special Revenue Fund -Replacement of 2000 International 4600 Dump Truck - Unit #3	118,000
Total Other Revenue Sources	\$483,000

*** Does not include all CPA proposed expenditure and reserve set asides and reauthorized revolving fund expenditure and Free Cash transfer to fund operating budget*

Town of Middleton Fiscal Year 2019 Capital Budget - Proposed Funding Sources

Project	Tax Levy	Overlay Reserve	Community Preservation Fund	Ambulance Fund	Free Cash	Stabilization Fund	Debt Service	Other	Notes
Articles/Special Projects									
Town Buildings: Feasibility and Cost									
Study of municipal building needs including Memorial Hall, Fire Department, Police Department and									
1 Council on Aging					100,000				
Total Articles/Special Projects	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	
Public Works									
Emily Maher Park - Sunshade and playground									
2					35,000				Proposed funding through Community Preservation Act (CPA)
Henry Tragert Common - Gazebo repairs									
3					4,200				
Oakdale Improvements - Garage repairs									
4							15,000		Proposed funding through Cemetery Receipts Reserved Fund
Transfer Station - Compactor concrete pads									
5					24,300				
Transfer Station - Roll-off container replacement									
6					7,700				
Highway Division - Power washer replacement									
7					5,500				
Highway Division - Sander/Plow for Truck #3									
8					46,000				
Highway Division - Chapter 90 state aid reconstruction									
9							300,000		Funded through Commonwealth Chapter 90 funding
Highway Division - Right-of-way tree cutting									
10					30,000				
Water Division - Replacement of 2000 International 4600 Dump									
11							118,000		To be paid from the Water Special Revenue Fund
Total Public Works	\$0	\$0	\$35,000	\$0	\$117,700	\$0	\$0	\$433,000	

Town of Middleton Fiscal Year 2019 Capital Budget - Proposed Funding Sources

Project	Tax Levy	Overlay Reserve	Community Preservation Fund	Ambulance Fund	Free Cash	Stabilization Fund	Debt Service	Other	Notes
Police									
12 Taser Replacements					12,700				
13 Two Replacement Patrol Vehicles					88,000				
Total Police	\$0	\$0	\$0	\$0	\$100,700	\$0	\$0	\$0	

Town of Middleton Fiscal Year 2019 Capital Budget - Proposed Funding Sources

Project	Tax Levy	Overlay Reserve	Community Preservation Fund	Ambulance Fund	Free Cash	Stabilization Fund	Debt Service	Other	Notes
Fire									
14 Equipment - Replace self-contained breathing apparatus gear (SCBA)								50,000	To be funded via repurposing of four prior warrant articles with balances
15 Equipment - Multi-gas meters					8,000				
EMS Equipment - Ambulance				10,750					
16 Toughbook computers									
EMS Equipment - Replace cardiac				80,000					
17 monitors									
General Administration Equipment -				51,000					
18 New portable radios									
General Administration Equipment -				55,000					
19 Communications equipment									
20 Vehicles - Replace Engine 1					622,000				To be funded from the Stabilization Reserve balance or Capital Expenditure Exclusion
					16,000				
21 Vehicles - Ladder 1 repairs									
Total Fire	\$0	\$0	\$0	\$141,750	\$79,000	\$622,000	\$0	\$50,000	

Town of Middleton Fiscal Year 2019 Capital Budget - Proposed Funding Sources

Project	Tax Levy	Overlay Reserve	Community Preservation Fund	Ambulance Fund	Free Cash	Stabilization Fund	Debt Service	Other	Notes
Elementary Schools									
Fuller Meadow School - End-user									
22 technology					34,000				
Howe Manning School - End-user									
23 technology					83,000				
Fuller Meadow School - Technology									
24 infrastructure					38,000				
Howe Manning School - Technology									
25 infrastructure					54,000				
Elementary Schools Total	\$0	\$0	\$0	\$0	\$209,000	\$0	\$0	\$0	

Town of Middleton Fiscal Year 2019 Capital Budget - Proposed Funding Sources

Project	Tax Levy	Overlay Reserve	Community Preservation Fund	Ambulance Fund	Free Cash	Stabilization Fund	Debt Service	Other	Notes
Masconomet Regional School									
Air conditioning for data closets:									
26 Total estimate \$92,000									
Replace 5 AED defibrillators and add 5 AED defibrillators: Total estimate									
27 net of funding offset \$16,000									
Central Office generator tie-in: Total									
28 estimate \$30,000									
Door rekey all locksets: Total									
29 estimate net of funding offset \$0									
Electrical alterations: Total estimate									
30 net of funding offset \$35,000									
Increase gas piping size: Total									
31 estimate \$98,000									
Mobile bleachers: Total estimate									
32 \$13,500									
Auditorium Speakers: Total estimate									
33 \$10,000									
Roof Repairs: Total estimate									
34 \$140,000									
Security cameras: Total estimate									
35 \$38,000									
Skid Steer loader replacement: Total									
36 estimate \$55,000									
Tennis courts preservation and mobile bleachers: Total estimate net									
37 of funding offset									
Wood shop safety enhancements:									
38 Total estimate \$35,000									
Masconomet Regional School - Middleton Assessment at 35.08%									
	\$0	\$192,765	\$0	\$0	\$0	\$0	\$0	\$0	

Town of Middleton Fiscal Year 2019 Capital Budget - Proposed Funding Sources

Project	Tax Levy	Overlay Reserve	Community Preservation Fund	Ambulance Fund	Free Cash	Stabilization Fund	Debt Service	Other	Notes
Town Buildings - Old Town Hall									
Security system cameras, intercom, 39 remote, door release					1,100				
Check in/out system - "My Senior 40 Center"					7,500				
Replacement of kitchen equipment - Refrigerator, freezer and 41 dishwashers					8,000				
	\$0	\$0	\$0	\$0	\$16,600	\$0	\$0	\$0	

Town of Middleton Fiscal Year 2019 Capital Budget - Proposed Funding Sources

Project	Tax Levy	Overlay Reserve	Community Preservation Fund	Ambulance Fund	Free Cash	Stabilization Fund	Debt Service	Other	Notes
Administration - General									
Funding for consultant to administer an assessment center to hire a replacement for the retiring Police									
42 Chief					20,000				
43	Consultant support for rezoning as a result of the Master Plan				25,000				
44	Town Clerk's Office - Eight electronic polling books at @\$1,590 per unit				12,720				
45	Town Clerk's Office - Replacement of voting booths				9,367				
46	<u>Information Technology Plan</u>				25,280				
Administration - General		\$0	\$0	\$0	\$0	\$92,367	\$0	\$0	\$0

Town of Middleton Fiscal Year 2019 Capital Budget - Proposed Funding Sources

Project	Tax Levy	Overlay Reserve	Community Preservation Fund	Ambulance Fund	Free Cash	Stabilization Fund	Debt Service	Other	Notes
Administration - Financial Transfers									
47 Free cash transfer to reduce the tax rate									
					100,000				
48 Funding for GASB 45 (Other Post Employment Benefits Stabilization Fund)									
					50,000				
49 Appropriation to Stabilization Fund									
Administration - Financial Transfers	\$0	\$0	\$0	\$0	\$200,000	\$0	\$0	\$0	
Other Warrant Articles									
50 Essex Tech Capital contribution									
Total Other	\$0	\$0	\$0	\$0	\$16,121	\$0	\$0	\$0	
Capital Budget Total	\$0	\$192,765	\$35,000	\$141,750	\$931,488	\$622,000	\$0	\$483,000	
Grand Total Capital Budget	\$2,406,003								

Town of Middleton Fiscal Year 2019 Capital Budget - Proposed Funding Sources

Project	Tax Levy	Overlay Reserve	Community Preservation Fund	Ambulance Fund	Free Cash	Stabilization Fund	Debt Service	Other	Notes
Free Cash Available as of November 8, 2017					\$1,949,799	A			
Fiscal Year 2018 operating appropriation					\$33,813,867				
Free Cash at a target range of at least 3% of the prior year general fund operating appropriation					<u>\$1,014,416</u>	B			
Available amount from Free Cash to fund Fiscal Year 2019 capital projects/warrant articles					\$935,383	A-B			
Projected surplus/(Deficit)					\$3,895				

**Capital Item Submitted by Department Heads but Omitted From the Proposed
Fiscal Year 2019 Capital Plan**

Item #	Description	Proposed Funding Amount
1	Highway Division - Town funded paving program	100,000
2	Old Town Hall - Repair patio area (shifted to operating budget as a repair project)	5,000
3	Old Town Hall - Painting of walls, trim, doors and ceilings	2,000
4	Old Town Hall - Refinishing hardwood flooring and miscellaneous woodwork	5,500
5	Old Town Hall - ADA upgrades to bathrooms	8,000
6	Flint Public Library - Building system upgrades (pursuing alternatives to consolidate and upgrade lighting systems)	15,000
7	Flint Public Library - Technology updates	5,000
8	Public Health - Vehicle replacement of 2014 Ford Fusion with Ford Explorer with tow package for mobile clinic trailer	24,500
9	Building Commissioner - Vehicle replacement of 2014 Ford Fusion with Ford F150	29,000
10	Information Technology Plan - Internal and External Fiber Communications Network for MH, Police, Fire, DPW, COA	295,000
Total		\$489,000

Warrant Article Update as of 3/1/2018

Organization	Object	Item Description	Original	Available	Available		Status Update
			Approved Amount	Balance as of 7/1/17	FY18 YTD Expended	Balance as of 3/1/18	
Town Wide Projects							
01122258	580311	REMEDIATE NATSUE WAY 0516 17	165,000	145,115	980	144,135	Funding supports the Natsue Way site remediation under the Massachusetts Contingency Plan (MCP). Additional steps include additional site surveys, characterization and disposal of stockpiled soils and supplemental site investigation associated with the Town controlled portion of the former Quinn parcel.
24605	582087	PHA 1 RAILS TO TRAILS FY15	130,000	126,600	0	126,600	MELD purchased the right-of-way from Danvers at the end of June 2017. The Town intends to engage with MELD regarding next steps related to the potential development of the right-of-way as a rail trail.
01122258	580312	LED STREETLIGHT CONV 0516 19	95,000	67,870	11,516	56,354	The Town and MELD are working in partnership with the lighting vendor to identify an acceptable bulb replacement for the colonial style residential streetlights. All cobra head and high wattage colonial style streetlights have been upgraded to LED lights.
01122258	580376	UPDATE MASTER PLAN ART 34 5/17	55,000	55,000	0	55,000	The Town has executed a contract with the Metropolitan Area Planning Council (MAPC) to provide professional services to undertake and perform all appropriate tasks to produce the Middleton Master Plan. MAPC is currently actively working on the update to the Master Plan.
350000	580284	PURCHASE LAND NATSUE WAY FY15	1,100,000	23,424	0	23,424	Remaining balance will be utilized for environmental engineering support for site remediation needs under the Massachusetts Contingency Plan (MCP)
01122258	580381	MEMORIAL HALL REPAIRS 11/17	25,000	20,411	12,354	12,646	Article approved at the 11/7/17 Town Meeting. Funds will be used for rug and ceiling replacement for the Memorial Hall Structural Repair project. Project complete. Awaiting submission of final invoices.
01161258	580378	VOTING TABULATORS ART 34 5/17	17,000	17,000	0	17,000	Town Clerk's Office is currently actively evaluating potential voting tabulator options.
01155258	580375	IT IMPROVE ART34 5/17	34,450	34,450	19,170	15,280	Information Technology (IT) capital program is ongoing. Fiscal Year 2018 projects include replacing the print server at the Council on Aging, upgrading the internal network wiring at the Council on Aging, phase two of the municipal building wireless network and upgrading the firewall at the Flint Public Library
01192258	580374	TOWN HALL WINDOWS ART 33 5/17	10,000	10,000	0	10,000	Project will commence upon the completion of the Memorial Hall Structural Repair project. Likely sometime in the spring/summer of 2018.

Warrant Article Update as of 3/1/2018

Organization	Object	Item Description	Original	Available	Available		Status Update
			Approved Amount	Balance as of 7/1/17	FY18 YTD Expended	Balance as of 3/1/18	
01122258	580377	EMPLOYEE TRAINING ART 34 5/17	10,000	10,000	3,472	6,528	Utilized for as-needed employee training.
24605	580379	CURTIS SAW MILL PRJ ART35 5/17	4,900	4,900	0	4,900	Funding was requested by the Historical Commission. Pike Messenger hopes to complete the project by spring 2018. The funding will be used if the Historical Commission is unable to identify volunteers to assist with the completion of the site work at the Curtis Mill site. The \$2,000 allocated by the May 2017 Town Meeting for the Mill Pond Dam marker was completely spent in July 2017. The marker has been installed.
01141258	580223	ASSESSOR GIS SYS 13 5/12	32,000	3,736	0	3,736	Plan to use this for further layer development for the town GIS. We plan to use this as a funding source for some layers that are in development by DPW, Health and any other departments that want to develop a layer.
01122258	580190	REPAIR TWN HALL & OLD 26 0510	52,000	2,277	0	2,277	Remaining balance will be utilized for as needed supplemental expenses associated with the Memorial Hall Repair Project.
01192258	580323	PUBLIC FACILITIES STUDY0516 26	50,000	5,500	3,500	2,000	Public Facilities Study is essentially complete. Remaining funding will be utilized toward prospective site and building layouts.
24605	580249	TRAIN STATION ART 14 0513	9,500	500	0	500	Article funded preliminary rehabilitation plans for former South Middleton Train Station. The current plan is to permanently locate the train station off of Maple Street adjacent to the proposed parking area for the rail trail. The final project solution will likely be incorporated into the rails-to-trails initiative.

Warrant Article Update as of 3/1/2018

Organization	Object	Item Description	Original	Available	Available		Status Update
			Approved Amount	Balance as of 7/1/17	FY18 YTD Expended	Balance as of 3/1/18	
DPW Projects/195 North Main Street							
01420258	580341	REP DUMP TRUCK ART 26 5/17	73,000	73,000	69,985	3,015	Truck was ordered over the summer, awaiting delivery.
01420258	580342	PAVING & ROAD IMPR ART 26 5/17	100,000	100,000	39,283	60,717	In process of paying bills and residual will be spent by end of fiscal year.
28005	580343	WATER LAKEVIEW ART 26 5/17	65,000	65,000	8,800	56,200	Contract has been awarded to Weston & Sampson and they have started their analysis. A report on their findings and recommendation is due mid December.
84045	580309	OAKDALE CEMETERY WORK 0515	63,000	30,182	0	30,182	Need to have the entrance landscape wall redesigned to flow into the front retaining wall along Maple Street. Construction to be completed in Spring of 2018.
01420258	580234	DPW BLDG REPAIR 25 5/12	41,000	29,320	0	29,320	Working with structural engineer for the exterior walls. Hope to have answers by February 2018.
01192258	580298	DPW BUILDING REFURB 0515 ART25	25,000	25,000	0	25,000	Front office renovations have just started and will continue through winter 2018.
01420258	580282	IMPROVE RUBCHINUK PK FY15	90,000	41,305	22,254	19,051	The parking lot has been paved, well drilled, and landscaping has commenced and will be finished in April 2018.

Warrant Article Update as of 3/1/2018

Organization	Object	Item Description	Original Approved Amount	Available Balance as of 7/1/17	FY18 YTD Expended	Available Balance as of 3/1/18	Status Update
01420258	584004	ATHLETIC FLD MAINT STM 5/15	35,000	19,357	2,667	16,689	Funds are being used to pay overtime to mow athletic fields.
01420258	580278	REP TRAILER LEAF VAC FY15	25,000	13,219	0	13,219	Completed, was able to purchase at a lower price
01420258	580281	DPW COPY MACH/STAIRS FY15	26,000	12,332	0	12,332	DPW project for the stairs was completed
01420258	580189	DPW RENO & MOWER 25 0510	43,000	9,800	3,500	6,300	Mower has been purchased. Residual to be used on front office renovation
01425258	580339	BUILDING & DECK REP ART26 5/17	9,000	9,000	0	9,000	To be built inside during the winter
01420258	580260	DPW BLDG IMPROVEMENTS 0513	35,000	8,513	2,619	5,894	Residual to be used on front office renovation
24605	580290	TOWN COMMON IMPRV 0515 ART 21	100,000	4,713	0	4,713	Need to construct a structure to hide the porta pottie if needed.
24605	580289	SHADE STRUCTURE HM 0515 ART 20	25,000	14,985	10,995	3,990	Completed
01420258	580214	STRM.MNGMT CONSULT ART30 0511	15,000	2,613	0	2,613	Waiting on new regulations
01425258	580340	REPL ROLL-OFF CONT ART26 5/17	7,000	7,000	6,000	1,000	Completed
01420258	580338	REPLACE FLAIL MOWER ART26 5/17	8,500	8,500	7,675	825	Completed
01420258	580337	REPL RIDING MOWER ART26 5/17	11,000	11,000	10,375	625	Completed
01420258	580313	TIRES FOR 2008 LOADER 0516 20	8,000	467	0	467	Completed
01420258	580296	ADDTL CHAP 90 FUNDING 0515	75,000	3,555	4,309	(754)	Completed

Warrant Article Update as of 3/1/2018

Organization	Object	Item Description	Original Approved Amount	Available Balance as of 7/1/17	FY18 YTD Expended	Available Balance as of 3/1/18	Status Update
Fire Projects/Building							
01220258	580354	FD BUILDING REPAIRS ART28 5/17	20,000	20,000	0	20,000	We are in the process of having the rot repaired and the painting will take place in spring 2018.
01220258	580357	OUTFIT FOREST TRUCK ART28 5/17	35,000	35,000	15,325	19,675	The outfitting is in progress, the tank has been ordered and it will be finished by spring 2018.
01220258	580359	FD TRAINING ART28 5/17	16,400	16,400	0	16,400	This money will be used when the new member goes to the academy.
01220258	580355	TURN-GEAR WASH/DRY ART28 5/17	17,000	17,000	678	16,322	We received the grant and after the town's matching portion is taken out approx. \$16,219 should be turned back to the town.
01220258	580352	IV PUMPS ART28 5/17	11,000	11,000	0	11,000	Per Chief this can be repurposed due to removal of state mandate
01220258	580351	COMAND POST EQUIP ART28 5/17	16,000	16,000	7,701	8,299	This money will be used shortly to outfit the vehicles.
01220258	580350	REPL FIRE HOSES ART28 5/17	8,000	8,000	1,980	6,020	These funds will be used to replace aging hoses, we are in the process of testing hose and making a list of what we need.
01220258	580293	FIRE STATION REPAIR 0515 ART15	15,000	8,782	4,875	3,907	These funds will be used for ongoing repairs at the station, most recently heating system repairs.
01220258	580294	FIRE TRAINING 0515 ART 16	16,000	3,951	0	3,951	These funds will be used up for academy training.
01220258	580217	RE-INSULATE FIRE STATION ROOF	35,000	1,271	193	1,078	These funds will be used up for the rot repair.
01220258	580267	FIRE DEPT DEFIB COMPT FY15	27,300	598	0	598	These funds will be used to purchase medical supplies.
01220258	580358	SAL MILITARY CALLUP ART28 5/17	26,000	26,000	25,947	53	Remaining balance to be closed out.

Warrant Article Update as of 3/1/2018

Organization	Object	Item Description	Original Approved Amount	Available Balance as of 7/1/17		FY18 YTD Expended	Available Balance as of 3/1/18	Status Update
Police Projects/Building								
01210258	580347	CRUISER LAPTOPS ART27 5/17	12,000	12,000	0	12,000	On order	
01210258	580276	RADAR GUN & VESTS FY15	23,300	5,085	189	4,897	Open	
01210258	580314	UPGRADE RADIO INFRASTR 0516 23	25,000	2,536	0	2,536	Purchase in process	
01210258	580349	PD PISTOLS ART27 5/17	15,900	15,900	15,052	848	Close out	
01210258	580348	PATROL RIFLES ART27 5/17	1,400	1,400	1,364	36	Close out	
01210258	580345	RADAR GUNS ART27 5/17	3,900	3,900	3,882	18	Close out	

Warrant Article Update as of 3/1/2018

Organization	Object	Item Description	Original	Available	Available	Status Update
			Approved Amount	Balance as of 7/1/17	FY18 YTD Expended	
Senior Center Projects/Old Town Hall						
01541258	580373	COA VAN ART 33 5/17	62,000	62,000	59,518	2,482 Purchase order for replacement van was issued on 9/14/2017. Delivery scheduled for mid-February.
<hr/>						
24605	580261	OLD TOWN HALL REPAIRS 0513	22,000	22,000	0	22,000 Architectural plans for the rehabilitation of the front of Old Town Hall are complete. Remaining balance will be utilized for the rehabilitation of the front of Old Town Hall including the replacement of the front stairs, windows and siding. Project is currently on hold pending further direction from the Public Facilities Study.
<hr/>						
24605	580305	OLD TOWN HALL PLANS 0515 ART45	20,000	8,510	0	8,510 Article funded architectural plans for the rehabilitation of the front of Old Town Hall. Plans are now complete. The remaining fund balance will be utilized for the rehabilitation of the front of Old Town Hall including the replacement of the front stairs, windows and siding. Project is currently on hold pending further direction from the Public Facilities Study.
<hr/>						
24605	580236	OLD TWN HALL, COPY MAC 27 5/12	13,000	23	0	23 Balance to be closed out.
<hr/>						

Warrant Article Update as of 3/1/2018

Organization	Object	Item Description	Original Approved Amount	Available Balance as of 7/1/17	FY18 YTD Expended	Available Balance as of 3/1/18	Status Update
Elementary School Projects							
01313258	580367	FM SECURITY SYSTM ART29 5/17	101,358	101,358	0	101,358	In process.
01313258	580360	FM TECH IMPROVE ART29 5/17	25,000	25,000	0	25,000	In process.
31114008	580327	ACCOUNTING HR SOFTWARE 0516 28	22,000	22,000	8,792	13,208	This was converted to SIM software. RFP is due 10/19. Evaluation will take place in November, Contract Award in December, implementation in the winter, spring , and early summer 2018.
01313258	580366	FM SCIENCE CURRIC ART29 5/17	36,750	36,750	29,966	6,784	In process. Purchased materials.
01313258	580365	FM LIBRARY FURNTURE ART29 5/17	13,000	13,000	0	13,000	Reviewing options and soliciting quotes.
01312258	580370	HM SCIENCE CURRIC ART29 5/17	66,550	66,550	63,770	2,780	In process. Purchased materials.
01301258	580251	SCHOOL SECURITY SYST 0513	37,000	7,691	0	7,691	Will use with Article 29.
01312258	580368	HM CHROMEBOOKsART29 5/16	29,700	29,700	26,370	3,330	Purchased and completing purchases.
31225008	580326	TEACHERS LAPTOPS 0516 27	3,300	3,300	0	3,300	Purchased and completing purchases.
31225008	580326	FM IPADS ART29 5/17	10,991	10,991	9,802	1,189	Purchased and completing purchases.
01313258	580361	FM CHROMEBOOKS ART29 5/17	23,100	23,100	22,175	925	Purchased and completing purchases.
01313258	580364	FM DOCUMENT CAMERAS ART29 5/17	138	138	0	138	Purchased and completing purchases.

\$56,746 = Amount available for re-purpose

Warrant Article Update as of 3/1/2018

Organization	Object	Item Description	Original Approved Amount	Available Balance as of 7/1/17	FY18 YTD Expended	Available Balance as of 3/1/18	Status Update
Warrant Articles to be repurposed to fund FY19 \$50,000 SCBA Equipment Replacement Article							
01420258	580278	REP TRAILER LEAF VAC FY15	25,000	13,219	0	13,219	Completed, was able to purchase at a lower price
01420258	580281	DPW COPY MACH/STAIRS FY15	26,000	12,332	0	12,332	DPW project for the stairs was completed
01220258	580355	TURN-GEAR WASH/DRY ART28 5/17	17,000	17,000	678	16,322	We received the grant and after the town's matching portion is taken out approx. \$16,219 should be turned back to the town.
01220258	580352	IV PUMPS ART28 5/17	11,000	11,000	0	11,000	Per Chief this can be repurposed due to removal of state mandate
Total				\$52,874			

**Capital Item Submitted by Department Heads but Omitted From the Proposed
Fiscal Year 2019 Capital Plan**

Item #	Description	Proposed Funding Amount
1	Highway Division - Town funded paving program	100,000
2	Old Town Hall - Repair patio area (shifted to operating budget as a repair project)	5,000
3	Old Town Hall - Painting of walls, trim, doors and ceilings	2,000
4	Old Town Hall - Refinishing hardwood flooring and miscellaneous woodwork	5,500
5	Old Town Hall - ADA upgrades to bathrooms	8,000
6	Flint Public Library - Building system upgrades (pursuing alternatives to consolidate and upgrade lighting systems)	15,000
7	Flint Public Library - Technology updates	5,000
8	Public Health - Vehicle replacement of 2014 Ford Fusion with Ford Explorer with tow package for mobile clinic trailer	24,500
9	Building Commissioner - Vehicle replacement of 2014 Ford Fusion with Ford F150	29,000
10	Information Technology Plan - Internal and External Fiber Communications Network for MH, Police, Fire, DPW, COA	295,000
Total		\$489,000

TOWN OF MIDDLETON, MA FINANCIAL MANAGEMENT POLICIES

Introduction

The following financial principles set forth the broad framework for overall fiscal planning and management of the Town of Middleton. In addition, these principles address both current activities and long-term planning. The principles are intended to be advisory in nature and serve as a point of reference for all policy-makers, administrators and advisors. It is fully understood that Town Meeting retains the full right to appropriate funds and incur debt at levels it deems appropriate, subject of course to statutory limits such as Proposition 2 ½. These policies supersede all previously adopted policies unless stated otherwise.

The principles outlined in this policy are designed to ensure the Town's sound financial condition now and in the future. Sound Financial Condition may be defined as:

- _) *Cash Solvency* : the ability to pay bills in a timely fashion
- _) *Budgetary Solvency*: the ability to annually balance the budget
- _) *Long Term Solvency*: the ability to pay future costs
- _) *Service Level Solvency*: the ability to provide needed and desired services

It is equally important that the Town maintain flexibility in its finances to ensure that the Town is in a position to react and respond to changes in the economy and new service challenges.

These Financial Management Policies will be periodically reviewed, revised, and readopted. At the very least, this shall occur every three years.

Policy Statements

1. **Budget Message:** The Town Administrator shall annually prepare a balanced budget and comprehensive Budget Message as required by state law and the Middleton Town Charter. The Budget Message shall include a detailed examination of trends in tax levy, new growth, local receipts, local aid, and available funds. The Town Charter further requires the preparation of a comprehensive five-year Capital Plan.
2. **Structurally Balanced Budget:** The Town will strive to fund recurring expenses with recurring revenues, thereby avoiding structural deficits. New operating costs associated with capital projects should be funded through the operating budget, but reflected in the capital improvement plan.
3. **Revenues:** municipal operations are funded from four primary revenue sources: 1) State Aid to Cities and Towns (a.k.a. Local Aid); 2) property taxes; 3) local receipts; and 4) other available funds. The Town Administrator, Chief Financial Officer, and other finance officials will develop an estimate prior

to the commencement of the budget development process. Estimates from each source must be reasonable and based on sound information. Guidance for each revenue source is discussed below:

- _) Property Tax Levy: Property taxes are the most stable revenue source. The estimate for the ensuing fiscal year shall be within the allowable levy limit under Proposition 2 ½.
- _) Local Receipts: Local receipts are locally generated revenues from sources such as license and permit fees and automobile excise taxes. Local receipts are tracked and the trends analyzed in order to identify potential changes. It shall be the policy to estimate local receipts based on the trend of the most recent five years.
- _) Local Aid: The State budget adopted by the Massachusetts Legislature and the Governor determines the aid each city and town will receive in the ensuing fiscal year. In most years, Middleton's budget is finalized before the State budget is adopted; at best, we have only an estimate based on the Governor's or House Ways & Means budget proposal. It shall be the policy that Local Aid for the ensuing year will be estimated at 100% of the current year, unless there is good reason to deviate, such as a known looming State deficit, Local Aid resolution, or other compelling evidence.
- _) Other Available Funds: These include transfers from other funds, such as from ambulance receipts to offset the operation of the Fire Department, from MELD to reimburse for expenses in areas such as insurance and pension assessments, and from other funds. Available funds can also include transfers from the Assessors overlay account, Free Cash, and various Stabilization Funds.

4. **Stabilization Funds**: A stabilization fund is designed to accumulate amounts for capital and other future spending purposes, although it may be appropriated for any lawful purpose. Communities may establish one or more stabilization funds for different purposes. A two-thirds vote of Town Meeting is required to establish or appropriate from a stabilization fund. The Town will maintain a series of Stabilization Funds as described below. Transfers to the various Stabilization Funds shall generally be from Free Cash or other reserves and shall be in conformance with G. L. c. 40, s. 5B.

- _) General Stabilization Fund: this is the Town's main financial reserve in the event of an emergency or extraordinary need. It shall be the goal of the Town to achieve and maintain a balance in the General Stabilization Fund of 5%-7% of current year budgeted general fund operating appropriation.
- _) Capital Stabilization Fund: The Capital Stabilization Fund will be available to set aside funds to use for one-time capital purchases or annual debt service payments. It shall be the goal to achieve and maintain a balance in the Capital Stabilization Fund of 3%-5% of current year budgeted general fund operating appropriation.
- _) Pension Stabilization Fund: The Pension Stabilization Fund will be available as a reserve to make future extraordinary "catch-up" contributions to the Essex Regional Retirement System (ERRS) if ERRS fails to achieve full funding due to unrealized investment returns or other factors. If ERRS's full funding schedule remains accurate, the Pension Stabilization Fund may be directed toward annual continuation payments, thereby limiting the impact on operating budget revenues. When full funding is complete or satisfactorily certain, the balance in the Pension Stabilization Fund may be transferred or appropriated as allowed by G. L. c. 40, s. 5B.
- _) Special Education Stabilization Fund: The Annual Town Meeting on May 10, 2016 established the Special Education Stabilization Fund. It shall be the goal of the Town to use the Special Education Stabilization Fund to offset spikes in elementary school special education costs, including special education transportation costs. It shall be the further goal to have a balance equal to the

average of the most recent five years actual special education spending. The initial target balance is \$350,000 with a maximum balance of \$500,000.

5. Free Cash reserves are the remaining, unrestricted funds from operations of the previous fiscal year. Free Cash is comprised of unexpended Free Cash from the previous year, actual receipts in excess of revenue estimates, and unspent amounts in budget line items. Once certified by the Director of Accounts, Free Cash is available for appropriation for any lawful purpose. The Town shall have a goal of maintaining Free Cash at a target range of at least 3% of the prior year general fund operating appropriation.

The Town hereby identifies the following as appropriate uses of Free Cash:

-]) Operating Budget: The Town has historically used Free Cash to subsidize the ensuing year's operating budget in order to reduce the tax rate. It is the Town's goal to eliminate or reduce the use of Free Cash used in the development of the operating budget. The Town will reduce its annual appropriation of Free Cash until it is \$0. When appropriate, the Town may, prior to setting the tax rate, elect to devote a portion of Free Cash for the purposes of reducing the tax rate.
-]) Stabilization Funds: to replenish the Town's various Stabilization Funds.
-]) OPEB Trust Fund: to fund the other post-employment benefits (OPEB) Trust fund.
-]) Capital Improvement Program: to fund capital improvements in order to avoid or minimize borrowing.
-]) Unexpected Deficits: to fund potential deficits in order to avoid carrying them into the next fiscal year. Snow and ice deficits are an example of a deficit appropriately funded with Free Cash.
-]) Emergency Appropriations: to allow for fiscal flexibility.

6. **Excess Levy Capacity:** The Town shall have a goal of maintaining Excess Levy Capacity of at least 1% of current year budgeted general fund operating appropriation in order to have tax capacity to pay for future fixed costs in excess of inflation, provide needed and desired services, and maintain flexibility to react and respond to changes in the economy with less measurable financial stress.

7. **Reserve Funds:** The Town shall maintain a general reserve fund and a special education reserve fund.

-]) General Reserve Fund: The Town, through its Finance Committee, shall maintain a Reserve Fund pursuant to G. L. c. 40, s. 6, to provide for extraordinary and unforeseen expenditures. The desirable annual appropriation shall be 1% of general fund expenditures excluding schools.
-]) Special Education Reserve Fund: The Town, through its Board of Selectmen and Middleton School Committee, shall maintain a Special Education Reserve Fund pursuant to G. L. c. 40, s.13E to provide for unanticipated or unbudgeted costs of special education, out-of-district tuition, or special education transportation. The desirable annual appropriation or fund balance shall be equal to 2% of net school spending.

8. **Debt Management:** The Town recognizes that maintaining debt levels consistent with best practices allows the Town to maintain and improve its credit rating with rating agencies. It shall be the goal of the Town to manage debt within the following parameters:

A. Annual debt service (principal and interest), exclusive of debt exempt from Proposition 2 ½,

State reimbursements (e.g. Mass. School Building Authority), and State aid shall be no less than 2% nor more than 10% of current year budgeted general fund operating appropriation. This is known as Net General Fund Debt Service.

B. Annual debt service inclusive of debt exempt from Proposition 2 ½, State reimbursements (e.g. Mass. School Building Authority), and State aid shall be no more than 15% of current year budgeted general fund operating appropriation. This is known as Gross General Fund Debt Service.

C. General Fund Debt does not include debt for water, sewer, and electric light.

9. **Capital Improvement Plan:** Capital items are assets that have a useful life of five (5) years and a cost of \$5,000. Regular capital investment is critical to maintaining the Town's infrastructure, including vehicle fleet, buildings, equipment, and acquisition of land. Annually, the Town Administrator will develop a capital improvement plan (CIP) for the next five (5) years. Year one (1) of the CIP is the ensuing year's proposed capital budget. In order to adequately invest in its capital assets, it is the Town's goal to annually spend at least two percent (2%) of general fund expenditures on its general fund capital plan. Non-general fund capital shall be evaluated and programmed based on need.

Funding of capital items may come from a number of sources, including, but not limited to:

- _) Available funds, such as Free Cash, Capital Stabilization, Overlay, Community Preservation Fund, and Ambulance Fund.
- _) Issuance of debt within the levy.
- _) Debt or Capital Outlay Expenditure Exclusion. In order to maintain budget capacity within the limits of Proposition 2 ½ and in recognition of the public facility needs facing the Town, the Town may wish to seek ballot approval for large general fund acquisitions, such as fire apparatus and public works equipment costing more than \$500,000, as well as for Town, school, and regional school building projects. Funding major acquisitions outside of Proposition 2 ½ will improve the Town's limited budget capacity, ensure broad community approval for such projects, and reinforce the Town's strong bond rating. Debt Exclusions and Capital Outlay Expenditure Exclusions allow a community to increase the tax levy above the limitations of Proposition 2 ½ and require a ballot vote.
 - A Debt Exclusion exempts the debt service for the term of the debt issuance.
 - A Capital Outlay Expenditure Exclusion is a one-time increase in the tax levy to fund a capital project or acquisition.

10. **Investments:** Investment practices are governed by the Massachusetts General Laws. The Town's general fund, special revenue funds, and trust funds are invested in accordance with all applicable Massachusetts General Laws using the list of legal investments and taking into consideration safety, liquidity, and yield.

Massachusetts General Laws, Chapter 44, section 55B requires the Town Treasurer to invest all public funds except those required to be kept un-invested for purposes of immediate distribution. The state law further requires that invested funds are to be placed at the highest possible rate of interest reasonably available, taking into account *safety, liquidity, and yield*. Therefore, these guidelines are intended to further the objective of securing the highest return that is consistent with safety of principal while meeting the daily cash requirements for the operation of the Town's business.

- **Safety** of principal is the foremost objective of the investment program. Investments

shall be undertaken in a manner that seeks to ensure the preservation of capital through the mitigation of credit risk (the risk of loss due to the failure of the security issuer or backer) and interest rate risk and interest rate risk (which is the risk that the market value of securities in the portfolio will fall due to changes in the market interest rates). These risks shall be mitigated by the diversification and prudent selection of investment instruments, and choice of depository.

- **Liquidity** is the next most important objective. The overall investment portfolio shall remain sufficiently liquid to meet all operating requirements that may be reasonably anticipated. Since all possible cash demands cannot be anticipated, the Treasurer shall carry out investment activities in a manner that provides for meeting unusual cash demands without the liquidation of investments that could result in forfeiture of accrued interest earnings, and loss of principal in some cases.
- **Yield** is the third, and last, objective. Investments shall be undertaken so as to achieve a fair market average rate of return, taking into account safety and liquidity constraints as well as all legal requirements.

11. **Procurement:** Procurement shall be conducted in accordance with Massachusetts General Laws c. 30B (Supplies & Services); c. 149 (Building Construction); c. 30, s. 39M (Public Works Construction); c. 7C, ss. 44-57 (Public Building Projects Design); the Middleton Charter; and Chapter 14 of the Middleton Code. The Town Administrator is the Chief Procurement Officer and as such may delegate procurement responsibilities.
12. **Receivable Write-Offs:** The Town is unable to collect all receivables. It shall be the policy of the Town to write-off uncollected receivables after three years. This policy shall not apply to motor vehicle excise, real property, and personal property taxes.
13. **Audit of Financial Statements and Management Letter:** It is the Town's goal to retain the services of an outside auditing firm to complete an audit of the Town's financial statements and to prepare a management letter detailing its findings and recommendations. It is the further goal to be prepared for the auditor by September 30 so the auditor can return its completed product in a timely manner.
14. **Fraud:** The Town is committed to protecting its assets against the risk of loss or misuse. Accordingly, it is the policy of the Town to identify and promptly investigate any possibility of fraudulent or related dishonest activities against the Town and, when appropriate, to pursue legal remedies available under the law. Reference is hereby made to the Town's Municipal Fraud Policies and Procedures.

BOARD OF SELECTMEN

FINANCE COMMITTEE

TOWN ADMINISTRATOR

TOWN ACCOUNTANT/CHIEF FINANCIAL OFFICER

TREASURER/COLLECTOR

DATE:

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Articles/Special Projects					
Town Buildings: Feasibility and Cost Study of municipal building needs including Memorial Hall, Fire Department, Police Department and Council on Aging	100,000				
Articles/Special Projects Total	\$100,000	\$0	\$0	\$0	\$0

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Public Works					
Recreational Facilities					
1) Rubchinuk Recreational Facility - East Street					
a.) Install Water Line for Irrigation			65,000	65,000	
b.) Field Recondition		30,000			
2) Emily Maher Park					
a.) Natsue Way - Phase I Park					
(Status TBD)					
b.) Phase II field development on top of landfill					
(Status TBD)					
c.) Reconstruct large soccer field					
d.) Sun Shade	15,000				
e.) Playground	20,000				
3) Fuller Meadow Complex					
a.) Field Recondition (2)		30,000		35,000	
4) Howe Manning Complex					
a.) Field Recondition					
b.) Shade Structure					
5) Henry Tragert Common					
a.) Gazebo Repairs	4,200				25,000
b.) Field Recondition					
RECREATION TOTAL:	\$39,200	\$60,000	\$65,000	\$100,000	\$25,000

TOWN OF MIDDLETON



ROBERT LABOSSIÈRE
Superintendent of Public Works

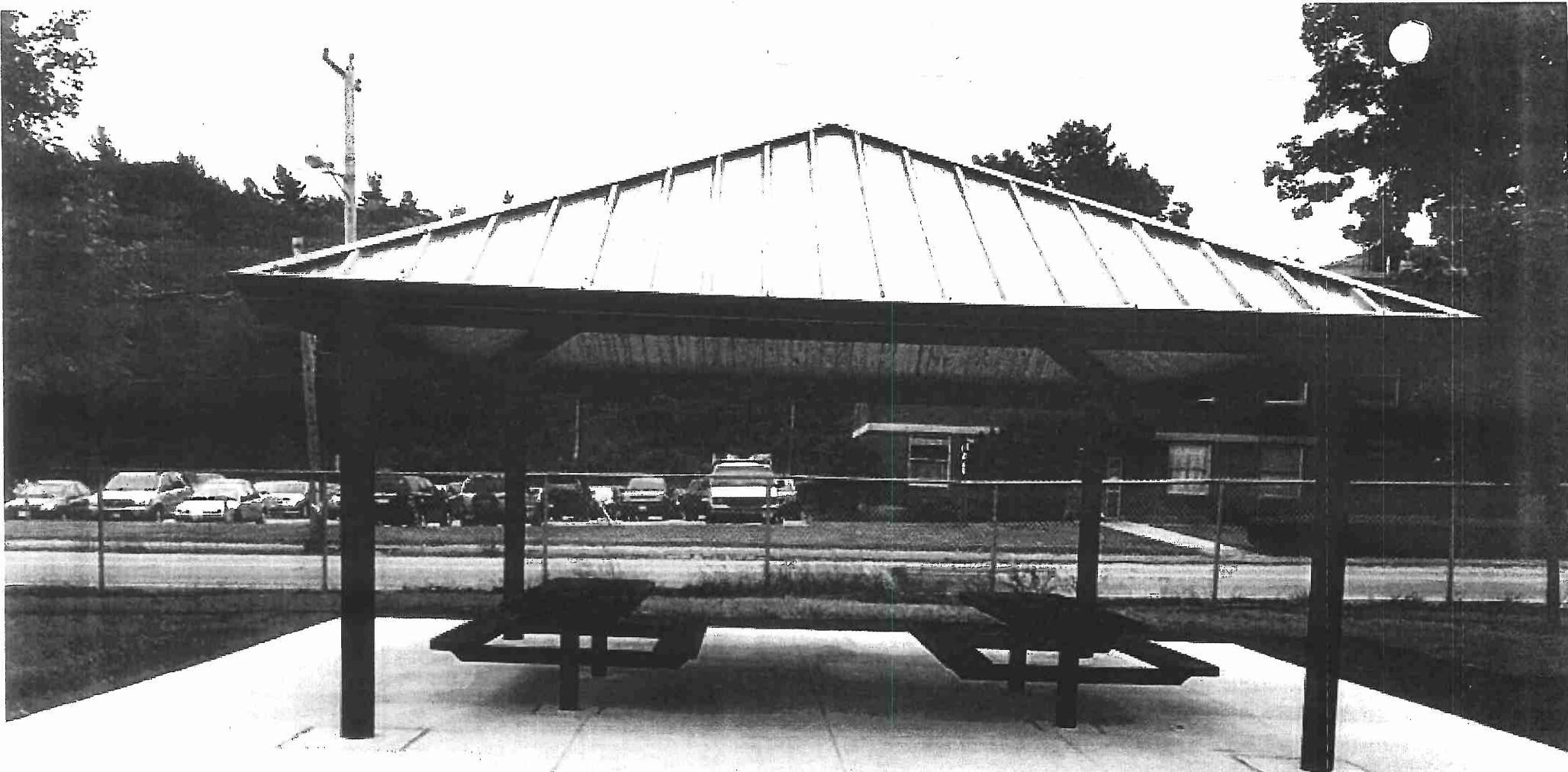
Tel (978) 777-0407
Fax (978) 774-0718

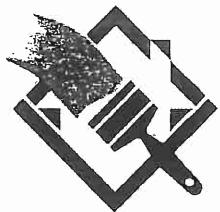
TO: Andrew Sheehan, Town Administrator
FROM: Bob LaBossiere, DPW Superintendent
DATE: February 12, 2018
SUBJECT: Capital Budget Back-Up Shade Structure/Playground/Maintenance

I am proposing an article for the DPW's FY19 Capital Budget to acquire funding for the purchase of a new shade structure and playground structure to be erected at the Emily Maher Recreational Facility as well as money to maintain the gazebo at Memorial Hall. These items have been requested by the recreation department. The shade structure will be used to protect children from the weather during sports camps or other activities. The playground is a request to help provide activities for children who are not participating in the sporting events and will keep them away from the busy roadways. These items will also be valuable during other town events at the facility such as Chief Will's Day. The gazebo, which was kindly donated by the Kiwanis Club, is approximately 15 years old and is in need of repair. A good pressure wash of the structure is recommended along with repairs to rotted boards on the structure. The entire structure will be primed and repainted.

Shade Structure:	\$15,000
Playground:	\$20,000
Gazebo:	\$ 4,200

Proposed Budget Price: **\$39,200**





GEM
PAINTING
COMPANY

60 Liberty Street
Middleton, MA 01949
978-774-6309

INVOICE

Town of Middleton
Ken Gibbons

DATE: 8.4.17

DESCRIPTION OF SERVICES

Pressure wash entire gazabo, repair rotted boards, caulk and
apply full primer and full coat of paint

Labor and Materials	\$3800.00
---------------------	-----------

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Public Works					
Cemetery Division					
1) 2012 EXMARK 60" Mower				15,000	
2) 1995 Scag 52" Walk behind Mower		10,000			
3) 2010 EXMARK 52" Mower					
4) Oakdale Improvements					
a.) Garage Repairs	15,000				
b.) Road Paving					
5) 2014 Trailer Mounted Leaf Vacuum					
6) 2007 Leaf & Chipper Box				10,000	
CEMETERY TOTAL:	\$15,000	\$10,000	\$0	\$15,000	\$10,000

TOWN OF MIDDLETON



Public Works Department
195 NORTH MAIN STREET
MIDDLETON, MA 01949

ROBERT LABOSSIÈRE
Superintendent of Public Works

Tel (978) 777-0407
Fax (978) 774-0718

TO: Andrew Sheehan, Town Administrator

FROM: Bob LaBossiere, DPW Superintendent

DATE: February 12, 2018

SUBJECT: Capital Budget Back-Up for Cemetery Garage

I am proposing an article for the DPW's FY19 Capital Budget to acquire funding to hire a contractor to replace the asphalt shingles on the Oakdale Cemetery Garage. As part of this project, I would like to also install siding on the garage to look like cedar shakes to make it look like a Colonial style building. The building is also in need of replacement of the garage doors and will be replaced by insulated doors with decorative hardware to look like wooden Colonial doors.

Garage Doors:	\$3,390
Asphalt Roof Shingles:	\$5,000
Siding:	\$6,500

Proposed Budget Price: **\$15,000**

Collins Overhead Door, Inc.

404 3rd STREET • EVERETT, MA 02149
TEL: (617) 387-0759 FAX: (617) 389-5967
24 HOUR EMERGENCY SERVICE

QUOTATION

11/01/17

**TOWN OF MIDDLETON
DEPARTMENT OF PUBLIC
WORKS
195 NORTH MAIN STREET
MIDDLETON, MA 01949**

**Tel#: 978-490-0772
Ken.gibbons@middletonma.gov**
**Ref#: 157342
Cust#: 34612**

**Attn: KEN
Job: 83 MAPLE STREET**

Furnish and Install (2) 10 x 9-9 steel insulated, Sonoma Style doors, with 12" radius tracks, Stockbridge Glass, decorative hardware, torsion springs and fully weather-stripped

Total Cost - \$3,390.00

Add \$875.00 for 2 electric operators with keypad and remotes

- ✓ *Wood door products must be finished, stained or painted according to manufacturer's instructions prior to installation to comply with the manufacturer's warranty. Wood doors not properly painted by outside contractors will not be warranted by the manufacturer or Collins Overhead Doors, Inc. Painting instructions are supplied with all wood doors. Please consult Collins Overhead Doors with any concerns regarding color, type of paints and/or prep information.*
- ✓ *Electrical and/or framework cost not included unless otherwise specified.*
- ✓ *Add \$25.00 per motor for surge protector.*
- ✓ *Customer is responsible for covering all finished flooring. Collins Door is not responsible for uneven floors or damage to concrete floors.*
- ✓ *To ensure the highest level of safety, 10' of work area at the front of the garage should be cleared of personal property. Additional costs may be incurred if work area is not cleared.*
- ✓ *Custom arch weather-stripping (if required) is not included in total price.*
- ✓ *A \$200.00 delivery fee may apply if the customer requests delivery of doors to job location prior to installation.*
- ✓ *Vinyl doors cannot be painted. This will void the warranty.*
- ✓ *Collins Door is not responsible for non-photo eyed operators (UL325 regulation).*
- ✓ *Cancelled custom orders are subject to 30% restocking fee.*
- ✓ *All new doors should be serviced at least once a year.*
- ✓ *Any legal fees or out of pocket costs due to collection will be the responsibility of the customer.*
- ✓ *Quotation valid for sixty (60) days.*

WAITT CONSTRUCTION

Building Contractors

30 Echo Street
Melrose, MA 02176
Phone / Fax 781-662-9756

Quotation

DATE February 19, 2018

Bill To:

Town of Middleton DPW
195 North Main Street
Middleton, MA 01949

Quotation valid until: April 19, 2018

Comments or special instructions:

Description	AMOUNT
Reshingle Oakdale Cemetery Garage roof (disposal of old shingles not included)	\$5,000
Vinyl siding installed on three sides of the building	\$6,500
TOTAL	\$ 11,500.00

If you have any questions concerning this quotation, contact Name, Phone Number, E-mail.

THANK YOU FOR YOUR BUSINESS!

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Public Works					
Parks Division					
1) 2007 John Deere 84" Rotary Mower					18,000
2) 2005 Scag 61" Turf Tiger Riding Mower		13,000			
3) 2017 Exmark 60" Riding Mower					
4) 2004 STHM 61" Riding Mower					
5) 2013 60" Exmark Riding Mower					
4) 2008 (16') Utility Trailer					
5) 2000 Athletic Field Conditioner					
6) 2006 John Deere Tractor				60,000	
7) 2017 Ferri Flail Mower					
8) 2015 Wood Chipper					
9) 2009 Bluebird Walk Behind Overseeder					
10) 2003 Lawn Core Aerator					
11) 2007 3pt. Hitch Spreader					
12) 2007 3pt. Hitch 60" Seeder					
13) 1995 Ransome Push Mower			2,000		
PARKS TOTAL:	\$0	\$13,000	\$2,000	\$60,000	\$18,000

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Administration 195 North Main Street					
Facilities					
1) 2005 Oce Plan Copier		18,000			
2) Photo Copy Machine - 2014				6,000	
3) Furniture/Files Replacement			2,500		
4) Photo Copy Machine - 2017					
ADMINISTRATION SUBTOTAL	\$0	\$18,000	\$2,500	\$6,000	\$0

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Public Works					
Transfer Station/Landfill Division					
1) Transfer Station Upgrades:					
a.) Canopy Repairs					10,000
b.) Building/Deck Repairs					
2) 2007 Mack Roll Off Truck		130,000			
3) Compactor Replacement (2013)					
4) Compactor Concrete Pads	24,300				
5) Roll-off Containers					
a.) Replacement	7,700		15,000		
b.) Repairs				8,000	
TRANSFER STATION /LANDFILL TOTAL:	\$32,000	\$130,000	\$15,000	\$8,000	\$10,000

TOWN OF MIDDLETON



ROBERT LABOSSIÈRE
Superintendent of Public Works

Public Works Department
195 NORTH MAIN STREET
MIDDLETON, MA 01949

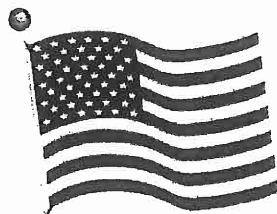
Tel (978) 777-0407
Fax (978) 774-0718

TO: Andrew Sheehan, Town Administrator
FROM: Bob LaBossiere, DPW Superintendent
DATE: February 12, 2018
SUBJECT: Capital Budget Back-Up for Recycling Container/Concrete trash pads

I am proposing an article for the DPW's FY19 Capital Budget to fund the purchase and acquisition of one 30 cubic yard standard duty rectangular roll-off container with a barn roof and hinged poly doors. The present Transfer Station recycling roll-off container to be replaced was purchased in 1996. We have maintained the container over the years by welding replacement metal and repainting, but the container requires too many repairs to keep it safe. The significant cost to repair and paint the roll-off container would be more than the cost of replacement. Also included in this request is funding for the replacement of the concrete pads (2) for the trash containers that are connected to the compactor units. These pads were constructed when the station was first constructed in 1995. Both pads have decayed and are breaking apart. We have made many repairs over the years, but with the weight of the containers and the constant wear on the pads, the need is to replace the pad in their entirety. The pads will be broken apart and removed, new rebar placed, and metal plates installed in the new concrete pads to extend the life expectancy.

30 cubic yard roll-off container:	\$ 7,700
Concrete compactor pads:	\$24,300
Demolition	\$8,500
Rebar	\$1,800
Concrete	\$8,000
Steel	\$2,500
Labor	\$3,500

Proposed Budget for Trash/Recycling Roll-off Containers: \$32,000



American Concrete Cutting, Inc.

87 New Salem Street
Wakefield, Massachusetts 01880
Tel. (781) 245-1997
Fax (781) 245-2887

BID PROPOSAL

Monday, February 05, 2018

Project: Dumpster Pads

GC: Town of Middleton
Attn:

We propose the following labor and materials for the project. The specific scope being bid is listed below.

Concrete Cutting & Flatwork

- Cut and remove (2) 80'x12' existing pads. Replace with 8" thick pads with embed steel as well as rebar mat.
- Cut and remove (2) 3'x5'/(1) 20'x3' squares and re pour.

All materials have been included in this proposal.

Total Project Proposal \$46,700.00

Exclusions

- All police details/permits by GC.
- No layout included.
- Based on cut and remove an existing 8" slab.

Thank you for the opportunity to bid on this project. If you have any questions, please do not hesitate to contact me at (617) 590-7778.

Brian Breslin
American Concrete Cutting Inc.
bb@americanconcretecuttinginc.com
(617) 590-7778



1079 State Route 20, New Lebanon, NY, 12125

PHONE: 800-235-0734 FAX: 518-794-6319

WQ-10065086

Sell To:

Contact Name Kenny Gibbons
Bill To Name Town of Middleton
Bill To 195 N Main St
Middleton, MA 01949-1655
USA
Email ken.gibbons@middletonma.gov
Phone (978) 777-0407
Mobile 978-490-0772

Ship To Name Town of Middleton
Ship To 195 N Main St
Middleton, MA 01949-1655
USA

Quote Information

Salesperson Bill Morin
Salesperson Email bmorin@wastequip.com
Salesperson Phone (603) 498-4401
Created Date 1/29/2018
Expiration Date 2/12/2018
Quote Number WQ-10065086
Please Reference Quote Number on all
Purchase Orders

Model	Product Description	Description	Quantity	Sales Price	Total Price
163065NE	30 Cubic Yard Standard Duty Rectangular Roll Off Container 22' Long - Floor: 7 gauge with 3" structural channels on 18" centers and 6"x 2"x 3/16" Structural Tubing Main Rails, Walls: 12 gauge with side columns on 24" centers and 3" x 4" x 11 gauge Top Rails, Door: CAM Latch, Primed and Painted any Standard Color		1.00	\$4,200.00	\$4,200.00
ROC402	Recycle Roof - Barn Roof		1.00	\$1,955.00	\$1,955.00
ROC404	Recycle Roof - 30" x 30" Hinged Poly Door Each		8.00	\$92.00	\$736.00
Container - Specialty ROC	Special ROC - NY (See Details for Product Information)	Cohen crash plate on front of rolloff container installed	1.00	\$250.00	\$250.00

Payment Terms	Net 30 Days if credit has been established	Subtotal	\$7,141.00
Shipping Terms	FOB Origin	Shipping and Handling	\$400.00
		Tax	\$0.00
		Grand Total	\$7,541.00

Special Instructions

Special Instructions Color to be Dark Green
Ship on partial load to Middleton MA freight on quote is for one container \$ 400
Freight quote is for one container only
Loading height from ground to bottom of door is 73"

Shipping Details

Estimated Lead Time 4 weeks ARO

Bin # 20
Serial #: 708522
Date of Purchase: 3/28/2008
Primary Use: Plastic
Type: 30 yd. recycling container

Date of Last Repair: no record *

Condition: minor surface rust throughout

Bin # 21
Serial #: NY9391
Date of Purchase: 7/29/2008
Primary Use: Plastic
Type: 30 yd. recycling container

Date of Last Repair: no record *

Condition: minor surface rust throughout

Bin # 22
Serial #: 105851
Date of Purchase: no record
Primary Use: Plastic
Type: 30 yd. recycling container

Date of Last Repair: 3/23/2015 – Leo McNichol
misc. welding

Condition: plates by rollers rotted through, side walls rotted through, plates by hook rotted through, top rib rotted through, one rib on door rotted through, surface rust throughout

Bin # 23
Serial #: 105843
Date of Purchase: no record
Primary Use: (out of service)
Type: 30 yd. recycling container

Date of Last Repair: 2/28/2007 – Miller Construction Services
2 new rails on door, re-lined side walls and front wall, 14 new ribs

Condition: very bad shape, multiple holes in floor, plates by hook rotted through, rollers frozen, top cover rotted through multiple areas, side ribs starting to rust through, door handle bent unable to pin back

Glass

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Public Works					
Highway Division					
1) 2010 Freightliner Dump Truck Unit #4 (winter & summer use)					
2) 2008 F550 1 Ton Dump Truck Unit #5 (winter & summer use)			75,000		
3) 2005 F550 Ford 1 Ton Dump Truck Unit #6 (winter & summer use)					
4) 2008 7400 International Dump Truck Unit #7 (winter & summer use)				132,000	
5) 2014 Peterbilt Dump Truck Unit #10					
6) 2006 7400 International Dump Truck Unit #11 (winter & summer use)		128,000			
7) 2014 John Deere 310SK Backhoe					
8) 2000 Ford F450 Rack Body					
9) 2009 Power Eagle power washer	5,500				
10) 2005 Portable Air Compressor					
HIGHWAY DIVISION SUBTOTAL (PAGE 1)	\$5,500	\$128,000	\$0	\$75,000	\$132,000

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Public Works					
Highway Division Continued					
11) 2001 Bobcat Skid Steer Loader					
a.) v-blade snow plow					
b.) snow blower attachment					
c.) low profile bucket					
d.) power broom attachment					
12) 2009 Bobcat Skid Steer Loader				46,000	
a.) V-blade snow plow					
b.) snow blower attachment					
13) 2016 - Ford Explorer - Car #1					
14) 2008 F 250 Pickup - Car #2		38,000			
15) Loader Mounted Snow Blower					
16) 2003 Ford F450 1.5 Ton Dump Truck					
Unit #1 (winter & summer use)					

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
17) Flink Sander/Plow for truck #3	46,000				
18) (2) Hi-Way Sanders					
19) (2) Monroe Sanders					
20) 2011 (16') Utility Trailer					
21) 2005 Volvo Wheel Loader Tire Replacement					
22) Sandblasting Vehicles/Equip.	20,000				
HIGHWAY SUB-TOTAL (PAGE 2):	\$46,000	\$38,000	\$20,000	\$46,000	\$0
HIGHWAY TOTAL:	\$51,500	\$166,000	\$20,000	\$121,000	\$132,000

TOWN OF MIDDLETON

Public Works Department

195 NORTH MAIN STREET
MIDDLETON, MA 01949



ROBERT LABOSSIÈRE
Superintendent of Public Works

Tel (978) 777-0407
Fax (978) 774-0718

TO: Andrew Sheehan, Town Administrator
FROM: Bob LaBossiere, DPW Superintendent
DATE: February 12, 2018
SUBJECT: Capital Budget Back-Up Water Pressure Washer

I am proposing an article for the DPW's FY19 Capital Budget to acquire funding for the purchase of a 2300 psi hot water pressure washer. The new washer will replace our current unit that was purchased in 2009 and is not working properly and replacement parts are no longer available to repair the unit. This item is used to wash the public works fleet. After storm events, the snow equipment is washed to remove salt residual from the equipment. This washing helps extend the life of our equipment. The pressure washer is also used for mowers, loaders, and cars to remove grass, mud and grime. This is a necessary piece of equipment to maintain our inventory in a workable manner.

Proposed Budget Price: **\$5,500**

EQUIPMENT SALES QUOTE



564 Main St.
P.O. Box 324
Sandown, NH 03873
Phone: 800-422-2332
Fax: 603-887-5787
Web: www.PowerEagle.net

January 18, 2018
Prepared by Patrick Devine
800-422-2332 x211
patrick@powereagleusa.com

QUOTE PREPARED FOR

Kenny Gibbons
Town of Middleton MA DPW
195 N. Main St.
Middleton, MA 01949
978-777-0407

SHIP TO

EQUIPMENT

Quantity	Description	Price
1	Power Eagle SS-2304-CL Hot Water Pressure Washer	\$5,395.00
	Clutch Drive Pump Protection	
	2300 psi @ 4 gpm 200 degree adjustable hot water	
	4 Swivel wheel chassis	
	50' 4000 psi rated hose w quick connects	
	36" Gun/wand assy	
	Lifetime heating coil warranty	
	Lifetime combustion chamber warranty	
	One year on site parts and labor warranty	

HOSE REEL SYSTEM

Quantity	Description	Price
1	16" Machine Mounted Hose Reel System 100' 4000psi rated hose w connecting hose (take back 50' from machine. Rec total of 100')	\$395 TRADE VALUE

DETERGENTS

Quantity	Description	Price
----------	-------------	-------

OPTIONS

Quantity	Description	Price
1	Adams Dual Lance Gun/Wand Soap Injector System	\$224 TRADE VALUE
	Down stream soap injection	
	"AT THE GUN" SOAP CONTROL	
1	Total Truck Wash Soap	\$62 TRADE VALUE
		TRADE VALUE \$681.00

TOTAL PURCHASE \$5,395.00

ADDITIONAL NOTES:

IN-STOCK

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
DPW BUILDING - OFFICES & GARAGE IMPROVEMENTS:					
1) 2nd Floor stairway in rear of bldg.					
2) Renovate main floor reception area					
3) Salt shed repairs			20,000		
4) Roof replacement				20,000	
5) Replacement of 1st floor heat/air conditioning		14,000			
 TOWN BUILDINGS					
Sub-Total:	\$0	\$14,000	\$20,000	\$20,000	\$0

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Public Works					
DPW Highway/Major Project Improvements					
1) Chapter 90 State Aid Reconstruction*	300,000	300,000	300,000	300,000	300,000
2) Sidewalks -Repairs				25,000	
3) Sidewalks - New Construction**					
a) Towne Rd. to Maple St. - 4,000 LF by Developers					
b) East Meadow Ln. to Peabody St. - 1,000 LF by Developer					
c) Towne Rd. to East Meadow Ln. - 2,800 LF by Town		90,000			
d) Wennerberg Rd. to Memorial Hall - 1,500 LF by State and/or Town			200,000		
4) Right of Way Tree Cutting	30,000				
5) Private Ways Bylaw Repairs					
6) Town Funded Paving Program - Overlay Repairs		100,000	100,000	100,000	100,000
<hr/>					
DPW HIGHWAY/MAJOR PROJECT IMPROVEMENTS	\$330,000	\$490,000	\$600,000	\$425,000	\$400,000

* \$300,000 Chapter 90 funding based upon a 10 year, \$300 million in annual funding from the transportation bond bill.

** Town internal sidewalk group to review the sidewalk construction projects and sidewalk fund.

TOWN OF MIDDLETON



ROBERT LABOSSIÈRE
Superintendent of Public Works

Public Works Department
195 NORTH MAIN STREET
MIDDLETON, MA 01949

Tel (978) 777-0407
Fax (978) 774-0718

TO: Andrew Sheehan, Town Administrator

FROM: Bob LaBossiere, DPW Superintendent

DATE: February 12, 2018

SUBJECT: Capital Budget Back-Up for Tree Cutting/Pruning

I am proposing an article for the DPW's FY19 Capital Budget to acquire funding to hire a contractor to cut and prune trees within the Town right of way. Over the last several years we have seen an increase in the number of trees that are diseased and in need of removal. We have been able to keep up with the demand, but have a number of trees that need attention that a bump in the operating budget will not be sufficient. A onetime expenditure will allow us to get back on track and address an immediate need. The funds will also be necessary to limb back the canopy above some of the major collector roads such as Boston Street, Forest Street and River Street to name a few. The Public Works Department does not have the necessary equipment or expertise to perform these tasks safely.

Crew and Equip:	\$23,000
\$2,300/day for 10 days	
Police Details:	\$ 4,400
\$440/day for 10 days	

Proposed Budget Price: **\$30,000**



Rate Sheet *

Two Man Bucket Crew

Daily rate \$2000

Half day rate \$1000

Hourly rate \$250 per hour

2 man bucket crew includes: two arborists, 62' bucket truck, chipper and chip truck

Two Man Bucket Crew for Emergency Work

Daily rate \$2400

Half day rate \$1200

Hourly rate \$300 per hour

Three Man Bucket Crew

Daily rate \$3200

Half day rate \$1600

Hourly rate \$400 per hour

3 man bucket crew includes: three arborists, 62' bucket truck, log truck, chipper and chip truck

Three Man Bucket Crew for Emergency Work

Daily rate \$4000

Half day rate \$2000

Hourly rate \$500 per hour

Four Man Crane Crew

Daily rate \$5000

Half day rate \$2500

Hourly rate \$625 per hour

Crane crew includes: four arborists, 150' crane, 77' bucket truck, log truck, 20" chipper and extra large chip truck

Four Man Crane Crew for emergency work

Daily rate \$6000

Half day rate \$3000

Hourly rate \$750 per hour

Stump Grinding

\$300 per hour with 4 hour minimum

***Rates effective for an 8 hour day.**

FY-18 D.P.W. CAPITAL BUDGET BACK-UP

5- Year Road Improvement Program

Updated February 2017

	<u>STREET</u>	<u>AMOUNT</u>	<u>FUNDING SOURCE</u>
<u>FY-19</u>	Locust St.	\$ 120,000	Chap. 90 \$ 120,000
	Gregory St. overlay	\$ 50,000	Town \$ 50,000
	East St. Phase II	\$ 180,000	Chap. 90 \$ 180,000
	Lakeview Ave.	\$ 50,000	Town \$ 50,000
	Grade Dirt Roads	\$ 6,000	Op. budget \$ 6,000
		Total: \$406,000	Total: \$406,000
<u>FY-20</u>	Maple St. overlay Phase I	\$ 150,000	Chap. 90 \$ 150,000
	Mt. Vernon, King St., Old Samhain	\$ 100,000	Town \$ 100,000
	East St. Overlay Phase III	\$ 150,000	Chap. 90 \$ 150,000
	Grade Dirt Roads	\$ 6,000	Op. budget \$ 6,000
		Total: \$406,000	Total: \$406,000
<u>FY-21</u>	Devonshire & Rye	\$ 150,000	Chap. 90 \$ 150,000
	Log bridge Road	\$ 100,000	Town \$ 100,000
	Maple St. overlay Phase II	\$ 150,000	Chap. 90 \$ 150,000
	Grade Dirt Roads	\$ 6,000	Op. budget \$ 6,000
		Total: \$406,000	Total: \$406,000
<u>FY-22</u>	Maplewood Road	\$ 150,000	Chap. 90 \$ 150,000
	Maple St. overlay Phase III	\$ 150,000	Chap. 90 \$ 150,000
	Forest St. Overlay Phase I	\$ 100,000	Town \$ 100,000
	Grade Dirt Roads	\$ 6,000	Op. budget \$ 6,000
		Total: \$406,000	Total: \$406,000
<u>FY-23</u>	Northwood's/Samos/Hemlock	\$ 150,000	Chap. 90 \$ 150,000
	Kimberly Ln.	\$ 150,000	Chap. 90 \$ 150,000
	Forest St. overlay Phase II	\$ 100,000	Town \$ 100,000
	Grade Dirt Roads	\$ 6,000	Op. budget \$ 6,000
		Total: \$406,000	Total: \$406,000

Chapter 90 funding is based on an estimated amount of \$300,000 from the Commonwealth.



Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Stephanie Pollack, MassDOT Secretary & CEO



February 26, 2018

Town of Middleton
Town Administrator
47 South Main Street
Middleton, MA 01949

Dear Town Administrator,

We are pleased to inform you that Chapter 90 local transportation aid funding for Fiscal year 2019 will total \$200 million statewide, pending final legislative approval.

This letter certifies that, pending final passage of the bond authorization, your community's Chapter 90 apportionment for Fiscal year 2019 is \$298309. This apportionment will automatically be incorporated into your existing 10-year Chapter 90 contract, which will be available on the MassDOT website www.massdot.state.ma.us/chapter90.

The Chapter 90 program is an integral part of the maintaining and enhancing your community's infrastructure and is an essential component of our state-local partnership. We look forward to working with you in the coming year to continue the success of this program.

Thank you for all that you do to make the Commonwealth of Massachusetts a great place to live, work and raise a family.

Sincerely,

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Public Works					
Water Division - Administration					
1) 2016 F350 Ford Utility Truck - Unit #9					
2) 2000 International 4600 Dump Truck		118,000			
Unit #3 (winter & summer use)					
3) Computer, Software, Office Furniture, etc.			9,000		
4) System Maintenance					
-Electronic catalog of infrastructure					
5) Community Water Conservation Program		15,000			
-Measures to comply with DEP Permit					
WATER ADMINISTRATION TOTAL	\$118,000	\$15,000	\$9,000	\$0	\$0

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Public Works					
Water Division - Capital					
Implementation of Master Plan					
1) Looping Mains:					
(a) Liberty Street Extension (2,800 LF)					
Woodbury Ln. to Mill St.					
(b) Boston Street Extension (2,400 LF)					
Lt. J. Cabral Dr. to N.R. town line					
2) Water Main Replacement:					
(a) Mt. Vernon Street (1,800 LF)			225,000		
6" cast iron main					

WATER CAPITAL SUBTOTAL	\$0	\$0	\$225,000	\$0	\$0
WATER TOTAL	\$118,000	\$15,000	\$234,000	\$0	\$0
TOTAL PUBLIC WORKS:	\$585,700	\$916,000	\$958,500	\$755,000	\$595,000

TOWN OF MIDDLETON



Public Works Department

195 NORTH MAIN STREET
MIDDLETON, MA 01949

ROBERT L. HOFFMAN
Superintendent of Public Works

Tel (978) 777-0407
Fax (978) 774-0718

TO: Ira Singer, Town Administrator
FROM: Bob Hoffman, DPW Superintendent
DATE: January 13, 2004
SUBJECT: Capital Budget Back-Up 35,000 GVW Dump Truck and Plow Attachment

I am proposing the purchase and acquisition of a new 37,600 GVW dump truck as part of the DPW's FY19 Capital Budget. This acquisition is intended to replace the existing 2000 International 4900 dump truck that is utilized for all DPW water division related activities along with snow plowing and sanding/salting assignments. The present vehicle has served the Town reliably but is now showing signs that it is past its cost effectiveness in terms of maintenance and fuel efficiency. The proposed vehicle must be available to respond to any needed emergency including water main breaks and snow related call-outs. The existing vehicle mentioned above will be traded or auctioned with resultant money (trade in value: \$5,000.00) going towards the purchase.

Cab and Chassis:	\$93,013
Dump Body & Hydraulics:	\$24,500
Snow Equip. Accessories:	\$45,650

Proposed Budget Price for New 37,600 GVW Dump Truck: **\$117,513**

Proposed Budget Price for Snow Equipment: **\$45,650**



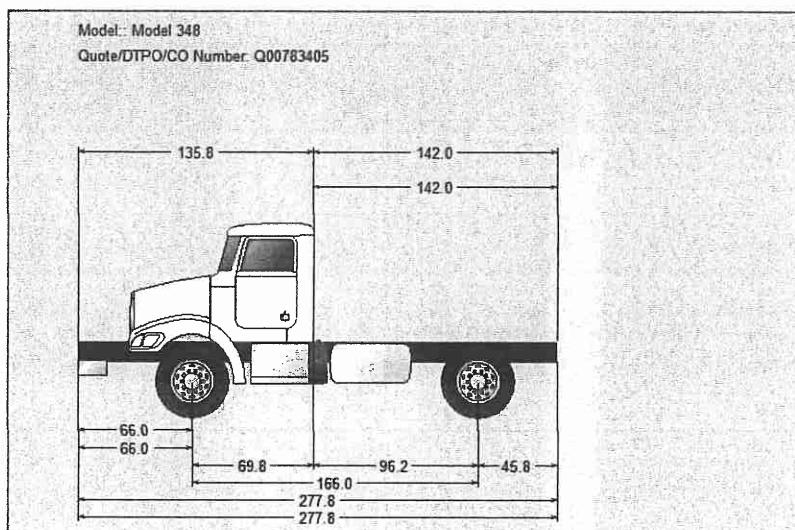
THE PETERBILT STORE BALTIMORE H831
5100 HOLABIRD AVE
c/o Bob Mahegan

BALTIMORE, Maryland United States 21224
Phone: (978) 994-5420
Fax: (508) 316-2790
Email:

Town Of Middleton DPW
105 North Main Street

Middleton, Massachusetts United States 01949
Phone: (978) 777-0407
Fax:
Contact Email:
Prepared for: Bob Labossleier

Horizontal Dimensions



Unpublished options may require review/approval.
Dimensional and performance data for unpublished options may vary from that displayed in PROSPECTOR.

Printed:	12/27/2017 9:19:24 AM	Complete	Model Number:	Model 348
Effective Date:	Jul 1, 2017		Quote/DTPO/CO:	Q00783405
Prepared by:	ID: bobmahegan2		Version Number:	35.20

THE PETERBILT STORE BALTIMORE H831
 5100 HOLABIRD AVE
 c/o Bob Mahegan

BALTIMORE, Maryland United States 21224
 Phone: (978) 994-5420
 Fax: (508) 316-2790
 Email:

Town Of Middleton DPW
 105 North Main Street

Middleton, Massachusetts United States 01949
 Phone: (978) 777-0407
 Fax:
 Contact Email:
 Prepared for: Bob Labossleier

Fuel Tanks

Summary
 Right Left

Location
 Under Cab
 Back: Of Cab 1
 Back: Of Cab 2
 Between Rail:
 Clearframe
 Def Tank

Type

Top View Side View
 Right Side Available Space: 59.95 in. Current Wheelbase Space: 166
 Left Side Available Space: 9.05 in. Required Wheelbase Space: 157

Material

Diameter

Position	Description	Price	Weight
RH Under	Aftertreatment RH U/C Alum Non-Slip Cab Entry	0	0
LH Under	Aluminum Battery Box LH Under Cab, Non-Slip Step	178	.55
LH BOC1	23in Aluminum 70 Gallon Fuel Tank LH BOC	37	9
LH Def Tank	DEF Tank Small	0	0

Unpublished options may require review/approval.
 Dimensional and performance data for unpublished options may vary from that displayed in PROSPECTOR.

Printed:	12/27/2017 9:19:53 AM	Complete	Model Number:	Model 348
Effective Date:	Jul 1, 2017		Quote/DTPO/CO:	Q00783405
Prepared by:	ID: bobmahegan2		Version Number:	35.20



THE PETERBILT STORE BALTIMORE H831
5100 HOLABIRD AVE
c/o Bob Mahegan

BALTIMORE, Maryland United States 21224
Phone: (978) 994-5420
Fax: (508) 316-2790
Email:

Town Of Middleton DPW
105 North Main Street

Middleton, Massachusetts United States 01949
Phone: (978) 777-0407
Fax:
Contact Email:
Prepared for: Bob Labossleier

Vehicle Summary

	Unit		Chassis
Model:		Model 348	14600
Type:		Full Truck	23000
Description:		01308450	37600
Intended Serv.:	Application	Road Conditions:	
Commodity:		Class A (Highway)	100
	Body	Class B (Hwy/Mtn)	0
		Class C (Off-Hwy)	0
		Class D (Off-Road)	0
Type:		Maximum Grade:	6
Length (ft):	End Dump	Wheelbase (in):	166
Height (ft):	20	Overhang (in):	45.8
Max Laden Weight (lbs):	13.5	Fr Axle to BOC (in):	69.8
	1000	Cab to Axle (in):	96.2
		Cab to EOF (in):	142.0
No. of Trailer Axles:		Overall Comb. Length (in):	266
Type:	Trailer		Special Req.
Length (ft):		0	
Height (ft):		0.0	
Kingpin Inset (in):		0	
Corner Radius (in):		0	
Length (ft):	Restrictions	40	
Width (in):		102	
Height (ft):		13.5	

Approved by: _____

Date: _____

Note: All sales are F.O.B. designated plant of manufacture.



Ask your dealer for a quote today, or visit our website @ www.paccarfinancial.com.

PACCAR Financial offers innovative finance, lease and insurance programs
customized to meet your needs.

Unpublished options may require review/approval.
Dimensional and performance data for unpublished options may vary from that displayed in PROSPECTOR.

Printed:	12/27/2017 9:20:20 AM	Complete	Model Number:	Model 348
Effective Date:	Jul 1, 2017		Quote/DTPO/CO:	Q42083006
Prepared by:	ID: bobmahegan2		Version Number:	35.20



THE PETERBILT STORE BALTIMORE H831
5100 HOLABIRD AVE
c/o Bob Mahegan

BALTIMORE, Maryland United States 21224
Phone: (978) 994-5420
Fax: (508) 316-2790
Email:

Town Of Middleton DPW
105 North Main Street

Middleton, Massachusetts United States 01949
Phone: (978) 777-0407
Fax:
Contact Email:
Prepared for: Bob Labossleier

Data	Code	Description	Weight
Base Model			
0003481	O	Model 348	10,610
0091200	O	Other Commodity	0
0093150	O	Snowplow Truck which is configured for mounting a snowplow to the front. May also have dump or other body.	0
0095170	O	End Dump	0
0098170	O	United States Registry	0
Configuration			
0200700	O	Not Applicable Secondary Manufacturer	0
Frame & Equipment			
0514000	O	10-3/4in Steel Rails To 354in 10.75x3.5x.375 Dimension, 2,136,000 RBM; Yield Strength: 120,000 psi. Section Modulus: 17.8 cubic inches. Weight: 1.74 lbs/inch pair	287
0612230	O	Custom Wheelbase or Overhang Engineering approval may be required.	0
0613090	S	Three-Piece Crossmembers	0
0620530	O	FEPTO Provision 27.8in Bumper Extension Includes Crankshaft Adapter Plate and Stationary Grille. Requires FEPTO Bumper.	86
0644090	S	EOF Square without Xmbr For use with body builder installed crossmember.	0
0651090	S	Omit Rear Mudflaps and Hangers	0
Front Axle & Equipment			
1011350	O	Dana Spicer E1462I 14,600 lb, 3.5 in. Drop Factory front axle alignment to improve handling & reduce tire wear. Zerk fittings on tie rod ends, king pins, & draglink ball joints for ease of maintenance & help extend service life of components. Cognis EMGARD® FE 75W-90 synthetic axle lube provides over 1% fuel economy improvement. Reduces wear & extends maintenance intervals, resulting in increased uptime. Provides improved fluid flow to protect components in extreme cold conditions & withstand the stress from high temperatures, extending component life.	28

Unpublished options may require review/approval.

Dimensional and performance data for unpublished options may vary from that displayed in PROSPECTOR.

Printed:	12/27/2017 9:20:20 AM	Complete	Model Number:	Model 348
Effective Date:	Jul 1, 2017		Quote/DTPO/CO:	Q42083006
Prepared by:	ID: bobmahegan2		Version Number:	35.20



Data	Code	Description	Weight
1112150	O	Taper Leaf Springs, Shocks 14,600 lb	57
1233050	O	Power Steering TRW TAS85 For use with 14,600 lb. axle ratings. Glidekote splines on steering shaft extend service life of components.	0
1250180	S	Power Steering Reservoir Frame Mounted	0
1354790	O	PHP10 Iron LMS Hubs 11-1/4" bolt circle. Includes a supplier extended coverage up to 3 years / 350,000 miles for bearings & seals.	78
1380240	O	Dana Spicer Wide Track IPO Std, Front Axle 71in KPI IPO 69in for E1202, E1322, E1462, D2000F front axles. For improved turning radius.	5
1380260	S	Bendix Air Cam Front Drum Brakes 16.5x5 For use with 10,000 lbs to 14,600 lbs steer axles. Includes automatic slack adjusters & outboard mounted brake drums.	0
1390540	O	Dust Shields, CAM Brakes, Front Axle	4
1391410	O	Gusseted Cam Brackets, Steer Axle	0

Rear Axle & Equipment

1513180	O	Dana Spicer S23-190 23,000 lb Laser factory axle alignment to improve handling & reduce tire wear. Magnetic rear axle oil drain plug captures & holds any metal fragments in drive axle lube to extend service life. Parking brakes on all drive axles for optimal performance. Cognis EMGARD® FE 75W-90 synthetic axle lube provides over 1% fuel economy improvement. Reduces wear & extends maintenance intervals, resulting in increased uptime. Provides improved fluid flow to protect components in extreme cold conditions & withstand the stress from high temperatures, extending component life.	75
1616230	S	PHP10 Iron LMS Hubs 11-1/4" bolt circle. Includes a supplier extended coverage up to 3 years / 350,000 miles for bearings & seals.	0
1631310	S	Standard Stroke Parking Brakes Drive Axle(s). Not for use on U.S. or Canada Tractors, other than Car Carriers.	0
1660000	O	Dust Shields For Cam Brakes, Drive Axle(s)	15
1671040	O	Diff Lock Rear-Rear Or Single Drive Axle (Air Rocker Switch occupies the space of one gauge)	24
1680450	O	Rear Brake Camshaft Reinforcement	9
1680490	O	Gusseted Cam Brackets, Drive Axle(s)	2
1680500	S	SBM Valve Full trucks require a spring brake modulation (SBM) system for emergency braking application. This system requires an SBM valve and a relay valve with spring brakes on the rear axles. The SBM valve allows the foot valve to operate the rear axle spring brakes if a failure exists in the rear air system.	0
1680950	S	Stability System Not Selected or Not Available	0

Unpublished options may require review/approval.

Dimensional and performance data for unpublished options may vary from that displayed in PROSPECTOR.

Printed:	12/27/2017 9:20:20 AM	Complete	Model Number:	Model 348
Effective Date:	Jul 1, 2017		Quote/DTPO/CO:	Q42083006
Prepared by:	ID: bobmahegan2		Version Number:	35.20



Data	Code	Description	Weight
1682430	S	Anti-Lock Braking System (ABS) 4S4M ABS-6. Includes air braking system.	0
1684200	S	Synthetic Axle Lubricant All Axles Peterbilt heavy duty models include Fuel Efficient Cognis EMGARD FE75W-90 which provides customers performance advantages over current synthetic lubricants with reduced gear wear and extended maintenance intervals, resulting in increased uptime. In addition, the lubricant provides improved fluid flow to protect gears in extreme cold conditions and withstand the stress from high temperatures, extending component life.	0
1686348	S	Single Drive Axle (Model 348)	0
1687010	S	Bendix Air Cam Rear Drum Brakes 16.5x7 Includes Automatic Slack Adjusters & Outboard Mounted Brake Drums.	0
1705570	O	Ratio 5.57 Rear Axle	0
1816100	O	Reyco 79KB Multi Leaf 26,000 lbs.	-125

Engine & Equipment

2074306	O	PACCAR PX-9 300@2000 GOV@2200 860@1300	0
		Productivity (2017 Emissions) Includes alum flywheel housing, cruise control, and J1939 provisions (provides an interface point for the Electronic Service Analysis-ESA and other PACCAR approved diagnostic tools). Chevron Delo LE SAE 10W30 engine oil is specially formulated for new low emissions engines. Magnetic engine oil drain plug captures and holds any metal fragments in engine oil to extend service life.	
		N21320 N205 120..Standard Maximum Speed Limit [LSL]	
		N21330 N207 0....Expiration Distance	
		N21340 P005 120..Hard Maximum Speed Limit	
		N21350 P001 72...Maximum Accelerator Pedal Vehicle Speed	
		N21370 P059 72...Maximum Cruise Speed	
		N21400 N203 252..Reserve Speed Function Reset Distance	
		N21410 N202 0...Maximum Cycle Distance	
		N21420 N206 10...Maximum Active Distance	
		N21430 N201 0....Reserve Speed Limit Offset	
		N21440 P015 NO...Engine Protection Shutdown	
		N21450 P026 NO...Gear Down Protection	
		N21460 P046 1400.Max PTO Speed	
		N21470 P062 NO...Cruise Control Auto Resume	
		N21480 P068 NO...Auto Engine Brake in Cruise	
		N21500 N209 0....Expiration Distance	
		N21510 P520 YES..Enable Idle Shutdown Park Brake Set	
		N21520 P030 20...Timer Setting	
		N21530 P233 YES..Enable Impending Shutdown Warning	
		N21540 P234 60...Timer For Impending Shutdown Warning	
		N21550 P516 35...Engine Load Threshold	
		N21570 P031 NO...Idle Shutdown Manual Overrule	
		N21590 P230 YES..Enable Hot Ambient Automatic Overrule	
		N21610 P172 40...Low Ambient Temperature Threshold	
		N21620 P173 60...Intermediate Ambient Temperature Threshold	
		N21630 P171 80...High Ambient Temperature Threshold	

Unpublished options may require review/approval.

Dimensional and performance data for unpublished options may vary from that displayed in PROSPECTOR.

Printed:	12/27/2017 9:20:20 AM	Complete	Model Number:	Model 348
Effective Date:	Jul 1, 2017		Quote/DTPO/CO:	Q42083006
Prepared by:	ID: bobmahegan2		Version Number:	35.20



Data	Code	Description	Weight
2091305	O	Engine Idle Shutdown Timer Enabled	0
2091315	O	Enable EIST Ambient Temp Overrule	0
2091372	O	Eff EIST NA Expiration Miles	0
2091640	O	Effective VSL Setting NA	0
2140010	O	Belly Pan	35
2140200	O	CARB Engine Idling Compliance PACCAR PX-7, PX-9 and MX, Cummins ISL, ISM and ISX diesel engines will include the required factory installed serialized sticker on the drivers door to identify them as meeting the NOx idling standard.	0
2513070	O	200 Amp Alternator, Standard Brush	0
2521090	O	Immersion Type Block Heater 110-120V Standard location is center left hand under cab and includes a weather-proof cover that protects the receptacle. This pre-heater keeps the coolant in the engine block from freezing when the engine is not running.	2
2521110	O	Oil Pan Heater 120V/300W Operates via 120V ShorePower System and keeps the oil warm when the engine is not running. This option utilizes the same receptacle as the immersion pre-heater if specified together.	2
2522050	S	PACCAR 12V Starter	0
2538040	O	3 PACCAR Premium 12V Dual Purpose Batt 2190 CCA Threaded stud type terminal. Stranded copper battery cables are double aught (00) or larger to reduce resistance.	62
2539740	O	Kissling Battery Disconnect Switch Mounted on battery box	3
2621000	O	2-Speed Fan Clutch For Frequent Start/Stops	0
2723210	S	18.7 CFM Air Compressor N/A X15. Furnished on engine. Teflon lined stainless steel braided compressor discharge line.	0
2812210	O	VGT Exhaust Brake (Variable Geometry Turbo). Provides approximately 90-100 HP of retardation and is part of the turbocharger.	0
2921160	S	Spin-On Fuel/Water Separator	0
2921210	S	No Fluid Heat Option for Fuel Filter	0
2921320	O	12V Heat for Fuel Filter	0

Unpublished options may require review/approval.

Dimensional and performance data for unpublished options may vary from that displayed in PROSPECTOR.

Printed: 12/27/2017 9:20:20 AM Complete Model Number: Model 348
 Effective Date: Jul 1, 2017 Quote/DTPO/CO: Q42083006
 Prepared by: ID: bobmahegan2 Version Number: 35.20



Data	Code	Description	Weight
3114270	S	High Efficiency Cooling System Cooling module is a combination of steel and aluminum components, with aluminum connections to maximize performance and cooling capability. Silicone radiator & heater hoses enhance value, durability, & reliability. Constant tension band clamps reduce leaks. ClimaTech extended life coolant extends maintenance intervals which reduces maintenance costs. Anti-freeze effective to -30 degrees F helps protect the engine. Low coolant level sensor warns of low coolant condition to prevent engine damage. Radiator Size by Model: 587: 1330 sq in, 579/367 FEPTO 1325 sq in, 567/365/367: 1440 sq in, 384/386: 1301 sq in, 365 FEPTO: 1184 sq in, 389/367 HH: 1669 sq in, 348: 1000 sq in, 320: 1242 sq in.	0
3211120	S	Radial Seal, Dry Type Air Cleaner, Frontal Air Intake. Molded rubber air intake connections with lined stainless steel clamps seal to prevent contaminants in air intake.	0
3365270	O	Exhaust Single RH Side Of Cab DPF/SCR RH Under Cab (2017).	29
3387610	O	18in Ht, 5in Dia Chrome, Clear Coat Standpipe(s)	-2

Transmission & Equipment

4052230	O	Allison 3500 RDS-P Transmission, Gen 5 Rugged Duty Series. Includes Rear Transmission Support except on MX engines, TranSynd Automatic Transmission Fluid, and Water Oil Heat Exchange. Also includes features that monitor the transmission fluid, filter and clutch condition. Will display percent life remaining for the transmission fluid, filter and clutches on the shift selector. This information may be displayed using the Mode and Up and Down buttons. A wrench icon will also be included to indicate when the transmission fluid, filter or clutches need servicing. (Suited for vehicles operating on/off highway and/or requiring PTO operation) Forward Ratios: 1st-4.59, 2nd-2.25, 3rd-1.54, 4th-1.00, 5th-0.75, 6th-0.65 / Reverse Ratios: DR-(5.00)	110
4210200	O	1760 HD Driveline, 1 Midship Bearing	-20
4233030	O	(1) Dash Mounted Single Acting Air PTO Control Standard with PTO engaged indicator light on Class 8 units. Occupies the space of one gauge. Specing PTO switch does not ensure the PTO will fit.	0
4250420	U	ALLISON 5TH GEN RDS, PKG 223	0
4250720	O	Allison FuelSense Not Desired	0
4252170	O	Auto Neutral Activates With Parking Brake	0
4256680	O	Allison 6-Speed Configuration, Wide Ratio Gears	0
4256920	O	Dash Mounted Push Button Shifter Available with Allison Transmissions.	0
4256940	U	ALLISON LOAD BASED SHIFT SCHEDULE	0

Air & Trailer Equipment

Unpublished options may require review/approval.

Dimensional and performance data for unpublished options may vary from that displayed in PROSPECTOR.

Printed:	12/27/2017 9:20:20 AM	Complete	Model Number:	Model 348
Effective Date:	Jul 1, 2017		Quote/DTPO/CO:	Q42083006
Prepared by:	ID: bobmahegan2		Version Number:	35.20



Data	Code	Description	Weight
4510330	O	Bendix AD-IS EP Air Dryer with Heater And Coalescing Filter; Extended Purge	0
4520420	O	Pull Cords All Air Tanks	0
4540420	S	Nylon Chassis Hose	0
4543340	O	Aluminum Painted Air Tanks All air tanks are aluminum with painted finish except when Code 4543330 Polish Aluminum Air Tanks is also selected (then exposed air tanks outside the frame rails will be polished aluminum). Peterbilt will determine the optimal size and location of required air tanks. Narratives requesting a specific air tank size or location will not be accepted for factory installation. See ECAT to determine number or location of air tanks installed.	-45
4543390	O	High Mount Air Tanks BOC/BOS Where Possible Subject to frame review.	0
4611930	O	Body Connections 5ft BOC Junction Box contains light and power circuits for Body Connections located 5ft from BOC.	4
Tires & Wheels			
5069770	O	FF: BR 16ply 12R22.5 R268 Ecopia Diameter = 42.7 inches; SLR = 19.9 inches	42
5169310	O	RR: BR 16ply 11R22.5 M799 Diameter = 42.0 inches; SLR = 19.5 inches	36
5190004	O	Code-rear Tire Qty 04	0
5210610	O	FF: Accur Stl Armor 50344PK 22.5X8.25 Heavy duty, 5 Hand Holes	28
5215090	U	FF:ACCUR 50291 PLT 22.5X8.25 STL WHL	18
5310610	O	RR: Accur Steel Armor 50344PK 22.5X8.25 Heavy Duty, 5 Hand Holes	56
5315090	U	RR:ACCUR 50291 PLT 22.5X8.25 STL WHL	36
5390004	O	Code-rear Rim Qty 04	0
5409310	O	Accuride Wheel Guards, Steer Axle	0
Fuel Tanks			
5536100	O	23in Aluminum 70 Gallon Fuel Tank LH BOC Paddle handle filler cap with threadless filler neck. Top draw fuel plumbing reduces chance of introducing air into the fuel system during low fuel level conditions due to the central placement of fuel pickup tube. Wire braid fuel lines increase durability & reduce potential for leaks.	9
5604070	O	Location LH BOC 70 Gallon	0
5652890	O	DEF Tank Mounted LH BOC Models 210, 220 and 320 mounted LH cab fender.	0
5652990	O	Standard DEF To Fuel Ratio 2:1 Or Greater	0
5653000	O	Polished Stainless Steel Cover For DEF Tank	0
5655019	S	DEF Tank Small	0

Unpublished options may require review/approval.

Dimensional and performance data for unpublished options may vary from that displayed in PROSPECTOR.

Printed:	12/27/2017 9:20:20 AM	Complete	Model Number:	Model 348
Effective Date:	Jul 1, 2017		Quote/DTPO/CO:	Q42083006
Prepared by:	ID: bobmahegan2		Version Number:	35.20



Data	Code	Description	Weight
Battery Box & Bumper			
6010030	O	Aluminum Battery Box LH Under Cab, Non-Slip Step Includes diamond pattern block shaped cover in traditional/vocational models and a smooth finish tapered cover on aerodynamic models.	-55
6030150	O	Rubber Battery Pad In Bottom Of (1) Battery Box (Mat in box that holds batteries only)	2
6034620	O	Heavy Duty Battery Box Step Reinforcement	2
6040550	S	Aftertreatment RH U/C Alum Non-Slip Cab Entry Step. DPF/SCR for diesel engines, catalyst for natural gas engines. On Models 579 specifying chassis fairings, the box will be aerodynamic.	0
6121060	O	Steel Bumper Swept Back Painted Black, With FEPTO With two tow pin holes and step plates on top of bumper.	90
Cab & Equipment			
6510110	S	Alum Cab 108in BBC Metton Hood w/Bright Crown Includes view window RH door and convex mirror over RH door.	0
6540120	O	Severe Service Cab Package #1 Includes Aluminum side skins, aluminum rear skin, steel windshield mask, steel firewall, and steel front floor sheet on all cabs, and additional reinforcement structure on the back wall of the day cab.	39
6540160	O	Thermal Insulation Package in Cab Includes thick, closed-cell foam in floor, special mylar-faced foam in walls and roof structure.	2
6800360	O	Rubber Fender Lips 2 Inch Wide	8
6911700	S	Peterbilt UltraRide Driver Seat	0
6921700	S	Peterbilt UltraRide Passenger Seat	0
6930500	O	Drivers Armrest - RH Only Required in Model 587 with Evolution LX seats. Optional with Evolution ST and Rolltek Seats.	2
6930800	O	Black Seat Color ipo Standard Color	0
6931120	O	Seat Belt Color Orange IPO Standard Black	0
6939400	S	Air Ride Driver	0
6939420	S	High Back Driver	0
6939480	O	Mordura Driver	0
6939510	S	Non-Air Ride Passenger	0
6939540	O	Low Back Passenger	0
6939580	O	Mordura Passenger	0
7000440	O	Manifest Pouch on Rear Cab Wall	0
7001520	O	Adjustable Steering Column - Tilt/Telescope	11
7001620	S	Steering Wheel with Peterbilt Logo Steering Wheel with embossed Peterbilt logo over horn button.	0

Unpublished options may require review/approval.

Dimensional and performance data for unpublished options may vary from that displayed in PROSPECTOR.

Printed: 12/27/2017 9:20:20 AM **Complete** Model Number: Model 348
 Effective Date: Jul 1, 2017 Quote/DTPO/CO: Q42083006
 Prepared by: ID: bobmahegan2 Version Number: 35.20



Data	Code	Description	Weight
7036120	S	Interior Grey/Black Includes rugged charcoal instrument panels, glare-resistant gray dash, black bezels on gauges, (2) power ports, monochromatic molded door pads with durable in-mold color, gray molded back wall, 18 inch 4-spoke soft-touch steering wheel, soft-touch steering column cover, power lift passenger window, extruded rubber floor covering, header-mounted dome light, foot well lighting, integrated "dead pedal", (4) inside entry grab handles, (2) inside sunvisors, (2) coat hooks, (2) cup holders and map bin in dash.	0
7210430	O	Extended Rear Window ipo Std Window-Day Cab The extended rear window protrudes two inches more than the standard conventional rear cab window. Take this into consideration when determining your loadspace.	0
7210540	S	Day Cab Rear Window	0
7230060	S	One Piece Curved Windshield	0
7322010	S	Combo Fresh Air Heater/Air Conditioner With radiator mounted condenser, dedicated side window defrosters, Bi-Level Heater/Defroster Controls, 54,500 BTU/HR, and silicone heater hoses.	0
7410040	O	Outside Sunvisor - Stainless Steel Not available with 2.1M high roof sleeper or furnished by owner sleeper.	4
7511010	O	Stainless Steel Mirrors 7x16 with Heat Element Right Click on Option to see Picture in Product Portfolio.	2
7560850	O	(2) Convex 8 Inch SS Mirrors Center mounted under mirror bracket. If rear view mirrors are heated, the convex mirrors will be heated. Option includes dual door stops.	4
7564110	O	Power Package Includes power door locks and power windows.	0
7610020	O	(1) Air Horn 15in Painted Mounted under cab.	8
7725710	O	Standard Speaker Package For Cab (2) Speakers	4
7725715	O	ConcertClass Without CD, Includes BT Phone and Audio, AM/FM, WB, USB and MP3.	10
7748140	O	CB Terminals/Wiring Mtd Under Header	0
7748500	O	CB Antenna Mounting, LH Mirror	0
7851480	S	Peterbilt Electric Windshield Wipers With Intermittent Feature.	0
7851780	O	CabMate Cab Air Suspension Mfg by Link. The class 8 conventionals (except Model 348) includes (2) airbags, (2) shock absorbers, (1) leveling valve, radius rod, and height limiter. The Models 330, 337, and 348 includes (1) airbag and (1) shock absorber.	15
7900090	O	Triangle Reflector Kit Shipped Loose	13
7900270	O	Fire Extinguisher; Cab Mounted Hazmat approved UL listed/rated ABC.	8

Unpublished options may require review/approval.

Dimensional and performance data for unpublished options may vary from that displayed in PROSPECTOR.

Printed: 12/27/2017 9:20:20 AM Complete Model Number: Model 348
 Effective Date: Jul 1, 2017 Quote/DTPO/CO: Q42083006
 Prepared by: ID: bobmahegan2 Version Number: 35.20



Data	Code	Description	Weight
7901130	O	Backup Alarm (107dB)	3
8011400	O	Main Transmission Oil Temperature Gauge Located in Driver Information Display	0
8021380	S	Air Restriction Indicator Mounted on air cleaner,intake piping, or firewall.	0
8071340	O	Bright Bezel Gauges	0
8071870	S	Main Instrumentation Panel, Graphics Display Includes speedometer with tripodometer, tachometer with hourmeter and outside air temperature display, voltmeter, engine oil pressure, engine coolant temperature, fuel level, primary and secondary air pressure gauges. Includes standard warning light package: high water temperature, low oil pressure, and low air pressure warning lights w/audible alarms, high beam, turn signal, low fuel, parking brake, and ice warning indicators; seat belt reminder; rocker switches with long-life LED indicators; multi-function turn stalk with flash-to-pass feature (night mode flashes headlights and marker lights; day mode flashes headlights only), intermittent windshield wiper and headlamp beam control. Hydraulic braked trucks do not include air pressure gauges.	0
8111110	S	Headlights Composite Fender Mounted Integral Park, Turn, and Side Marker	0
8120980	S	(5) Marker Lights, Aero LED Light Emitting Diodes	0
8140120	S	Incandescent Square Stop/Turn/Tail/Backup LH/RH Square EOF or Dropped A-Brace	0
8151140	O	(2) Load Lights, Flush Mounted Low Outboard Loc B	4
8153100	O	(1) F/O Load Light, Switch & 10ft Wire Coil Under / in cab / sleeper	2

Paint

8530770	S	(1) Color Axalta Two Stage - Cab/Hood Base Coat/Clear Coat N85020 A - L0348EY DARK BLUE N85400 HOOD TOP L0348EY DARK BLUE N85500 CAB ROOF L0348EY DARK BLUE N85200 FRAME N0001EA BLACK N85700 BUMPER N0001EA BLACK N85300 FENDER L0348EY DARK BLUE	0
8531320	O	Axalta Two Stage Effect - Metallic/Pearl Cab/Hood & Sleeper Only	0

Options Not Subject To Discount

9400091	O	Peterbilt Class 7 Standard Coverage 1 year/Unlimited Miles/km	0
9400094	O	PACCAR PX-9 Standard Coverage 2 yrs/250,000 mi (402,336 km)/6,250 hrs	0

Unpublished options may require review/approval.

Dimensional and performance data for unpublished options may vary from that displayed in PROSPECTOR.

Printed:	12/27/2017 9:20:20 AM	Complete	Model Number:	Model 348
Effective Date:	Jul 1, 2017		Quote/DTPO/CO:	Q42083006
Prepared by:	ID: bobmahegan2		Version Number:	35.20



Data	Code	Description	Weight
9404745	O	Paccar 2017 PX-9 Protection Plan 1 (5/100) Five Years/100,000 Miles/160,935 Kilometers. Coverage is 100 percent parts and labor with no deductibles on internally lubricated components and major engine systems including turbo charger, water pump, and fuel injectors.	0
9404820	O	Paccar 2017 PX-9 Aftertreatment Coverage 5 Years/100K Mi (160,935 KM)	0
Miscellaneous			
9409800	O	2017 EPA Emissions Engine Warranty Only	0
Promotions			
9566211	U	TPS Municipal Assistance	0
Total Weight			11738

Prices and Specifications Subject to Change Without Notice.

Unpublished options may require review/approval.
Dimensional and performance data for unpublished options may vary from that displayed in PROSPECTOR.

Printed: 12/27/2017 9:20:20 AM **Complete** Model Number: Model 348
Effective Date: Jul 1, 2017 Quote/DTPO/CO: Q42083006
Prepared by: ID: bobmahegan2 Version Number: 35.20



THE PETERBILT STORE BALTIMORE H831
5100 HOLABIRD AVE
c/o Bob Mahegan

BALTIMORE, Maryland United States 21224
Phone: (978) 994-5420
Fax: (508) 316-2790
Email:

Town Of Middleton DPW
105 North Main Street

Middleton, Massachusetts United States 01949
Phone: (978) 777-0407
Fax:
Contact Email:
Prepared for: Bob Labossleier

Customer Quote

Equipment

Quantity Ordered: _____

1

Truck Price: _____

Dealer Options: _____

Equipment List Price: _____

Surcharges Not Subject to Discount: _____

Options Not Subject to Discount: _____

Factory Freight Cost: _____

Total Equipment Price: _____

\$2,790 FULL COST OF 5 YEAR

100,000 MILE ENGINE + AFTERTREATMENT

WARRANTY INC. IN TOTAL BELOW

NET Sale Price: _____

\$163,163

Miscellaneous

FET Tire Credit: _____ \$0

Net Chassis FET: _____ \$0

State Tax: _____ \$0

Body/Trailer/Accessories FET: _____ \$0

Fees: _____ \$0

Other: _____ \$0

Quotation Total: INC. DONOVAN EQUIP. QUOTE # N1271-4 \$163,163

Unpublished options may require review/approval.

Dimensional and performance data for unpublished options may vary from that displayed in PROSPECTOR.

Printed:	12/27/2017 9:19:02 AM	Complete	Model Number:	Model 348
Effective Date:	Jul 1, 2017		Quote/DTPO/CO:	Q00783405
Prepared by:	ID: bobmahegan2		Version Number:	35.20



ORDER ENTRY # _____

QUOTATION

QUOTE / ORDER # N1271-4

CUSTOMER: T/O MIDDLETON, MA. DPW
CONTACT: BOB LABOSSIÈRE
ADDRESS: 195 NORTH MAIN ST.
MIDDLETON, MA. 01949
PHONE: 978-777-0407
FAX: 978-774-0718

6 ENTERPRISE DRIVE
LONDONDERRY, NH 03053
PHONE: 603-669-2250
FAX: 603-669-0501
DATE: 2/15/18

TRUCK INFO:

VIN #: _____
YEAR: 2018
MAKE: PETE
MODEL: 348
CA/CT: 96"
TRANS: AUTOMATIC

BODY SR. # HOIST SR. #
"BEAU-ROC" STAINLESS STEEL DUMP # BR-SS 11' LONG X 30" SIDES X 36" GATE
.304 SS CONSTRUCTION WITH 3/16" HARDOX 450 STEEL FLOOR – UNIBODY CONSTRUCTION
.304 7 GA SIDES W/ DIRT SHEDDERS & VERTICAL BOX BRACING
.304 7 GA DOUBLE ACTING SIX (6) PANEL TAILGATE
FORMED 3/16" 50W STEEL LONG SILLS W/ REINFORCED GUSSETS – 10" HIGH
36" CAB SHIELD
MAILHOT CS-100-4.5-3 FRONT MOUNT TELESCOPIC HOIST 25 TON CAP
SAFETY PROP / BACKUP ALARM & BODY UP ALARM
SET OF FRONT & REAR MUD FLAPS
ALL LIGHTS & REFLECTORS TO MEET FMVSS-108 (LED)

INSTALLED ----- **\$24,500.00**

OPTIONS:

LABEL ALL SWITCHES & HYDRAULICS HANDLES-----
 HOT SHIFT PTO DRIVEN CENTRAL HYDRAULIC SYSTEM W VALVES
TO OPERATE DUMP / PLOW LIFT / PLOW ANGLE & SANDER----- \$8,050.00
 MINI LIBERTY WHELEN L.E.D. LIGHTBAR INSTALLED ON CAB #IT9AAAAP ----- \$1,200.00
 AERO ELECTRIC COVER W/ MESH ----- \$2,400.00
 LOW PROFILE NON TILT HITCH W/ 3" X 10" S/A LIFT CYLINDER ----- \$4,800.00
 8" OAK SIDE BOARDS ----- \$ 110.00
 INSTALL RUBBER FLAPS ON SANDER SO SAND DOESN'T
GO BETWEEN THE FRAME RAILS ----- \$ 125.00
 POLY FENDERS INSTALLED OVER REAR TIRES ----- \$ 750.00
 LED 404 STROBES INSTALLED IN CAB SHIELD & REAR POSTS ----- \$ 800.00
 10' MONROE S/S BRUTE SANDER W/ FRONT DEFLECTOR & GREASE TO REAR--- \$16,900.00
 S/S LIGHT BAR WITH STOP TURN & TAIL LIGHTS INCL. LED STROBES ----- \$ 965.00
 (2) ROUND SPOT LIGHT IN REAR TO VIEW SPREAD W/ SWITCH----- \$ 250.00
 11' MONROE POWER ANGLE TORSION TRIP PLOW# MPR39R11-ISTT ----- \$ 9,300.00
 POLAR FLEX CUTTING EDGE & CURB GUARDS INSTALLED ON MONROE PLOW \$ INCL.
SUPPLIED BY THE TOWN OF MIDDLETON

TOTAL: \$ 70,150.00

I HAVE READ AND APPROVED THE ABOVE QUOTATION AND
HEREBY AUTHORIZE YOU TO COMPLETE THE WORK.

CUSTOMER SIGNATURE: _____

DATE: _____

QUOTED BY: NICK COVATIS

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Police Equipment					
New Cruiser Radio (2)		5,000		5,000	
Radar Gun (X2)		2,000		5,000	
Radio Infrastructure				25,000	
Portable Radio Upgrade					
Police Vests				20,000	
Replace Cruiser Laptops		5,000		5,000	5,000
Patrol Rifles Upgrades		1,400		5,000	
40 Caliber Pistol Upgrade					
Copier Replacement		6,000			7,000
Automated License Plate Reader		20,000			

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Office Furniture		10,000		10,000	
Police Station Upgrades		10,000			10,000
Taser Replacement	12,700	23,700	23,700	11,000	
Police Motorcycle			30,000		
Patrol Vehicle	88,000	42,000	42,000		
POLICE EQUIPMENT TOTAL	\$100,700	\$125,100	\$95,700	\$86,000	\$22,000
Department: Police					
Building Repairs					
Additional Garage Space		30,000			
Building Renovations			30,000		
Carport		25,000			
POLICE BUILDING REPAIRS TOTAL	\$0	\$55,000	\$30,000	\$0	\$0
TOTAL POLICE	\$100,700	\$180,100	\$125,700	\$86,000	\$22,000

FY 2019

Capital Improvement Plan

Electronic Control Device (ECD) – TASERS X2



Electrical weapons, often referred to by a common brand name “Taser” are electro-muscular disruptors that override the central nervous system. Such weapons provide officers with another control option.

Prior to the implantation of these Tasers in 2011, four officers were injured while dealing with people who were under the effects of illegal drugs or emotionally disturbed persons. We found that the normal compliance techniques failed to keep the officer safe during these encounters. I’m happy to report that since the implantation of the Tasers “No” officers have been injured on duty, these units were deployed on 10 different occasions.

At the end of the 5year plan the Middleton Police Department will receive (16) new Tasers at no charge.

Taser is the only authorized vendor in Massachusetts to sell these weapons to police departments.

YEAR 1		PRICE	TOTAL
--------	--	-------	-------

(16) TASER UNITS	X2		
------------------	----	--	--

Taser 60 (Year#1) Payment Basic	\$248.72	\$3,979.52
Taser Assurance Plan CEW Annual Payment	\$471.14	\$7,538.24
	TOTAL	\$12,669.76

YEAR 2		
--------	--	--

Taser Assurance Plan CEW Annual Payment	\$62.43	\$998.88
Taser 60 (Year#2) Payment Basic	\$248.72	\$3,979.52
Taser Assurance Plan CEW Annual Payment	\$232.00	\$3,712.00
Taser 60 (Year#3) Payment Basic	\$248.72	\$3,979.52
	TOTAL	\$12,669.76

YEAR 3		
--------	--	--

Taser Assurance Plan CEW Annual Payment	\$62.43	\$998.88
Taser 60 (Year#4) Payment Basic	\$248.72	\$3,979.52
Taser Assurance Plan CEW Annual Payment	\$232.00	\$3,712.00
Taser 60 (Year#5) Payment Basic	\$248.72	\$3,979.52
	TOTAL	\$12,669.92
Total at the end of 3 years		\$38,009.60



Middleton Police Dept - MA

2/26/2018

Q-153963-43157.827JL

1

Axon Sales Representative
Jeremy Lebovitz
480-463-2204
jlebovitz@taser.com

203



Axon Enterprise, Inc.
Protect Life.
17800 N 85th St.
Scottsdale, Arizona, 85255
United States
Phone: (800) 978-2737

QUOTE: Q-153963-43157.827JL

Issue Date: 02/26/2018

Quote Expiration: 03/07/2018

Account Number: 327036

Start Date: 02/08/2018

Payment Terms: Net 30

Delivery Method: Fedex - Ground

Sales Representative:

Jeremy Lebovitz
Phone: 480-463-2204
Email: jlebovitz@taser.com
Fax: 480-550-9024

Primary Contact:

Adam Maccini
(978) 774-4424
adam.maccini@middletonma.gov

BILL TO:

Middleton Police Dept - MA
65 N. Main St.
Middleton, MA 01949
US

SHIP TO:

Adam Maccini
Middleton Police Dept - MA
65 N. Main St.
Middleton, MA 01949
US

Year 1

Item	Description	Quantity	Net Unit Price	Total (USD)
Axon Plans & Packages				
85176	TASER 60 YEAR 1 PAYMENT: X2 BASIC	16	248.72	3,979.52
85049	TASER ASSURANCE PLAN CEW ANNUAL PAYMENT, X2	16	471.14	7,538.24
Hardware				
85047	TASER ASSURANCE PLAN CEW, X2	16	0.00	0.00
22003	HANDLE, YELLOW, CLASS III, X2	16	0.00	0.00
22010	PPM, BATTERY PACK, STANDARD, X2/X26P	26	0.00	0.00
22157	CARTRIDGE, PERFORMANCE, SMART, TRAINING, 25'	32	0.00	0.00
22151	CARTRIDGE, PERFORMANCE, SMART, 25'	32	36.00	1,152.00
22013	KIT, DATAPORT DOWNLOAD, USB, X2/X26P	1	0.00	0.00
				Subtotal
				12,669.76
				Estimated Shipping
				0.00
				Taxes
				0.00
				Total
				12,669.76

Year 2

Item	Description	Quantity	Net Unit Price	Total (USD)
Axon Plans & Packages				
85049	TASER ASSURANCE PLAN CEW ANNUAL PAYMENT, X2	16	62.43	998.88
85177	TASER 60 YEAR 2 PAYMENT: X2 BASIC	16	248.72	3,979.52
85049	TASER ASSURANCE PLAN CEW ANNUAL PAYMENT, X2	16	232.00	3,712.00
85178	TASER 60 YEAR 3 PAYMENT: X2 BASIC	16	248.72	3,979.52
				Subtotal
				12,669.92
				Taxes
				0.00
				Total
				12,669.92

Year 3

Item	Description	Quantity	Net Unit Price	Total (USD)
Axon Plans & Packages				
85049	TASER ASSURANCE PLAN CEW ANNUAL PAYMENT, X2	16	62.43	998.88
85179	TASER 60 YEAR 4 PAYMENT: X2 BASIC	16	248.72	3,979.52
85049	TASER ASSURANCE PLAN CEW ANNUAL PAYMENT, X2	16	232.00	3,712.00
85180	TASER 60 YEAR 5 PAYMENT: X2 BASIC	16	248.72	3,979.52
			Subtotal	12,669.92
			Taxes	0.00
			Total	12,669.92

Grand Total **38,009.60**



Discounts (USD)

Quote Expiration: 03/07/2018

List Amount	46,380.00
Discounts	8,370.40
Total	38,009.60

**Total excludes applicable taxes and shipping*

Summary of Payments

Payment	Amount (USD)
Year 1	12,669.76
Year 2	12,669.92
Year 3	12,669.92
Grand Total	38,009.60

FY 2019 Capital Improvement Plan Cruiser Replacement



The Middleton Police Department depends on certain tools to insure the safety and survival of our police officers. As in most trades a professional must depend on their tools to get the job done right; it's no different in the police field.

We depend on our weapons and our ballistic vests to protect us when needed; however, the public doesn't realize that the most important tool we use on a daily basis is our police vehicles. These rolling offices are the officer's home away from home for eight hours a day. There are no companies making cars solely for use as police cars, with a few very rare exceptions. Instead, car companies make special "interceptor" or "police" versions of certain models -- typically large sedans. In addition, police departments occasionally purchase civilian vehicles that fit their particular needs and customize them for a specific use.

2018 Ford Utility Police Interceptor- 3.7 L V6 Ti-VCT FFV AWD
304 Horsepower @ 6259 rpm- Automatic transmission- Heavy Duty 18" Steel Wheels

	Unit Price	
SYNC Basic –Voice Activated Communication System	\$27,995.00	
Misc. Extra's	\$ 286.15	
	\$ 1052.15	
Paint 4 doors only	\$ 29,333.60	
	\$ 495.00	
		Vehicle Total: \$29,828.60
Vehicles to be Purchased (2)	\$59,657.20	
Outfit with emergency equipment	\$28,000.00	
	\$ 87,657.20	

CUSTOMER

Contact Name:	Chief James Digianvittorio	Date:	1/30/2018
Company/Dept:	Middleton MA Police Dept.	Valid For:	60 Days*
Street Address:	65 N Main St, Middleton	Customer #:	
City, State, Zip:	MA 01949	Contract:	GBPC
Phone:	978-774-4424	Sales Rep:	Kris Wright
Email:	mailto:chief@middletonpolice.com		

Vehicle:

CONTRACT LINE REFERENCE	LINE DESCRIPTION	UNIT PRICE	QTY.	EXTENDED PRICE
K8A	2018 Ford Utility Police Interceptor - 3.7L V6 Ti-VCT FFV AWD - 304 Horsepower @ 6259 rpm - 279 lb-ft Torque @ 4000 rpm - 6 Speed Automatic Transmission - Heavy Duty 18" Steel Wheels Small Chrome Center Hub Caps - 75 MPH Rear Crash Tested - Heavy Duty Vinyl Flooring - 1st Row Police Grade Cloth Dual Front Bucket Seats (Driver's Side Six Way Power Seat; Passenger side Manual) - 2nd Row Vinyl 60/40 Split Bench Seats - Power Adjustable Pedals - Advance Trac Stability Control System - ABS with Traction Control - Rear View Camera - 3 Year 36,000 mile Bumper to Bumper Warranty	\$ 27,995.00	1	\$ 27,995.00
G1	Shadow Black	\$ -	1	\$ -
18D	Global Lock / Unlock feature (Door-panel switches will lock/unlock all doors and rear liftgate. Eliminates the overhead console liftgate unlock switch)	\$ -	1	\$ -
422	California Emissions System	\$ -	1	\$ -
87R	Rear View Camera (Mirror Display)	\$ -	1	\$ -
153	License Plate Bracket - Front	\$ -	1	\$ -
53M	SYNC Basic - Voice-Activated Communication System	\$ 286.15	1	\$ 286.15
18W	Rear window power delete, operable from front driver side switches	\$ 24.25	1	\$ 24.25
43D	Dark Car Feature – Courtesy lamp disable when any door is opened	\$ 19.40	1	\$ 19.40
51T	Spot Lamp - Driver only (Whelen LED)	\$ 407.40	1	\$ 407.40
549	Mirrors - Heated Side View	\$ 58.20	1	\$ 58.20
52P	Hidden Door-Lock Plunger w/Rear-door handles inoperable	\$ 155.20	1	\$ 155.20
76R	Reverse Sensing	\$ 266.75	1	\$ 266.75
86P	Front Headlamp / Police Interceptor Housing Only	\$ 121.25	1	\$ 121.25
VEHICLE TOTAL:				\$ 29,333.60

Equipment:

CONTRACT LINE REFERENCE	LINE DESCRIPTION	UNIT PRICE	QTY.	EXTENDED PRICE
	Paint 4 doors only	\$ 495.00	1	\$ 495.00
				EQUIPMENT TOTAL: \$ 495.00
				Vehicle Equipment Total: \$ 29,828.60
				Vehicles to be purchased: 2
				Grand Total: \$ 59,657.20

TERMS AND CONDITIONS

*This quote is valid for 60 days. Any purchase orders or approved quotes received outside of this date will be subject to price adjustments. By signing this quote, the customer is agreeing to pay, in full, for all items listed above. Any requests for changes, modifications, replacements, removals or additional items may be subject to additional fees and/or adjusted delivery dates.

M.G.L. c.30B applies to the procurement of all commodities quoted. Greater Boston Police Council contract items have been collectively purchased pursuant to M.G.L. c 30B sec. 1c and M.G.L. c.7 sec. 22B. The governmental body is responsible to determine the applicability of M.G.L. c 30B to off contract items, including, but not limited to off contract items that have already been properly procured under M.G.L. c 30B sec. 1c and M.G.L. c. 7 sec. 22A (purchases from a vendor on a contract with the Commonwealth), other contracts procured under M.G.L. c 30B sec 1c and M.G.L. c.7 sec. 22B, or any M.G.L. c. 30B contract between the vendor and the jurisdiction. All off contract items must be procured under M.G.L. c. 30B.

The terms and conditions stated herein and the provisions of any agreement between MHQ and Buyer, if applicable, shall constitute the complete and only terms and conditions applicable to any and all purchases by Buyer from MHQ. Any additional and/or different terms and/or conditions printed anywhere including on, or with, Buyer's order shall be inapplicable in regard to any purchase by Buyer from MHQ.

IMPORTANT NOTE: Pricing shown requires membership into referenced contract. ** Denotes non contract item

By signing this document you are agreeing to the above terms and conditions of this order from MHQ, Inc.

x

PRINT NAME

x

TITLE

x

SIGNATURE

x

DATE

**Adamson Industries Corp.
45 Research Dr.
HAVERHILL, MA 01832**

Tel: 978-374-3300/1-800-232-0162
Fax: 978-975-7168

Quotation

Quote Number:
21478

Quote Date:
Jan 16, 2018

Page:
1

Quoted to:

MIDDLETON POLICE DEPT
65 N. MAIN STREET
MIDDLETON, MA 01949

Customer ID	Good Thru	Payment Terms	Sales Rep	
MID MA PD	2/15/18	Net 30 Days	SHIRLEY	
Quantity	Item	Description	Unit Price	Extension
1.00		2018 INTERCEPTOR UTILITY		
1.00	FL ETHFSS-SP-ISO	GRAPHICS KIT	825.00	825.00
		ETHFSS-SP-ISO ISOLATION HDLT	54.95	54.95
		FLASHER		
2.00	GLL ELUC2S010B	UNIVERSAL LED INSERT BLUE TO FRONT	87.95	175.90
1.00	EP PB400FIU16	2016 EXPLR/2016 UTILITY INTR BUMPER	379.00	379.00
2.00	GLL ENFSSS3E	nFORCE 12 LED SINGLE SRF MNT - BLUE/WHITE ON SIDE OF PUSHBUMPER	129.95	259.90
2.00	GLL ENFSGS3BW	nFORCE 12 LED SINGLE DECK/GRILL BLUE/WHITE ON PUSHBUMPER	139.95	279.90
1.00	GLL FIUFAW	2016 UTILITY FRT AUX WARNING KIT	979.95	979.95
2.00	GLL ELUC2S010B	UNIVERSAL LED INSERT BLUE FOR AUX LIGHTING	87.95	175.90
2.00	GLL ELUC2S010W	UNIVERSAL LED INSERT WHITE FOR AUX LIGHTING	87.95	175.90
1.00	SR RUMBLER-3	RUMBLER LOW FREQ SIREN SYS	439.95	439.95
1.00	MT RB-FPIU16	2016+ INT UTILITY RUMBLER BRKT	39.95	39.95
1.00		BLUEPRINT SYSTEM BELOW		
1.00	LF ENFLB-S	48" nFORCE LIGHT BAR SILVER		
1.00	SW ENGCC01241	CENTRAL CONTROLLER 20 OUTPUTS	6,600.95	6,600.95
2.00	SW ENGND04101	REMOTE NODE 10 OUTPUTS 4 HIGH/LOW INPUTS		
1.00	SW ENGCP18001	REMOTE CONTROL PANEL - 15 BUTTON/3-POSITION SLIDE		
1.00	AC ENGHNK01	CENTRAL CONTROLLER HARNESS KIT		
1.00	AC ENGHNK02	REMOTE NODE HARNESS KIT		

**ALL QUOTATIONS ARE VALID FOR 60 DAYS.
PRODUCTS ARE SUBJECT TO AVAILABILITY.
WOMAN OWNED SMALL BUSINESS**

Subtotal	Continued
Sales Tax	Continued
Freight	
Total	Continued

**Adamson Industries Corp.
45 Research Dr.
HAVERHILL, MA 01832**

Tel: 978-374-3300/1-800-232-0162
Fax: 978-975-7168

Quotation

Quote Number:
21478

Quote Date:
Jan 16, 2018

Page:
2

Quoted to:

MIDDLETON POLICE DEPT
65 N. MAIN STREET
MIDDLETON, MA 01949

Customer ID	Good Thru	Payment Terms	Sales Rep	
MID MA PD	2/15/18	Net 30 Days	SHIRLEY	
Quantity	Item	Description	Unit Price	Extension
2.00	SR ETSS100N	100N SERIES 100W SPEAKER W/BAIL BRKT		
1.00	SR ENGSA07152	REMOTE SIREN AMPLIFIER 200 WATTS-***USE THIS FOR BLUEPRINT***		
2.00	GLL ENT2B3E	INTERSECTOR SPLIT LED UNDER MIRROR LIGHT BLU/WHT	189.95	379.90
1.00	MT PNT1CRV05	2013 INT UTILITY/EXPLR INTERSECTOR MOUNTING WEDGE, PAIR	7.95	7.95
1.00	DAS MDASHCPE	MICRODASH PRE-EMPTION - HARDWIRE OPTION	299.95	299.95
1.00	MT C-VS-1308-INUT	21" STANDARD UTILITY CONSOLE	383.95	383.95
1.00	MT C-CUP2-I	4" DUAL CONSOLE MNT CUP HOLDER	40.95	40.95
1.00	MT C-ARM-103	FLIP UP CONSOLE MNT ARM REST	113.95	113.95
2.00	MT SMIC	SINGLE MIC CLIP&L-BRKT	19.95	39.90
1.00	UL 75713	STINGER LED W/AC&DC	139.95	139.95
1.00	MT LT6600-EXPL-11	2011+EXPLORER/2013 INTR UTILITY LAPTOP MOUNT	459.95	459.95
1.00	SW CG-X	CHARGE GUARD TIMER	89.95	89.95
1.00	PT P1000UINT13A	2013 INTR UTILITY SINGLE PRISONER TRANSPORT SYSTEM 1/2 PARTITION W/SCA	1,995.00	1,995.00
1.00	MT G6300D	PRO-CELL DUAL VERTICAL GUN RACK	399.95	399.95
2.00	GLL MPS600UB	MICRO PULSE ULTRA 6-LED SURFACE MNT BLUE ON HATCH	99.95	199.90
4.00	GLL ENFSGS3	nFORCE 12 LED SINGLE DECK/GRILL BLUE MOUNTED IN REAR WINDOW & SIDE CARGO	139.95	559.80

**ALL QUOTATIONS ARE VALID FOR 60 DAYS.
PRODUCTS ARE SUBJECT TO AVAILABILITY.
WOMAN OWNED SMALL BUSINESS**

Subtotal	Continued
Sales Tax	Continued
Freight	
Total	Continued

**Adamson Industries Corp.
45 Research Dr.
HAVERHILL, MA 01832**

Tel: 978-374-3300/1-800-232-0162
Fax: 978-975-7168

Quotation

Quote Number:
21478

Quote Date:
Jan 16, 2018

Page:
3

Quoted to:

MIDDLETON POLICE DEPT
65 N. MAIN STREET
MIDDLETON, MA 01949

Customer ID		Good Thru	Payment Terms	Sales Rep	
MID	MA	PD	2/15/18	Net 30 Days	SHIRLEY
Quantity	Item	Description		Unit Price	Extension
1.00	SW 060-770	ROUND ROCKER SWITCH, BLUE LED		8.95	8.95
1.00	GLL ENL172x-L	Only RB available - 72" nLINE		459.95	459.95
1.00	GLL ENL172x-R	RUNNING LIGHT, LEFT WIRE EXIT		459.95	459.95
1.00	GLL ELUC2S010B	Only RB available - 72" nLINE		459.95	459.95
2.00	GLL ELUC2S010B	RUNNING LIGHT, RIGHT WIRE EXIT		87.95	175.90
		UNIVERSAL LED INSERT BLUE IN			
2.00	GLL ELUC2S010R	REVERSE		87.95	175.90
		UNIVERSAL LED INSERT RED IN			
		TAILLIGHTS			
1.00	MT PNFFTBRK2LPV	FIT LICENSE PLATE BRACKET		25.95	25.95
2.00	GLL ENFFTSSMS9BRW	nFORCE FIT 9 LED TRI COLOR SRF		117.95	235.90
		MNT - BLUE/RED/WHITE - BLACK			
		HOUSING			
1.00	AC 94293	EXPLR/13+ INT UTILITY VENT SHADES		125.00	125.00
1.00	AC 807	# 807 5LB VERT FIRE EXT BRKT		49.95	49.95
1.00	AC 466425	5 LB FIRE EXTINGUISHER		59.95	59.95
1.00	SW 05.0700.030	30A, 12V RELAY SPST		13.95	13.95
1.00	SW 05.0700.075	75A, 12V, RELAY SPST		44.95	44.95
1.00	SW 131-0010	100A MANUAL RESET CIRCUIT BREAKER		49.95	49.95
2.00	SW 46060	6 POSITION FUSE BLK W/GRD		15.95	31.90
1.00	CO NMOC/P3E	DUAL BAND 800MHz + 1800MHz		21.95	21.95
		ANTENNA			
1.00	CO NMOQSPECB	136-512 MHz ANTENNA		20.95	20.95
2.00	CO NM025NOCONN	25' COAX CABLE		29.95	59.90
1.00	CO MPLCRIMP	MINI UHF CRIMP PLUG		4.95	4.95
1.00	CO TNCCRIMP	TNC CRIMP		3.95	3.95
1.00	TR EQUIP-SUV	INSTALL EQUIPMENT		1,295.00	1,295.00
1.00	TR PUSHBUMPF	INSTALL PUSHBUMPER		225.00	225.00

**ALL QUOTATIONS ARE VALID FOR 60 DAYS.
PRODUCTS ARE SUBJECT TO AVAILABILITY.
WOMAN OWNED SMALL BUSINESS**

Subtotal	Continued
Sales Tax	Continued
Freight	
Total	Continued

**Adamson Industries Corp.
45 Research Dr.
HAVERHILL, MA 01832**

Tel: 978-374-3300/1-800-232-0162
Fax: 978-975-7168

Quotation

Quote Number:
21478

Quote Date:
Jan 16, 2018

Page:
4

Quoted to:

MIDDLETON POLICE DEPT
65 N. MAIN STREET
MIDDLETON, MA 01949

Customer ID		Good Thru	Payment Terms		Sales Rep
MID MA PD		2/15/18	Net 30 Days		SHIRLEY
Quantity	Item	Description		Unit Price	Extension
1.00	TR MIRROR BEAMS	INSTALL MIRROR BEAMS/ INTERSECTORS		225.00	225.00
1.00	TR PARTITION	INSTALL PROCELL		150.00	150.00
1.00	TR GUNRACK	INSTALL GUNRACK		120.00	120.00
1.00	TR RADIO	INSTALL SUPPLIED RADIO		175.00	175.00
1.00	TR RADAR	INSTALL SUPPLIED RADAR		125.00	125.00

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Fire					
Equipment Replacement					
FIRE/APPARATUS EQUIPMENT					
Fire Hose Replacement					
Replace SCBA	50,000	150,000		50,000	
Fire Pumper Equipment					
Ice Rescue Sled*					
Multi-Gas Meters	8,000				
Replace Air Bags - Pneumatic Lifting/Rescue System		20,000			
*The Department received an ice rescue unit from the federal surplus program in February 2017 worth over \$7,000.					
EMS EQUIPMENT					
Replace 2 AED's - (Automated External Defibrillators)		5,000			
Ambulance Toughbook Computers	10,750				
Lucas Device			30,000		
Replace Cardiac Monitor	80,000				

**Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan**

	2019	2020	2021	2022	2023
GENERAL ADMIN. EQUIPMENT					
New Portable Radios		51,000			
Fire Station Copier/ Printer/ Scanner			7,000		
<u>Communications Equipment</u>	55,000				
EQUIPMENT SUBTOTAL	\$254,750	\$162,000	\$70,000	\$30,000	\$0
 Department: Fire					
Building/Grounds Improvements					
Replace Garage Door					
Building Repairs/Paint - Exterior and Interior					
Turnout Gear Washer/ Dryer**					
New Roof			10,000		
Replacement Windows		15,000			
Relocate Water Line and Meter		20,000			
BUILDING/GROUNDS IMPROVEMENTS SUBTOTAL:	\$0	\$35,000	\$10,000	\$0	\$0

**A grant was received for the gear washer/dryer in FY18 for \$17,000.

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Fire					
Vehicle Replacements					
Replace Engine 1***		622,000			
Engine 3 Body Work		10,000			
Replace Engine 3					650,000
Ladder 1 Repairs	16,000				
Replace Ambulance 1 - 2010 Lifeline Ambulance		290,000			
Replace Squad 5 - 2012 F450				60,000	
Replace Marine 1			25,000		
All Terrain Vehicle****					
VEHICLE REPLACEMENT SUBTOTAL:	\$638,000	\$300,000	\$25,000	\$60,000	\$650,000

***Fire Department is holding off replacing Ladder 1 until a new station is build. To try to have a ladder built to fit the station will cost more and limit what the Town can buy.

****All-terrain vehicle to assist with special events, brush fires, storms, etc. (Fund from other sources).

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Fire					
Training					
One Time Training Costs For New Firefighter/ Paramedic(s)					
TRAINING SUBTOTAL:	\$0	\$0	\$0	\$0	\$0
TOTAL FIRE:	\$892,750	\$497,000	\$105,000	\$90,000	\$650,000

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Apparatus/ Equipment Inventory					
Car 1		2018 Chevy Tahoe			
Car 2		2016 Ford Explorer			
Engine 1		2001 HME/ Ferrara Pumper			
Engine 2		2016 KME Predator Pumper			
Engine 3		2002 HME/ Ferrara Pumper			
Engine 4		2012 Freightliner/ Rosenbauer Tanker			
Squad 5		2012 F-450 4X4			
Engine 6		1989 Army Surplus 5 ton			
Signal 2		2000 International Bucket Truck			
Ladder 1		1999 Sutphen 104' Aerial			
Ambulance 1		2010 Ford E-450 Ambulance			
Ambulance 2		2016 Ford F550 Ambulance			
2011 Mercury 20 HP Outboard - 12' Boat and Trailer					
2005 Cargo Mate 14' Utility Trailer					
Fire Alarm Wire Trailer					
4 Hurst Tools "Jaws of Life"					
2 Gasoline Powered Fans					
2 Electric Powered Fans					
5 Portable Generators					
Fire Station Emergency Generator					
7 Portable Pumps/ 1 Flotation Pump					
4 Chain Saws					
Emergency Management Light Tower/ Generator					

FY2019 Capital Budget **FIRE DEPARTMENT**

SCBA replacement - \$50,000

These funds will be used for the replacement of self-contained breathing apparatus. The current equipment is aging and reaching the end of its useful life. NFPA 1981: Standard on Open-Circuit Self Contained Breathing Apparatus (SCBA) is on its third revision since this equipment was purchased and has made safety and operational changes.

This equipment is vital to the life and safety of the firefighters and the people that they serve.

Last year I had asked for \$8000 to replace bottles that were out of date and had to be removed from service, but I was able to obtain bottles from a different source to get us by until we replaced this equipment.

I have applied for the Assistance to Firefighters Grant in hopes of covering the cost of this equipment (The grant is for \$250,000). This year's funds will be used for the towns matching portion of \$13,000 and to purchase equipment not covered by the grant. The funds requested in years two and three would not be needed if the grant is received. In the event that the grant is not received these funds will be used to start the replacement process.

Additional information can be found on pages A1-A4

Multi-Gas meters - \$8, 000

The funds will be used to replace the current multi-gas meters. Currently we have three meters that are out of service. This past year we have spent upwards of \$2000 to repair the meters to try to keep them working. The current meters are discontinued, and it is extremely difficult to get parts for them.

These meters are used for carbon monoxide detection and detection of gas (propane and natural gas) and to detect deadly gases such as cyanide that is produced by modern fire situations.

More information can be found on pages A7-A11.

Ambulance Toughbook's- \$10,750

The funds will be used to replace the computers that are used in the ambulances and in the engine for patient care reports and for dispatch information, GIS, and other pertinent information needs. The new units will be used to replace the older units in the

vehicles and the older units will be used for fire prevention and public education among other uses.

More information can be found on pages A12-A14

Replace Cardiac Monitors/Defibrillators - \$80,000

These funds will be used to replace the two LIFEPAK monitors currently used by the department. These devices are used to monitor patient's EKG, defibrillate, monitor blood pressure, record carbon monoxide levels in patients suspected of carbon monoxide poisoning, among many other functions. The current units are over eight years old and in need of replacement.

More information can be found on pages A15.

Replacement of portable radios (continued) \$51,000

The funds will be used to purchase new portable radios, which will replace some of the radios purchased early in fiscal year 2009 (This is continuing the replacement process started in FY17). The radios are assigned to the members and are used on every call and are the primary method of communication while responding both on-duty and off-duty. The radios are designed according to their designated use in extreme conditions including heat, cold, wet environments, and hazardous materials conditions. They withstand rough handling and will work after being submerged in water, which can happen during a fire or other emergency. These radios also assure interoperability with other agencies because they cover multiple band widths. These funds will also be used for chargers and batteries for the radios.

Additional information can be found on pages A16- A23.

Communications Equipment-\$55,000

These funds will be used to purchase radio/phone equipment that is used for our radio system (both Fire and Police). With Verizon doing away with the copper lines an alternative needed to be found in the short term to keep our radio system operating. Recently Middleton Fire personnel worked with Verizon to come up with a solution for both the fire and police radios at the police station. This site was shared by both departments and we share the cost of the T-1 lines. The equipment that Verizon installed is worth over \$5500.00 and can be used by the town, the other sites we must pay for. These funds are for that equipment. A better explanation can be found in C1-C6.

More information can be found on pages A24-A39 and C1-C6

Replace Engine 1- \$600,000

These funds will be used to purchase a new pumper to replace and equip Engine 1, which is a 2001 Ferrara. This vehicle has over 80, 000 miles and has had some costly repairs in the last few years, including suspension, engine and pump repairs costing over \$30,000. In the last 10-15 years, much progress has been made in upgrading the functional capabilities and improving the safety features of fire apparatus. The 2016 edition of NFPA 1901: *Standard for Automotive Fire Apparatus* states that because the changes, upgrades, and fine tuning to NFPA 1901 have been significant, especially in the area of safety, fire departments should seriously consider the value (or risk) to firefighters of keeping fire apparatus older than 15 years old in front line service. The new pumper will have the latest in vehicle safety requirements including enhanced cab safety features, electronic stability control, Better utilization of compartment space to carry the equipment safer and efficiently. This will give the department and the town a reliable and modern piece of equipment to safely and efficiently protect its citizens for the next decade. Once the truck is approved and ordered, it will take approximately one year for delivery.

More information can be found on page A40-A40-6.

Ladder 1 repairs-\$16,000

These funds will be used to repair ladder 1. Every year the vehicle is tested to make sure it is safe to use and to make sure that it is maintained in good working order. As the vehicle ages it needs repairs to keep it up to safety standards and to extend the life of the vehicle. These repairs are noted in the report from the inspection/testing company. These funds would be used for the repairs. The plan is to keep this vehicle running and safe until a new station is built. With the current station there are only two companies who can build a vehicle to fit and this will drive the cost up and limit our options. A new vehicle, when it comes time, will be in the range of \$1.4-\$1.8 million. The vehicle will be twenty years old this fiscal year, maximum life for a ladder truck is twenty-five to thirty years.

More information can be found on pages A41-A47



INDUSTRIAL PROTECTION

P.O. Box 685 • 220 Ballardvale St. • Wilmington, MA 01887

Tel: 978-657-4740 • Fax: 978-658-0257

JOHN A. MERRILL
Quotation

January 9, 2018

Middleton Fire Department
4 Lake Street
Middleton, Ma. 01949
Attn. Chief Martinuk

Industrial Protection Services is pleased to quote the Middleton Fire Department the following equipment from Scott Safety.

25	Scott Air-Pak Pro X3, 4500 or 5500 psi, With Pak-Tracker, Pak-Alert & Monitor	\$7,100.00
	Scott 30 Min., 4500 or 5500 psi Cyl.	\$999.00
	Scott AV 3000 HT Facepiece	\$315.00
	Scott EBSS (Buddy Breathing)	\$520.00

Sub Total Air-		
Pak	\$8,934.00	\$223,350.00

Accessories

Scott Pak-Tracker		
Receiver	\$1,320.00	\$1,320.00
Scott Pak-Tracker Charger	\$473.00	\$473.00
Scott 30 Min. 4500 or 5500 psi Cylinder.	\$999.00	\$24,975.00
Scott Epic 3 Voice-Amp	\$396.00	ea.
Scott Rit-Pak III, with Bag, 60 min. Cylinder, High and Low Pressure Hoses, and		
Regulator.	\$4,128.00	\$4,128.00

THIS IS A MASSACHUSETTS STATE BID PRICE, FIR 04

THIS IS A FCAM BID, FCAM 2016 SCBA-IPS

THESE BUDGETARY PRICES ARE SUBJECT TO CHANGE WITH OUT
NOTICE. PLEASE CONTACT ME FOR UPDATED PRICING BEFORE
STARTING THE PROJECT.

John A. Merrill
Regional Sales Manager

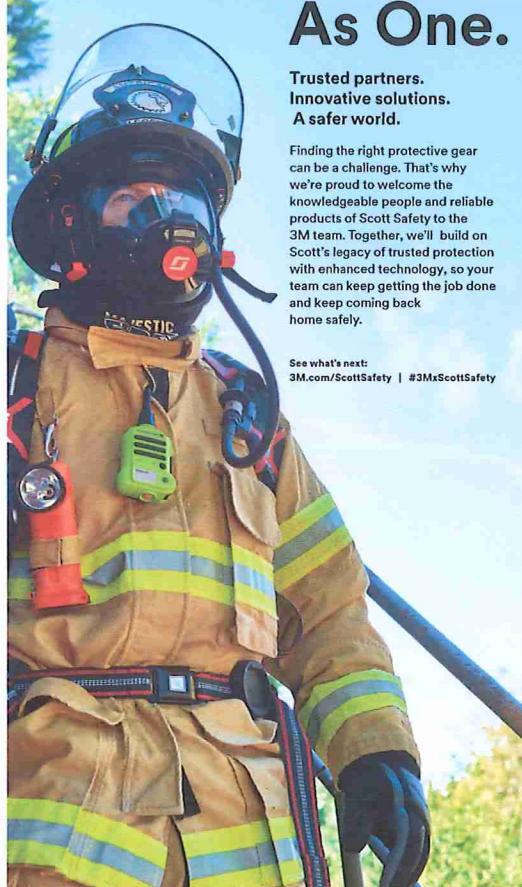
3M | SCOTT SAFETY

As One.

Trusted partners.
Innovative solutions.
A safer world.

Finding the right protective gear can be a challenge. That's why we're proud to welcome the knowledgeable people and reliable products of Scott Safety to the 3M team. Together, we'll build on Scott's legacy of trusted protection with enhanced technology, so your team can keep getting the job done and keep coming back home safely.

See what's next:
3M.com/ScottSafety | #3MxScottSafety



3M | SCOTT SAFETY

www.ScottSafety.com
www.ScottSafetyNation.com/X3PRO

3M | SCOTT SAFETY

Introducing the
AIR-PAK™ X3 PRO

- CLEANABILITY
- COMFORT
- CONNECTIVITY



NEPA 2018 READY
2018
3M SCOTT SAFETY

**CHANGE
THE FUTURE.**



COMFORT

With redundant safety features, superior breathability, and a naturally articulating waist pad, this next Air-Pak SCBA platform takes comfort to a new level.

- **Redundant Safety Features**
Affords firefighters a peace of mind knowing that the SCBA is going to perform in the toughest environments.
- **Superior Breathability**
Offers minimal breathing resistance to reduce user burden and improve operational efficiencies.
- **Natural Articulation**
Promotes greater range of motion to the firefighter, while transferring weight to the hips for a more balanced load.



CHANGE THE FUTURE. AIR-PAK X3 PRO

CLEANABILITY

The harness on our latest Air-Pak SCBA can be easily disassembled and cleaned to reduce a firefighter's risk of cancer.

- **New Harness Materials**
Offers greater resistance to chemical and water absorption to help minimize contamination.
- **Easy-To-Remove Harness**
Allows for cleaning and decontamination after use to help reduce long-term carcinogen exposure; Improves serviceability.



CONNECTIVITY

When communication is critical, the Air-Pak X3 Pro connects you to your most important assets—people and data.

- **Bluetooth® Enabled Electronics**
Supports wireless connectivity between devices for improved configurability, data transmission/retrieval, firefighter safety and fireground accountability.
- **Electronic PAR (ePAR)**
Provides wireless, bi-directional communication between the firefighter and incident command to improve fireground accountability and communications.
- **System Integrity Alarm**
Provides visual and audible alert to notify SCBA wearer and incident command (I/C) of impending electronics degradation due to elevated temperature.

Chief Tom Martinuk (MFD)

From: Kevin Joyce <kevin@ifacilityservices.com>
Sent: Monday, August 21, 2017 15:23
To: Chief Tom Martinuk (MFD)
Subject: RE: Micro Max Pro UNit
Attachments: X-am_2500.lit.Safety.1013.pdf

\$ 1920.00

Follow Up Flag: Flag for follow up
Flag Status: Flagged

Hi Tom,

The usual equipment we recommend for replacing Micro Max Pros are X-AM 2500's, the literature for which I've attached. A comprehensive kit (including the unit, a case, cal gas, usb cord, water filter, tubing segments of different lengths, external pump) is \$1920.00. Please let me know if you need anything else.

Best,

Kevin Joyce

From: Chief Tom Martinuk (MFD) [mailto:tom.martinuk@midfire.com]
Sent: Monday, August 21, 2017 1:28 PM
To: Kevin Joyce
Subject: RE: Micro Max Pro UNit

I Kevin,

Go ahead and fix that one too. We need to get a few more months out of them before we replace them.

While we are on the subject, can you put together some info on new meters for me with prices?

Thank you.

Tom

From: Kevin Joyce [<mailto:kevin@ifacilityservices.com>]
Sent: Monday, August 21, 2017 12:58 PM
To: Chief Tom Martinuk (MFD) <tom.martinuk@midfire.com>
Subject: Micro Max Pro UNit

Hi Tom,

I just wanted to let you know that the unit that was brought back for servicing from the on-site service has been reviewed, and it has been determined that a new O2 sensor is needed. If an O2 sensor replacement were approved, the entire cost, including calibration and the replacement, would be \$321 (\$75 for an evaluation fee if you want to have it returned unrepairs or retired in-house). Please let me know how you'd like to proceed. Thank you for your time and your business!

Best,

Kevin Joyce

Dräger X-am® 2500 Multi-Gas Monitor

The Dräger X-am 2500® was especially developed for use as personal protection. The 1 to 4 gas detector reliably detects combustible gases and vapours, as well as O₂, CO, NO₂, SO₂ and H₂S. Reliable and fully mature measuring technology, durable sensors and easy handling guarantee a high degree of safety with extremely low operating costs.



DURABLE ELECTROCHEMICAL SENSORS

Fully developed, high performance Dräger sensors in an extra small format for CO, H₂S, O₂, SO₂ and NO₂ gases enable safe use in industry, mining and in refineries. The impressive hydrogen sulphide sensor has a high resolution, so it can reliably measure even very low workplace limits. The non-consumptive and lead-free sensor for oxygen is characterized by an especially long service life of more than 5 years. Our CO and H₂S sensors also have this long service life expectation, so they contribute to especially low operating costs.

POISON RESISTANT EX SENSOR

The innovative, catalytic Ex sensor is impressive due to its high resistance to silicone and hydrogen sulphide. Together with the high degree of drift stability, this resistance enables an extraordinarily long service life of more than 4 years. Its high sensitivity with regard to flammable gases and vapours is confirmed by technical approval for measuring according to IEC/EN 60079-29-1 from methane to nonane. This approval also demonstrates the suitability of this instrument for use in refineries and in the chemical industry as well.

MAXIMUM SAFETY

The Dräger X-am 2500 has Ex approval for zone 0, so it is clearly designed for very high user safety in areas subject to explosion hazard. The functional design ensures that gas can enter from above and from the side – even if the instrument is inside a pocket or if the front gas entry is accidentally covered.

MAINTENANCE: FAST, EASY, INEXPENSIVE

From functional test to complete documentation, users have access to practical solutions that provide safety for implementation at any time. The Dräger Bump Test Station, which does not require a local power source, and the automatic Dräger X-dock testing and calibration station for comprehensive equipment management are ideal system additions that save time and effort. Together with the Dräger X-dock, the high quality Dräger sensors enable quick bump tests of 8 to 15 seconds¹ with very low gas consumption. This significantly reduces your equipment operating costs.

D-58025-2012



Dräger X-am® 2500
Robust 1 to 4 gas detector for personal protection.

¹ With standard sensors: CH₄, O₂, CO, H₂S

DRÄGER X-AM® 2500



DIFFUSION OR PUMP

For clearance measurements for tanks and shafts or when searching for leaks, an optional external pump with a hose up to 30 m long is the optimum solution. When the measuring instrument is inserted, the pump function starts automatically. The switch from diffusion to pump operation can be handled quickly and easily without tools or screws.

ERGONOMIC AND ROBUST

Thanks to its low weight and ergonomic design, the Dräger X-am 2500 offers a high degree of wearing comfort. The practical

two button control panel and easy menu navigation allow the instrument to be used intuitively, despite its comprehensive functionality. The integrated protective rubber coating and sensors that are not sensitive to shock provide additional safety in case of impacts or vibrations. Moreover, the Dräger X-am 2500 is not sensitive to electromagnetic radiation, e.g. from wireless devices. The Dräger X-am 2500 is water and dust resistant in accordance with protection class IP 67, so full functionality is guaranteed even if it falls into the water.

RELIABLE POWER SUPPLY

The Dräger X-am 2500 can operate with either alkaline batteries or with rechargeable NiMH batteries. This enables a reliable power supply for more than 12 hours, and with the high capacity battery pack more than 13 hours. Depending on the requirements, the batteries can be charged either in the workshop or in a vehicle. Operating time without Ex sensor is typically more than 250 hours.



Dräger X-am® 2500
Efficient maintenance and comprehensive equipment management with the optional Dräger X-dock testing and calibration station.



Dräger X-am® 2500
Flexible with external pump for clearance measurements.



Dräger X-am® 2500
Reliable personal protection, e.g. in confined space entry.

ORDERING INFORMATION

DESIGNATION	ORDER NO.
Dräger X-am® 2500 Available in various versions. Cannot be modified later with other sensors. Includes calibration certificate. No power supply included.	
Dräger X-am® 2500 EX ¹⁾	83 23 910
Dräger X-am® 2500 Ex, O ₂ ¹⁾	83 23 912
Dräger X-am® 2500 Ex, O ₂ , H ₂ S-LC ¹⁾	83 23 914
Dräger X-am® 2500 Ex, O ₂ , CO ¹⁾	83 23 916
Dräger X-am® 2500 Ex, O ₂ , H ₂ S-LC, CO ¹⁾	83 23 918
 Dräger X-am® 2500 Flex¹⁾ Available in various versions. Can be modified later with other sensors. Includes calibration certificate. No power supply included.	83 23 900
Dräger X-am® 2500 Ex, O ₂ , CO, H ₂ S-LC	
Dräger X-am® 2500 Ex, O ₂ , CO	
Dräger X-am® 2500 Ex, O ₂ , H ₂ S-LC	
Dräger X-am® 2500 Ex, O ₂	
Dräger X-am® 2500 Ex	
Dräger X-am® 2500 O ₂ , CO, H ₂ S-LC	
Dräger X-am® 2500 O ₂ , CO	
Dräger X-am® 2500 O ₂ , H ₂ S-LC	
Dräger X-am® 2500 Ex, O ₂ , CO, NO ₂	
Dräger X-am® 2500 Ex, O ₂ , H ₂ S-LC, SO ₂	
 Power supply units	
NiMH power pack T4 with charging module and PSU (complete set)	83 18 785
NiMH power pack T4	83 18 704
NiMH HC power pack T4 with charging module and PSU (complete set)	83 22 785
NiMH HC power pack T4	83 22 244
Alkaline power pack (w/o batteries)	83 22 237
Alkaline batteries T4 (2 pcs.) for power pack 83 22 237	83 22 240
 Charging accessories	
Charging module	83 18 639
Charging kit consisting of a charging module and a single charger (worldwide)	83 20 333
Power pack with power cord (worldwide) for multiple charging modules (max. 20)	83 15 805
Single charger (worldwide) for multiple charging modules (max. 5)	83 16 994
Single charger (worldwide) for multiple charging modules (max. 2)	83 15 635
Vehicle charging cable 12V/24V for charging module	45 30 057
Vehicle mounting kit for a Dräger X-am 1/2/5x00 charging module	83 18 779
 Pump accessories	
Dräger pump X-am 125, external pump	83 19 400
Manual pump adapter	83 19 195
Confined Space Entry Kit with external pump and 3 m Viton hose	83 19 399
Empty case with room for X-am® 1/2/5x00, charging accessories, probe, gas cylinder, pump, 3 m hose, etc.	83 20 467
 Calibration accessories	
Calibration cradle for Dräger X-am® 1/2/5x00	83 18 752
Dräger X-dock 5300 for Dräger X-am® 1/2/5x00	83 21 880
Other versions of Dräger X-dock	by request
Dräger Bump Test Station for Dräger X-am® 1/2/5x00 (w/o gas cylinder)	83 19 131
Dräger Bump Test Station for Dräger X-am® 1/2/5x00, incl. gas cylinder 58L (gas and concentration can be selected)	83 19 130
Nonane tester for Dräger X-am® 1/2/5x00	83 20 080
 Communication Accessories	
Dräger GasVision	83 14 034
Dräger CC-Vision	Freeware
USB DIRA with USB cable, IR communication adapter to USB	83 17 409

ORDERING INFORMATION

Dräger sensors	Measuring range	Resolution	Response time(t_{90})	Expected service life	Order No.
CatEx 125 PR ¹⁾	0 - 100 % LEL 0 - 5 Vol.-% CH ₄	1 % LEL	10 sec.	> 4 years	68 12 950
DrägerSensor XXS O ₂ ¹⁾	0 - 25 Vol.-%	0.1 Vol.-%	10 sec.	> 5 years	68 10 881
DrägerSensor XXS CO ¹⁾	0 - 2.000 ppm	2 ppm	15 sec.	> 5 years	68 10 882
DrägerSensor XXS H ₂ S LC ¹⁾	0 - 100 ppm	0.1 ppm	15 sec.	> 5 years	68 11 525
DrägerSensor XXS SO ₂	0 - 100 ppm	0.1 ppm	15 sec.	> 3 years	68 10 885
DrägerSensor XXS NO ₂	0 - 50 ppm	0.1 ppm	15 sec.	> 3 years	68 10 884

¹⁾ Dräger provides a 3 year guarantee on the Dräger X-am 2500 and these sensors. The legal rights arising from defects remain unaffected.

TECHNICAL DATA

Dimensions (W x H x D)	48 x 130 x 44 mm
Weight	220 - 250 g
Ambient conditions	<p>Temperature -20 to +50 °C</p> <p>Pressure 700 to 1300 mbar</p> <p>Relative humidity 10 to 95 % r.h.</p>
Protection class	IP 67
Alarms	<p>Visual 360 °</p> <p>Audible Multi-tone > 90dB at 30cm</p> <p>Vibration</p>
Operating times	> 12 h with alkaline and NiMH, > 13 h with NiMH HC, > 250 h w/o Ex sensor with alkaline batteries
Charging time	< 4 h
Datalogger	Retrievable using an infrared interface > 1000 h with 4 gases at a recording interval of 1 value per minute
Approvals	<p>ATEX</p> <p>I M1 Ex ia I Ma, II 1G Ex ia IIC T3 Ga, I M2 Ex d ia I Mb, II 2G Ex d ia IIC T4/T3 Gb</p> <p>Performance approval to:</p> <p>EN 50104 (2002)+A1(2004) O₂ EN 45544 CO & H₂S EN 60079-29-1:2007 Methane to nonane EN 50271:2001 Software and documentation</p> <p>CSA (Canada & USA)</p> <p>Class I Div. 1 Group A, B, C, D T.-Code T4/T3 A/Ex ia IIC T3/Ga A/Ex d ia IIC T4/T3 /Gb</p> <p>IECEx</p> <p>Ex ia I Ma Ex ia IIC T3 Ga Ex d ia I Mb Ex d ia IIC T4/T3 Gb</p> <p>CE mark</p> <p>Electromagnetic Compatibility (Directive 2004/108/EC); ATEX (Directive 94/9/EC)</p> <p>MED</p> <p>Marine Equipment Directive (Directive 96/98/EC)</p>

CORPORATE HEADQUARTERS
Drägerwerk AG & Co. KGaA
Moislinger Allee 53-55
23558 Lübeck, Germany

**Safety Inc.**

119 Foster Street, Bldg #6 • Peabody, MA 01960

Tel: (800) 462-1103 Fax: (978) 532-7325 www.ESafetyInc.com • sales@ESafetyInc.com

Haywood Associates Incorporated
 dba TransCOR Info Technologies
 124 Jewett Street
 Georgetown, MA 01833

Voice: (978) 352-3100
 Fax: (978) 352-9199

QUOTATION

Quote Number: 18-0091
 Quote Date: Jan 30, 2018
 Page: 1

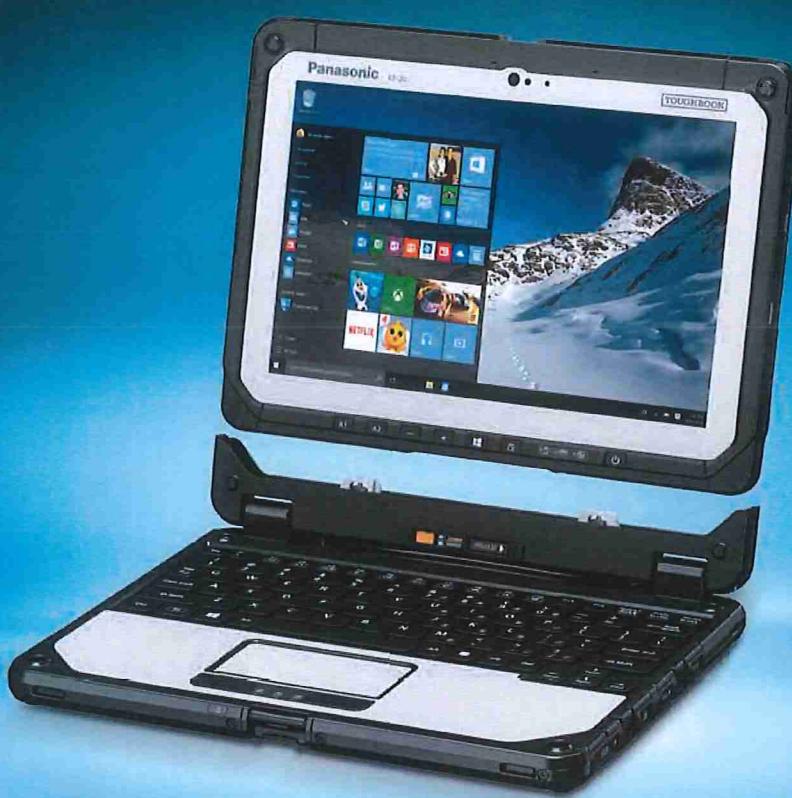
Quoted To:

Middleton Fire Department
 4 Lake Street
 Middleton, MA 01949

Customer ID	Good Thru	Payment Terms	Sales Rep
MID05	3/1/18	Net 25 Days	RRH

Quantity	Item	Description	Unit Price	Amount
1.00	COMMENT A	ATTN: Doug LeColst E-M: dlecolst@gmail.com TEL: -----		
1.00	COMMENT M4 ITC47	REF: Massachusetts State Contract ITC47 Category 8 Rugged Mobile Devices Terms & Conditions -----		
1.00	COMMENT	Quote for CF-20		
1.00	CF-20C5-00VM	PubSectorSpec Win10Pro, IntelCore m5-6Y57, 1.1GHz, vPro, 10.1" GlvdMltTch+Digi ,8GB, 256GB SSD, Intel WiFi abgn/ac, BT, DPT, 4G LTE M-C, EKB, Wbcom, 3Yr PubSector Svc&Supp	3,565.50	3,565.50
1.00	S & H	Shipping & Handling	17.50	17.50
				Subtotal 3,583.00
				Sales Tax
				TOTAL 3,583.00

Panasonic



Panasonic recommends Windows.

TOUGHBOOK 20

- 10.1" Fully Rugged PC For Use as a Laptop or Tablet
- Sunlight-viewable Display Works With or Without Gloves
- Optional Bridge Battery Enables Hot-swap Battery Replacement for Continuous Use
- Integrated 2nd Battery, SmartCard, Barcode, Magstripe, Fingerprint, Serial Options and More
- Built-in Handle Also Functions as a Kickstand
- Industry leading driver packages for ease of deployment and support

THE WORLD'S FIRST FULLY RUGGED DETACHABLE LAPTOP.

The Toughbook 20 is the first fully rugged detachable PC with a removable keyboard that quickly transforms from a laptop into a fully functioning tablet with just one hand. At only 3.9 pounds, it's good on the go with a clever built in handle that also functions as a kickstand, an optional bridge battery allows hot swappable battery replacement while running without disruption and the broadest range of ports and integrated options in its class. The Toughbook 20 display can be used with or without gloves and its sunlight-viewable 800 nit IPS display with direct bonding enables wider viewing angles and richer colors.



For more information contact TransCOR:
1-888-RUGGED-3
TransCOR-IT.com
rugged@TransCOR-IT.com



TOUGHBOOK®

TOUGHBOOK 20

Panasonic recommends Windows.

SOFTWARE

- Windows® 10 Pro 64-bit [available Windows 7 Professional downgrade option]
- Panasonic Utilities (including Dashboard, Recovery Partition)
- Enterprise ready driver packages including CAB files and one-click driver bundles

DURABILITY

- MIL-STD-810G certified (4' drop 5' tablet only), shock, vibration, rain, dust, sand, altitude, freeze/thaw, high/low temperature, temperature shock, solar radiation, salt fog, humidity, explosive atmosphere¹
- MIL-STD-461F certified
- IP65 certified sealed all-weather design²
- Optional hazardous location class I division 2, groups ABCD certified model³
- Mag bullet
- Buoy in dual purpose handle
- SSD heater
- Removable battery
- Optional rotating hand strap
- Reinforced locking port covers
- Raised bezel for LCD impact protection
- Preinstalled replaceable screen film for LCD protection

CPU

- Intel® Core™ m5-6Y57 vPro® Processor
 - 1.1GHz with Turbo Boost up to 2.8GHz
 - 4MB Cache

STORAGE & MEMORY

- 8GB or 16GB SDRAM (DDR3L - 1600MHz)²
- 128GB SSD with heater²
- Optional 256/512GB SSD with heaters²
- Optional OPAL encrypted SSD with heater

DISPLAY

- 10.1" WUXGA 1920 x 1200
 - 10-point capacitive gloved multi touch
 - 10-point capacitive gloved multi touch + digitizer
- 2-800 nit
- IPS display with direct bonding
- Anti-reflective (AR) and anti-glare (AG) screen treatments
- Intel HD Graphics 515
- 4 monitor support
- Concealed mode (configurable)

AUDIO

- Integrated dual array microphone
- Intel® High Definition Audio compliant
- Integrated speaker
- On-screen and button volume and mute controls

CAMERAS

- 1080p webcam with dual array mic and camera on/off indicator
- Optional 8MP rear camera with autofocus and triple LED flash

KEYBOARD & INPUT

- Waterproof IP55 stylus pen with integrated stylus holder, tether and cleaning cloth
- Stylus glove mode and rain mode
- 7 tablet buttons (2 user-definable A1/A2 buttons)
- On-screen QWERTY keyboard
- 82-key with dedicated Windows® key
- Emissive backlit keyboard
- Pressure-sensitive touchpad with multi touch

INTERFACE & EXPANSION

- On the tablet:
 - USB 3.0 x1 (optional 2nd USB^{3,4}) Type A
 - USB 3.0 is high powered 1.5A USB (Always on USB, USB rapid charging)
 - MicroSDXC UHS-I
 - HDMI Type A
 - 10/100/1000 Ethernet RJ-45
 - Optional Serial (True)^{3,4}
 - Headphones/speaker Mini-jack stereo
 - Micro-SIM 3FF
- On the keyboard dock:
 - USB 3.0 x2, USB 2.0 x1 Type A
 - SDXC UHS-I
 - HDMI Type A
 - VGA D-sub 15-pin
 - 10/100/1000 Ethernet RJ-45
 - Serial (USB) D-sub 9-pin

WIRELESS

- Optional 4G LTE multi carrier mobile broadband with satellite GPS⁵
- Optional dedicated GPS (u-blox NEO-M8N)⁵
- Dual high-gain antenna pass-through
- Optional contactless SmartCard/NFC reader
- Intel® Dual Band Wireless-AC 8260 Wi-Fi 802.11a/b/g/n/ac
- Bluetooth® V4.1 (Class II) + EDR
- Security
 - Authentication: LEAP, WPA, 802.1x, EAP-TLS, EAP-FAST, PEAP
 - Encryption: CKIP, TKIP, 128-bit and 64-bit WEP, Hardware AES

POWER

- Li-Ion battery pack:
 - Standard tablet; optional 2nd battery in keyboard dock
 - 11.4V, 2600mAh [each battery]
 - Battery operation: 10 hours [20 hours with opt. 2nd battery]⁶
 - Battery charging time: 3 hours [3.5 hours with opt. 2nd battery]⁶
 - Optional bridge battery: 1 minute hot swap time
- AC Adapter: AC 100V-240V 50/60Hz, auto sensing/switching worldwide power supply

POWER MANAGEMENT

- Suspend/Resume Function, Hibernation, Standby

SECURITY FEATURES

- Password Security: Supervisor, User, Hard Disk Lock
- Kensington cable lock slots x2 (on tablet and keyboard dock)
- Trusted platform module (TPM) security chip v.1.2
- Persistent⁷ technology by Absolute embedded in BIOS⁷
- Optional fingerprint reader⁸
- Optional installable SmartCard reader⁹
- Optional contactless SmartCard/NFC reader⁹
- ISO 14443 A/B compliant

WARRANTY

- 3-year limited warranty, parts and labor

DIMENSIONS & WEIGHT

- 10.7" (L) x 9.2" (W) x 1.3" (H)¹⁰
- 3.9 lbs.¹⁰

HAZARDOUS LOCATION CERTIFICATIONS

- ANSI/ISA 2.12.01-2013

- Optional class I division 2, groups ABCD certified model

INTEGRATED OPTIONS¹¹

- Choice of dedicated GPS (u-blox NEO-M8N) or 4G LTE multi carrier mobile broadband with satellite GPS
- Choice on tablet of 10/20 capable barcode reader (N6603I, serial [true], or second USB 2.0 port)
- Choice on tablet of magstripe reader [future availability], insertable SmartCard reader, or contactless SmartCard/NFC reader or fingerprint reader¹²
- 8MP rear camera
- Bridge battery
- 256/512GB SSD with heaters
- OPAL encrypted SSD with heater

ACCESSORIES¹¹

AC Adapter 65W (3-prong)	CF-AA6413CM
Battery Pack	CF-V2SU00W
4-Bay Battery Charger	CF-VCB231M
LIND Charger F20W	CF-LINCF2120
LIND Solar Charge System	PASC1580-4464
ToughMate ComUniversal Jr. Carrying Case	TBCCOMUJR-P
ToughMate Backpack	TBCBPK-P
Rotating Hand Strap	CF-VST2011U
Vehicle Cradle (In Electronics) <ul style="list-style-type: none"> - Panasonic Keyed Alike - Panasonic Keyed Differently 	CF-CDS20VM05 CF-CDS20VM06
Vehicle Docks (No pass-through) <ul style="list-style-type: none"> - Panasonic Keyed Alike - Panasonic Keyed Differently 	CF-CDS20VM02 CF-CDS20VM04
Vehicle Dock (Dual pass-through) <ul style="list-style-type: none"> - Panasonic Keyed Alike - Panasonic Keyed Differently 	CF-CDS20VM01 CF-CDS20VM03
AntennaPlus Dual LTE & GPS Antenna Kit	AP-PAN-CCGPD-Q-BL
Threaded Black Mount	AP-PAN-CCGPD-Q-WH
Threaded White Mount	CF-VNP023U
Multi Touch IP55 Stylus	CF-VNP023U
Multi Touch + Digitizer IP55 Stylus	CF-VNT002U
Tether	CF-VEK201LMP
Spare Keyboard	CF-VFP31U
10.1" LCD Protector Film	CF-VFP31U

Please consult your reseller or Panasonic representative before purchasing.

¹ Tested by national independent third party lab following MIL-STD-810G Method 516.6 Procedure IV for transit drop test and IEC 60529 Sections 13.4, 13.5.2, 14.2.5 and 14.3 for IP65.

² 1GB = 1,000,000,000 bytes. Total usable memory will be less depending upon actual system configuration. Please contact your reseller or Panasonic representative if you are interested in the 16GB memory.

³ Barcode, Serial (true) and 2nd USB 2.0 Port are mutually exclusive.

⁴ Serial, 2nd USB and the Magstripe reader integrated options increase the overall height and prohibit use in convertible mode.

⁵ Dedicated GPS and 4G LTE are mutually exclusive.

⁶ Battery performance features such as charge time and life span can vary according to the conditions under which the computer and battery are used. Battery operation and recharge times will vary based on many factors, including screen brightness, applications, features, power management, battery conditioning and other customer preferences. Battery testing results from MobileMark 2007.

⁷ Requires software and activation to enable theft protection.

⁸ Magstripe, Insertable SmartCard, Contactless SmartCard/NFC and Fingerprint Readers are mutually exclusive.

⁹ Includes tablet and keyboard dock with handle. Tablet when detached is 10.7" (L) x 7.7" (W) x 0.6" (H). Serial, 2nd USB, Magstripe reader or Barcode+Insertable SmartCard integrated options increase overall height and prohibit use in convertible mode.

¹⁰ Includes tablet and keyboard dock with handle. Tablet when detached is 2.1 lbs. Option 2nd battery weighs 0.4 lbs.

¹¹ Accessories and Integrated Options may vary depending on your configuration. Visit the Panasonic website for more accessories and details.



For more information contact TransCOR:

1-888-RUGGED-3

TransCOR-IT.com

rugged@TransCOR-IT.com





Physio-Control, Inc
11811 Willows Road NE
P.O. Box 97006
Redmond, WA 98073-9706 U.S.A.
www.physio-control.com
tel 800.442.1142
Sales Order fax 800.732.0956
Service Plan fax 800.772.3340

To MIDDLETON FD
Attn: Doug LeCoist, EMS Coordinator
4 LAKE ST
MIDDLETON,MA 01949
9787777403
dlecoist@verizon.net

Quote Number 00108543
Revision # 1
Created Date 1/9/2018
Sales Consultant Crystale Perry
(401) 255-8876
crystale.perry@stryker.com
FOB Redmond, WA
Terms All quotes subject to credit approval and the following terms and conditions
NET Terms NET 30
Expiration Date 4/8/2018

Product	Product Description	Quantity	List Price	Unit Discount	Unit Sales Price	Total Price
99577-001372	LIFEPAK 15 V4 Monitor/Defib, Adaptive Biphasic, Manual & AED, Color LCD, 100mm Printer, Noninvasive Pacing, Metronome, Trending, SpO2, NIBP, 12-Lead ECG, EtCO2, 2 Invasive Pressure Channels, Carbon Monoxide, MetHemoglobin, Bluetooth INCLUDED AT NO CHARGE: 2 PAIR QUIK-COMBO ELECTRODES PER UNIT - 11996-000091, TEST LOAD - 21330-001365, IN-SERVICE DVD - 21330-001486 (one per order) , SERVICE MANUAL CD- 26500-003612 (one per order) and ShipKit (RC Cable) 41577-000288. HARD PADDLES, BATTERIES, CARRYING CASE NOT INCLUDED.	1.00	40,420.00	0.00	40,420.00	40,420.00

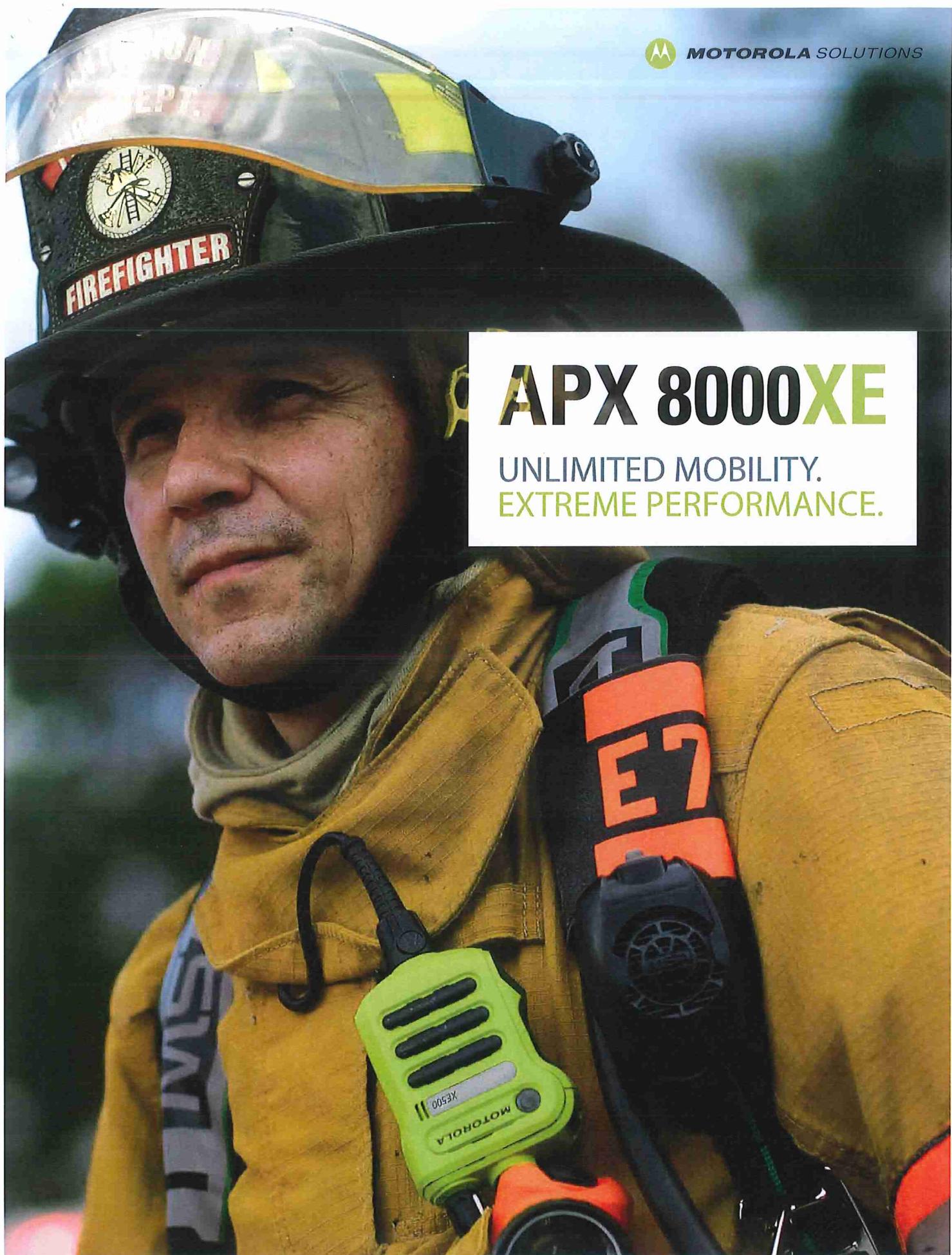
Subtotal USD 40,420.00
Estimated Tax USD 0.00
Estimated Shipping & Handling USD 185.00

Tax will be calculated at time of invoice and is based on the Ship To location where product will be shipped.

Grand Total USD 40,605.00

Pricing Summary Totals

List Price Total	USD 40,420.00
Total Contract Discounts Amount	USD 0.00
Total Discount	USD 0.00
Trade In Discounts	USD 0.00
Tax + S&H	USD 185.00



MOTOROLA SOLUTIONS

APX 8000XE

UNLIMITED MOBILITY.
EXTREME PERFORMANCE.

APX™ 8000XE ALL-BAND P25 PORTABLE RADIO

Working together with firefighters around the world, we designed the APX™ Extreme Series, a safe, and easy and efficient to use portfolio of ergonomically advanced, ultra-rugged radios and accessories. With over eighty years of experience in ergonomics, design and technology for public safety, the APX Series is the culmination of cross-disciplines and user input.

Firefighters said they wanted equivalent extreme features as the APX Extreme Series including a larger display, exaggerated control knobs, and the capability to communicate with surrounding municipalities within an all-band radio solution. The APX 8000XE brings together not only these requirements, but also the integration of WiFi® for programming flexibility.

The APX 8000XE is redefining mission critical communications by delivering an ultra-durable radio that combines unlimited interoperability, loud audio, and secure WiFi connectivity. With a dedicated channel knob and ability to withstand 500 degrees heat exposure, the APX XE500 Remote Speaker Microphone is the perfect companion to the APX 8000XE. When combined, the APX 8000XE All-Band Portable Radio and XE500 Remote Speaker Microphone create the ultimate mission critical solution designed for safety personnel in extreme environments.

KEY FEATURES

- Unlimited interoperability with one device
- Secure WiFi for seamless software updates
- Extra-large buttons for glove use
- IP68 submersion (2 meters, 4 hours)
- ANSI/ISA-12.12.01-2015 CAN/CSA C22.2 NO. 213-15, Nonincendive Electrical Equipment for Use in Class I, Division 2, Groups A, B, C, D; Class II, Division 2, Groups F, G; Class III, Division 2
- Integrated GPS/GLONASS for outdoor location tracking
- Equipped with FIPS - certified encryption hardware
- RFID volume knob for asset tracking (optional)
- Bluetooth-enabled APX radios capable of transmitting SCBA voice and data





MODEL 1.5
NO KEYPAD

MODEL 2.5
LIMITED KEYPAD

MODEL 3.5
FULL KEYPAD

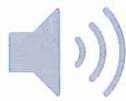
UNLIMITED MOBILITY.
EXTREME PERFORMANCE.



ALL-BAND

Unlimited mobility

With a 4-in-1 radio, you now have the ability to stay connected and expand voice and data communications across multiple agencies with one device. Improve response time by instantly operating on digital or analog networks, in 700/800, VHF, UHF Range 1 and 2 bands at any given time.



ADAPTIVE AUDIO ENGINE

Hear and be heard

The APX8000XE is equipped with a 3-Watt speaker, 3 integrated microphones and Adaptive Audio Engine. This changes the level of noise suppression, microphone gain, windporting and speaker equalization to produce clear and loud audio in any environment.



SECURE WIFI

Voice and data, all at once

Update your radio fleet with Integrated WiFi. This dramatically improves the speed of configuring new codeplugs, firmware and software features over-the-air with Radio Management without interrupting voice communications. Agencies can provision up to 20 secured WiFi networks so their personnel can easily access updates at the facility or in the field.



ENHANCED CONTROLS

Designed for the mission

The ergonomic design of the APX 8000XE is a well-thought-out solution. Whether you're putting out fires, defending your country's coastline or working in other extreme conditions that require heavy gloves, the exaggerated control knobs are easy to grip and locate in even the most stressful moments. From display size to button positioning, this radio is easy to access and operate.



FAST, SIMPLE, SECURE

Greater mobility

APX Personnel Accountability allows Incident Commanders to quickly and accurately account for first responders through radio roll call and an interactive GUI. Real-time accountability allows incident commanders to focus on maintaining control of a chaotic fireground.

With BT standard on all APX XE radios, we are able to partner with SCBA industry leaders to provide clear in-mask communications so you can hear and be heard. Collaborations with both MSA and Scott Safety allow us to deliver clear voice and data communications.

PRODUCT DATA SHEET
APX™ 8000XE



RF BANDS

- 700/800 MHz, VHF, UHF Range 1 & 2

OPERATION MODES

- 9600 Baud Digital APCO P25 Phase 1 FDMA and Phase 2 TDMA Trunking
- 3600 Baud SmartNet®, SmartZone®, Omnilink Trunking
- Digital APCO 25, Conventional, Analog MDC 1200, Quick Call II System Configurations
- Narrow and wide bandwidth digital receiver (6.25 kHz equivalent/25/20/12.5 kHz)

STANDARD FEATURES

- Mission Critical Wireless Bluetooth®*
- ASTRO 25 Integrated Voice & Data
- Integrated GPS/GLONASS for outdoor location tracking
- Software Key
- Text-Messaging
- Voice Announcements
- ISSI 8000 Roaming
- Radio Profiles, Dynamic Zone
- Intelligent Lighting
- Single-key ADP Encryption
- IP68 submersion (2 meters, 4 hours)

* Compatible with BT4.0, BT2.1, HSP, PAN, DUN and SPP Profiles found in off-the-shelf BT accessories

IMPRES Battery

- ANSI/ISA-12.12.01-2015 CAN/CSA C22.2 NO. 213-15, Nonincendive Electrical Equipment for Use in Class I, Division 2, Groups A, B, C, D; Class II, Division 2, Groups F, G; Class III, Division 2

ADAPTIVE AUDIO ENGINE

- 3 Watt Speaker with Adaptive Equalization
- Adaptive Dual-sided Operation
- Adaptive Noise Suppression Intensity
- Adaptive Gain Control
- Adaptive Windporting

PROGRAMMING

- Utilizes Windows 7 & 8 Customer Programming Software (CPS) with Radio Management

OPTIONAL FEATURES

- WiFi 802.11 b/g/n
- RFID Volume Knob
- Multikey for 128 keys and multi-algorithm
- Programming Over Project 25 (OTAP)
- Over the Air Rekey (OTAR)
- Digital Tone Signaling
- P25 Authentication
- Man Down Sensor

TRANSMITTER - TYPICAL PERFORMANCE SPECIFICATIONS

	700/800	VHF	UHF Range 1	UHF Range 2
Frequency Range/Bandsplits	764-776, 794-806 MHz 806-825, 851-870 MHz	136-174 MHz	380-470 MHz	450-520 MHz
Channel Spacing	25/20/12.5 kHz	25/20/12.5 kHz	25/20/12.5 kHz	25/20/12.5 kHz
Maximum Frequency Separation	Full Bandsplit	Full Bandsplit	Full Bandsplit	Full Bandsplit
Rated RF Output Power Adj ¹	700 MHz: 1-2.5 Watts 800 MHz: 1-3 Watts	1-6 Watts	1-5 Watts	1-5 Watts
Frequency Stability ¹ (-30°C to +60°C; +25°C Ref.)	+/- 1.0 ppm	+/- 1.0 ppm	+/- 1.0 ppm	+/- 1.0 ppm
Modulation Limiting ¹	$\pm 5\text{ kHz} / \pm 4\text{ kHz} / \pm 2.5\text{ kHz}$	$\pm 5\text{ kHz} / \pm 4\text{ kHz} / \pm 2.5\text{ kHz}$	$\pm 5\text{ kHz} / \pm 4\text{ kHz} / \pm 2.5\text{ kHz}$	$\pm 5\text{ kHz} / \pm 4\text{ kHz} / \pm 2.5\text{ kHz}$
Emissions (Conducted and Radiated) ¹	-75 dBc	-75 dBc	-75 dBc	-75 dBc
Audio Response ¹	+1, -3 dB	+1, -3 dB	+1, -3 dB	+1, -3 dB
FM Hum & Noise (25kHz / 12.5kHz) ¹	700 MHz 800 MHz	-49 dB / -47 dB -49 dB / -46 dB	-51 dB / -51 dB	-51 dB / -47 dB
Audio Distortion (25kHz / 12.5kHz) ¹	700 MHz 800 MHz	0.90 % / 0.90 % 0.60 % / 0.90 %	0.50 % / 0.90 %	0.60 % / 0.90 %

BATTERIES FOR APX 8000XE

Battery Capacity / Type	Dimensions (HxWxD)	Weight	Battery Part Number	Battery Capacity
Li-Ion IMPRES UL2054 DIV 2 Rugged 3400 mAh IP68**	3.4" x 2.3" x 1.7"	6.5 oz	PMNN4504A	3400 mAh
Li-Ion IMPRES UL2054 DIV 2 Rugged 4850 mAh IP68	5" x 2.3" x 1.7"	10 oz	PMNN4505A	4850 mAh

KEY AUDIO ACCESSORIES****

Name	Type	Part Number	Features
IMPRES Display RSM	Wired	HMN4104	Windporting, Audio Jack, Channel Knob, Volume Control, Orange Button, IP68
IMPRES XE RSM BLACK	Wired	NNTN8575ABLK	Windporting, Audio Jack, Strobe Light, Volume Control, Orange Button, IP68
IMPRES XE RSM GREEN	Wired	NNTN8575	Windporting, Audio Jack, Strobe Light, Volume Control, Orange Button, IP68
IMPRES XE500 RSM BLACK	Wired	PMMN4106ABLK	Adaptive Audio Engine, Audio Jack, Strobe Light, Volume Control, Channel Knob, Orange Button, IP68
IMPRES XE500 RSM GREEN	Wired	PMMN4106	Adaptive Audio Engine, Audio Jack, Strobe Light, Volume Control, Channel Knob, Orange Button, IP68

**Ships standard with radio
****Pending Hazardous Certification

PRODUCT DATA SHEET
APX™ 8000XE

RADIO MODELS



	MODEL 1.5	MODEL 2.5	MODEL 3.5
Display	Full bitmap monochromatic LCD top display 1 line text x 8 characters 1 line of icons No menu support Multi-color backlight	Top display plus: Full bitmap color LCD display 4 lines of text x 14 characters 2 lines of icons 1 menu line x 3 menus White backlight	Top display plus: Full bitmap color LCD display 4 lines of text x 14 characters 2 lines of icons 1 menu line x 3 menus White backlight
Keypad	none	Backlit keypad 3 soft keys 4 direction navigation key Home and Data buttons	Backlit keypad 3 soft keys 4 direction navigation key 4x3 keypad Home and Data buttons
Channel Capacity	1200	3000	3000
FLASHport Memory	2 GB	2 GB	2 GB
700/800 MHz (764-870 MHz)			
VHF (136-174 MHz)	H91TGD9PW5AN	H91TGD9PW6AN	H91TGD9PW7AN
UHF Range 1 (380-470 MHz)			
UHF Range 2 (450-520 MHz)			
Buttons & Switches	Large PTT button • Angled On/Off volume control • X-large orange emergency button • 16 position top-mounted rotary switch 2-position concentric switch • Glove accessible 3-position switch • 3 programmable side buttons		
Regulatory Information			
FCC ID	AZ489FT7061		
Industry Canada	109U-89FT7061		
Emission Designators	LMR: 8K10F1D, 8K10F1E, 8K10F1W, 11K0F3E, 16K0F3E***, 20K0F1E*** Bluetooth®: 852KF1D, 1M17F1D, 1M19F1D, 1M04F1D WLAN (WiFi): 13M7G1D, 17M0D1D, 18M1D1D		

***In accordance with FCC mandate, the APX8000XE all band radio is restricted to 12.5 kHz operation only and does NOT support 25 kHz in the VHF and UHF Bands (excluding T-Band). This applies to customers under Rule Part 90.

RECEIVER - TYPICAL PERFORMANCE SPECIFICATIONS

	700	800	VHF	UHF
Frequency Range/Band splits	764-776 MHz	851-870 MHz	136-174 MHz	380-520 MHz
Channel Spacing	25/20/12.5 kHz	25/20/12.5 kHz	25/20/12.5 kHz	25/20/12.5 kHz
Maximum Frequency Separation	Full Bandsplit	Full Bandsplit	Full Bandsplit	Full Bandsplit
Speech Loudness at 30cm	105 Phons	105 Phons	105 Phons	105 Phons
Audio Output Power at Rated/Max	3 Watt/5 Watt	3 Watt/5 Watt	3 Watt/5 Watt	3 Watt/5 Watt
Frequency Stability ¹ (-30°C to +60°C; +25°C Ref.)	+/- 1.0 ppm	+/- 1.0 ppm	+/- 1.0 ppm	+/- 1.0 ppm
Analog Sensitivity ¹	12 dB SINAD	0.224 uV	0.224 uV	0.168 uV
Digital Sensitivity ²	1% BER	0.316 uV	0.316 uV	0.251 uV
	5% BER	0.211 uV	0.211 uV	0.149 uV
	5% BER Faded	0.562 uV	0.562 uV	0.562 uV
Selectivity (25 kHz / 12.5 kHz) ^{1,5}	79 dB / 72 dB	78 dB / 72 dB	82 dB / 77 dB	80 dB / 74 dB
Intermodulation Rejection ¹	81 dB	80 dB	82 dB	80 dB
Spurious Rejection ¹	98 dB	98 dB	92 dB	98 dB
FM Hum and Noise (25 kHz / 12.5 kHz) ¹	-55 dB / -53 dB	-54 dB / -52 dB	-57 dB / -55 dB	-56 dB / -54 dB
Audio Distortion at Rated	1.2%	1.3%	1.3%	1.2%

PORTABLE MILITARY STANDARDS 810 C, D, E, F & G

	MIL-STD 810C		MIL-STD 810D		MIL-STD 810E		MIL-STD 810F		MIL-STD 810G	
	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.	Method	Proc./Cat.
Low Pressure	500.1	I	500.2	II	500.3	II	500.4	II	500.5	II
High Temperature	501.1	I, II	501.2	I/A1, II/A1	501.3	I/A1, II/A1	501.4	I/Hot, II/Hot	501.5	I/A1, II/A1
Low Temperature	502.1	I	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I/C3, II/C1	502.5	I/C3, II/C1
Temperature Shock	503.1	I	503.2	I/A1C3	503.3	I/A1C3	503.4	I	503.5	I/C
Solar Radiation	505.1	II	505.2	I	505.3	I	505.4	I	505.5	I/A1
Rain	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, III	506.5	I, III
Humidity	507.1	II	507.2	II	507.3	II	507.4	1 Proc	507.5	II/Aggravated
Salt Fog	509.1	I	509.2	I	509.3	I	509.4	1 Proc	509.5	1 Proc
Blowing Dust	510.1	I	510.2	I	510.3	I	510.4	I	510.5	I
Explosive Atmosphere	-	-	-	-	-	-	511.4	I	511.5, 511.6	I
Blowing Sand	1 Proc	1 Proc	510.2	II	510.3	II	510.4	II	510.5	II
Submersion	512.1	I	512.2	I	512.3	I	512.4	I	512.5	I
Vibration	514.2	VIII/F, Curve-W	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24	514.6	I/24
Shock	516.2	I, III, V	516.3	I, V, VI	516.4	I, V, VI	516.5	I, V, VI	516.6	I, V, VI
Shock (Drop)	516.2	II	516.2	IV	516.4	IV	516.5	IV	516.6	IV

PRODUCT DATA SHEET
APX™ 8000XE

DIMENSIONS OF THE RADIOS WITHOUT BATTERY

	Inches	Millimeters
Length	6.15	156.2
Width Push-To-Talk button	2.39	60.7
Depth Push-To-Talk button	1.40	35.5
Width Top	3.32	84.3
Depth Top	2.13	54.1
Depth Bottom of Battery	1.24	31.5
Weight of the radios without battery	13.9 oz	394.1 g

ENCRYPTION

Supported Encryption Algorithms	ADP, AES, DES, DES-XL, DES-OFB, DVP-XL, Localized Algorithm
Encryption Algorithm Capacity	8
Encryption Keys per Radio	Module capable of storing 1024 keys. Programmable for 128 Common Key Reference (CKR) or 16 Physical Identifier (PID)
Encryption Frame Re-sync Interval	P25 CAI 360 mSec
Encryption Keying	Key Loader and Over the Air Rekeying (OTAR)
Synchronization	XL – Counter Addressing OFB – Output Feedback
Vector Generator	National Institute of Standards and Technology (NIST) approved random number generator
Encryption Type	Digital and SecureNet
Key Storage	Tamper protected volatile or non-volatile memory
Key Erasure	Keyboard command and tamper detection
Standards	FIPS 140-2 Level 3 FIPS 197

GPS/GNSS SPECIFICATIONS

Constellations	GPS & GLONASS
Tracking Sensitivity	-164 dBm
Accuracy ³	<5 meters (95%)
Cold Start ³	<60 seconds (95%)
Hot Start ³	<5 seconds (95%)
Mode of Operation	Autonomous (Non-Assisted)

RUGGED SPECIFICATIONS

Leakage (submersion)	MIL-STD-810 C, D, E, F and G Method 512.6 Procedure I, IP68 (2 meters, 4 hours)
----------------------	---

WIRELESS CONNECTIVITY & SECURITY

Frequency Range/Band splits:	
Bluetooth: 2402 - 2480 MHz; WLAN (WiFi): 2400 - 2483.5 MHz	
WLAN (WiFi) 802.11 b/g/n supports WPA-2, WPA, WEP security protocols; radio can be pre-provisioned with up to 20 SSIDs ⁶	
Mission Critical Wireless Bluetooth 2.1 uses 96-bit encryption for pairing & 128-bit encryption for voice, signaling and data. The radio BT supports up to 6 data connections and 1 audio connection	
Bluetooth 4.0 Low Energy uses 128-bit AES-CCM encryption	

¹ Measured conductively in analog mode per TIA / EIA 603 under nominal conditions.

² Measured conductively in digital mode per TIA / EIA 6102.CAAA under nominal conditions.

³ Measured conductively with >6 satellites visible at nominal –130 dBm signal strength. Specs provided are 95th percentile values.

⁴ Temperatures listed are for radio specifications. Battery storage is recommended at 25°C, ±5°C to ensure best performance.

⁵ Measured using the TIA-603 single-tone method.

⁶ 2400-2483.5 MHz for EMEA region and includes guard band. Channels 1-11 used for FCC/IC region.

Specifications subject to change without notice.

All specifications shown are typical.
Radio meets applicable regulatory requirements.

For more information, please visit: www.motorolasolutions.com/apx

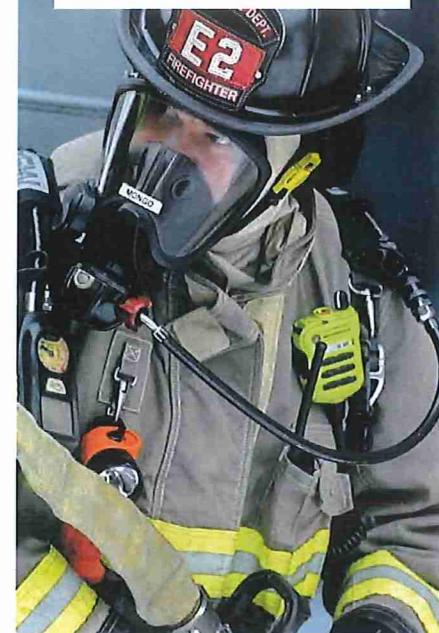
MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. ©2016 Motorola Solutions, Inc. All rights reserved. 08-2016



APX™ XE500
REMOTE SPEAKER
MICROPHONE

With its ultimate usability and extreme performance, the APX XE500 Remote Speaker Microphone (RSM) is the perfect companion to the APX 8000XE.

ULTIMATE USABILITY.
EXTREME PERFORMANCE.





Town of Middleton

Communications Site Backhaul Project

Phase 1

Executive Summary

This project's goal is to provide the necessary equipment to ensure consistent, and reliable audio transport links between the Fire and Police radio systems.

Currently the communications systems for both Fire and Police rely on leased copper telephone lines from Verizon. Each of these lines provide a single voice path between a remote radio site and its respective "head-end" equipment at each public safety building, (Police/Fire). These copper lines are currently at their 'end of life' within Verizon's network and are being retired. It is anticipated that these lines will be taken out of service by the end of Summer 2018. A loss of connectivity would mean our public safety radio systems would no longer be operational.

Phase 1 of this project is designed to fund the necessary equipment required to replace the copper telephone lines serving our primary radio sites. The new equipment will be IP (Internet protocol) based, which will allow us to remain flexible in the future if the town pursues technology such as; private fiber optic networks, and or microwave transport. For now, we intend to leverage a T1 circuit delivered over fiber from Verizon. A T1 circuit provides us with the capacity to eliminate many of our existing telephone circuits, reducing our circuit demand from Verizon to only four, down from eleven. This project's technology will also allow us to share low bandwidth ethernet connections between radio sites, which will simplify network management and monitoring. The extra circuit capacity between sites allows us to add 'fill-in' receiver sites at any of our existing locations without the historical problem of commissioning a new phone line. This is particularly important to the Police department as they suffer coverage degradation in the Village Rd high-rise complexes. Lastly, the project will allow the co-location of much of our equipment thus leading to sharing of common resources such as; equipment cabinets, uninterruptable power supplies, and antenna networks where possible.

Phase 2 of this project will be dependent on cooperation of our partners in business where we have equipment already located. We will through existing agreements be engaging these entities to share some of the costs associated with connecting our equipment. However, in the event we are unable to obtain support, we may require additional funding to ensure operational readiness and responder safety. Thank you for your consideration of this project!

1. Fire station & Remote Sites

1.1. Fire Station & Remote Sites

1.1.1. **Fire Station - Radio System Head End** – Currently our systems terminate in separate locations. The fire station 911 Equipment room(s) provides an environment that is climate controlled and has a large battery back-up system. This project would allow audio pathways to our existing communications equipment, and additionally provide low-bandwidth IP data capability. This will allow remote management of radio equipment and some VOIP telephony capability. This configuration would allow us to co-locate both agencies equipment in one location resulting in reduced operating costs through the decrease of individual circuits between the various remote site locations.

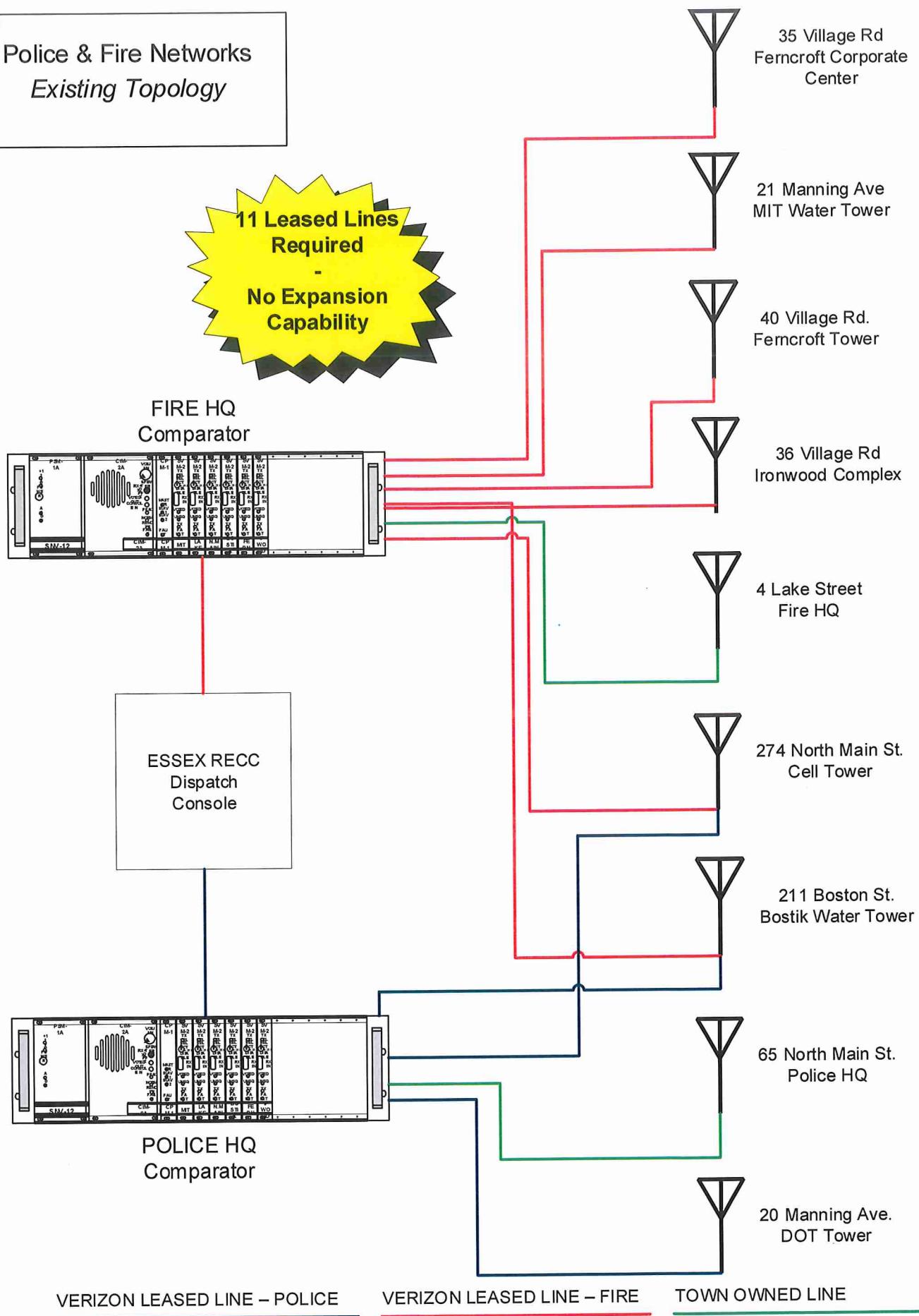
1.1.2. **Remote Sites** – With the exception of two sites, our fire and police radio systems utilize separate and geographically disparate transmit and receive sites. This project would allow for these sites to be combined in some cases, reducing costs by use of share equipment such as uninterruptable power supplies, equipment cabinets, and audio transport.

1.1.3. Components

<u>Qty</u>	<u>Description</u>	<u>Unit Cost</u>	<u>Extended</u>
6	Rad RICL-T1	637.78	3826.68
6	Rad IPMUX 1E	2093.07	12558.42
8	Bud Rack Shelf	66	528
4	Cisco 8-Port Managed Switches	696	2784
2	Omnitronics Audio Bridges	2147.95	4295.9
2	JPS Interop NXU2	923.67	1847.34
2	RAD KM2104	3388.34	6776.68
6	RAD VC-16 CARDS	2202.05	13212.3
1	Cisco 24 Port Switch	1358.99	1358.99
1	Osp Cable - Hardware	7400	7400
1	Dell TZ 400 Firewall	500	500
			55088.31

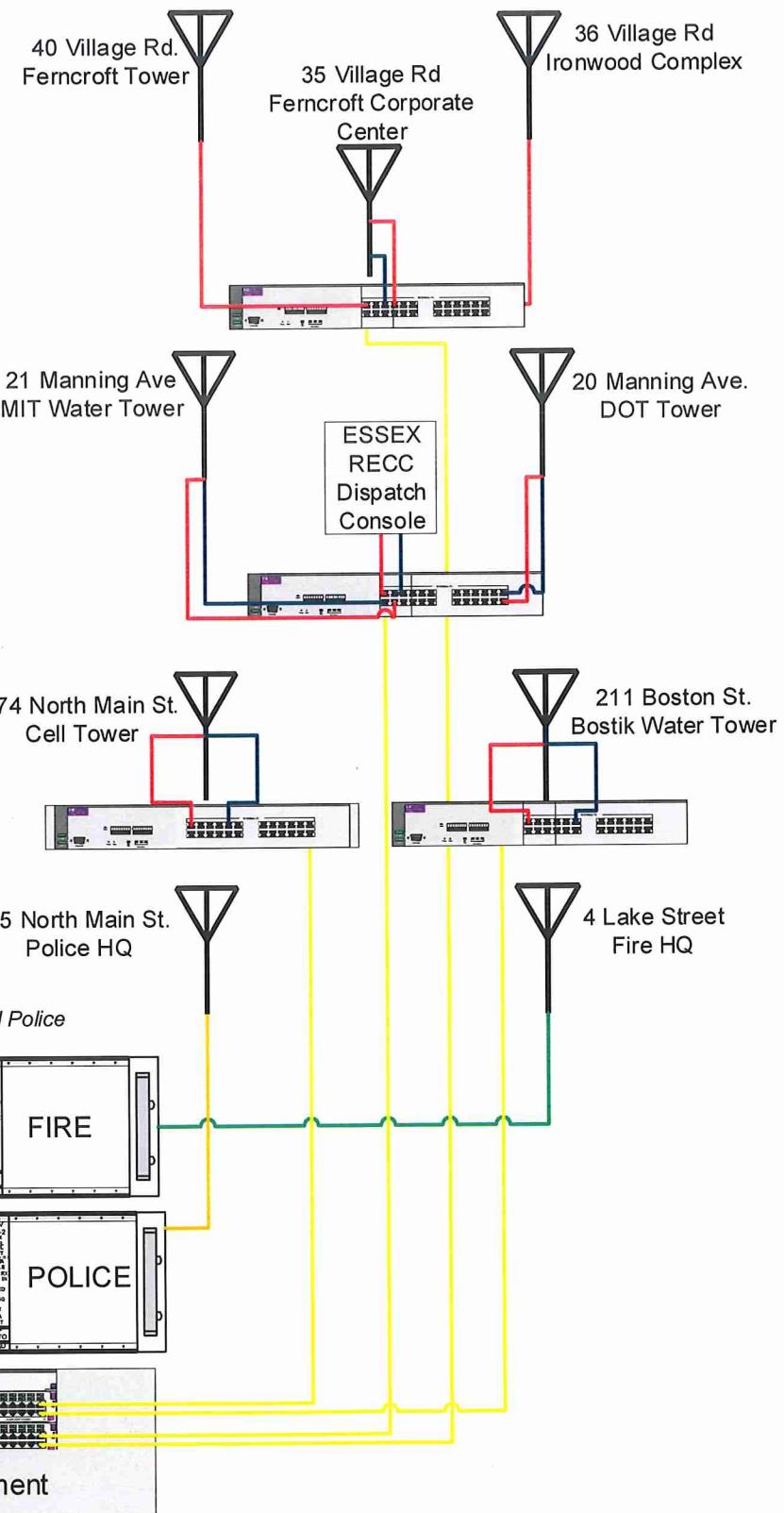
Police & Fire Networks

Existing Topology



TITLE
**Police & Fire Ch 1
 Networks
*Proposed Topology***

**4 Leased T1 Lines
 Required**
**Capacity for
 expansion at each site**



T1 OVER VZ FIBER NETWORK

TOWN OWNED – OSP LINE

TOWN OWNED – ISP LINE



C6

NOTICE OF COPPER RETIREMENT

*****SNGLP T9 P1 PAL 0 00001579
COMNLTH OF MASS DBA ECRECC
18 MANNING RD
MIDDLETON MA 01949
MIDDLETON, MA 01949



June 01, 2017

Dear COMNLTH OF MASS DBA ECRECC:

Telephone Number: 508-703-3178-084

Currently, Verizon brings voice and/or data services to your business location over copper cables. However, Verizon is updating to fiber-optic technology in your area, and will be retiring its copper facilities that currently serve your business.

To continue to provide you service, Verizon will have to move your service to these fiber-optic facilities. If fiber is available to your business location now, we will be contacting you individually soon to schedule an appointment to transition your services to fiber. Otherwise, we will be contacting you once fiber is available. In either case we will need to move your service well before we retire the copper in your area which is scheduled for on or after December 12, 2017.

If you currently subscribe to voice service from Verizon, we will transfer your service from copper to fiber at no cost to you. This transfer will not result in any change to the voice service that you currently receive from Verizon. You may continue to subscribe to the same voice service at the same price, terms, and conditions. In addition, any devices that rely on your voice service, such as fax machines, payment systems, or security alarms connected to a central station, will continue to work in the same way as they currently do over copper. In the event of a commercial power outage, your voice service will not work without battery backup. We can provide a battery backup device for an additional charge.

If you subscribe to any of our DS1 data services, there will be no change to the price, terms, and conditions when you move these services to our fiber-optic facilities.

If you subscribe to our High Speed Internet service, the migration to fiber will require a change since that service is not available on our fiber facilities. The Internet access service that we offer on fiber is Fios Internet. Fios Internet is available at significantly faster speeds than High Speed Internet. We will offer the service at a special rate for customers who migrate from copper to fiber facilities as a result of the retirement of our copper facilities. In some cases, this price may be lower or higher than what you currently pay for Internet access.

There are some copper-based low bandwidth private line services that will not be available on fiber in the future. Many of them are outdated and may not meet your needs going forward. If you subscribe to one of those services, we will work with you to find a more appropriate service to meet your needs. Low bandwidth private line circuits that are transferred to fiber will have no change in price, terms and conditions.

Please review the Frequently Asked Questions for additional information about the fiber upgrade or visit us at verizon.com/fiberupgrade. If you still have questions, please contact your Verizon sales representative or Janet Gazlay Martin at 1.844.881.4693.

You may also contact the Federal Communications Commission or your State Commission if you have any questions.

Thank you for continuing to be a loyal customer. We greatly appreciate your business.

Sincerely,

Janet Gazlay Martin
Director-Network Transformation
janet.a.gazlaymartin@verizon.com
Verizon
230 W 36th St.
NY, NY 10018

LTRO_

C6



JumboSwitch®

Industrial Gigabit Ethernet Modular Switch



- Integrates Data, Voice and Delay-Sensitive TDM Traffic over Ethernet
- Provides a Viable Migration from TDM to Ethernet
- Reliability of SONET/SDH with Simplicity of Ethernet
- Comprehensive Standards-Based Network Management
- Designed for Harsh Industrial Environments

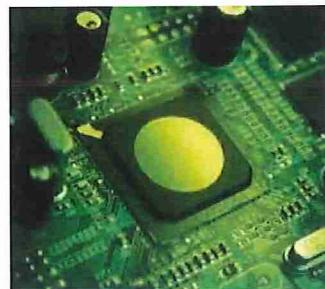


www.JumboSwitch.com

JumboSwitch®

JumboSwitch®

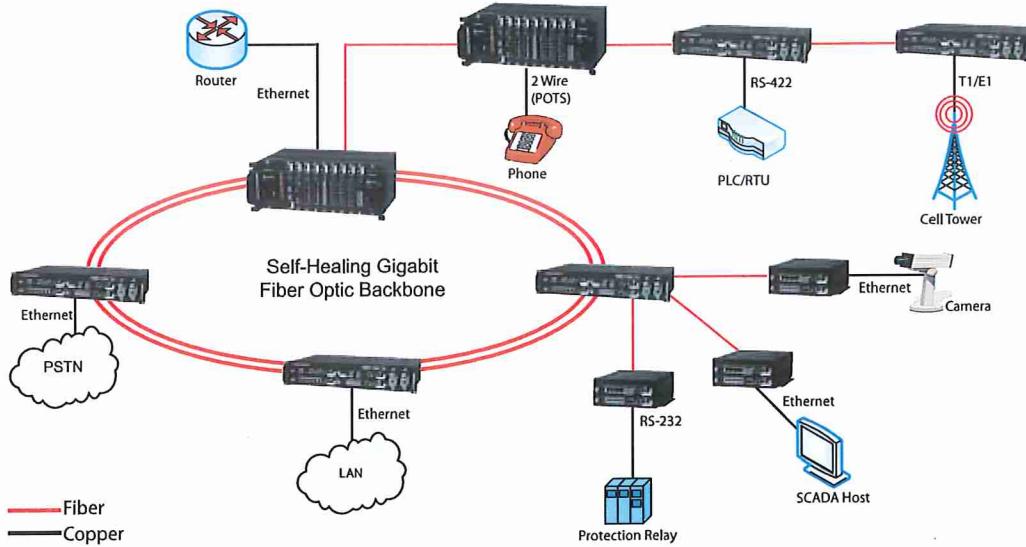
Industrial Gigabit Ethernet Modular Switch



JumboSwitch - Overview

The JumboSwitch® is a full-featured Layer 2 Switch that is designed to support virtually any network topology configuration including string, star, self-healing ring and ring variations.

Based on the most advanced Ethernet, VoIP and TDM-over-IP technologies, the JumboSwitch® Industrial Gigabit Ethernet Modular Switch integrates traditionally separate industrial applications such as Ethernet, voice and serial connections over a simplified, reliable and cost effective GigE IP platform. It offers backward compatibility with legacy devices and forward compatibility with developing Ethernet standards and Industrial Standards such as IEC61850-3, IEEE1613 for the power industry; and, NEMA TS-2 for the transportation industry.



Multiple Industrial Applications Supported over Flexible JumboSwitch Network Topologies

The JumboSwitch® provides numerous user benefits including three "industry first" interface cards:

- an Industrial grade VoIP+ Virtual PBX card removing the need for external SIP server or Call Manager
- a TDM-over-IP card that can transmit and receive T1, E1 or ISDN primary signals at zero bit-error or frame slips consecutively
- a "Turbo" Serial-over-IP card for Teleprotection with less than 3msec latency, end-to end

The JumboSwitch® also offers important administrative and maintenance features typically not available on traditional Industrial Switches: These features include:

- Remote Software/Firmware download capability
- Extensive Asset Management including ongoing collection of part/serial numbers and version numbers/upgrade dates for precise inventory management
- Remote Monitoring for "live" operating temperatures/power consumption of each interface card

Because of its sophisticated real time technology, it is particularly well-suited for Industrial Automation, SCADA and Process Control networks. It is currently the only Industrial Gigabit Ethernet Modular Switch that provides hot-swappable universal interface card slots to support Voice with IP PBX, T1/E1 or Primary ISDN circuits, serial interfaces (RS-232, RS-422/485), near Stratum II clock precision, and delay-sensitive teleprotection applications.

Ethernet Standards:

- IEEE 802.1x
- IEEE 802.3
- IEEE 802.1w
- IEEE 802.3u
- IEEE 802.1s
- IEEE 802.3x
- IEEE 802.1D
- IEEE 802.1p
- IEEE 802.1Q
- IEEE 802.3z
- IEEE 802.3ab
- IEEE 802.3ad
- IEEE 802.3ah
- IEEE 10/100/1000Base-T
- 100Base-FX
- 1000Base-SX/LX

Legacy/TDM Interfaces:

- Gigabit Ethernet
- Gigabit SFP Ethernet
- DCS/SCADA
- Teleprotection
- Serial (RS-232/422/485)
- VoIP Distributed and Integrated PABX
- Dry Contact
- T1/E1-over-Ethernet
- T3/E3-over-Ethernet
- Ethernet-over-PDH(T1/E1, T3/E3, STS-1/3, STM-1)
- 2W/4W 600 Ω Analog
- G.703/64k
- C37.94

JumboSwitch - Features & Benefits



JumboSwitch® Chassis Options



Ruggedized Design

- Industrial hardened (-40°C to +80°C), conformal coating, no moving parts, vibration and shock tested
- Industrial standards compliance: IEC 61850-3, IEEE 1613, NEMA TS-2

Benefits:

JumboSwitch® is substation and industrial hardened making it operational in the harshest of environments.

Flexibility

Flexible Topology support:

- Dual counter-rotating ring
- String/Bus
- Point-to-Point
- Full mesh

Benefits:

Self-healing rings provide protection against fiber cuts and loss of nodes with less than 30 ms recovery time. Point-to-Point, Mesh & String/Bus topologies offer the ultimate in flexible and efficient network designs.

Scalability

- Hot-swappable modular design
- 4 chassis options
- Migration path to 10GigE

Benefits:

Modular design offers pay-as-you-grow scalability. With multiple chassis options, JumboSwitch networks can be efficiently tailored to a customer's specific needs.

Ethernet design offers scalable, future proof migration to 10GigE.

VoIP+

Voice-over-IP (Distributed, Internal PABX)

Benefits:

The VoIP+™ eliminates the need for a central PABX. It supports all major features of a PABX without an external SIP server or call manager. The PABX features include: Caller ID hot-line, call transfer, call forwarding, 3-way calling, internal address book and more. A distributed virtual PABX eliminates the need for a central PABX and it eliminates a single point of failure for mission critical applications.

Network Management

- Web Based (Graphical User Interface)
- Telnet
- Serial Console
- TCView® (Graphical SNMP-based management)

Benefits:

A flexible standards-based network management system (NMS) provides comprehensive Fault Management, easy Configuration, Administration, Asset Management and Security. Users have the ability to remotely monitor optical Tx & Rx power and temperature conditions.

GigE Technology

GigE backbone with migration to 10GigE

Benefits:

The Ethernet-based design of the JumboSwitch® provides a migration path and future growth without fork-lift upgrades. Any customer's investment in chassis, interface modules, power supply & NMS cards is protected.

Interface Types

Large selection of interfaces:

• Gigabit Ethernet	• T1/E1-over-Ethernet
• Gigabit SFP Ethernet	• T3/E3-over-Ethernet
• DCS/SCADA	• Ethernet-over-PDH(T1/E1, T3/E3, STS-1/3, STM-1)
• Teleprotection	• 2W/4W 600 Ω Analog
• Serial (RS-232/422/485)	• G.703/64k
• VoIP Distributed and Integrated PABX	• C37.94
• Dry Contact	

Benefits:

JumboSwitch offers network convergence for data, voice and delay-sensitive industrial applications over a single, cost-effective full-featured GigE IP network.

Ethernet Standards

• IEEE 802.1x	• IEEE 802.3	• 10/100/1000Base-T
• IEEE 802.1w	• IEEE 802.3u	• 100Base-FX
• IEEE 802.1s	• IEEE 802.3z	• 1000Base-SX/LX
• IEEE 802.3x	• IEEE 802.3ab	
• IEEE 802.1D	• IEEE 802.3ad	
• IEEE 802.1p	• IEEE 802.3ah	
• IEEE 802.1Q		

JumboSwitch - Security Features

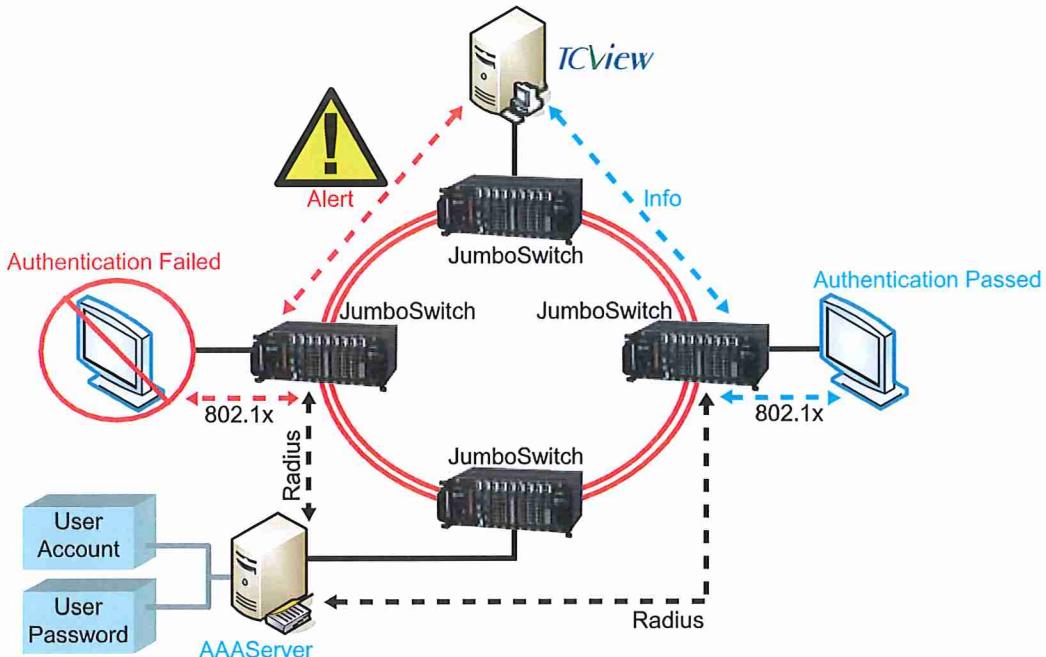
Network security in Industrial environments such as power plants, pipelines, transportation corridors, airports, oil refineries, factory floors, etc. is extremely important. Security laps in these types of environments could potentially have devastating consequences of national proportions.

TC Communications Inc. has provided comprehensive industrial hardened network platforms, including critical security solutions, since 1992. As evidence of this commitment to security, its newly designed JumboSwitch® IP platform complies with the North American Electric Reliability Council (NERC) Critical Infrastructure Protection (CIP) requirements.

The JumboSwitch® supports the following security features:

- **Enable/Disable Ports** – The ability to disable ports to provide physical security
- **MAC Based Port Security** – Enhances Ethernet port security by limiting device access to use the port
- **802.1Q VLAN** – Separates Ethernet traffic into virtual LANs to provide physical security and improve network availability by limiting broadcast storms

- **Passwords** – Prevent unauthorized logins and user access
- **SSH** – Encrypts all transmission data for secure, remote Command-Line Interface (CLI) access over IP networks, such as Telnet
- **SSL** – Encrypts HTTP traffic for secured access to the browser-based JumboSwitch® management GUI
- **802.1x** – Works with RADIUS to only allow authenticated ports.
- **Radius** – Provides centralized user authentication and service authorization through a RADIUS server
- **Bandwidth Rate Limiting** – Enforces Ethernet port controls for traffic monitoring and prioritization to protect against unwanted traffic storm
- **SNMPv3** – Maximizes security by authenticating and encrypting JumboSwitch® management (e.g. TCView) via SNMP protocol



In the left section of the above diagram, an unwanted user's attempt to access the network is blocked after it fails authentication by the RADIUS AAA server. In this case, JumboSwitch® sends an alert to TCView and the failed attempted port is disabled. The right section of the diagram depicts a successful attempt by a valid user who is authenticated by the RADIUS AAA server.

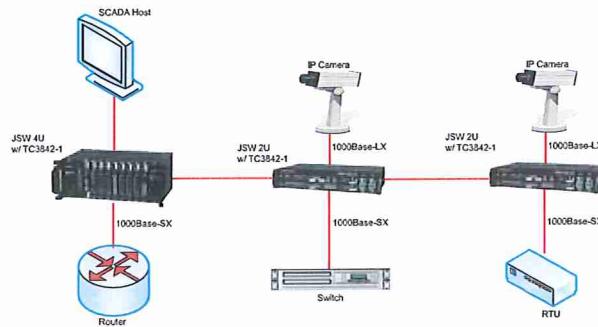
JumboSwitch - Interface Cards

TC3842-1: SFP Ethernet Card

- 6-Port SFP Gigabit Ethernet Switch
- Single Mode, Multimode, Optional One Fiber Bi-Directional Communications
- Ethernet Rate-Limit, VLAN, QoS & More
- Network Manageable Via Web (with TC3840 MGMT card)
- Temperature & Power Consumption Monitoring

Also Available:

- TC3841: 6 Port Gigabit Copper RJ45 Card
- TC3842-2: 3-Port Gigabit SFP + 3-Port 100FX SFP Card
- TC3842-3: 6 Port 100FX SFP Card

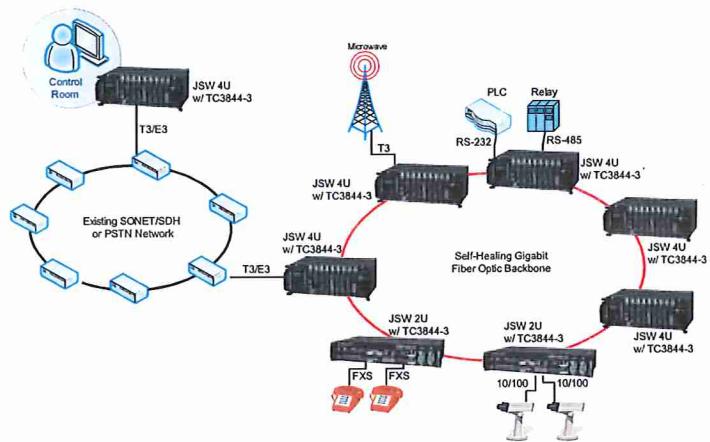


TC3844-3: Ethernet-over-T3/E3

- 1 Port Fast Ethernet Transport over Framed/Unframed T3 or E3 with QoS
- Flexible Fractional T3/E3 Support
- Ethernet and T3/E3 Statistics Monitoring
- VLAN Tagging and Priority Labeling
- Manage Via Web, SNMP, Serial Console, Telnet
- Temperature & Power Consumption Monitoring

Also Available:

- TC3844-1 Ethernet-over-T1/E1
- TC3844-4: Ethernet-over-STS-1
- TC3844-5: Ethernet-over-STS-3

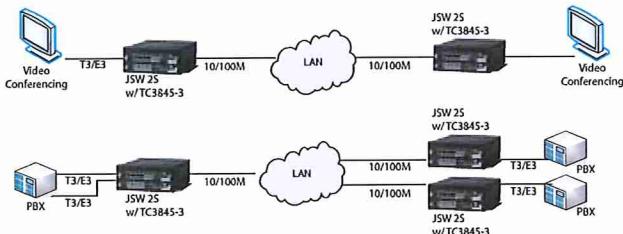


TC3845-3: T3/E3-over-IP

- Transports 1 Ch. T3/E3-over-Ethernet/IP
- Near Stratum-II Clock Precision & Extremely Low Latency
- Point-to-Point & Point-to-MultiPoint Applications
- VLAN and QoS Support
- Manage Via Web, SNMP, Serial Console, Telnet
- Temperature & Power Consumption Monitoring

Also Available:

- TC3845-1: T1/E1-over-IP



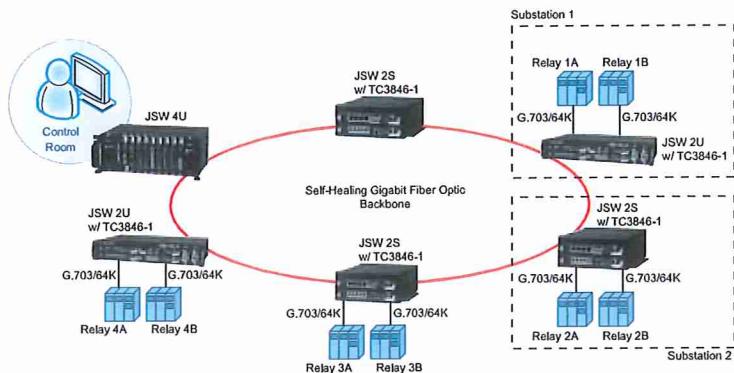
JumboSwitch - Interface Cards

TC3846-1: G.703/64K (Co-Directional)-over-IP

- Extends 2 Ch. G.703/64k Co-directional Interface-over-Ethernet
- Less Than 5 msec. Latency, One Way
- Point-to-Point & Point-to-MultiPoint Applications
- VLAN and QoS Support
- Manage Via Web, SNMP, Serial Console, Telnet
- Temperature & Power Consumption Monitoring

Also Available:

TC3846-2 C37.94-over-IP
 TC3846-6 4 Ch. 600 Ω Analog + 4 Ch Dry Contact (2 or 4 Wire)

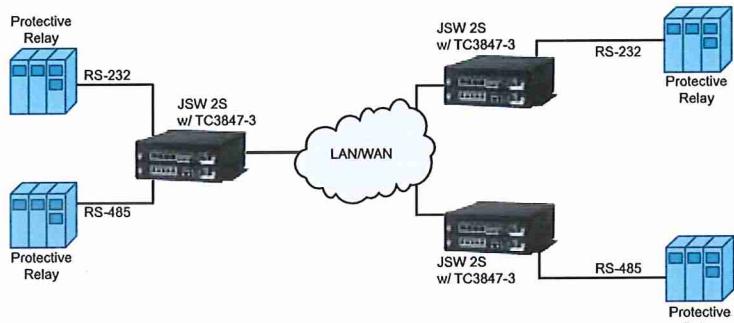


TC3847-3: 4-Ch. Turbo Serial-over-IP Card

- 4 Ch. of RS-232 or 4 Ch. of RS-422 / RS-485
- Extremely Low Latency (Supports Teleprotection Relays)
- RS-232 Ports Support Hardware Handshaking or Synchronous Mode
- Data Rates up to 115kbps
- VLAN & QoS Support
- Temperature & Power Consumption Monitoring

Also Available:

TC3847-1 4 Ch. RS-232, RS-422/485 Server
 TC3847-5 Dry Contact (4 or 8 Ch.)

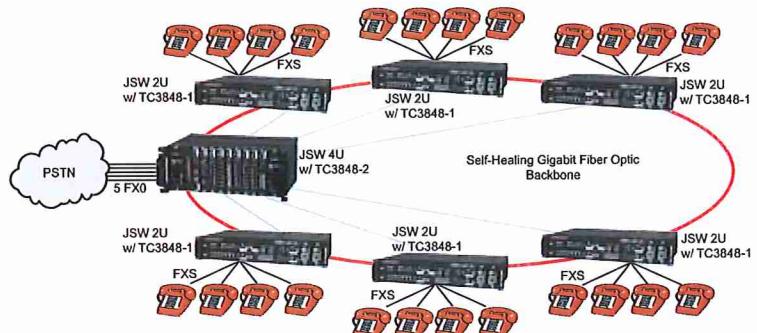


TC3848-1 VoIP+™: Virtual PBX

- 2 or 4 Port FXS + 1 Port FXO
- Call Processing Features: Caller ID, hot-line, call transfer, auto-attendant, group hunting.
- Supports Fax, Dial-up Modem and Phone
- Internal Address Book
- SIP Server
- Manage via Web, SNMP or Telnet
- Remote Firmware Upgrade

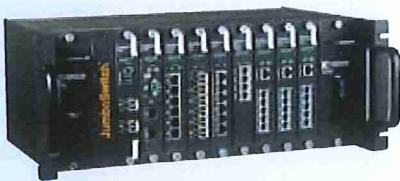
Also Available:

TC3848-2 5 Port FXO



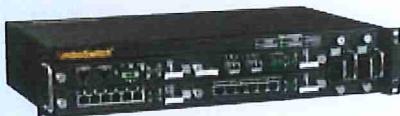
JumboSwitch - Cages & Chassis

JumboSwitch - 4U



- Ruggedized Design for Harsh Environments
- Industry Standard 19" Wide and 4U High
- Designed to Hold 1 Main Card, 1 Management Card and 7 Interface Cards
- Dual Power Supply, Mix and Match
- Power Supply Options are 12VDC, 24VDC, -48VDC, 125VDC, 115VAC, 230VAC and 240VAC (50-60Hz)

JumboSwitch - 2U



- Ruggedized Design for Harsh Environments
- Industry Standard 19" Wide and 2U High
- Designed to Hold 1 Main Card, 1 Management Card and 2 Interface Cards
- Dual Power Supply, Mix and Match
- Power Supply Options are 12VDC, 24VDC, -48VDC, 125VDC, 115VAC, 230VAC and 240VAC (50-60Hz)

JumboSwitch - 1U



- Ruggedized design for Harsh Environments
- Industry Standard 19" Wide and 1U High
- Designed to Hold 1 Main/Management Combo Card and 1 Interface Card
- Standard 12VDC Dual Load-Sharing Power Supply
- Power Supply Options are 24VDC, -48VDC, 125VDC, 115VAC, 230VAC and 240VAC (50-60Hz)

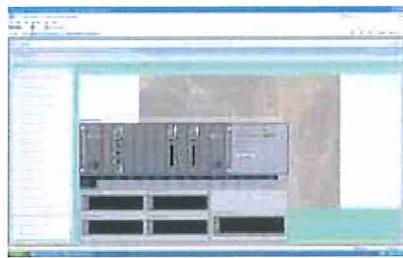
JumboSwitch - 2S



- Ruggedized Design for Harsh Environments
- Standard 12VDC Dual Load-Sharing Power Supply
- Designed to Hold 1 Main/Management Combo Card and 1 Interface Card
- Power Supply Options are 24VDC, -48VDC, 115VAC, 230VAC and 240VAC (via External AC Power Adapter)



Network Management System for TC Networking Devices



Overview:
Provides the integrated and comprehensive management tools needed to simplify the configuration, administration, monitoring, troubleshooting,

and servicing of JumboSwitch® networks and other TC Communications networking devices. Going beyond traditional element manager applications, it delivers a unique platform of cross-functional management capabilities that integrate all TC networking products into one network administration platform.

Key Features:

- Remote Software/Firmware download capability
- Extensive Asset Management capabilities including ongoing collection of system part/serial numbers and version numbers/upgrade dates for precise inventory management
- Remote Monitoring for "live" operating temperatures of each interface card
- Remote Monitoring for "live" power consumption of each interface card
- Remote Monitoring for "live" fiber ports TX RX power of critical fiber links

Management:

- Fault Management
- Configuration Management
- Asset/Administration Management
- Performance Management
- Security Management

Specifications:

Minimum System Hardware:

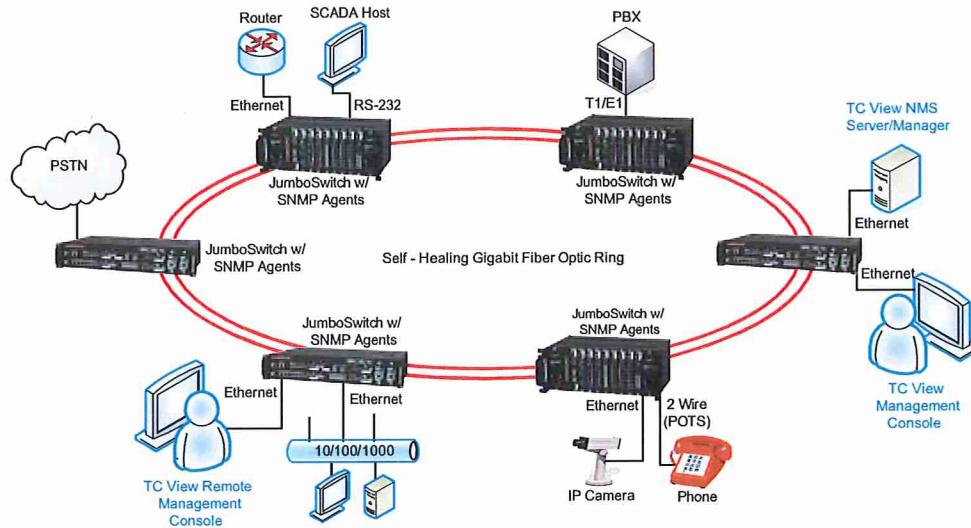
- 3.0 GHz Intel Pentium 4 or better processor
- 4 GB RAM memory
- 100 GB storage
- 1000 Mbit NIC

Supported Software:

- Windows XP Professional or Vista
- Microsoft Windows 2003 or 2008 Server
- Microsoft SQL Server 2005 or 2008

Browser:

Microsoft Internet Explorer version 6.0 or later



About TC Communications



TC Communications takes pride in being the "right" vendor for your application. Customers are guaranteed high quality products and timely, courteous and professional service.

Established in 1992, TC Communications designs and manufactures Data, Ethernet, Voice, Audio, T1/E1, T3/E3 and Industrial Hardened communications products for Fiber Optic networks. Engineering, manufacturing, technical support, sales & administration are all located in Irvine, California, USA.

Since its inception, TC Communications has focused on designing and manufacturing the most versatile and reliable fiber optic communication products possible to meet the rigorous requirement of industrial, military, government and commercial customers all over the world.

With more than 10,000 installed sites around the world, TC Communications has earned its reputation as a proven and reliable fiber optic communication equipment manufacturer.



TC Communications, Inc.
17881 Cartwright Road
Irvine, CA 92614 U.S.A.
Factory Tel: (949) 852-1972
Fax: (949) 852-1948

Sales Office
U.S.A. Domestic International:
(800) 569-4736 (949) 852-1973

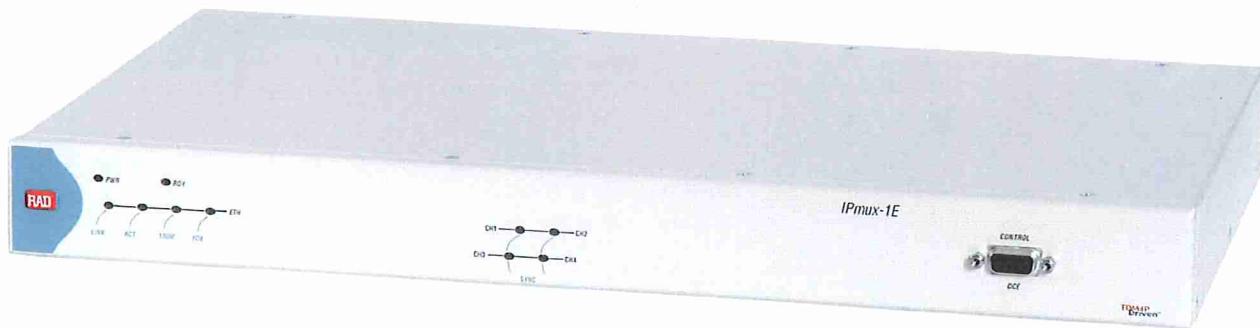
Web Sites:
www.tcomm.com
www.jumboswitch.com
E-mail:
sales@tcomm.com

609

IPmux-1E

TDMoIP Gateway

RAD



TDMoIP
Driven®

FEATURES

- TDMoIP gateway enabling E1, T1, ISDN, and analog phone communication over asynchronous IP and Ethernet networks
- Framed (full or fractional) and unframed E1/T1 user traffic
- Four FXS/E&M/FXO voice ports for standard analog telephones and key system connections
- Four standard S0 NT or TE interfaces for ISDN basic rate service

- QoS includes:
 - Labeling IP level priority Type of Service (ToS)
 - VLAN tagging and priority labeling according to IEEE 802.1p&Q
- Optional Ethernet user port offering:
 - Transparent LAN bridging
 - User data bandwidth and access control through rate limiting and VLAN filtering
- Ethernet network port with either copper UTP or fiber optic interfaces
- Minimal processing delay (under 3 msec)
- Configurable jitter buffer to compensate for network packet delay
- Manageable via ASCII terminals, Telnet hosts or RADview-Service Center, RAD's Java-based network management system
- Compact, 1U-high enclosure

IPmux-1E

TDMoIP Gateway

DESCRIPTION

- IPmux-1E is a TDMoIP gateway for transporting E1/T1, ISDN BRI, and FXS/FXO/E&M services over IP and Ethernet-based networks. IPmux-1E converts the data stream from the user ports to packets for transmission over the packet-switched network. The addressing scheme of these packets is IP. These packets are transmitted via the IPmux-1E Ethernet port to the network. A remote TDMoIP device converts the IP packets back to TDM traffic.
- A powerful internal Layer-2 Ethernet switch provides a user Ethernet port with rate limiting and port-based VLAN tagging capabilities.
- The device supports standard IP features, such as ICMP (ping), ARP, next hop and default gateway.
- Figure 1 shows a point-to-point application extending analog phone service to a remote PBX, and providing LAN-to-LAN communication over a shared fiber optic or UTP cable.
- Figure 2 shows a multi-tenant office building where a variety of legacy TDM services (ISDN, E1/T1, and analog phones) are provided by IPmux-1E units connected to IPmux-16 and Megaplex-2100 with ML-IP via the packet-switched network.

PERFORMANCE

- IPmux-1E achieves end-to-end processing delay as low as 3 msec, using high-performance buffering and forwarding techniques.
- Configurable packet size allows to achieve proper balance between PSN throughput and delay.
- An enhanced buffering mechanism compensates for network packet delay variation (jitter) of up to 300 msec.
- An optional internal echo canceller improves voice quality when a large end-to-end delay exists on the TDMoIP link.

QoS SUPPORT

- VLAN tagging and priority labeling are supported according to 802.1p&Q. TDMoIP frames are assigned (tagged) a dedicated VLAN ID.
- VLAN membership allows:
 - Management traffic to be run over a dedicated VLAN
 - User data traffic to be filtered according to a set of up to 15 VLANs.

- The user can configure the ToS or Diffserv of the outgoing TDMoIP packets. This allows the TDMoIP packets to be given a higher priority by network switches and routers.
- Assigned, IANA-registered UDP socket number for TDMoIP simplifies flow classification through switches and routers.
- Rate limiting can be applied on the Ethernet user port to control the maximum rate of the traffic transmitted towards the IP/Ethernet network.

TIMING

- Synchronization between TDM devices is maintained by using advanced clock distribution mechanisms. The clocking options are:
 - Internal** – the master clock source for the TDM circuit is provided by the IPmux-1E internal clock oscillator
 - Loopback** – the transmit clock is derived from the E1/T1 port receive clock
 - Adaptive** – the clock is recovered from the Ethernet network interface
 - External** – an external clock source is used to synchronize the units with E1 or T1 user interfaces via their station clock ports.
- The external clock port provides out-of-band synchronization.

APPLICATIONS

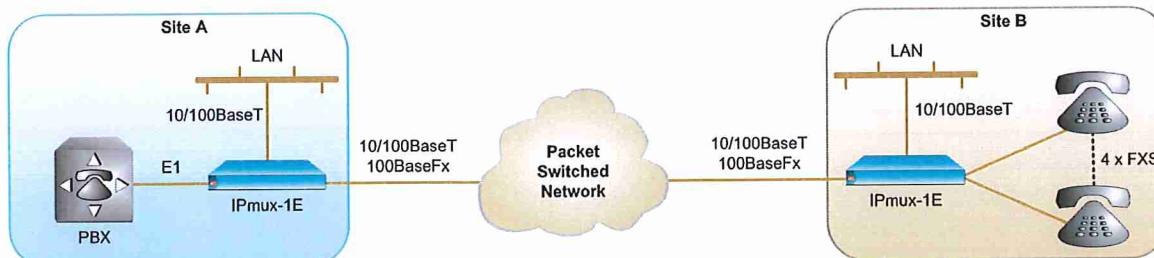


Figure 1. Voice and Data Integration over an Ethernet Link

ETHERNET PORTS

- IPmux-1E supports the following Ethernet ports:
 - One network port (copper or fiber optic)
 - One user port (copper).

E1 OR T1 PORT

- One E1 or T1 port for connectivity to any standard E1 or T1 device.
- E1 and T1 interfaces support the following:
 - Integral LTU/CSU for line protection and long haul applications
 - G.703 unframed and G.704 framed modes
 - CAS
 - CRC-4 bit generation (E1).
- An internal 16-msec echo canceller for the E1 and T1 ports is available.

ISDN BRI S0 PORTS

- Four standard ISDN basic rate S0 ports provide connectivity to any Network Termination (NT) or Terminal Equipment (TE) ISDN device.
- The phantom feeding function enables IPmux-1E to power the remote user equipment (NT mode).
- Each S0 port supports remote and local digital loopback test modes.

ANALOG PORTS

- IPmux-1E offers four FXS, FXO, or E&M analog ports.
- An internal 16-msec echo canceller for the analog ports is available.

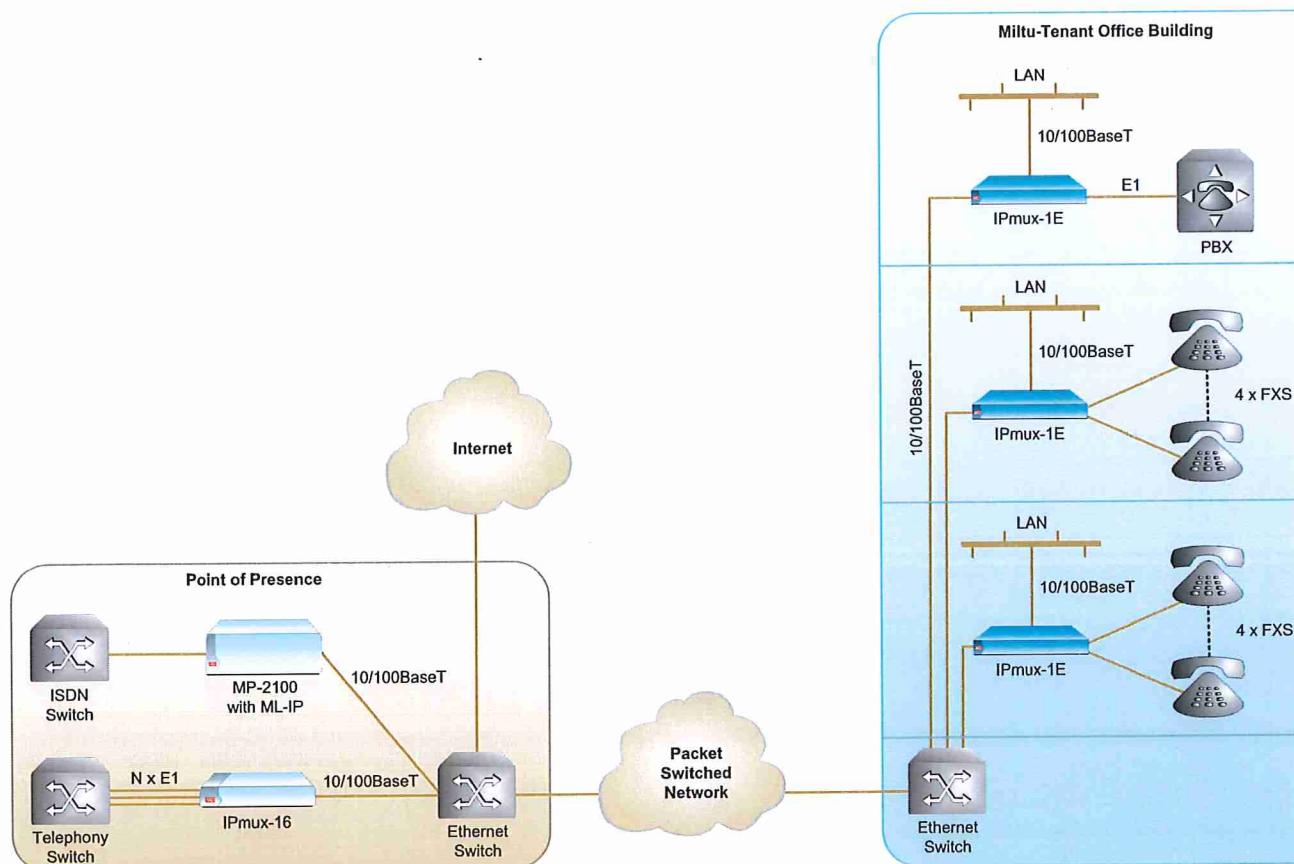


Figure 2. Integrated Ethernet-Based Voice and Data Access for Multi-Tenant Building

IPmux-1E

TDMoIP Gateway

DIAGNOSTICS

- External and internal loopbacks can be used to check the TDM links connectivity.
- The following physical layer alarms are supported:
 - E1/T1 LOS, AIS, LOF, LCV
 - ISDN S0 LOF
 - FXS/FXO/E&M port status.
- IPmux-1E provides end-to-end alarm generation and end-to-end AIS indication. When a local E1 or T1 port receives AIS, it is passed to the remote port via the Ethernet/IP network. If a local Ethernet port is not connected, AIS indication is generated both in the local and the remote devices.

- An internal built-in test (BIT) is performed after power-up. The results of the test are visible via the local terminal.
- IPmux-1E monitors LAN and IP layer network condition statistics, such as packet loss and packet delay variation (jitter). The events are stored in log files.

MANAGEMENT

- Configuration and monitoring are performed locally via an ASCII terminal, or remotely via Telnet, or RADview.
- Software download is supported via the local terminal, using XMODEM, or remotely, using TFTP. After downloading a new software version, IPmux-1E automatically saves the previous version in non-volatile memory for backup. Similarly, copies of the configuration file can be downloaded and uploaded to a remote workstation for backup and restore purposes.

- RADview Service Center TDMoIP network management application provides TDMoIP service and manages the TDMoIP devices via a user-friendly graphical interface that allows monitoring and configuring multiple IPmux devices. Fault isolation, statistics and event gathering are available. The intuitive GUI, "point-and-click" functionality and easy-to-follow wizards increase the efficiency and accuracy of the service provisioning process.

Table 1. Fiber Optic Interface Characteristics

Interface Type	Wavelength [nm]	Optical Power		Receive Sensitivity [dBm]	Optical Budget [dB]*	Loss Min [dB/km]	
		Min	Max			Min	Max
Multimode	1310	-19	-14	-32	10*	1	4
Single mode	1310	-15	-8	-32	14*	0.5	0.8

* Permitted fiber optic cable length differs according to fiber characteristics, splices, and connectors.

SPECIFICATIONS

E1 INTERFACE

- **Standards**
ITU-T Rec. G.703, G.704, G.706, G.732, G.823
- **Framing**
 - Unframed
 - CRC-4 with or without MF
 - CAS with or without MF
- **Data Rate**
2.048 Mbps
- **Line Code**
HDB3
- **Receive Level**
0 to -28 dB with LTU
0 to -9 dB without LTU
- **Transmit Level**
 $\pm 3V \pm 10\%$, balanced
 $\pm 2.37V \pm 10\%$, unbalanced
- **Connector**
 - Balanced: RJ-45
 - Unbalanced: RJ-45 (RJ-45 to BNC adapter cable is supplied)
- **Line Impedance**
120Ω, balanced
75Ω, unbalanced
- **Jitter Performance**
Per ITU-T G.823

T1 INTERFACE

- **Standards**
AT&T TR-62411; ITU-T Rec. G.703, G.704; ANSI T1.403, G.824
- **Data Rate**
1.544 Mbps
- **Line Code**
AMI, B8ZS, B7ZS
- **Framing**
Unframed, SF, ESF
- **Receive Level**
0 dB to -30 dB
- **Transmit Level**
 $\pm 2.75V \pm 10\%$ at 0 to 655 ft
with DSU
0 dB, -7.5 dB, -15 dB, -22.5 dB
with CSU
- **Connector**
RJ-45
- **Line Impedance**
100Ω, balanced
- **Jitter Performance**
Per AT&T TR-62411, ITU-T G.824

ETHERNET INTERFACE

- **UTP**
 - Standards: IEEE 802.3, 802.3u, 802.1p&Q
 - Data rate: 10 or 100 Mbps, half/full-duplex
 - Range: up to 100m (328 ft) on UTP Cat.5 cable
 - Connector: RJ-45
- **Fiber Optic (network port only)**
 - Characteristics: see Table 1
 - Connector: SC or LC

CONTROL INTERFACE

- **Interface**
RS-232/V.24 (DCE)
- **Data Rate**
9.6, 19.2, 38.4 or 57.6 kbps
- **Connector**
DB-9, female

ISDN S0 INTERFACE

- **Compliance**
ETS 300012, I.430, NTT, 5ESS, DMS-100, NI1
- **Bit Rate**
192 kbps
- **Line Coding**
Pseudo-ternary
- **Line Termination**
100Ω ±5%
- **Connector**
RJ-45

ANALOG INTERFACES

- **Type**
FXS, FXO, and E&M
- **Modulation Method**
PCM (per ITU-T G.711 and AT&T PUB-43801), μ-Law or A-Law
- **Interface**
Loop start for direct connection to a 2-wire telephone
- **Diagnostics**
 - Remote analog loopback
 - 1-kHz tone injection
 - Activity status
- **Connectors**
 - FXS and FXO: RJ-11
 - E&M: RJ-45

GENERAL

- **Timing**
E1/T1:
 - Internal (from internal oscillator)
 - External (E1 or T1, via dedicated port)
 - Loopback (derived from the E1/T1 receive line)
 - Adaptive (regenerated from Ethernet link)
- **PCM:**
 - Internal (from internal oscillator)
 - Loopback (derived from Channel 1 for the unit with ISDN/TE, FXS, FXO and E&M interfaces)
 - Adaptive (regenerated from the Ethernet link)
- **Power**
AC: 100 to 240 VAC, 50/60 Hz
DC: -48 VDC only
- **Power Consumption**
25W or 32W (with Ethernet switch)
- **Physical**
Height: 44 mm (1.7 in)
Width: 432 mm (17.0 in)
Depth: 246 mm (9.7 in)
Weight: 2.3 kg (5.1 lb)
- **Environment**
Temperature: 0–50°C (32–122°F)
Humidity: Up to 90%, non-condensing

IPmux-1E

TDMoIP Gateway

ORDERING

IPmux-1E/#/+/&*

TDMoIP gateway

Specify power supply:

AC for 100 to 240 VAC

DC for -48 VDC

+ Specify TDM user port type:

4BRI for 4 ISDN S0 interfaces

4FXS for 4 analog FXS interfaces

4FXO for 4 analog FXO interfaces

4E&M for 4 analog E&M interfaces

4FXS-EC for 4 analog FXS interfaces and echo canceller

4FXO-EC for 4 analog FXO interfaces and echo canceller

4E&M-EC for 4 analog E&M interfaces and echo canceller

E1-EC for balanced E1 interface and echo canceller

E1CX-EC for unbalanced E1 interface, RJ-45 and echo canceller (RJ-45 to BNC adapter cable is supplied)

T1-EC for balanced T1 interface, RJ-45 and echo canceller

- & Specify Ethernet port type:
 - UTP** for 10/100BaseT network port, RJ-45
 - MM-SC** for 100BaseFx network port, 850 nm, multimode, SC
 - SM-SC** for 100BaseFx network port, 1310 nm, single mode, SC
 - UTP/UTP** for 10/100BaseT network port, RJ-45 and 10/100BaseT user port, RJ-45
 - MM-LC/UTP** for 100BaseFx network port, 850 nm, multimode, LC and 10/100BaseT user port, RJ-45
 - SM-LC/UTP** for 100BaseFx network port, 1310 nm, single mode, LC and 10/100BaseT user port, RJ-45
- * Specify station clock port type (optional, default is none):
 - STC-E1** for 2.048-Mbps balanced, RJ-45
 - STC-E1CX** for 2.048-Mbps, unbalanced, mini BNC (mini BNC to BNC adapter cable is supplied)
 - STC-T1** for 1.544-Mbps balanced, RJ-45

Note: Station clock port is available for the units with E1 or T1 TDM user ports only.

SUPPLIED ACCESSORIES

Power cord

DC power supply connector kit (if a DC-powered unit is ordered)

CBL-RJ45/2BNC/E1/X

RJ-45 to BNC adapter cable (if an unbalanced E1 interface is ordered)

CBL-MINIBNC-BNC

Mini BNC to BNC adapter cable (if a station clock module with unbalanced E1 interface is ordered)

RM-34

Hardware kit for mounting one IPmux-1E unit into a 19-inch rack

OPTIONAL ACCESSORIES

CBL-DB9F-DB9M-STR

Control port cable



data communications

www.rad.com

- **International Headquarters**
24 Raoul Wallenberg Street
Tel Aviv 69719, Israel
Tel: 972-3-6458181
Fax: 972-3-6498250
Email: market@rad.com
- **North America Headquarters**
900 Corporate Drive
Mahwah, NJ 07430, USA
Tel: (201) 529-1100
Toll free: 1-800 444-7234
Fax: (201) 529-5777
Email: market@radusa.com

114-100-06/06

Middleton Fire Department pumper replacement history

And proposal 2018

In the year 2000 the Middleton Fire Department pumper fleet consisted of a 1972 International Farrar 750 GPM pump with 500-gallon tank, a 1979 Ward LaFrance 1250 GPM pump with 750-gallon tank and a 1986 Hahn 1250 GPM pump with 750-gallon tank. All three pumps were well worn and in need of major repairs. The 1972 pumper should have been replaced around 1992, but never was for unknown reasons.

The 1979 and 1986 pumpers had major mechanical issues, besides the fact that the 1979 pumper was twenty-one years old and was refurbished once already. The replacement of the 1979 pumper was also put off, again for unknown reasons.

The 1986 pumper was replaced first because it was in worse shape than the 1979 pumper, but there was a clause in the contract that guaranteed that the price would be the same for a second pump if it was bought within a year. This put the town in a predicament where they were relying on two pumpers that had a combined age of fifty years (with the 1986 pump out of service) and sometimes the thirty-year-old pump was first due if the others were out of service for repairs. Both replacement pumpers were bought out of desperation and meant to be ten-year vehicles because they were cheap and weren't built to last long.

In 2014 both newer pumpers (the 2001 and 2002) had a major issue with a wiring harness and pump controllers (the pump controllers are what run the pump). The pump controllers had to be specially built because the trucks were too old, and the parts were not made anymore. This took over two weeks. Again, the town was relying on a thirty-year-old pump and a thirty-year-old pump borrowed from a neighboring town, not a good situation! These older pumps do not have the safety features that the newer vehicles have and are obviously well worn if they are the third line piece of apparatus. Recently Engine one, the 2001 pumper, had to have two gauges replaced, the mechanic took them out and they fell apart in his hands. The replacements took two weeks to order because they are not common stock.

In 2015 a new pumper was ordered (delivered in 2016) to replace the forty-three-year-old, 1972 pumper. This gave the town three pumpers with a thousand gallons of water each. This, along with the tanker, helped the town to meet certain requirements of ISO (having 4000 gallons of water at a fire within a certain time frame).

Engine one (2001 pumper) has 81,000 miles and 4346 engine hours. The fire truck industry uses a formula where the engine hours multiplied by 33 gives the actual total miles (this considers the engine is running while the truck is pumping). In this case the actual mileage of engine one is 143,418, engine three (2002 pumper) has 56,000 miles and 125,763 actual miles. Engine one is going to need more work, such as an oil pan, brakes, valve work and anything else unseen.

The pricing for the 2015 pumper was taken off the 2013 FCAM price list, this pricing was updated right after we bought the truck in 2015. EPA update of \$29,000 along with a 12.9% increase from 2013-2017 brought last years price for a pump to \$555,000. This year the price went up 3% making it \$571,650 not including changes to the spec. The trade-in value of engine one has also gone down (final pricing for the truck and trade-in is not available as of this writing).

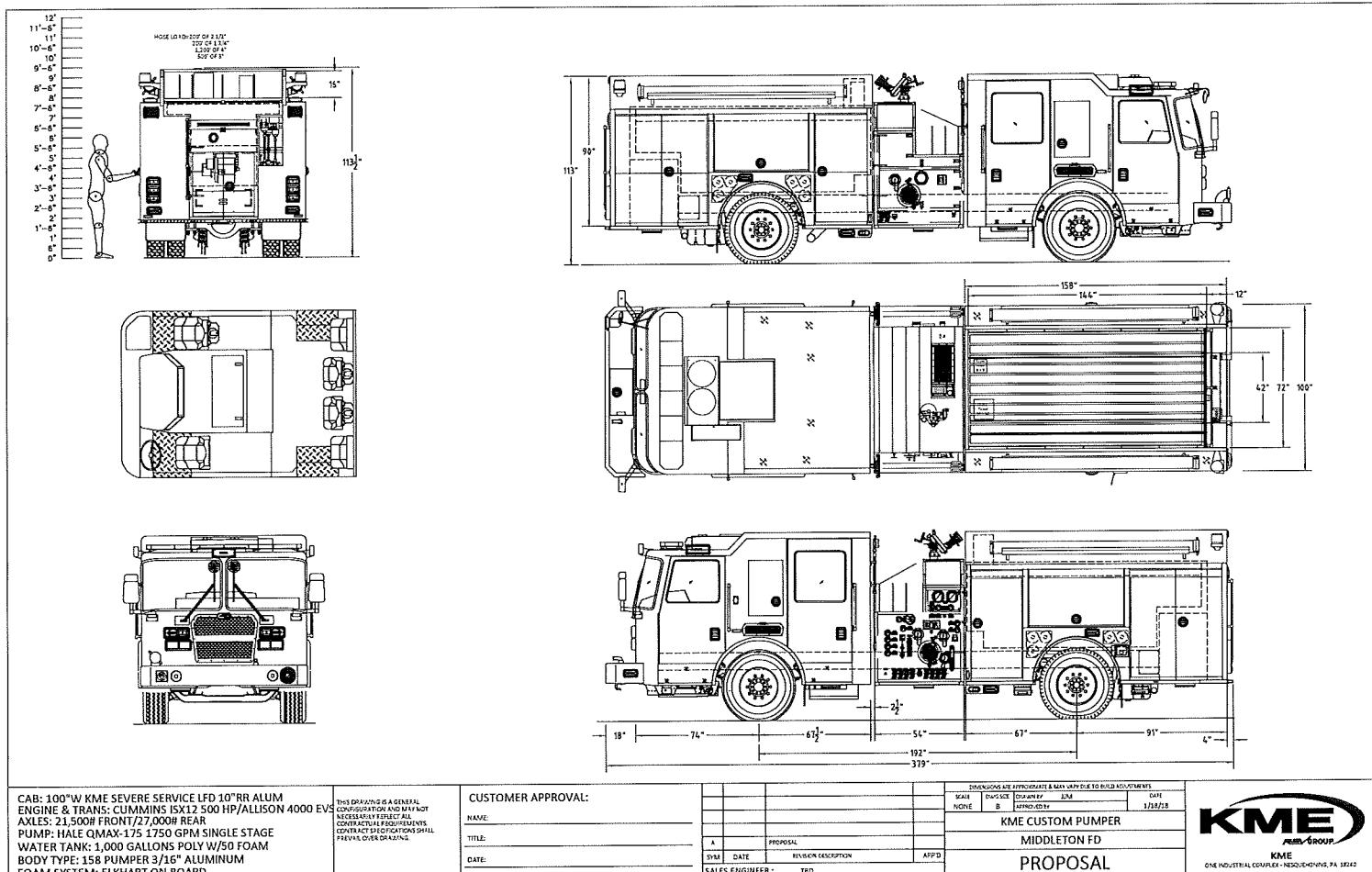
The biggest concern is that the two older pumbers will break down again leaving us with one pumper. We are trying to replace the pumbers so that we do not run into a situation like we have in the past. By spacing out the replacement of the pumbers and replacing them on a regular basis will keep us from having anymore situations where we are not adequately protected, and the safety of the firefighters and the townspeople are not in jeopardy. As I have stated in the past this department (any fire department) relies heavily on apparatus and manpower, without the best of both we cannot do our jobs.

Respectfully,



Thomas J Martinuk

Chief of Department

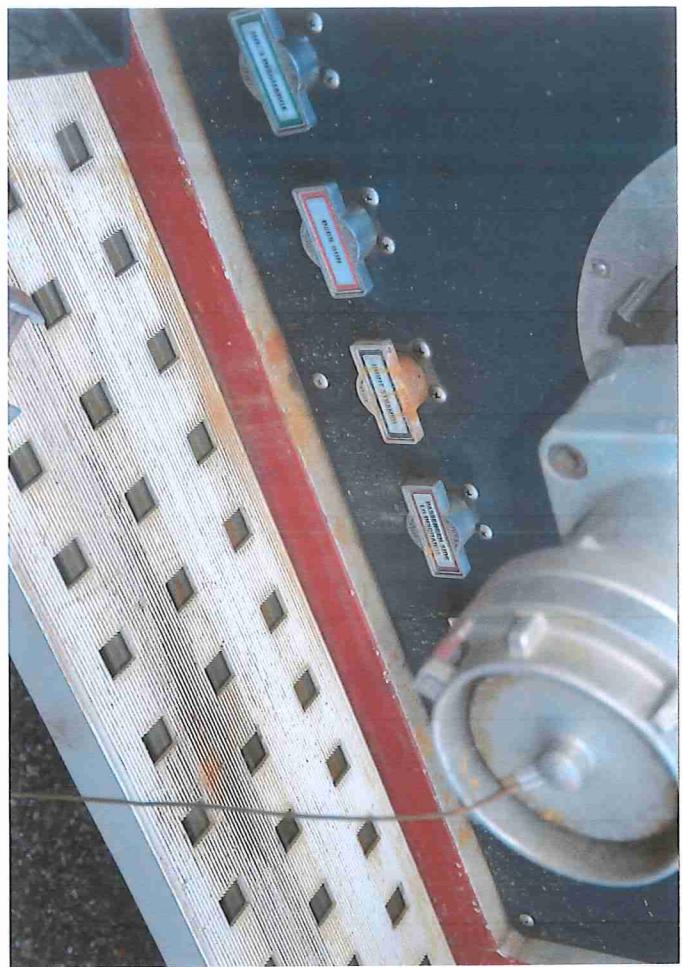


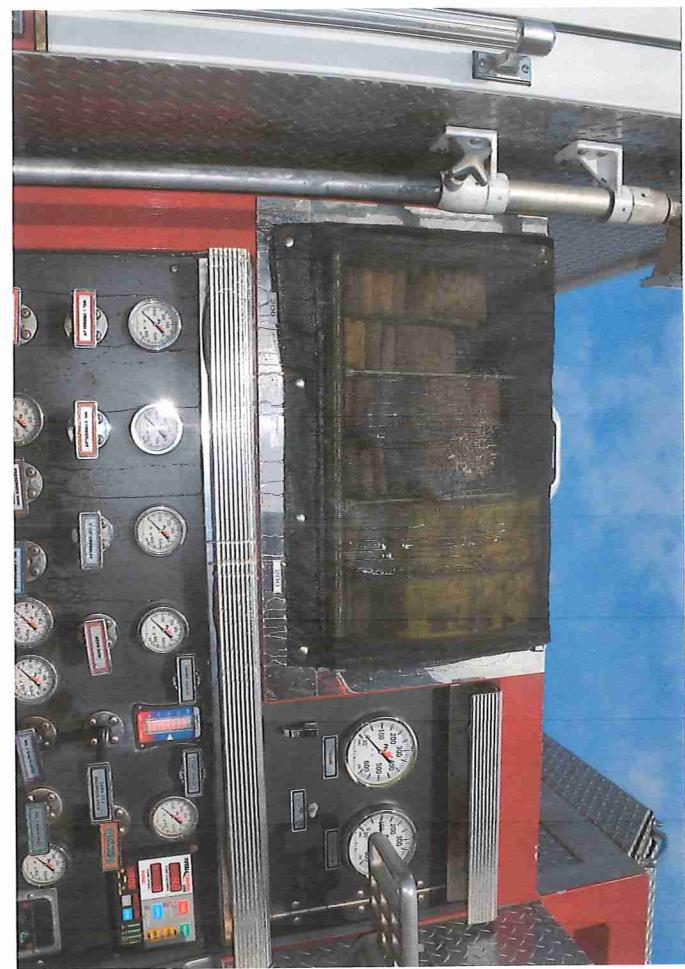
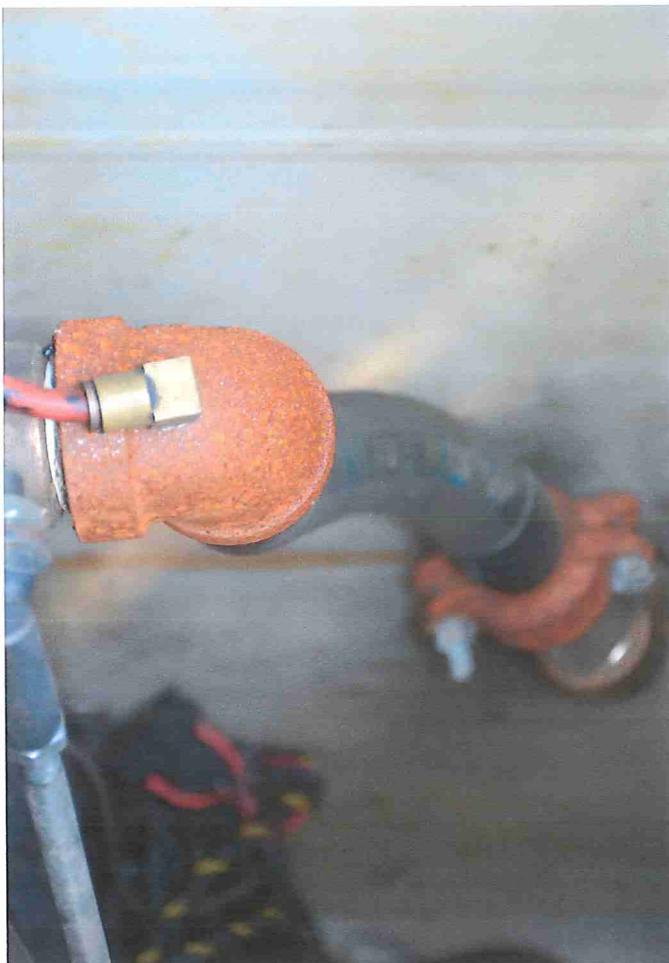
MIDDLETON FIRE DEPARTMENT
REQUEST FOR QUOTE

<u>Description</u>	<u>Quantity</u>	<u>Each</u>	<u>Total</u>
Jafrib hose 4" x 100' yellow 4" storz couplings	5	\$495.00	\$2,475.00
Jafrib hose 4" x 25' yellow 4" storz couplings	2	\$182.00	\$364.00
Jaflne or equivalent 3" x 50' hose coupled 2.5" NH Aluminum couplings white	20	\$251.10	\$5,022.00
Jaflne or equivalent 3" x 25' hose coupled 2.5" NH Aluminum couplings white	2	\$156.65	\$313.00
Jaflne or equivalent 2.5" x 50' hose coupled 2.5" NH Aluminum couplings white	3	\$180.00	\$540.00
Jaflne or equivalent 1.75" x 50' hose coupled 1.5" NST Aluminum couplings (4 blue – 4 red)	8	\$120.00	\$960.00
Akron Sabrejet handline nozzle 2.5" NH	1	\$839.00	\$839.00
Akron Sabrejet handline nozzle 1.5" NH	2	\$919.00	\$1,838.00
Harrington HAV	1	\$1,138.00	\$1,138.00
Super Vac Model P164SE Smoke Ejector With support bar	1	\$1,367.00	\$1,367.00
TFT or equivalent 2.5" hydrant gate valve	2	\$525.00	\$1,050.00
Flat head ax 6# fiberglass	2	\$50.00	\$100.00
Pick head ax 6# fiberglass	2	\$55.00	\$55.00
30" Halligan	2	\$245.00	\$490.00
Pike Pole 6'	1	\$90.00	\$90.00
Pike Pole 8'	1	\$100.00	\$100.00

Universal spanner wrench	2	\$18.50	\$36.00
Dual wrench holder w/ #10 wrenches	2	59.00	\$118.00

<u>Description</u>	<u>Quantity</u>	<u>Each</u>	<u>Total</u>
Hydrant and spanner wrench	2	\$39.00	\$78.00
2.5" double male	2	\$25.50	\$51.00
2.5" double female	2	\$25.50	\$51.00
1.5" double male NST	2	\$15.50	\$31.00
1.5" double female NST	2	\$15.50	\$31.00
Rubber mallet	1	\$18.00	\$18.00
Package of 5 collapsible NFPA compliant Traffic cones	1	\$99.00	\$99.00





Leaky and rusty valves



A41

Five Star Fire
Service Department
45 Brainard Rd
Hartford Ct 06114

Phone: 888-777-4458 Fax: 860-290-8064
e-mail mmarcinko@five-star-fire.com

Middleton MA Fire Department
Ladder 1 repairs

01-11-2018

Exhaust wrap falling off piping Disassemble and install new heat sleeve and reassemble	\$443.00
Alternator belts are cracking Remove and replace alternator belt	\$208.50
Breather hose for engine is leaking and alternator is drawing oil in through fan system Parts and labor Replace breather and steam engine clean	\$204.00
Power steering pump is leaking class 2 Remove and replace gasket	\$170.50
Cab tilt cylinder lines and fittings are leaking class 2 Replace 2 hoses and secure and top fluid	\$761.00
Tie rod end boots are torn Replace both tie rod ends and set toe. If rod is bad it will be additional	\$627.00
Rear hangers on steer axle have worn out bushings Replace 6 spring pins and bushings. If upper hangers are bad they will be additional	\$1450.00
Emergency Power unit is leaking Replace unit with new	\$751.00
Cab tilt motor is damp with oil (Monitor)	
L4, L6, R6, R5, Hydraulics compartment, Rear center compartment all have Lights out Trouble shoot	\$300.00
Transmission output seal is leaking Class 2 Replace trans seal if yoke or flange is damaged it will be extra	\$368.00
Forward rear input seal is damp class 1 Replace seal if yoke is damaged it will be extra	\$368.00
Forward rear brake shoes are cracked on LH side (was to be done already)	

Rear rear shoes on RH side are cracked and LH side has bad wheel seal (was to be done already)

Front shocks are rusted \$428.00
Remove and replace both front shocks

Recommend replacing maxi cans due to rust/corrosion \$1002.00
Replace all 4 maxi cans with MGM replacements and adjust as required

Heavy rust jacking above Forward rear axle \$ Time and materials

Rear stabilizer holding valve corroding off bracket \$786.00
Replace holding valve and fittings as required. Will be a new style

Hydraulic swivel is damp(monitor)

Rust jacking at top turn table bolts near windsmith (rotation drive) \$501.00
Estimated 4 hours of repairs and painting with POR15 to prevent rust.

Windsmith has class 1-2 oil leak
Can be better evaluated during rust repairs

Aerial control valves are leaking class 1

Hardware missing on body near generator reservoir \$65.00

Step light switch broken LH side step at outrigger area \$69.50

Missing hardware on outrigger panel \$65.00

Wiper blades are in poor condition \$114.00

City horn is inop \$165.00
Remove and replace horn and or relay. If wiring is bad could be additional

Air horn foot pedal on RH side is inop \$169.00
Replace pedal switch with new

Cab pivot mount on LH side is cracked \$Time and materials

Circuit breakers in battery box are heavily rusted and should be replaced \$450.00
Replace old style breakers with new style plastic body repair connections and spray protect

Cradle pad hardware is loose/broken \$ Time an Materials

Spot light at the tip is out \$54.50 + bulb

Base section slide blocks are cracked
Blocks have to be cut and milled to fit location for gap and twist corrections \$ to be estimated

2nd section tip has a dented rung
Rung must be measured better to determine proper replacement part \$ to be estimated

Both hour meters appear inop
May only be a connection issue \$109.00 trouble shoot

10/525

Windsmith flywheel weight is vibrating and may be bent
Replace with new fly weight. Includes freight and labor. \$893.00

Customer Acceptance

Mike Marcinko
Service Manager
Five Star Fire

Print Name: _____
Signature: _____
Date: _____

Five Star Fire

SANTE M. BENEDETTO CO.

Heavy Equipment & Industrial Land Rental

P.O. Box 931

Middleton, MA 01949

P.O. Box 436

Wakefield, MA 01880

PHONE (508) 777-1479

Heavy Equipment Spray Painting

• Truck Lettering •

Collision Work

VEHICLE DAMAGE APPRAISAL

Estimate

A44

OWNER

MIDDLETON FIRE DEPT.

SOUTHMANN STREET

Middleton, MA 01949

PHONE _____ DATE 1/12/2018
BODY STYLE SUTPHEN LADDER TRUCK

YEAR	MAKE	MODEL	LICENSE NO.	VIN	TRUCK LADDER # II	COLOR
99	SUTPHEN	LADDER	_____	_____	TRUCK LADDER # II	RED

REPAIR	REPLACE	DESCRIPTION OF OPERATION	PARTS	PAINT	LABOR
		VIN # 1S9A8LLE4X2 C03012			
		TRUCK LADDER # I			
		WAX & GREASE Remove, SAND, PRIME, TAPE OFF TRUCK, SPRAY Complete			
		TURN TABLE, BIG PISTONS, 3 LADDER TIPS, "CROSS MEMBER" LADDER REPAIR, HAND RAIL, INSTRUMENT PANEL BOX.			
		All in SILVER PPG CODE # 3453 "CONCEPT"			
		All paint & Materials			
		DA PAPER, TAPE, SILVER PAINT, PRIMER, HARDENER, DEGREASERS, THINNER ETC.			\$ 950. -
		ALL LABOR TO DO 150 R (TURNTABLE)			\$ 2000. -

Both SIDES AROUND REAR WHEEL WELLS

RED PAINT PEELING TOP & SIDE OF WHEELS

ALSO REAR OUTRIGGER PADS "Red"

RED PAINT PPG CODE 923562 DEFLEET

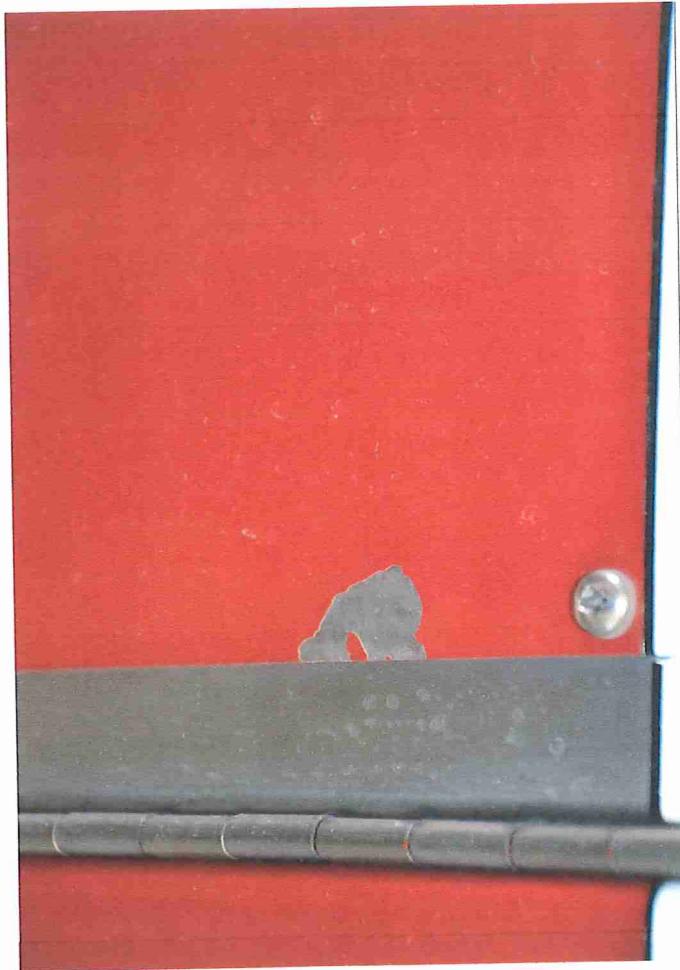
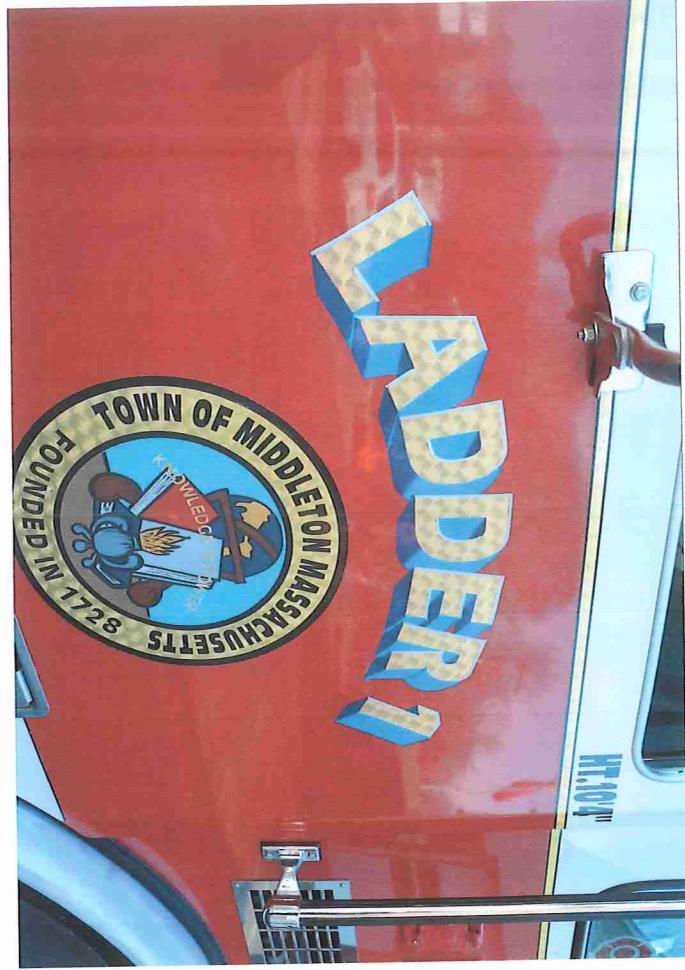
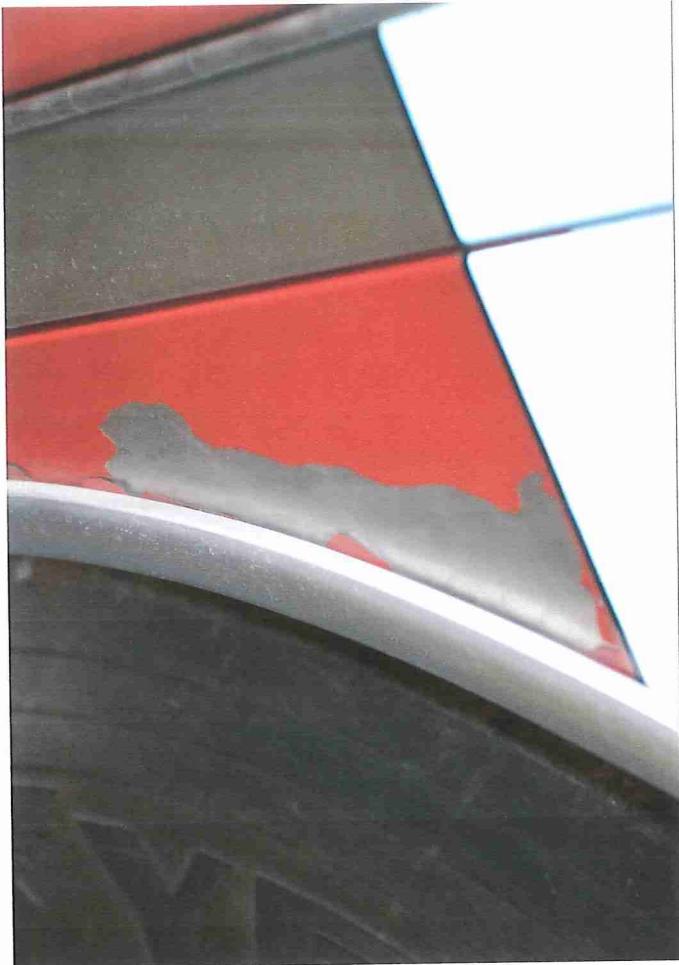
All paint, thinner, HARDENER ETC. \$ 325. -

ALL LABOR, SAND, TAPE UP, Spray etc. \$ 800. -

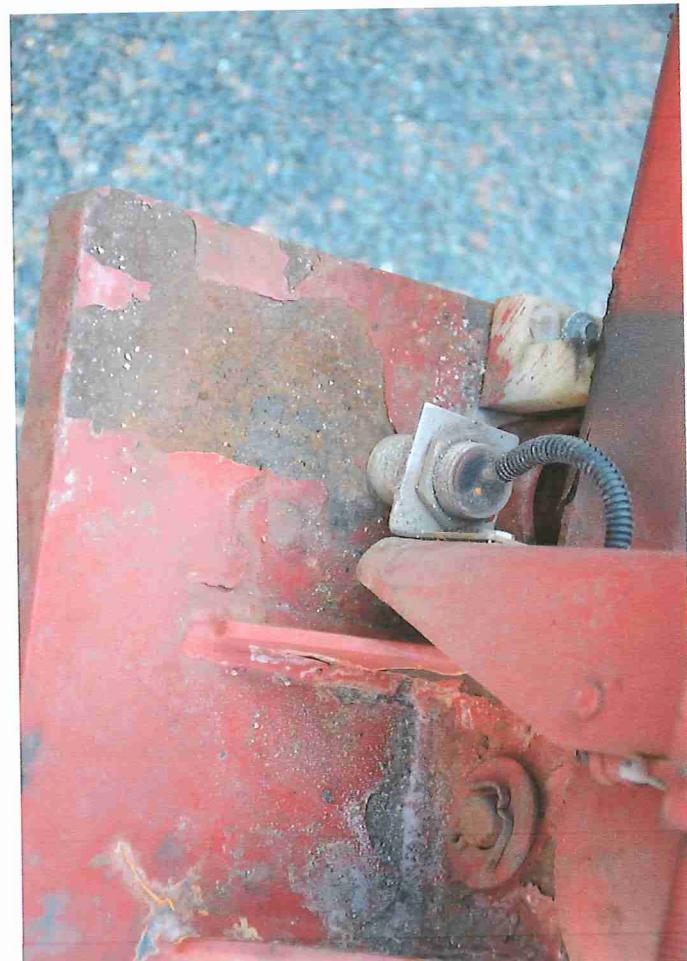
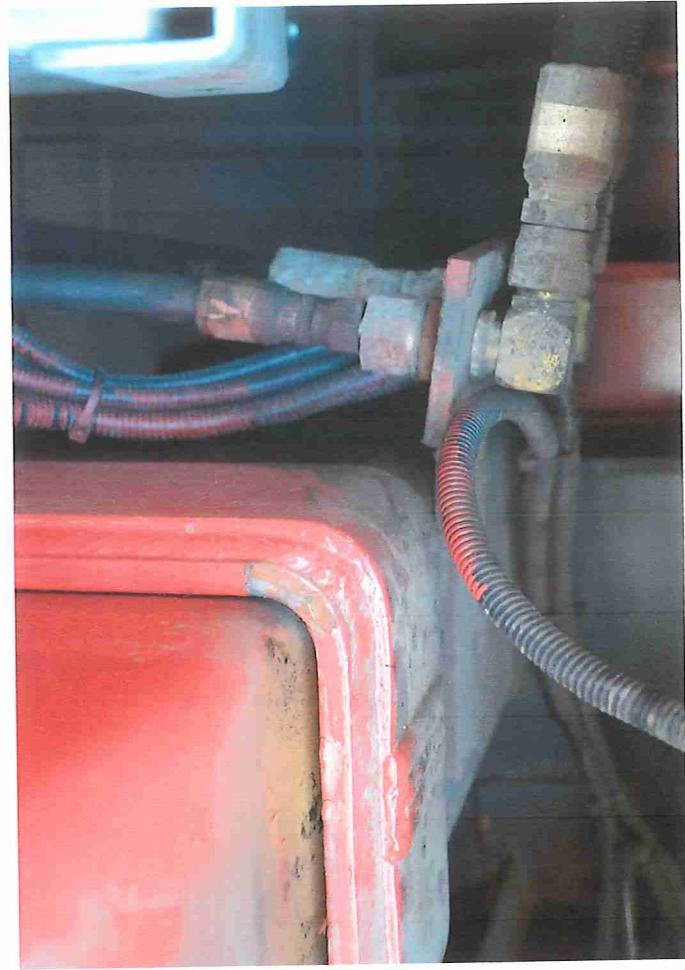
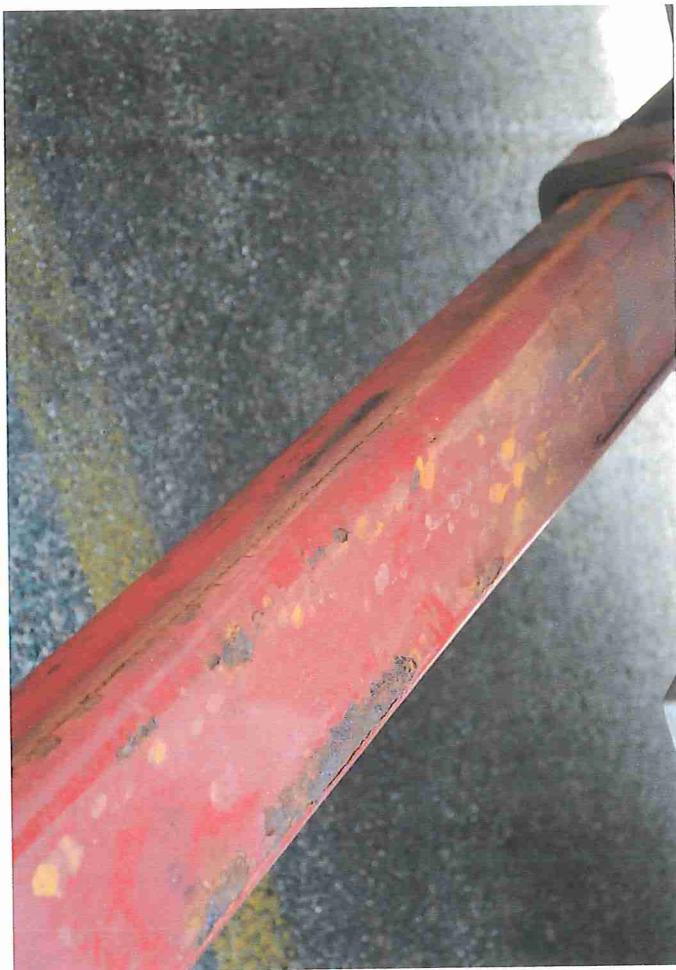
TOTAL \$ 4,075.00

		TOTALS	TOTAL PARTS TOTAL PAINT P & M SUBLET FRAME TAX TOTAL

A44



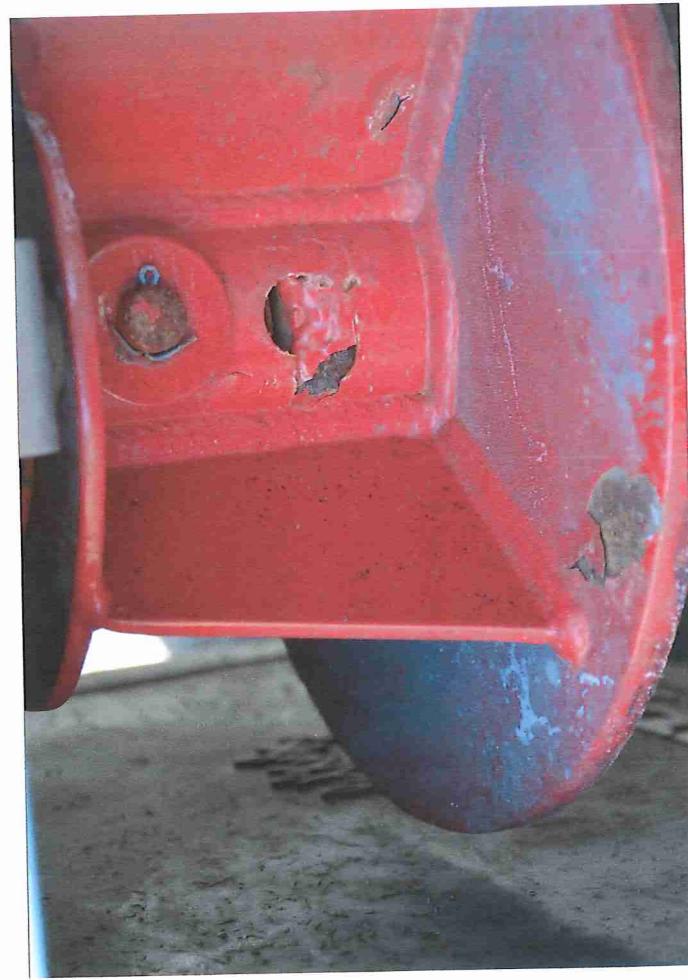
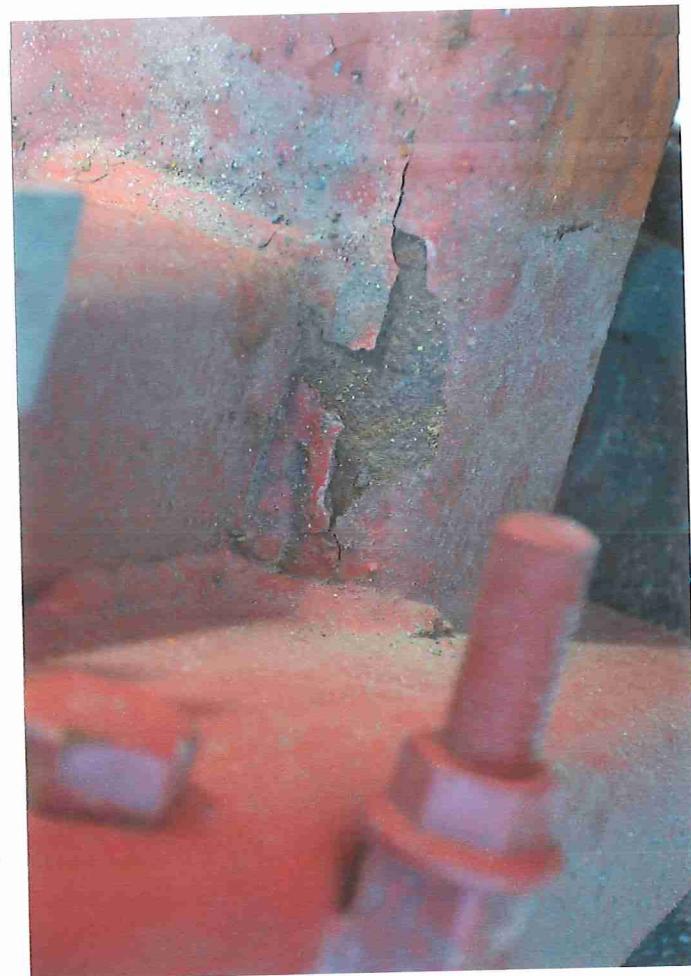
A46



A46

277

A47



A47

278

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Elementary Schools					
Educational Capital					
Curriculum					
Fuller Meadow School					
Curriculum		10,000	10,000	10,000	10,000
Howe Manning School					
Curriculum	15,000	15,000	15,000	10,000	10,000
End-User Technology					
Fuller Meadow School					
End-User Technology	34,000	50,000	50,000	50,000	50,000
Howe Manning School					
End-User Technology	83,000	50,000	50,000	50,000	50,000

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Technology Infrastructure					
Fuller Meadow School					
Technology Infrastructure	38,000				100,000
Howe Manning School					
Technology Infrastructure	54,000				800,000
Furniture					
Fuller Meadow School					
Furniture					
Howe Manning School					
Furniture					
Internal Building Capital					
Building Interior					
Fuller Meadow School					
Building Interior					
Howe Manning School					
Building Interior					
Bathrooms					
Fuller Meadow School					
Bathrooms					
Howe Manning School					
Bathrooms					

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Flooring					
Fuller Meadow School					
Flooring		60,000	65,000	70,000	
Howe Manning School					
Flooring					
Floor Care Equipment					
Fuller Meadow School					
Floor Care Equipment		12,000			
Howe Manning School					
Floor Care Equipment	13,500	12,000			
External Building Capital					
Large Scale Painting					
Fuller Meadow School					
Large Scale Painting					
Howe Manning School					
Large Scale Painting					
Grounds/Parking Lot/Sidewalks					
Fuller Meadow School					
Grounds		90,000			
Howe Manning School					
Grounds					

**Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan**

	2019	2020	2021	2022	2023
--	-------------	-------------	-------------	-------------	-------------

Septic System

Fuller Meadow School

Septic System

Howe Manning School

Septic System

Playground Equipment & Parking Lot

Fuller Meadow School

Playground Equipment & Parking Lot

Howe Manning School

Playground Equipment & Parking Lot

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Roofs					
Fuller Meadow School					
Roofs				1,000,000	
Howe Manning School					
Roofs					
Building Exterior					
Fuller Meadow School					
Building Exterior					
Howe Manning School					
Building Exterior					
Windows					
Fuller Meadow School					
Windows				2,000,000	
Howe Manning School					
Windows					

**Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan**

	2019	2020	2021	2022	2023
Building Systems and Building Equipment					
Kitchen Equipment					
Fuller Meadow School					
Kitchen Equipment		300,000			
Howe Manning School					
Kitchen Equipment					

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Boilers / Pumps & Controls					
Fuller Meadow School					
Boilers and Boiler Control					
Howe Manning School					
Boilers and Boiler Control					
Classroom HVAC					
Fuller Meadow School					
Classroom HVAC					
Howe Manning School					
Classroom HVAC					
Large HVAC Equipment					
Fuller Meadow School					
Large HVAC Equipment					135,000
Howe Manning School					
Large HVAC Equipment					
Telephone Systems					
Fuller Meadow School					
Telephone Systems					
Howe Manning School					
Telephone Systems					

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Security/Video Systems					
Fuller Meadow School					
Security/Video Systems					
Howe Manning School					
Security/Video Systems					
Public Address Systems					
Fuller Meadow School					
Public Address Systems					
Howe Manning School					
Public Address Systems					
Master Clock Systems					
Fuller Meadow School					
Master Clock Systems					
Howe Manning School					
Master Clock Systems					
Water					
Fuller Meadow School					
Water					
Howe Manning School					
Water					

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Electrical					
Fuller Meadow School					
Electrical					
Howe Manning School					
Electrical					
Emergency Generator					
Fuller Meadow School					
Emergency Generator				275,000	
Howe Manning School					
Emergency Generator					
Aaron Wood Building					
TOTAL ELEMENTARY SCHOOLS:	\$209,000	\$428,500	\$299,000	\$3,600,000	\$1,090,000

FY2018-2019 Tri-Town School Union Capital Plan



Harry Lee Cole, Boxford



Spofford Pond, Boxford



Fuller Meadow, Middleton



Howe-Manning, Middleton



Steward Elementary, Topsfield



Proctor Elementary, Topsfield

Tri Town School Union Capital Plan Table of Contents

Tri-Town School Union –FY19 Fifteen Year Capital Plan Overview.....	2
Boxford Elementary Schools	3
Harry Lee Cole School Overview	3
Harry Lee Cole School Proposed Future Capital Requests	5
Spofford Pond Overview	8
Spofford Pond School Proposed Future Capital Requests.....	9
Middleton Elementary Schools.....	11
Fuller Meadow School Overview	11
Fuller Meadow School Proposed Future Capital Requests.....	13
Howe Manning Elementary School Overview	15
Howe Manning School Proposed Future Capital Requests	17
Topsfield Elementary Schools	18
Steward Elementary School Overview	18
Steward School Proposed Future Capital Requests	20
Proctor Elementary School Overview.....	21
Proctor School Proposed Future Capital Requests.....	22

Appendix A: Capital Plan Schedule

Tri-Town School Union –FY19 Fifteen Year Capital Plan Overview

Boxford, Middleton, & Topsfield Elementary Schools – Fifteen Year Capital Plan

The Tri-Town School Union Capital Plan is a proposed fifteen year schedule for the renovation or replacement of capital expenditures for each of the elementary schools in Boxford, Middleton, and Topsfield. The reason why we use this model is to assist the member Towns with reasonable planning for capital expenses in the short-term and long-term.

This document will provide specific details about the various capital categories and the reason(s) behind the renovation and/or replacement. It is important to keep in mind that it is very difficult to estimate costs for capital items over a long-term period. Under these circumstances, the proposal amount functions like a placeholder and reminder that a particular capital item will be coming to the end of its useful life.

In addition, the Capital Plan and corresponding schedule is a fluid document. The presented capital plan is based on estimated end of life, educational mandates, and curriculum update schedules. The Capital Plan is vulnerable to the economic, political, financial, and local environmental factors and constraints. Each of these factors have a strong influence in each of the districts' abilities to maintain the Capital Plan Schedule. Therefore while this document functions as a desirable schedule, it is more like a guide for all stakeholders when you take into consideration the external influences.

The threshold that would trigger a capital request in each town is listed below:

Boxford = \$10,000

Middleton = \$5,000 Guideline

Topsfield = \$5,000

Areas of capital that are communicated (per School) in this document include:

- I. Educational Capital (Curriculum Purchases & Technology)
- II. Technology Infrastructure
- III. Furniture
- IV. Internal Building Capital:
 - a. Building Interior
 - b. Bathrooms
 - c. Flooring
 - d. Floor Care Equipment

- e. Large Scale Painting
- f. Kitchen Equipment

V. External Building Capital:

- a. Grounds & Playground Equipment
- b. Roofs
- c. Building Exterior & Windows

VI. Building Systems & Building Equipment

- a. Boilers & Boiler Controls
- b. Classroom HVAC
- c. Large HVAC Equipment
- d. Telephone Systems, Security Systems, P/A & Master Clock Systems
- e. Water
- f. Electrical
- g. Septic Systems
- h. Emergency Generators

VII. Aaron Wood Building

Boxford Elementary Schools
Harry Lee Cole School Overview

Building Square Footage: 71,000 square feet

1954 - Original wood frame two story, CMU walls, brick exterior face building built. Building consisted of (8) Classrooms, Cafe/Gym combination space and kitchen. (2) Oil fired steam boilers with local radiation.

1986 - Addition built for expansion. Two Story brick faced, steel frame with CMU, gypsum wallboard and GCMU wall construction.

Classrooms on two levels, small instruction spaces, admin/principal suite with conference room, new gymnasium, computer lab, library, elevator and relocation of schools main entrance. This project added a second boiler room on the west side of the school that consisted of (2) hot water gas fired boilers, single loop hot water heat system with (2) 3HP pumps. Pneumatic HVAC controls for boilers/ CRUV's/ exhaust fans were introduced. (3) Constant volume heating & ventilation units were installed on the roof along with exhaust fans for bathroom, kitchen and classroom exhaust. Potable well storage and controls were relocated to this space. (1) Domestic hot water heater and temperature reducing station. A 30KW N.G. emergency generator was added along with new switchgear, electrical distribution fed by a relocated building sub grade service feeder via transformer. New telephone and fire control were also incorporated. Replacements of most of the original section windows with Anderson vinyl clad awning

windows to match the new construction windows were installed. Replacement of classroom unit ventilators (CRUV) in the old section with to match units installed in new addition. Flooring is mostly VCT in halls with carpet/VCT combination floors in classrooms and maple wood in gymnasium. Steam boilers located in the east boiler room were converted to burn CNG.

1996 - Addition built for expansion. (12) Classrooms. Two story Brick / block exterior faced, steel frame construction with CMU, gypsum wallboard interior construction. Roof is ballasted built up asphalt. Aluminum window systems installed throughout. A third natural gas fired boiler was added to the west boiler room. The addition was served by a single hot water heating loop served by (1) pump. (1) Reznor RTU constant volume make up air unit serving upper and lower hallways, bathroom and classroom exhaust. Flooring is VCT-hallways and carpet/VCT combination in classrooms.

2012 - Completed roof replacement under MSBA's Green Repair Program.

Lighting retro-fit and parking lot completed in 2010 - 2012.

2013 - Installed category 6A cabling, 30 Aerohive 330 WAPs, and updated the core switches.

P/A and Master Clock updated in 2010. Phone system updated in 2014. Access control is scheduled for 2015. Added two cameras and replaced DVR in 2014.

2014 – Harry Lee Cole Playground and Pre-School Playground were replaced.

2015 – Timer controls for steam units one and two were replaced. This program was 100% reimbursed by National Grid.

District:	Boxford
School Name:	Cole Elementary School
Address:	26 Middleton Rd. Boxford, MA 01921
School Hours:	
In-session Contact:	
Off-Hours Contact:	Steve Clifford (978) 887-0771 x225 Cell: (978) 479-7713
Approach Hazards:	
Notes:	

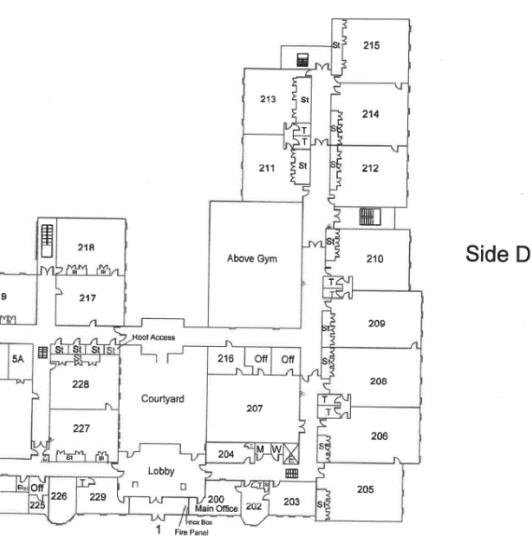
1st Floor

Side B

Single Door
Double Door
Window
Stairs
Trap
Elevator
Fire Extinguisher
Gas Shut-Off
Electrical Shut-Off
Water Shut-Off
Chair Lift
Sprinkler Shut-off
Generator
Camera
Fire Standpipe

Side C

For Official Use Only



Side D

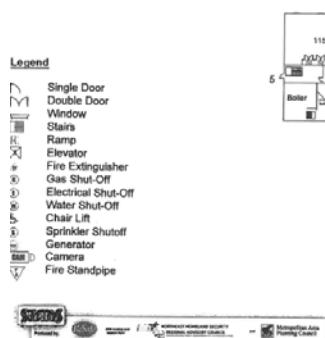
Side A

1st Floor Plan 5

District:	Boxford
School Name:	Box Elementary School
Address:	28 Middleton Rd. Boxford, MA 01921
School Hours:	8:55 am - 3:10 pm
In-session Contact:	-
Off-Hours Contact:	-
Approach Hazards:	-
Notes:	-

Basement

Side B



Side C

For Official Use Only



Side D

Side A

Basement Floor Plan 6

Harry Lee Cole School Proposed Future Capital Requests

Tri-Town School Union

Appendix A: Capital Plan Schedule

Updated: 12/13/2011

Proposed Fiscal Year 2019

Dollar Place Holder (Estimated) - Note: Amounts are subject to change

Curriculum FY2021, FY2022, FY2023, FY2025, & FY2027: Curriculum review and program enhancements and/or modifications will be investigated and evaluated. Investments in curriculum at the amounts projected will be presented in the operating budget. We are communicating this information in the capital plan for informational purposes and future discussion.

Technology Infrastructure FY2019, FY2023 & FY2033: The technology infrastructure will be at the end of its useful life by 2023 and will be in excess of ten years old. We are projecting that we will need to replace the existing switches and wireless access points with more powerful switches and wireless access points in order to handle the increase in internet traffic.

For FY2019 we are proposing expanding the infrastructure to improve wireless coverage and capacity in the building. The FY2019 request consists of 8 wireless access points, a 48 port switch, and a heavy duty battery back-up.

We are investigating options concerning building servers and off site options. Our goal is to move away from onsite servers and move to a consolidated and secure offsite solution. We believe this will be a cost and budget friendly plan for our future educational technology needs.

Building Interior Feasibility Study & Access Ramp (ADA) FY2019: Solicit architectural services to evaluate the ADA compliance and make recommendations for the Harry Lee Cole School.

We are working on accommodating the needs of existing students that have physical limitations. This challenge makes it difficult, unsafe, and/or not possible for students with physical limitations to use the building in an independent manner. In the event of an emergency and a mass building evacuation is required, the current building stairways and hallways create a serious safety concern as well as a building code issue. The work needed includes an engineering study, design, and construction of a wheel chair ramp, hallway adjustments, door configuration, and plumbing work, in the cafeteria hallway.

Bathrooms FY2022: The student bathrooms located in the old wing of the building are original and are due for a renovation as well as outfitting them with water efficient equipment. We have maintained this capital request since 2009. The update of these bathrooms would address existing ADA deficiencies.

Floor Care Equipment FY2021: The current floor scrubber will come to the end of its extended life. The facilities staff go to great effort to preserve the equipment so that they may extend the useful life beyond industry recommendations.

Roofs FY2021: Replace the 1995 portion of the Harry Lee Cole School Roof. We will submit a Statement of Interest to partner with the MSBA for this project.

Kitchen Equipment FY2029: The proposal involves feasibility study, design, installation, and renovation of the kitchen, kitchen equipment, and walk in freezer.

Boilers & Boiler Controls FY2021: Our goal will be to partner with the Massachusetts School Building Authority and the Accelerated Repair Program to replace the boiler system and controls.



Classroom Unit Ventilators and Large HVAC Equipment FY2019, FY2022, FY2023, & FY2025: This proposed capital expense would be to replace end of life unit ventilators and large volume HVAC equipment. The capital request would include engineering study and design along with appropriate equipment and ancillary building work.

Telephone System FY2027: By FY2027 the phone system will come to the end of its useful life. The proposal includes feasibility and system design and turn-key installation.

Security System FY2022: We will be proposing the replacement and upgrade of the video surveillance system for the Harry Lee Cole School. The proposal will include engineering, design, and turnkey installation.

Electrical FY2020: We are recommending the replacement of the Fire Control Panel and the field devices (smoke detectors, heat detectors, horns, strobes, pull stations, tamper switches, flow switches, and other related hardware).

Emergency Generator FY2022: This proposed capital expense would be to replace end of life emergency generator. The capital request would include engineering study and design and turn-key installation.

Spofford Pond Overview

Building Square Footage: 76,895 square feet

The Spofford Pond School was built in 1962/63. Single story steel frame, CMU walls with brick veneer. The building contained approximately eleven classrooms, administration area, kitchen Cafe and Gym. Hot water heating through CRUV's by gas fired boilers. Potable water provided by on site well and sewerage by onsite septic system. All CRUV's in this wing were replaced in 2003/2004. Exhaust systems not replaced. HVAC remains pneumatically controlled.

The 1996 roof was a tar & gravel Tremco System replaced in 2017 with a Sarnafil Roof System.

Classroom flooring is combination carpet and VCT. Hallways are VCT, lavatories are tile.

1967/1968 - A single story twelve classroom wing was added due to district expansion. Steel frame, CMU walls with brick veneer. The mechanicals are similar to original wing. Utilities are the same as original wing.

The tar & gravel Tremco System was replaced in 2017 with a Sarnafil Roof System.

CRUV were replaced in 2012. HVAC controls for this wing were upgraded to DDC from pneumatic. Classroom flooring is combination carpet and VCT. Hallways are VCT, lavatories are tile.

1990 - A nine classroom wing was built. Steel frame, CMU walls with brick veneer. This wing included an Art Room, Music Room and six regular classrooms. Utilities are the same as other wings. Roof is a 2017 Sarnafil Roof System. Mechanicals are classroom CRUV/Roof Exhaust that is pneumatically controlled original to the construction. Flooring is VCT in hallways and classrooms original to construction.

1996 - A five room classroom wing was added to include a science lab. This addition also expanded the cafe, added a library, small conference room and computer lab. Construction is steel frame, CMU walls with brick and decorative concrete block veneer. Roof is a 2017 Sarnafil Roof System. Utilities are the same as original wing. Site transformer was upsized to serve additional load. Flooring is carpet/VCT combination floors in the classrooms and all VCT in the hallways and science lab. The library, small conference and computer lab are full carpet. Cafe is all VCT with hardwood on stage. Mechanicals in classrooms are CRUV's with hot water coils and pneumatic controls. Classroom roof top exhaust and hallway makeup via gas fired 100% OA RTU. Library, computer lab and small conference have separate RTU's for each, hot air gas fired heat and DX cooling. The Cafe is heated with a 100% OA gas fired RTU. All RTU's are stand-alone controlled. All mechanicals, plumbing and electrical are original to construction.

2017 – Completed roof replacement under MSBA's Accelerated Repair Program.

2018 – Will complete window replacement under MSBA's Accelerated Repair Program.

District:	Boxford
School Name:	Spofford Pond Elementary School
Address:	31 Spofford Road Boxford, MA 01921
School Hours:	
In-session Contact:	
Off-Hours Contact:	
Approach Hazards:	
Notes:	

For Official Use Only

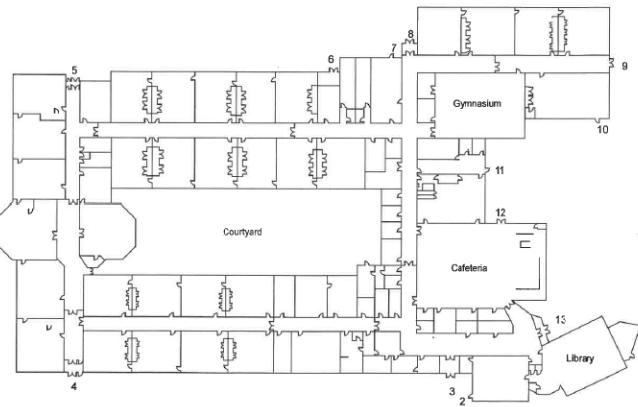
Side C

Footprint

Side B

Legend

- Single Door
- Double Door
- Window
- Stairs
- Ramp
- Elevator
- Fire Extinguisher
- Gas Shut-Off
- Electrical Shut-Off
- Water Shut-Off
- Chair Lift
- Sprinkler Shutoff
- Generator
- Camera
- Fire Standpipe



Side D



Building Footprint 4

Side A

Spofford Pond School Proposed Future Capital Requests

Tri-Town School Union

Appendix A: Capital Plan Schedule

Updated: 12/13/2017

Proposed Fiscal Year 2019

		Dollar Place Holder (Estimated) - Note: Amounts are subject to change														
		FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033
Spofford Pond	Curriculum		15,000	15,000	10,000	10,000		10,000		20,000						
Spofford Pond (in the Op. Budget)	End-User Technology															
Spofford Pond	Technology Infrastructure	19,000				100,000									150,000	
Spofford Pond	Furniture															
Spofford Pond	Building Interior	50,000														
Spofford Pond	Bathrooms				250,000											
Spofford Pond	Flooring															
Spofford Pond	Floor Care Equipment				15,000											
Spofford Pond	Large Scale Painting															
Spofford Pond	Grounds			75,000												
Spofford Pond	Septic System															
Spofford Pond	Playground Equipment & Parking Lot	350,000														
Spofford Pond	Roofs															
Spofford Pond	Building Exterior															
Spofford Pond	Windows		3,000,000													
Spofford Pond	Kitchen Equipment											500,000				
Spofford Pond	Boilers & Boiler Control			750,000												
Spofford Pond	Classroom HVAC					400,000					300,000					
Spofford Pond	Large HVAC Equipment															
Spofford Pond	Telephone Systems									200,000						
Spofford Pond	Security Systems					100,000										
Spofford Pond	Public Address Systems															
Spofford Pond	Master Clock Systems															
Spofford Pond	Water		75,000			20,000						750,000				
Spofford Pond	Electrical		65,000													
Spofford Pond	Emergency Generator				200,000											

Curriculum FY2020, FY2021, FY2022, FY2023, FY2025, & FY2027: Curriculum review and program enhancement and/or modifications will be investigated and evaluated. Investments in curriculum at the amounts projected will be presented in the operating budget.

Technology Infrastructure FY2019, FY2023 & FY2033: The technology infrastructure will be at the end of its useful life by 2023 and will be in excess of ten years old. We are projecting that we will need to replace the existing switches and wireless access points with more powerful switches and wireless access points in order to handle the increase in internet traffic.

For FY2019 we are proposing expanding the infrastructure to improve wireless coverage and capacity in the building. The FY2019 request consists of 6 wireless access points, a 48 port switch, and a heavy duty battery back-up.

We are investigating options concerning building servers and off site options. Our goal is to move away from onsite servers and move to a secure offsite solution. We believe this will be a cost and budget friendly plan for our future educational technology needs.

Building Interior - Feasibility Study (ADA) FY2019: Solicit architectural services to evaluate the ADA compliance and make recommendations for the Spofford Pond School.

Bathrooms FY2022: The bathrooms will be due for renovation as well as outfitting them with water efficient equipment. Capital proposal includes design, engineering, construction, and renovation.

Floor Care Equipment FY2022: The current auto scrubber will come to the end of its extended life. The facilities staff go to great effort to preserve the equipment so that they may extend the useful life beyond industry recommendations.

Grounds FY2021- Parking Lot: We will propose to repair the parking lot area on the campus. The process will include engineering study, design, and site preparation, and installation.

Playground Equipment & Parking Lot FY2019: For FY2019 we will be requesting funding to install additional playground equipment and surfacing that is ADA compliant and allows access for students with physical limitations. This proposal has been under review for the past two years.

Window Replacement FY2019: The window replacement will be phase II of the Spofford Pond Envelope Project. We are partnered with the MSBA and will receive approximately 40% reimbursement for eligible costs. The project will start with design and bidding during the winter months. Construction will begin in late spring at the conclusion of the school year. Substantial completion is scheduled for August 2018 with punch list items completed in September.

Kitchen Equipment FY2030: The proposal involves feasibility study, design, installation, and renovation of the kitchen and kitchen equipment.

Boilers & Boiler Controls FY2021: Our goal will be to partner with the Massachusetts School Building Authority and the Accelerated Repair Program to replace the boiler system and controls.

Classroom Unit Ventilators and Large HVAC Equipment FY2023 & FY2027: This proposed capital expense would be to replace end of life unit ventilators and large volume HVAC equipment. The capital request would include engineering study and design along with appropriate equipment and ancillary building work.

Telephone System FY2027: By FY2027 the phone system will come to the end of its useful life. The proposal includes feasibility and system design and turn-key installation.

Security System FY2022: We will be proposing the replacement and upgrade of the video surveillance system for the Spofford Pond School. The proposal will include engineering, design, and turnkey installation.

Water FY2020, FY2023& FY2032: For FY2020 we will propose that the well is rejuvenated and the well pumps are replaced. For FY2023 we will plan to replace the green media in the water plant filtration system (filtration, pumps, and instrumentation). For FY2032 we will propose a total overhaul of the water treatment plant. This capital proposal will involve engineering, design, turnkey installation and staff training.

Electrical FY2020: We are recommending the replacement of the field devices and associated wiring (smoke detectors, heat detectors, horns, strobes, pull stations, tamper switches, flow switches, and other related hardware).

Emergency Generator FY2022: This proposed capital expense would be to replace end of life emergency generator. The capital request would include engineering study and design and turn-key installation.

Middleton Elementary Schools

Fuller Meadow School Overview

Building Square Footage: 58,700 square feet

1964 – Fuller Meadow School opened. The original building is approximately 27,000 square feet, exterior faced masonry brick over CMU interior walls. Exposed web steel interior framing with exposed Tectum roof panel ceilings. Double insulated awning style classroom windows with stationary glazing clear panels above. The roof is a new Sarnafil Roof System Roofing.

The school consisted of (10) Classrooms, administration, nurse and support areas. Cafetorium / Gymnasium combination space with kitchen.

HVAC, (2) Hot water cast iron sectional boilers with hot water circulation throughout feeding classroom unit ventilators (CRUV), perimeter radiation and an air handler for Café/Gym . In 1997 – A 30,000 square foot addition was opened to address a growing school population. This addition consists fifteen classrooms, a library/media center, (3) small specialist spaces and a gymnasium.

Exterior construction is a combination of decorative concrete precast and masonry brick. Roofing is a Sarnafil Roof System and a minor area that is .045 EPDM.

HVAC for this addition is an expansion of the hot water circulating loop feeding CRUV's, perimeter radiation and a heating/ventilation air handler serving the gymnasium. All HVAC controls are pneumatic. Classroom CRUV's in the original section of the building were also replaced at this time. The administration and nurse sections are air conditioned with roof mounted heat pump package units installed in the early 1980's.

In 2006 a modular building addition was added on the southeast corner of the 1964 wing to ease an increasing district student population. This 2,700 square foot addition has (2) classroom size spaces and (3) small instructional support spaces. HVAC is by roof top package units with DX cooling and electric heat. Roofing is .060 EPDM. All flooring throughout the school is a mixture of nylon wall to wall carpet and VCT tile.

The gymnasium has a synthetic urethane sports floor. The building is served by a 40KW emergency diesel generator installed inside the building.

The original building roof was replaced in 2016 in partnership with the MSBA.

District:	Middleton
School Name:	Middleton Fuller Meadow Elementary School
Address:	143 South Main Street Middleton, MA 01970
School Hours:	
In-session Contact:	
Off-Hours Contact:	
Approach Hazards:	
Notes:	

Main Floor

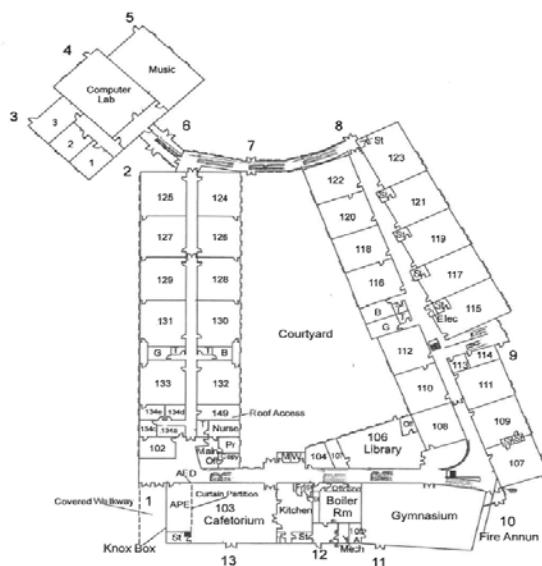
Side B

Side C

For Official Use Only

Side D

Legend



Side A

Fuller Meadow School Proposed Future Capital Requests

Tri-Town School Union

Appendix A: Capital Plan Schedule

Updated: 12/13/2017

Proposed Fiscal Year

2019

X		Dollar Placeholder (Estimated) - Note: Amounts are subject to change													
		FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032
Fuller Meadow	Curriculum			10,000	10,000	10,000	10,000	10,000	10,000	15,000					
Fuller Meadow	End-User Technology	34,000	50,000	50,000	50,000	50,000	50,000	150,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Fuller Meadow	Technology Infrastructure	38,000				100,000									150,000
Fuller Meadow	Furniture														
Fuller Meadow	Building Interior														
Fuller Meadow	Bathrooms							130,000	130,000						
Fuller Meadow	Flooring		60,000	65,000	70,000										
Fuller Meadow	Floor Care Equipment		12,000												
Fuller Meadow	Large Scale Painting														
Fuller Meadow	Grounds			90,000											
Fuller Meadow	Septic System														
Fuller Meadow	Playground Equipment & Parking Lot														
Fuller Meadow	Roofs				1,000,000										
Fuller Meadow	Building Exterior														
Fuller Meadow	Windows				2,000,000										
Fuller Meadow	Kitchen Equipment		300,000												
Fuller Meadow	Boilers & Boiler Control									500,000					
Fuller Meadow	Classroom HVAC				135,000										
Fuller Meadow	Large HVAC Equipment														
Fuller Meadow	Telephone Systems														
Fuller Meadow	Security Systems														
Fuller Meadow	Public Address Systems														
Fuller Meadow	Master Clock Systems														
Fuller Meadow	Water														
Fuller Meadow	Electrical														
Fuller Meadow	Emergency Generator				275,000										

Curriculum FY2021, FY2022, FY2023, FY2025, & FY2027: Curriculum review and program enhancement and/or modifications will be investigated and evaluated. Investments in curriculum at the amounts projected will be presented in the operating budget.

End User Technology FY2019-: End User Technology part of the everyday instruction. It is an everyday tool of teaching and learning. New and replacement technology is part of the proposed capital plan and warrant process. The dollar amount varies from year to year based upon existing inventory, changes in education, and changes in technology.

Every year we review our inventory, look at our program needs, and determine the best method to fulfill that need. End user technology is part of that process and is subject to change from year to year.

Technology Infrastructure FY2019, FY2023 & FY2033: The technology infrastructure will be at the end of its useful life by 2023 and will be in excess of ten years old. We are projecting that we will need to replace the existing switches and wireless access points with more powerful switches and wireless access points in order to handle the increase in internet traffic.

For FY2019 we are proposing expanding the infrastructure to improve wireless coverage and capacity in the building. The FY2019 request consists of 12 wireless access points, 2 - 48 port switches, and two heavy duty battery back-ups.

We are investigating options concerning building servers and off site options. Our goal is to move away from onsite servers and move to a secure offsite solution. We believe this will be a cost and budget friendly plan for our future educational technology needs.

Bathrooms FY2025 & FY2026: The bathrooms will be due for renovation as well as outfitting them with water efficient equipment. We propose the upper level bathrooms in the original wing would be renovated in FY2025 and the lower level bathrooms in the new wing would be renovated in FY2026. The capital proposal includes design, engineering, and turnkey installation.

Flooring FY2020 – FY2023: For FY2020 we will be proposing a multi-year/phased floor replacement program. The proposal will be to replace VCT and carpet flooring over a three year period.

Floor Care Equipment FY2022: The current Auto Scrubber will come to the end of its extended life. The facilities staff go to great effort to preserve the equipment so that they may extend the useful life beyond industry recommendations.

Grounds – Parking Lot FY2021: We will propose the engineering study and replacement of the parking lot for the Fuller Meadow campus.

Roof & Windows FY2022: For FY2022 we will file a SOI to participate/partner with the MSBA in the ARP to replace the last remaining older portion of the roof along with the replacement of the windows.

Kitchen Equipment FY2020: The proposal involves feasibility study, design, installation, and renovation of the kitchen and kitchen equipment.



Boilers & Boiler Controls FY2027: Our goal will be to partner with the Massachusetts School Building Authority and the Accelerated Repair Program to replace the boiler system and controls. This capital expense will include engineering, design, and turnkey installation.

Large HVAC Equipment FY2022: We will propose the engineering, design, and turnkey installation of roof top unit number three as it will have come to the end of its useful life.

Emergency Generator FY2022: This proposed capital expense would be to replace end of life emergency generator. The capital request would include engineering study, design and turn-key installation.

Howe Manning Elementary School Overview

Building Square Footage: 80,000 square feet

Built in 2012, Howe Manning is a three story building constructed in partnership with the MSBA with a reimbursement of 51+% for eligible costs.

District Name:	MIDDLETON PUBLIC SCHOOLS
Building Name:	Howe - Manning Elementary School
Address:	26 Central Street Middleton, MA 01970

Side D

For Official Use Only



1st Floor Plan

1st Floor

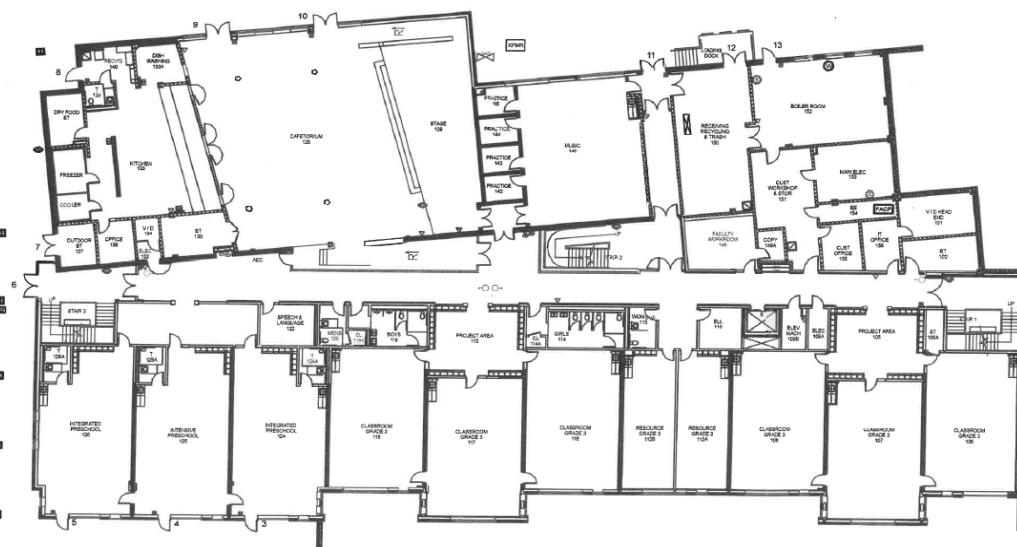
Side C

Legend

- Camera
- Chair Lift
- MWT Bathrooms: Mens, Womens, Unisex
- ST Storge
- ODH Overhead Door
- Elevator
- Emergency Phone
- Knox Box
- Water Shutoff
- Sprinkler Shutoff
- Electrical Shutoff
- Gas Shutoff
- Ramp
- Emergency Generator
- FACP Fire Alarm Control Panel
- FDPC Fire Dept. Connection
- FE Fire Extinguisher



Side B



1st Floor Plan

6

District Name:	MIDDLETON PUBLIC SCHOOLS
Building Name:	Howe - Manning Elementary School
Address:	26 Central Street Middleton, MA 01970

Side D

For Official Use Only

2nd Floor Plan

2nd Floor

Side C

○ →	Camera
○ ↑	Chair Lift
MWT	Bathrooms: Mens, Womens, Unisex
ST	Storage
OHD	Overhead Door
E	Elevator
EP	Emergency Phone
KB	Knox Box
W	Water Shutoff
S	Sprinkler Shutoff
E	Electrical Shutoff
GAS	Gas Shutoff
R	Ramp
GEN	Emergency Generator
FACP	Fire Alarm Control Panel
FD	Fire Dept. Connection
FE	Fire Extinguisher



Side B

2nd Floor Plan

7

District Name:	MIDDLETON PUBLIC SCHOOLS
Building Name:	Howe - Manning Elementary School
Address:	26 Central Street Middleton, MA 01970

Side D

For Official Use Only

3rd Floor Plan

3rd Floor

Side C

○ →	Camera
○ ↑	Chair Lift
MWT	Bathrooms: Mens, Womens, Unisex
ST	Storage
OHD	Overhead Door
E	Elevator
EP	Emergency Phone
KB	Knox Box
W	Water Shutoff
S	Sprinkler Shutoff
E	Electrical Shutoff
GAS	Gas Shutoff
R	Ramp
GEN	Emergency Generator
FACP	Fire Alarm Control Panel
FD	Fire Dept. Connection
FE	Fire Extinguisher



Side B

3rd Floor Plan

8

Howe Manning School Proposed Future Capital Requests

Proposed Fiscal Year	Category	Dollar Placeholder (Estimated) - Note: Amounts are subject to change														
		FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033
Howe Manning	Curriculum		15,000	15,000	15,000	10,000	10,000	20,000								
Howe Manning	End-User Technology	83,000	50,000	50,000	50,000	50,000	200,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
Howe Manning	Technology Infrastructure	54,000				800,000									500,000	
Howe Manning	Furniture															
Howe Manning	Building Interior															
Howe Manning	Bathrooms															
Howe Manning	Flooring															
Howe Manning	Floor Care Equipment															
Howe Manning	Large Scale Painting															
Howe Manning	Grounds															
Howe Manning	Septic System															
Howe Manning	Playground Equipment & Parking Lot															
Howe Manning	Roofs															
Howe Manning	Building Exterior															
Howe Manning	Windows															
Howe Manning	Kitchen Equipment															
Howe Manning	Boilers & Boiler Control															
Howe Manning	Classroom HVAC															
Howe Manning	Large HVAC Equipment															
Howe Manning	Telephone Systems															
Howe Manning	Security Systems															
Howe Manning	Public Address Systems															
Howe Manning	Master Clock Systems															
Howe Manning	Water															
Howe Manning	Electrical															
Howe Manning	Emergency Generator															

Curriculum FY2020, FY2021, FY2022, FY2023, FY2025, & FY2027: Curriculum review and program enhancement and/or modifications will be investigated and evaluated. Investments in curriculum at the amounts projected will be presented in the operating budget.

End User Technology FY2019-: End User Technology part of the everyday instruction. It is an everyday tool of teaching and learning. New and replacement technology is part of the proposed capital plan and warrant process. The dollar amount varies from year to year based upon existing inventory, changes in education, and changes in technology.

Technology Infrastructure FY2023 & FY2033: The technology infrastructure will be at the end of its useful life by 2023 and will be in excess of ten years old. We are projecting that we will need to replace the existing servers, switches, and wireless access points. This proposed capital expense will be quite involved as it includes the technology that manages all building systems as well as the educational support technology. The proposal will include engineering, design, turnkey installation of equipment, and training.

For FY2019 we are proposing expanding the infrastructure to improve wireless coverage and capacity in the building. The FY2019 request consists of 22 wireless access points, 1 - 48 port switch, and two heavy duty battery back-ups.

We are investigating options concerning building servers and off site options. Our goal is to move away from onsite servers and move to a secure offsite solution. We believe this will be a cost and budget friendly plan for our future educational technology needs.

Floor Care Equipment FY2020 & FY2021: The current T-5 and T-3 Floor Scrubbers will come to the end of their extended lives, respectively. The facilities staff go to great effort to preserve the equipment so that they may extend the useful life beyond industry recommendations.

Security System FY2025: We will be proposing the replacement and upgrade of the video surveillance system for the Howe Manning School. The proposal will include engineering, design, turnkey installation, and training.

Topsfield Elementary Schools

Steward Elementary School Overview

Building Square Footage: 58,216 square feet

Steward School is a single story elementary school serving grades PK - 3rd grade. The campus is set in a rural residential setting bordering conservation land to the west and south and other municipal recreation property to the north. Residential housing is located to the east across the street from the campus.

Steward School is a single story school building constructed with brick / concrete exterior, wood / metal fascia, steel framing, CMU, Glazed Ceramic Block and GWB interior walls. Windows are double pane insulated units with predominant aluminum framing, some steel. EPDM roofing with a small section of standing seam metal roofing.

The school is heated by (2) gas fired sectional boilers through a primary / secondary hydronic loop system using (7) HWH circulating pumps. Interior offices, classrooms and library are heated and ventilated with CRUV's that are pneumatically controlled. Gymnasium and Cafetorium are heated and ventilated by dedicated CV AHU units with HW coils. The Kitchen is heated and ventilated through a dedicated RTU with HW coil. Exhaust for the whole building is through local RTE units.

The building has CMU, GCMU and GWB interior walls. Flooring is VCT throughout classrooms and hallways, carpet in Library. Ceilings are ACT throughout. Lighting is T-8/28W throughout with exception of Gymnasium which is T5/25W. Exterior doors are metal and wood.

The Building is fed with 208V, 3 phase, 1000A service. Interior distribution is 208 3 phase for mechanical equipment and 208V/120V single phase for equipment, plug power and lighting. The entire building load is backed up with an onsite 150KW diesel generator.

District:	Topsfield
School Name:	Steward Elementary School
Address:	261 Perkins Row Topsfield, MA 01983
School Hours:	
In-session Contact:	
Off-Hours Contact:	
Approach Hazards:	
Notes:	

Side C

For Official Use Only

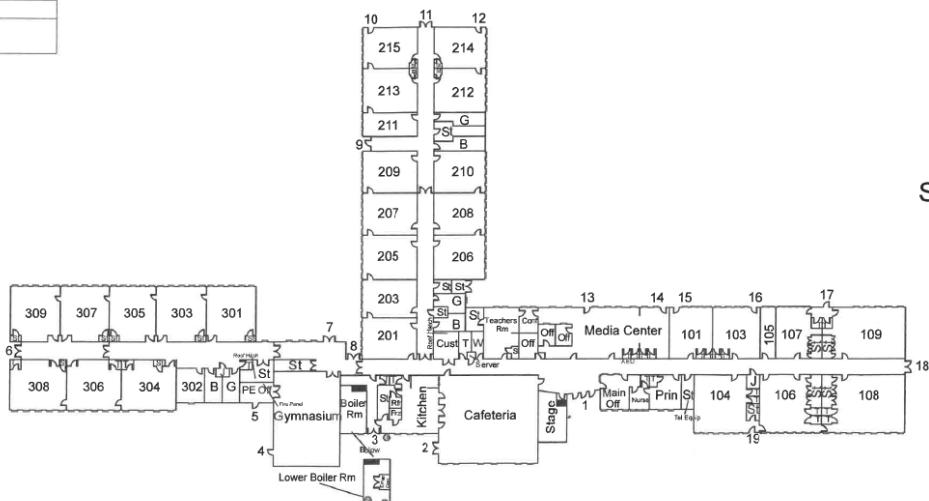
Main Floor

Side B

Side D

Legend

- Single Door
- Double Door
- Window
- Stairs
- Ramp
- Elevator
- Fire Extinguisher
- Gas Shut-Off
- Electrical Shut-Off
- Water Shut-Off
- Chair Lift
- Sprinkler Shutoff
- Generator
- Camera
- Fire Standpipe



Main Floor Plan 5

Tri-Town School Union

Appendix A: Capital Plan Schedule

Updated: 12/13/2017

Proposed Fiscal Year 2019

Dollar Place Holder (Estimated) - Note: Amounts are subject to change

		FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033
Steward	Curriculum			15,000	15,000	10,000		10,000		20,000						
Steward	End-User Technology															
Steward	Technology Infrastructure					100,000										150,000
Steward	Furniture															
Steward	Building Interior															
Steward	Bathrooms															
Steward	Flooring				60,000	60,000	70,000									
Steward	Floor Care Equipment		13,500													
Steward	Large Scale Painting						150,000					200,000				
Steward	Grounds															
Steward	Septic System															
Steward	Playground Equipment & Parking Lot															
Steward	Roofs		2,887,443													
Steward	Building Exterior															
Steward	Windows							2,500,000								
Steward	Kitchen Equipment											400,000				
Steward	Boilers & Boiler Control											800,000				
Steward	Classroom HVAC											2,000,000				
Steward	Large HVAC Equipment															
Steward	Telephone Systems								100,000							
Steward	Security Systems		85,000													
Steward	Public Address Systems															
Steward	Master Clock Systems		50,000													
Steward	Water															
Steward	Electrical															
Steward	Emergency Generator															

Steward School Proposed Future Capital Requests

Curriculum FY2021, FY2022, FY2023, FY2025, & FY2027: Curriculum review and program enhancement and/or modifications will be investigated and evaluated. Investments in curriculum at the amounts projected will be presented in the operating budget.

Technology Infrastructure FY2023 & FY2033: The technology infrastructure will be at the end of its useful life by 2023 and will be in excess of ten years old. We are projecting that we will need to replace the existing switches and wireless access points with more powerful switches and wireless access points in order to handle the increase in internet traffic.

We are investigating options concerning building servers and off site options. Our goal is to move away from onsite servers and move to a secure offsite solution. We believe this will be a cost and budget friendly plan for our future educational technology needs.

Flooring FY2022 – FY2024: For FY2022 we will be proposing a multi-year/phased floor replacement program. The proposal will be to replace flooring over a three year period in the classrooms, assembly area, and hallways.

Floor Care Equipment FY2020: The current Auto Scrubber will come to the end of its extended life. The facilities staff go to great effort to preserve the equipment so that they may extend the useful life beyond industry recommendations.

Large Scale Painting FY2024 & FY2029: We will propose large scale exterior painting at the school. The proposed capital expense will include specification development, labor, and materials.

Roof FY2019: The work for the Steward School Roof Project will begin in May 2018 and be substantially complete in October of 2018. Punch-list items are anticipated as we work toward project completion.

Windows FY2026: For FY2026 we will file a SOI to participate/partner with the MSBA in the ARP to replace the windows. The project will consist of a study, design, engineering, and installation.

Kitchen Equipment FY2029: The proposal involves feasibility study, design, installation, and renovation of the kitchen and kitchen equipment.

Boilers & Boiler Controls FY2029: For FY2029 we will file a SOI to participate/partner with the MSBA in the ARP to replace the Boilers and Boiler Controls. The project will consist of a study, design, engineering, and installation.

Classroom Unit Ventilators Equipment FY2029: This proposed capital expense would be to replace end of life classroom unit ventilator equipment. The capital request would include engineering study and design along with appropriate equipment and ancillary building work.

Telephone System FY2026: By FY2026 the phone system will come to the end of its useful life. The proposal includes feasibility and system design and turn-key installation.

Security System FY2020: Steward School is in need of an appropriate surveillance system. We will be proposing a video surveillance system for the Steward School. The proposal will include engineering, design, turnkey installation, and training. This will be discussed in greater detail and may require an adjustment in the timeline for implementation.

Master Clock/PA System FY2020: We will propose the replacement of the existing Master Clock/PA System. The capital expense includes design and turnkey installation.

Proctor Elementary School Overview

Building Square Footage: 56,144 square feet

Proctor School was constructed in 1932 with additions for expansion in 1952, 1958, 1973 and 1994. A renovation and expansion of several classrooms was completed in 1998 - 1999. The exterior of the building is brick with wood trim. The wood trim was re-painted in 2015.

The building exterior walls are brick with metal and wood trim. Interior walls are CMU and GWB. The roof is gray slate on the original 3 story Georgian building with copper gutters and downspouts. Low slope EPDM on classroom wings, Media Center and Kitchen with internal drains. Asphalt shingles on Gymnasium with aluminum gutters and PVC downspouts. Historical leak areas have been throughout EPDM areas with more frequent problems in a recessed EPDM area over the Library. Another area of frequent leaking is the cupola area on the Georgian roof and other slate intersection flashed areas.

Variety of windows throughout the building. Georgian 3 story building has double hung fiberglass insulated units. Majority of single story building is aluminum frame awning style with insulated units. Kitchen/café have steel frame single pane.

Interior of building is a mixture of painted CMU and Painted GWB walls. Ceilings are ACT throughout. Flooring is VCT throughout classrooms and hallways with the exception of Gymnasium (wood) and Media Center (carpet). Bathrooms are a mixture of VCT and ceramic tile. Doors are maple HC with poly finish or painted solid wood. Exterior doors are FRP. Lighting is all T-8/28W with exception of Gymnasium, T-5.

Classrooms heated and ventilated through CRUV's, pneumatically controlled with HW coils. Exhaust via roof top mushroom exhaust. HWH via (2) Gas Fired sectional boilers through a primary/secondary circulation loop using 9 circulation pumps. Administration, Media Center and office area via DX CV RTU with HW reheat coils. Gymnasium served by (2) CV AHU with HW coils. Kitchen served by CV AHU with HW coil.

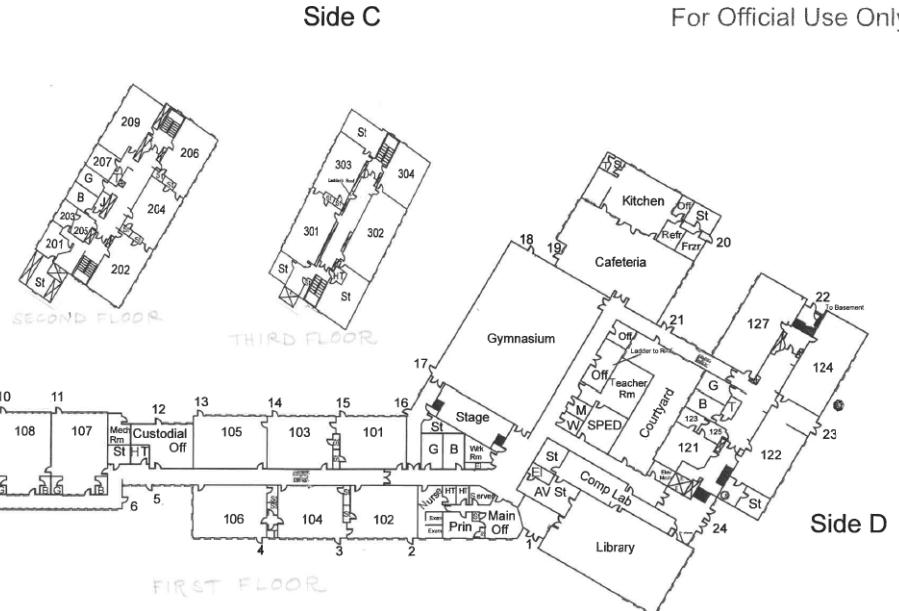
Electrical service is 1000A Main Service with main distribution to local power and lighting circuit panels. All panels using circuit breaker protection throughout. All interior lighting retrofitted in 2011 to T-8 and exterior retrofitted in 2013 to LED. Backup power provided by on site 300KW Diesel Generator.

The 1996 Renovation project consisted of classrooms partitions, flooring, interior finishes and accessories, replacement of boilers, HWH pumps and DHW heater. Kitchen rehab with new equipment.

District:	Topsfield
School Name:	Proctor Elementary School
Address:	60 Main Street Topfield, MA 01983
School Hours:	
In-session Contact:	
Off-Hours Contact:	
Approach Hazards:	
Notes:	

First Floor

Side B



Side A

For Official Use Only

Side D

First Floor Plan 5

Proctor School Proposed Future Capital Requests

Tri-Town School Union

Appendix A: Capital Plan Schedule

Updated: 12/13/2017

Proposed Fiscal Year 2019

		Dollar Place Holder (Estimated) - Note: Amounts are subject to change														
		FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033
Proctor	Curriculum		15,000	10,000	10,000	10,000		10,000		15,000						
Proctor	End-User Technology															
Proctor	Technology Infrastructure														150,000	
Proctor	Furniture								50,000							
Proctor	Building Interior															
Proctor	Bathrooms														350,000	
Proctor	Flooring				60,000	60,000	70,000									
Proctor	Floor Care Equipment														16,000	
Proctor	Large Scale Painting														200,000	
Proctor	Grounds				90,000											
Proctor	Septic System															
Proctor	Playground Equipment & Parking Lot															
Proctor	Roofs		3,325,549													
Proctor	Building Exterior															
Proctor	Windows									2,500,000						
Proctor	Kitchen Equipment															
Proctor	Boilers & Boiler Control														400,000	
Proctor	Classroom HVAC														800,000	
Proctor	Large HVAC Equipment														2,000,000	
Proctor	Telephone Systems															
Proctor	Security Systems		85,000													
Proctor	Public Address Systems															
Proctor	Master Clock Systems				50,000											
Proctor	Water															
Proctor	Electrical															
Proctor	Emergency Generator														200,000	

Curriculum FY2020, FY2021, FY2022, FY2023, FY2025, & FY2027: Curriculum review and program enhancement and/or modifications will be investigated and evaluated. Investments in curriculum at the amounts projected will be presented in the operating budget.

Technology Infrastructure FY2023 & FY2033: The technology infrastructure will be at the end of its useful life by 2023 and will be in excess of ten years old. We are projecting that we will need to replace the existing switches and wireless access points with more powerful switches and wireless access points in order to handle the increase in internet traffic.

We are investigating options concerning building servers and off site options. Our goal is to move away from onsite servers and move to a secure offsite solution. We believe this will be a cost and budget friendly plan for our future educational technology needs.

Classroom Furniture FY2024: We will evaluate the condition of the classroom furniture throughout the building and propose a list of new furniture for consideration.

Bathrooms FY2029: The bathrooms are due for renovation as well as outfitting them with water efficient equipment. We propose the Georgian wing would be renovated in FY2029. The capital proposal includes design, engineering, and turnkey installation.

Flooring FY2022 – FY2024: For FY2022 we will be proposing a multi-year/phased floor replacement program. The proposal will be to replace flooring over a three year period in the classrooms, assembly area, and hallways.

Floor Care Equipment FY2028: The current Auto Scrubber will come to the end of its extended life. The facilities staff go to great effort to preserve the equipment so that they may extend the useful life beyond industry recommendations.

Large Scale Painting FY2024 & FY2029: We will propose large scale exterior painting at the school. The proposed capital expense will include specification development, labor, and materials.

Grounds – Parking Lot FY2021: We will propose the engineering study and replacement of the parking lot for the Proctor campus.

Roof FY2019: The work for the Steward School Roof Project will begin in May 2018 and be substantially complete in October of 2018. Punch-list items are anticipated as we work toward project completion.

Windows FY2026: For FY2026 we will file a SOI to participate/partner with the MSBA in the ARP to replace the windows. The project will consist of a study, design, engineering, and installation.

Kitchen Equipment FY2029: The proposal involves feasibility study, design, installation, and renovation of the kitchen and kitchen equipment.

Boilers & Boiler Controls FY2029: For FY2029 we will file a SOI to participate/partner with the MSBA in the ARP to replace the Boilers and Boiler Controls. The project will consist of a study, design, engineering, and installation.

Classroom Unit Ventilators Equipment FY2029: This proposed capital expense would be to replace end of life classroom unit ventilator equipment. The capital request would include engineering study and design along with appropriate equipment and ancillary building work.

Telephone System FY2026: By FY2026 the phone system will come to the end of its useful life. The proposal includes feasibility and system design and turn-key installation.

Security System FY2022: Proctor School is in need of an appropriate surveillance system. We will be proposing a video surveillance system for the Proctor School. The proposal will include engineering, design, turnkey installation, and training. This will be discussed in greater detail and may require an adjustment in the timeline for implementation.

Master Clock/PA System FY2020: We will propose the replacement of the existing Master Clock/PA System. The capital expense includes design and turnkey installation.

Emergency Generator FY2030: This proposed capital expense would be to replace end of life emergency generator. The capital request would include engineering study, design and turn-key installation.

February 28, 2018

TO: Scott Morrison, Superintendent of Schools
Middleton School Committee

FROM: Steven Greenberg, Assistant Superintendent of Operations

SUBJECT: FY19 Capital Plan

The purpose of this memorandum is to update the information associated with the proposed capital requests for the elementary schools for FY19.

Included with this memorandum is quote information for your review.

Fuller Meadow School:

End-user Technology

<u>Quantity</u>	<u>Description</u>	<u>Unit Cost</u>	<u>Total Cost</u>
41	Acer Chromebooks	292.00	11,972.00
2	Chromebook Carts	1,492.00	2,984.00
20	iPads	299.00	5,980.00
20	iPad Covers	39.00	780.00
4	Lightspeed Sound Systems	1,500.00	6,000.00
5	Document Cameras	299.00	1,495.00
5	Replacement Laptops (HP Pro 450G4)	748.00	3,740.00
			-

Special Education Technology

11	iPads	292.00	3,212.00
11	iPad Covers	39.00	429.00
2	VPP	500.00	1,000.00

Totals **37,592.00**

Infrastructure Equipment

<u>Quantity</u>	<u>Description</u>	<u>Unit Cost</u>	<u>Total Cost</u>
12	Aerohive WAPs	1,153.77	13,845.24
2	48 Port Dell Switches	2,350.00	4,700.00
2	UPS	985.00	1,970.00

Totals **20,515.24**

Howe Manning School:**End-user Technology**

140	Acer Chromebooks	292.00	40,880.00
4	Interactive Board Replacements	6,000.00	24,000.00
22	iPads	299.00	6,578.00
22	iPad Covers	39.00	858.00
5	Lightspeed Sound Systems	1,500.00	7,500.00
5	Document Cameras	299.00	1,495.00
5	Replacement Laptops (HP Pro 450G4)	748.00	3,740.00
1	Phonak System	3,000.00	3,000.00

Special Education Technology

2	Interactive Board Replacements	6,000.00	12,000.00
15	iPads	292.00	4,380.00
15	iPad Covers	39.00	585.00
1	iPad Cart	1,500.00	1,500.00
1	VPP	500.00	500.00

Totals **107,016.00****Infrastructure Equipment**

<u>Quantity</u>	<u>Description</u>	<u>Unit Cost</u>	<u>Total Cost</u>
22	Aerohive WAPs	1,153.77	25,382.94
1	48 Port Dell Switches	2,350.00	2,350.00

Totals **27,732.94**

The total technology end-user equipment and infrastructure request is \$192,855.24.

With regard to the entire 15 year capital plan, the document is intended to communicate future capital needs with an approximation of cost.

As a reminder, the presented capital plan is based on estimated end of life, educational mandates, and curriculum update schedules. The capital plan is vulnerable to the economic, political, financial, and local environmental factors and constraints. Each of these factors have a strong influence in the district's ability to maintain the capital plan schedule. Therefore, while the original document functions as a desirable schedule, it is more like a guide for all stakeholders when you take into consideration the external influences. It is also important to stress that the school department is a department of the Town. We are willing and able to exercise flexibility with the schedule in order to support the overall financial condition of the Town and the capital needs of other Town Departments.

Please let me know if you have any questions or need additional information.



HIQ COMPUTERS
477 Riverside Ave.
Medford, MA 02155
617-951-4650
617-951-4651

Quote No: 24881
Date: 01/03/18
Page: 1

Sold To: Tri-Town School Union
Accounts Payable
28 Middleton Road
Boxford, MA 01921

Customer No: 3463
Phone No: 978-887-0771

Ship To:
Tri-Town School Union
28 Middleton Road
Boxford, MA 01921

Salesperson: #4 - Ben

Item Description	Qty	Unit Price	Amount
AEROHIVE AP250 AP250 with 3-Year License	57	595.00	33915.00
INSTALLATION/SETUP	57	50.00	2850.00
DELL N1148P SWITCH 48x 1G Ports Poe/PoE+ 4x 10G Uplinks	8	2350.00	18800.00
INSTALLATION/SETUP	1	800.00	800.00
APC SMT2200RM UPS	8	985.00	7880.00
INSTALLATION/SETUP	1	1200.00	1200.00
MISC Hardware Antennas, Connectors, and Related Components	100	30.00	3000.00
INSTALLATION/SETUP	1	0.00	0.00
CABLING for APs All new cabling required for Installing APs Parts and Labor included	1	24000.00	24000.00

This quote is valid for 30 days

Sub-Total: 92445.00
:
Shipping: 0.00
Tax [0]: EXEMPT*

Total: 92445.00

T h a n k
Y o u



QUOTE CONFIRMATION

DEAR STEVE GREENBERG,

Thank you for considering CDW-G for your computing needs. The details of your quote are below. [Click here](#) to convert your quote to an order.

QUOTE #	QUOTE DATE	QUOTE REFERENCE	CUSTOMER #	GRAND TOTAL
JPWV612	2/28/2018	ACER CHROMEBOOK	7829630	\$52,852.00

QUOTE DETAILS					
ITEM	QTY	CDW#	UNIT PRICE	EXT. PRICE	
<u>Acer Chromebook 14 CB3-431-C99D - 14" - Celeron N3060 - 4 GB RAM - 16 GB SS</u> Mfg. Part#: NX.GC2AA.016 UNSPSC: 43211503 Contract: Massachusetts IT Hardware Category 6 (ITC47)	181	4463363	\$261.00	\$47,241.00	
<u>Google Chrome Management Console License</u> Mfg. Part#: CROSSWDISEDU UNSPSC: 43232804 Electronic distribution - NO MEDIA Contract: Massachusetts IT Hardware Category 6 (ITC47)	181	3577022	\$25.00	\$4,525.00	
<u>CDWG EDU White Glove Service for Chromebooks and Chrome OS Devices T1</u> Mfg. Part#: CDWCHROMEOS SVC1 UNSPSC: 43232401 Contract: Massachusetts IT Hardware Category 6 (ITC47)	181	3254461	\$6.00	\$1,086.00	
<u>CDW/CDWG Asset Tag applied WITH another CDW Configuration Center service</u> Mfg. Part#: ASSETTAGW/INSTALL UNSPSC: 81111511 Contract: Massachusetts IT Hardware Category 6 (ITC47)	181	338520	\$0.00	\$0.00	
INSTALL SUMMARY					
ITEM	QTY	CDW#			
<u>Acer Chromebook 14 CB3-431-C99D - 14" - Celeron N3060 - 4 GB RAM - 16 GB SS</u>	181	4463363			
ITEMS TO BE INSTALLED					
CDWG EDU White Glove Service for Chromebooks and Chrome OS Devices T1	181	3254461			
CDW/CDWG Asset Tag applied WITH another CDW Configuration Center service	181	338520			

PURCHASER BILLING INFO	SUBTOTAL	\$52,852.00
Billing Address: TRI TOWN SCHOOL UNION ACCTS PAYABLE 28 MIDDLETON RD BOXFORD, MA 01921-2336 Phone: (978) 750-1955 Payment Terms: NET 30 Days-Govt/Ed	SHIPPING	\$0.00
	GRAND TOTAL	\$52,852.00
DELIVER TO		Please remit payments to:

Shipping Address:
TRI TOWN SCHOOL UNION
STEVE GREENBERG
28 MIDDLETON RD
BOXFORD, MA 01921-2336
Phone: (978) 750-1955
Shipping Method: FEDEX Ground

CDW Government
75 Remittance Drive
Suite 1515
Chicago, IL 60675-1515

Need Assistance? CDW•G SALES CONTACT INFORMATION



Jim Pinto

| (866) 743-5679

| jimpin@cdwg.com

This quote is subject to CDW's Terms and Conditions of Sales and Service Projects at
<http://www.cdwg.com/content/terms-conditions/product-sales.aspx>
For more information, contact a CDW account manager

© 2018 CDW•G LLC, 200 N. Milwaukee Avenue, Vernon Hills, IL 60061 | 800.808.4239

iPad

[Overview](#) [iOS](#) [Tech Specs](#)[Trade in your eligible iPad and get credit toward a new one. Learn more >](#)

Buy iPad

Get free two-business-day delivery on any in-stock iPad ordered by 5:00 p.m.*

Space Gray

[Change](#)

32GB¹

[Change](#)

Connectivity

Wi-Fi

\$329.00

Wi-Fi + Cellular

\$459.00

[Do you need Wi-Fi or Wi-Fi + Cellular?](#)

From \$329

 [View gallery](#)

 [Add AppleCare+](#)

Get up to two years of tech support and accidental damage coverage.

\$99.00



[Get help buying. Chat now or call 1-800-MY-APPLE.](#)

What's in the Box



iPad



Lightning to USB Cable



USB Power Adapter

Compare iPad models

[Find the best iPad for you >](#)



12.9-inch iPad Pro
From \$799



10.5-inch iPad Pro
From \$649



iPad
From \$329



iPad mini 4
From \$399

Frequently Asked Questions



Answers from the Community



1. Available space is less and varies due to many factors. A standard configuration uses approximately 8GB to 11GB of space (including iOS and preinstalled apps) depending on the model and settings. Preinstalled apps use about 4GB, and you can delete these apps and restore them.

**We approximate your location from your Internet IP address by matching it to a geographic region or from the location entered during your previous visit to Apple.

[iPad](#) [iPad 9.7-inch](#) [Buy iPad 9.7-inch](#)

[Shop and Learn](#)
[Mac](#)

[Apple Store](#)
[Find a Store](#)

[For Education](#)
[Apple and Education](#)

[Account](#)
[Manage Your Apple ID](#)

[About Apple](#)
[Apple Info](#)

[iPad](#)
[iPhone](#)
[Watch](#)
[TV](#)
[Music](#)
[iTunes](#)
[HomePod](#)
[iPod touch](#)
[Accessories](#)
[Gift Cards](#)

[Genius Bar](#)
[Today at Apple](#)
[Youth Programs](#)
[Apple Store App](#)
[Refurbished and Clearance](#)
[Financing](#)
[Reuse and Recycling](#)
[Order Status](#)
[Shopping Help](#)

[Shop for College](#)
For Business
[Apple and Business](#)
[Shop for Business](#)

[Apple Store Account](#)
[iCloud.com](#)
[Apple Values](#)
[Accessibility](#)
[Education](#)
[Environment](#)
[Inclusion and Diversity](#)
[Privacy](#)
[Supplier Responsibility](#)

[Newsroom](#)
[Job Opportunities](#)
[Investors](#)
[Events](#)
[Contact Apple](#)

More ways to shop: Visit an Apple Store, call 1-800-MY-APPLE, or find a reseller.

Copyright © 2018 Apple Inc. All rights reserved.

[Privacy Policy](#)

[Terms of Use](#)

[Sales and Refunds](#)

[Legal](#)

[Site Map](#)

 United States



Redcat Options



Included

Redcat



Access Primary Microphone

- Flexmike
- Sharemike

SELECT AN OPTION ▶

Secondary Microphone

- None
- Flexmike
- Sharemike

Media Connector

SELECT AN OPTION ▶

- None
- Access Media Connector

Item Summary

SKU: RCA-F

MSRP Price

\$1367.00

[Add To Quote](#) [Add To Order](#)

[Continue Shopping >](#)

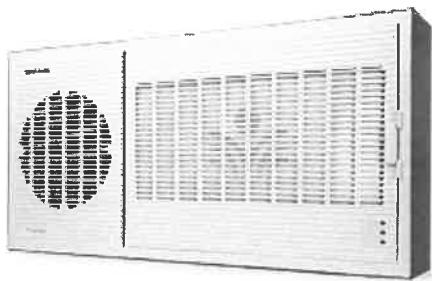
Educational pricing available

With a Lightspeed Account you've got access to our "education pricing" for professionals, order tracking and time savings.

[Login or Create Account >](#)



Topcat Options



Topcat

Included



Access Primary Microphone

- Flexmike
- Sharemike

SELECT AN OPTION ▶

Access Secondary Microphone

- None
- Flexmike
- Sharemike

SELECT AN OPTION ▶

Media Connector

- None
- Access Media Connector

Item Summary

SKU: TCA-F

MSRP Price **\$1562.00**

[Add To Quote](#) [Add To Order](#)

[Continue Shopping >](#)

Educational pricing available

With a Lightspeed Account you've got access to our "education pricing" for professionals, order tracking and time savings.

[Login or Create Account >](#)

IPEVO

Design
for Learning

VZ-X Wireless, HDMI & USB 8MP Document Camera

Wi-Fi, HDMI and USB.
Giving you different possibilities.

\$299.00

Model Number: 5-884-4-01-00

Available April 2018

[Tweet](#) [Like 6](#) [Save](#)



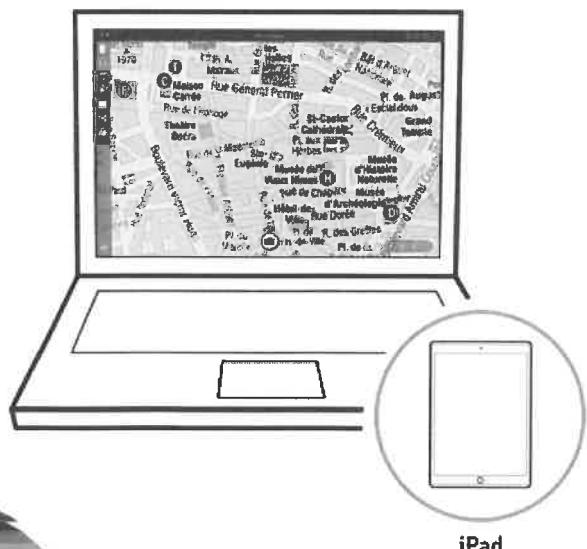
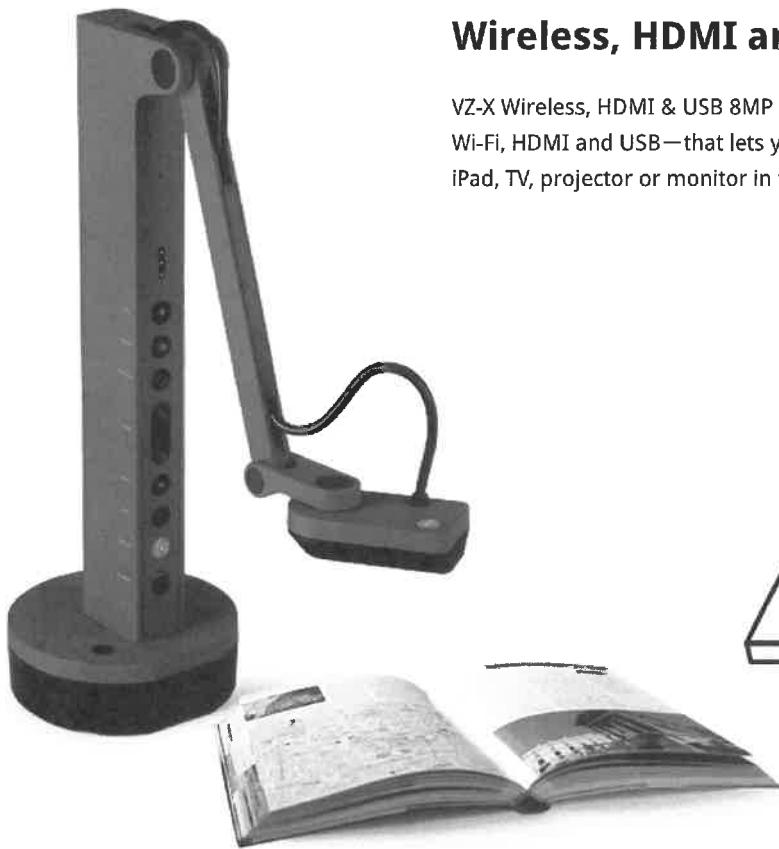


Features

IPEV

Wireless, HDMI and USB connectivity.

VZ-X Wireless, HDMI & USB 8MP Document Camera features three modes of connection—Wi-Fi, HDMI and USB—that lets you capture and stream real-time images to your computer, iPad, TV, projector or monitor in the connectivity mode that best suits your needs.



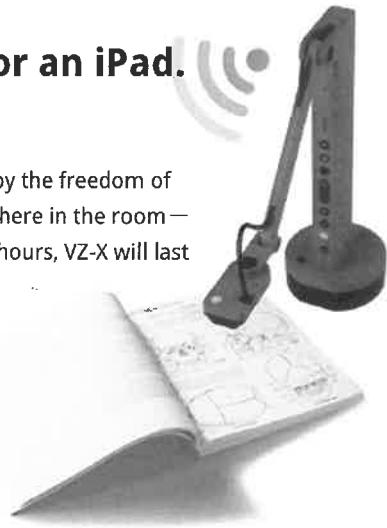
iPad





Wireless connection to a computer or an iPad. Engage from anywhere in the room.

Connect VZ-X wirelessly to your computer or iPad via Wi-Fi and enjoy the freedom of streaming real-time images for teaching and presenting from anywhere in the room — all without wires getting in the way! And with a battery life of 9~12 hours, VZ-X will last you through your entire lesson.



Flat Screen TV



Projector

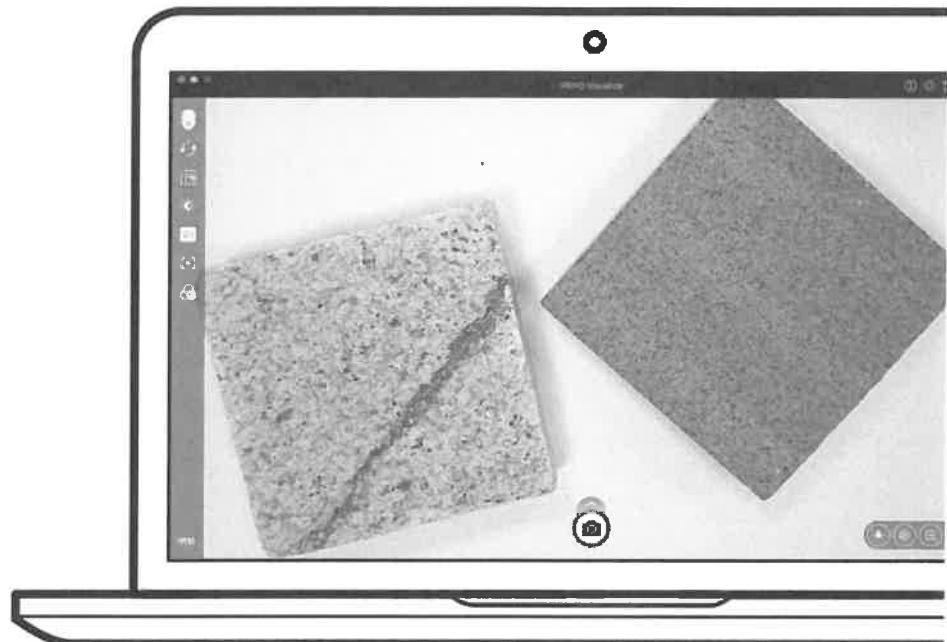
Direct HDMI projection to TV and projector. No computer required.

Skip the need for a computer and stream real-time images directly to your TV, projector or monitor using an HDMI connection. This helps to cut the clutter and makes large screen projection more straightforward.

Compatible with different software in USB mode. One document camera, many uses.

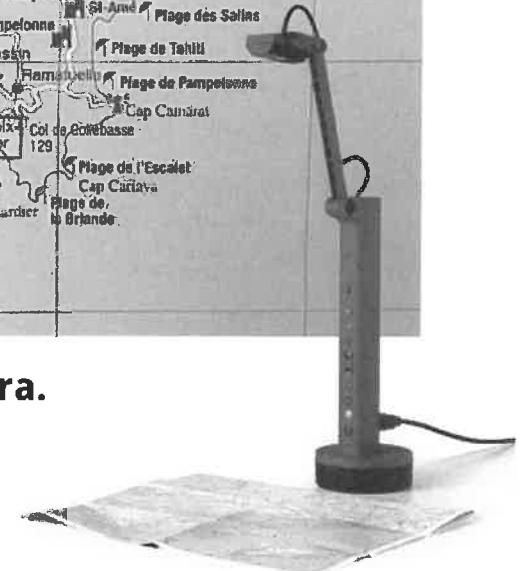
Use VZ-X in its USB mode with a computer via a USB connection to capitalize on its compatibility with a wide variety of software. You may use it with our newly developed IPEVO Visualizer software that features an intuitive UI and borderless window display to present student work, or, create flipped classroom videos with video recording software such as Camtasia or OBS. Additionally, you can even double it up as a webcam for online meetings, video conferencing or remote teaching when used with video conferencing software such as GoToMeeting, Skype or Google Hangouts.

*VZ-X features a built-in microphone that is only functional in USB mode.



Capture stunning details with the 8 MP camera. Be surprised at what you see.

Place your material under VZ-X, capture details you wish to show to your audience using its 8 MP camera and be surprised at how crisp and clear the images are! A range of high definition resolutions is available for your different needs.



Performance boost with Sony CMOS image



sensor and Ambarella SoC. Fast focus, low noise, excellent color reproduction.

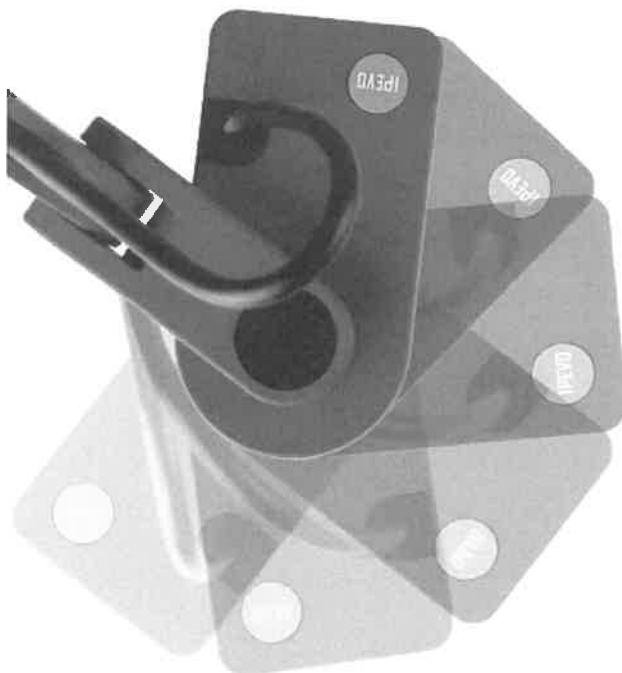
With a Sony CMOS image sensor and a powerful Ambarella integrated system-on-a-chip (SoC), you'll find enhanced performance in areas of focusing speed, noise reduction under low-light conditions and reproduction of colors as compared with previous models of IPEVO doc cams. This allows you to teach or present with lesser disruptions, distortions, and latency even in dimly lit environments.



Stronger with glass fiber reinforced stand.

Inside VZ-X's stand, you'll find a type of glass fiber reinforced thermoplastic—GVX-5H (developed by the Swiss company EMS-GRIVORY). Having the strength of metal yet light-weighted than most, GVX-5H has been widely used to replace metal components in many different applications. With it, you'll enjoy increased durability as VZ-X is less likely to break from heavy daily usage.





Swiveling head and multi-jointed stand. Capture from different heights, angles and orientations.

With a swiveling head and strengthened multi-jointed stand, you're free to position VZ-X at different heights, angles and various orientations for capturing your material.



Small footprint. Big impact.

VZ-X's small footprint allows you to do more with a limited amount of space. Its base won't take up too much of your desk, and the unit can be folded together and transported between classrooms, home or office.



Built-in LED light. Light up when you need it.

VZ-X features a built-in LED light that gives you additional illumination for capturing material in dimly lit environments. It is ideal for use in classrooms or conference

rooms that don't have adequate lighting.

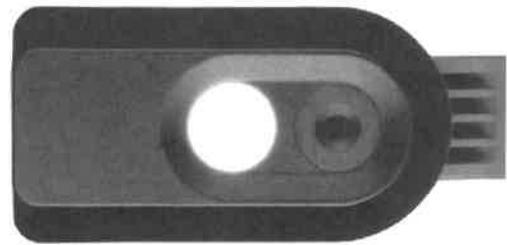
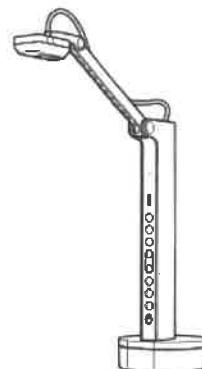


Image adjustments at your fingertips. Capture the perfect image easily.

Adjust the real-time images instantly to better fit your needs using the buttons conveniently located on VZ-X. You can rotate, apply video filters, adjust exposure, refocus, take snapshots, and do much more!

Features at a Glance

- Wi-Fi, HDMI and USB connectivity—choose the connectivity mode that best suits your needs.
- Connect wirelessly to your computer or iPad via Wi-Fi and enjoy the freedom to stream real-time images from anywhere in a room.
- Battery life of 9~12 hours—enough to last you through your entire lesson.
- Skip the need for a computer and stream real-time images directly to TVs, projectors, or monitors via HDMI.
- Use it with your computer via *USB mode to capitalize on its compatibility with a wide variety of third-party software such as Skype, Google Hangouts, GoToMeeting, Camtasia, OBS and more.
- *VZ-X features a built-in microphone that is only functional in USB mode.
- 8 Megapixel camera lets you capture stunning details of your material.
- Performance boost with Sony CMOS image sensor and Ambarella integrated system-on-a-chip (SoC)—faster focusing speed, better noise reduction under low-light conditions and excellent reproduction of colors for lesser disruptions, distortions and latency.



- Increased strength and durability with glass fiber reinforced stand (GVX-5H).
- Capture from different heights, angles and orientations with VZ-X's swiveling head and multi-jointed stand.
- Small footprint and vertical design give you a decisive space advantage.
- Built-in LED light for capturing material in dimly lit environments.
- Adjust real-time images instantly with buttons conveniently located on VZ-X. You can rotate, adjust exposure, apply video filters, take snapshots and do much more.

[Track Your Packages](#)[Enter Email to receive tracking information.](#)[Email Me](#)**Tel: 1-408-490-3085 Fax: 1-408-516-8168 440 N. Wolfe Road, Sunnyvale, CA 94085****Follow Us:****Products**[VZ-R HDMI/USB Dual Mode 8MP Document Camera](#)[V4K Ultra High Definition USB Document Camera](#)[VZ-X Wireless, HDMI & USB 8MP Document Camera](#)[All Products](#)**Service & Resources**[Downloads & Updates](#)[Need Help?](#)[Video Tutorials](#)[Ideas & Inspiration](#)[School POs](#)[International](#)[Contact Us](#)**IPEVO**[Who We Are](#)[Press & Media](#)[Catalog 2017](#)[Developer](#)[Wishpool](#)[EdTech Conferences](#)[IPEVO Sponsorship](#)[Terms of Use](#)[Software Privacy Policy](#)**Store**[New Customers](#)[My Account](#)[Order Status](#)[Order Change and Cancellation](#)[Return Request](#)[Warranty Information](#)[TOP OF PAGE](#)

Content on this site is licensed under a Creative Commons Attribution-ShareAlike 3.0 License.

Copyright © 2018 IPEVO Inc.

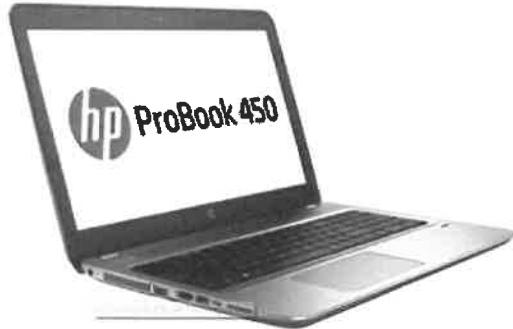


Welcome to HP Customer Support

[Support Home](#) [Products](#) [Software and Drivers](#) [Forums](#) [Contact Support](#) [Business Support](#) 

HP ProBook 450 G4 Notebook PC Product Specifications

- [Product features](#)
- [Operating systems](#)
- [Processors](#)
- [Graphics](#)
- [Displays](#)
- [Storage/drives](#)
- [Memory](#)
- [Networking/communications](#)
- [Audio/multimedia](#)
- [Keyboards/pointing devices](#)
- [Software/security](#)
- [Power](#)
- [Weight/dimensions](#)
- [Ports/slots](#)



HP ProBook 450 G4 Notebook PC

Product features

Specification	Description
Weight	Starting at 2.04 kg (4.5 lbs)

Specification	Description
	Non-Touch
Dimensions (W x D x H)	38.20 x 26.30 x 2.44 cm (15.04 x 10.35 x 0.96 in)
	Touch
	38.22 x 26.35 x 2.61 cm (15.05 x 10.37 x 1.03 in)

Operating systems

Specification	Description
	Windows 10 Pro 64
Preinstalled, Windows ^{1,2}	Windows 10 Pro (National Academic only) Windows 10 Home 64 Windows 10 Home Single Language 64 Windows 10 Home 64 (National Academic only)
Preinstalled, other	FreeDOS 1.2
Web only support ^{1,2}	Windows 10 Pro 64 Windows 10 Home 64 Windows 10 Enterprise 64

NOTE:

¹Not all features are available in all editions or versions of Windows. Systems might require upgraded and/or separately purchased hardware, drivers, software, or BIOS update to take full advantage of Windows functionality. Windows 10 automatic updates are always enabled. ISP fees might apply and additional requirements might apply over time for updates.

NOTE:

²This product does not support Windows 8 or Windows 7. In accordance with Microsoft support policy, HP does not support the Windows 8 or Windows 7 operating system on this product or provide any Windows 8 or Windows 7 drivers.

Processors

Specification	Description
	2.4 GHz
Intel Core i3-7100U Intel HD Graphics 620 ¹	3 MB L3 cache 2 cores
	2.5 GHz, up to 3.1 GHz with Intel Turbo Boost technology
Intel Core i5-7200U Intel HD Graphics 620 ¹	3 MB L3 cache 2 cores
	2.7 GHz, up to 3.5 GHz with Intel Turbo Boost technology
Intel Core i7-7500U Intel HD Graphics 620 ¹	4 MB L3 cache 2 cores
Chipset	Integrated

 **NOTE:**

¹Processor speed denotes maximum performance mode; processors run at lower speeds in battery optimization mode. Multicore is designed to improve performance of certain software products. Not all customers or software applications necessarily benefit from use of this technology. Performance and clock frequency vary depending on application workload and hardware and software configurations. Intel numbering is not a measurement of higher performance. HD content required to view HD images.

Graphics

Specification	Description
Integrated	<p>Intel HD Graphics 620</p> <p> NOTE:</p> <p>HD content required to view HD images.</p>

Specification	Description
	NVIDIA GeForce 930MX (2 GB DDR3 dedicated, switchable)
Discrete	<p>⚠ NOTE:</p> <p>NVIDIA Optimus technology requires an Intel processor, plus an NVIDIA GeForce discrete graphics configuration and is available on Windows 10 Professional. With NVIDIA Optimus technology, full enablement of all discrete graphics video and display features might not be supported on all systems (e.g. OpenGL applications run on the integrated GPU or the APU).</p>

Displays

Specification	Description
Non-touch	<p>39.62 cm (15.6 in) diagonal HD anti-glare LED-backlit (1366 x 768)</p> <p>39.62 cm (15.6 in) diagonal FHD anti-glare LED-backlit (1920 x 1080)</p>
Touch	39.62 cm (15.6 in) diagonal HD touch screen (1366 x 768)
External	<p>Up to 32-bit per pixel color depth</p> <p>VGA: resolutions up to 2048 x 1536 external resolution at 60 Hz</p> <p>HDMI: resolutions up to 4096 x 2160 at 24 Hz and 7-channel audio</p>

⚠ NOTE:

Resolutions are dependent upon monitor capability and resolution and color depth settings. HD content required to view HD images.

Storage/drives

Specification	Description

Specification	Description
Hard drives ¹	<p>SATA 7 mm/9.5 mm (.28 in/.37 in), 6.35 cm (2.5 in) hard drives supported</p> <p>500 GB (5400 rpm) hard drive</p> <p>500 GB (5400 rpm) SSHD (Hybrid) (8 GB cache)</p> <p>500 GB (7200 rpm) hard drive</p> <p>1 TB (5400 rpm) hard drive</p> <p>2 TB (5400 rpm) hard drive</p>
Mini card solid state drives ¹	<p>M.2 (NGFF) 2280 solid state drive</p> <p>128 GB SATA-3 Value solid state drive</p> <p>256 GB SATA-3 Value solid state drive</p>
Dual solid state drive ¹	256 GB + 256 GB SATA-3 Value solid state drive
HP 3D DriveGuard (Windows only)	Yes
Optical drives (optional)	<p>Fixed</p> <p>9.0 mm (.35 in) SATA</p> <p>DVD-ROM</p> <p>DVD+/-RW SuperMulti DL Drive</p> <p>NOTE:</p> <p>For Blu-ray drives, certain disc, digital connection, compatibility and/or performance issues might arise, and do not constitute defects in the product. Flawless playback on all systems is not guaranteed. Some Blu-ray titles might require an HDMI digital connection, and your display might require HDCP support. HD-DVD disks cannot be played on this drive. Note that DVD-RAM cannot read or write to 2.6 GB single sided/5.2 GB double sided version 1.0 media. Actual speeds might vary.</p>

NOTE:

¹For solid state drives or hard drives, GB = 1 billion bytes. TB = 1 trillion bytes. Actual formatted capacity is less. Up to 30 GB (for Windows 10) is reserved for system recovery software.

Memory

Specification	Description
	<p>(2) SODIMM slots (customer accessible/upgradeable)</p> <p>Dual channel memory</p> <p>NOTE:</p> <p>Maximized dual-channel performance requires SODIMMs of the same size and speed in both memory slots.</p>
Standard	<p>DDR4 PC4, transfer rates up to 2133 MT/s</p> <p>4 GB total system memory (4 GB x 1)</p> <p>8 GB total system memory (4 GB x 2) (dual channel)</p> <p>8 GB total system memory (8 GB x 1)</p> <p>12 GB total system memory (8 GB + 4 GB) (dual channel)</p> <p>16 GB total system memory (8 GB x 2) (dual channel)</p>
Support	Up to 16 GB (8 GB x 2)

Networking/communications

Specification	Description
Broadband Wireless (WWAN) (optional) ^{1, 2}	HP lt4132 LTE/HSPA+ 4G mobile broadband
Wireless LAN (WLAN) (optional) ¹	<p>Realtek 802.11b/g/n (1 x 1) and Bluetooth 4.0 combo</p> <p>Intel dual band Wireless-AC 3168 802.11a/b/g/n/ac (1 x 1) Wi-Fi and Bluetooth 4.0 combo</p> <p>Intel dual band Wireless-AC 8265 802.11a/b/g/n/ac (2 x 2) Wi-Fi and Bluetooth 4.0 combo (non-vPro)</p> <p>Intel dual band Wireless-AC 7265 802.11a/b/g/n/ac (2 x 2) Wi-Fi and Bluetooth 4.2 combo (non-vPro)</p>

Specification	Description
Ethernet	<p>Realtek RTL8111HSH (10/100/1000)*</p> <p>NOTE:</p> <p>*The term "10/100/1000" or "Gigabit" Ethernet indicates compatibility with IEEE standard 802.3ab for Gigabit Ethernet and does not connote actual operating speed of 1 Gb/s. For high-speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.</p>

NOTE:

¹Sold separately or as an optional feature. Wireless access point and Internet service required and sold separately. Availability of public wireless access points limited. The specifications for the 802.11ac WLAN are draft specifications and are not final. If the final specifications differ from the draft specifications, it might affect the ability of the notebook to communicate with other 802.11ac WLAN devices.

NOTE:

²Mobile broadband requires separately purchased service contract. Check with service provider for coverage and availability in your area. Connection speeds vary due to location, environment, network conditions, and other factors. 4G LTE not available on all products, or in all areas.

Audio/multimedia

Specification	Description
Audio	<p>(2) stereo speakers</p> <p>Integrated microphone (dual-microphone array when equipped with optional webcam)</p> <p>Headphone/microphone combo jack</p>
Webcam (optional) ¹	<p>HD camera</p> <p>720p</p>

NOTE:

¹Internet access required. HD content required to view HD images.

Keyboards/pointing devices

Specification	Description

Specification	Description
Keyboard	HP Premium keyboard Spill-resistant Separate numeric keypad Backlit (optional)
Clickpad	Gestures support 2-way scroll
Touchpad	Taps enabled as default Enabled by default, Windows 10 2-finger scrolling 2-finger zoom (pinch) OSD (enable/disable) 3-finger tap = Cortana 3-finger flick = App switch 4-finger tap = Action Center Disabled by default, Windows 10 3-finger flick 2-finger rotate Momentum motion 1-finger vertical scroll

Software/security

Specification	Description

Specification	Description
BIOS	<p>HP BIOSphere</p> <p>⚠ NOTE:</p> <p>Available only on business PCs with HP BIOS. HP BIOSphere features might vary depending on the PC platform and configuration.</p> <p>HP DriveLock (HP Automatic DriveLock)</p> <p>HP BIOS Protection</p> <p>BIOS update via network</p> <p>Master boot record security</p> <p>Power on authentication</p> <p>Pre-boot security</p> <p>Secure Erase</p> <p>Hybrid boot</p> <p>Measure boot</p> <p>Secure boot</p> <p>Absolute persistence module (purchased subscription required)</p>
Multimedia	<p>Cyberlink Power Media Player</p> <p>⚠ NOTE:</p> <p>Only available with optical drive.</p> <p>Native Miracast support</p>
Communication	<p>HP Mobile Connect</p> <p>⚠ NOTE:</p> <p>HP Mobile Connect is only available on preconfigured devices with WWAN and is not available in all areas.</p>

Specification	Description
HP Value Add software	<p>HP 3D DriveGuard HP ePrint Driver</p> <p>⚠ NOTE: Requires an Internet connection to HP web-enabled printer and HP ePrint account registration. Requires optional broadband module. Broadband use requires separately purchased service contract.</p> <p>HP Hotkey support HP Recovery Manager HP Support Assistant</p>
Microsoft products	<p>Buy Office Bing search Skype (Not available in China)</p>
Manageability	<p>HP Driver Packs*</p> <p>HP SoftPaq Download Manager (SDM)</p> <p>HP System Software Manager (SSM)*</p> <p>HP BIOS Config Utility (BCU)*</p> <p>HP Client Catalog*</p> <p>HP CIK for Microsoft SCCM*</p> <p>LANDesk Management (subscription required)</p>
Security	<p>⚠ NOTE:</p> <p>*Available on manageability website.</p> <p>HP Security Manager Microsoft Defender Trusted Platform Module (TPM) 2.0 (1.2 optional) Lock slot HP Fingerprint Reader Pre-boot authentication</p>

Power

Specification	Description
Power supply	45 W smart AC adapter 45 W smart AC adapter 2-prong (Japan only) 65 W smart AC adapter 65 W EM smart AC adapter (China and India only)
Battery ¹	HP 3-cell, Long Life 48 WHr Li-ion Internal (not replaceable) Battery life Solid state drive: Up to 14 hrs and 15 mins Hard disk drive: Up to 12 hrs

¹Windows 10/MM14 battery life varies depending on product model, configuration, loaded applications, features, use, wireless functionality, and power management settings. The maximum capacity of the battery naturally decreases with time and usage.

Weight/dimensions

Specification	Description
Weight	Starting at 2.04 kg (4.5 lbs)
Dimensions (W x D x H)	Non-Touch 38.20 x 26.30 x 2.44 cm (15.04 x 10.35 x 0.96 in) Touch 38.22 x 26.35 x 2.61 cm (15.05 x 10.37 x 1.03 in)

NOTE:

Height varies depending upon where on the notebook the measurement is made. Weight varies by configuration and components.

Ports/slots

Specification	Description
Ports ¹	<ul style="list-style-type: none">(1) USB 3.0(2) USB 2.0(1) USB Type-C(1) HDMI(1) Headphone/microphone combo(1) AC power(1) RJ-45 (Ethernet)(1) VGA
Slots	<ul style="list-style-type: none">Multimedia readerSD, SDHC, SDXC supported

NOTE:

Cables sold separately.

Ask the community!**Support Forum**

Join the conversation! Find Solutions, ask questions, and share advice with other HP product owners. Visit now

Country/Region:  United States **About us**[Contact HP](#)[Careers](#)[Investor relations](#)[Sustainability](#)[Press center](#)[The Garage](#)**Ways to buy**[Shop online](#)[Store locator](#)[Call an HP rep](#)[Find a reseller](#)[Enterprise store](#)[Public sector purchasing](#)**Support**[Download drivers](#)[Support & troubleshooting](#)[Forums](#)[Register your product](#)[Authorized service providers](#)[Check repair status](#)[Training & certification](#)[Fraud alert](#)**HP Partners**[HP Partner First program](#)[HP Partner First Portal](#)[Developers](#)**Stay connected**[Sign up for news & offers](#)

[Recalls](#) | [Product recycling](#) | [Accessibility](#) | [CA Supply Chains Act](#) | [Site map](#) | [Privacy](#) | [Cookies & ad choices](#) | [Terms of Use](#) | [Limited warranty statement](#) | [Terms & conditions of sales & service](#)

Boxford - InFocus INF7530eAG Wall Mounted

Tri-Town School Union

Tri-Town School Union, Central Office
 28 Middleton Road
 Boxford, MA 01921
 978-887-0771

Name: Steve Guditus
 Title: Dir. of Educational Technology
 Phone: 978-412-2056
 Email: sguditus@tritownschoolunion.com



20 1st Ave
 Chicopee, MA 01020-4619
 800-522-4136
www.valleycommunications.com

James P. Tremble
 Regional Sales Manager | Eastern, MA



617-227-0601 Direct
 413-374-2876 Cell
JamesT@valleycommunications.com

Valley Communications Systems, Inc.

Valley Communications Systems, Inc. or licensed subcontractor ("VCS") will provide Tri-Town School Union ("The Client") the system described in this document. Owner Furnished Equipment ("OFE") is any equipment pre-existing or provided by The Client that is a part of this system. Client responsibilities are listed in detail at the end of this document.

Executive Summary:

VCS to install a 75" InFocus INF7530eAG LED Interactive Flat Panel with a fixed Chief wall mount. VCS will add cabling and a wall plate to the computer location.

Classrooms TBD:

Display:

VCS will install the 75" InFocus INF7530eAG LED Interactive Flat Panel with a fixed Chief wall mount. The display will need power provided by the Client. The InFocus unit comes with a 6' power cable. The display weighs 139 lbs.

Note: Please discuss with VCS if the display is to be installed on a 2nd floor and up. Please discuss with VCS if there is no elevator access. Additional labor may be necessary for the larger 75" interactive displays depending on access to the installation room.

Note: Please discuss with VCS if blocking will be necessary on the wall prior to installation.

75" Diagonal Display

Image Detail for 2-hour viewing:

1080p (1920 x 1080) (16:9) resolution
 65" w x 36.5" h (75" d) size

Max distance viewing Excel documents (or 11 point font): 11.5 ft.

Max distance for viewing web content (or 16 point font): 19.0 ft.

Max distance for viewing PowerPoint (at 24 point font): 38.5 ft.

Max distance for viewing video: 43.5 ft.

Closest comfortable viewing distance: 4.5 ft.

Wire and Cable:

The InFocus unit comes with a 6' HDMI and 6' USB. VCS will wrap the cables into protective Techflex.

Note: If there are setups that need longer cable connections or a request for wall plate (vs direct connections) please discuss with VCS Sales Representative.

Audio:

The display comes equipped with two Stereo 10 watt speakers. The Client may add more audio to the system at a later date.

Training:

At an additional cost, VCS can offer training on the InFocus panel. At an additional cost, VCS can offer training on the SMART Learning Suite & EPSON Software.

Owner Furnished Equipment [OFE]:

Laptop/Desktop computer.

Note: The Client must, with guidance from VCS, verify all existing functionality of any old AV equipment that will be integrated into the proposed system before the beginning of any proposed alterations. Any old or pre-existing equipment that VCS has specified to integrate as a part of this proposal but is beyond expected equipment end-of-life, or has previously been damaged by normal wear and tear, hazardous environmental conditions, use in excess of manufacturer's recommendation, alteration, user negligence, misuse, or any activity that would otherwise void the manufacturer's warranty cannot be guaranteed to retain any functionality after integration into the proposed system regardless of any initial functionality verification. VCS cannot guarantee the functionality of any remaining old equipment and connections that are not a part of any integration outlined in this proposal.

Client Responsibilities:

AC requirements:

- AC power is the responsibility of the Client and not VCS.
- VCS may direct as to power requirements and location of outlets as part of the design process.
- AC power hard-wired to equipment such as screens or lifts must be disconnected from AC power before being uninstalled.
- Any devices requiring hard-wired power must be connected to AC power after VCS's installation is complete.

Blocking:

- Blocking to support proposed equipment needs to be provided by the owner before the installation of the suspended equipment.
- VCS may direct as to blocking requirements and locations as part of the design process.

Prevailing Wage:

- The awarding authority must inform VCS if this is a prevailing wage qualifying installation and if so, provide VCS with prevailing wage rate sheets. The awarding authority can both register the opportunity and obtain up-to-date prevailing wage worksheets from the Massachusetts Executive Office of Labor and Workforce Development, Department of Labor Standards.
- The Client may register applicable projects at www.mass.gov/dols/pw

Supplied network capable equipment:

- All network configuration and setup is the responsibility of the Client.

Warranty:

VCS warrants against defects in the workmanship provided by VCS as it pertains to the scope of work included in this proposal. VCS will provide all necessary labor required to repair or replace any defects in workmanship for the period of one year from the date of installation. This warranty does not cover damage or system malfunction caused by normal wear and tear, hazardous environmental conditions, use more than the original equipment manufacturer's recommendation, alteration of the system or any of its parts, user negligence, misuse, or acts of God.

The manufacturer's warranty (begins when VCS orders the equipment) governs equipment repair or replacement. VCS facilitates repair or replacement of equipment covered by a manufacturer warranty for 30 days from the date of installation. After this 30-day period, VCS will facilitate repairs/replacements for the current time and material(s) rate, plus any applicable shipping cost(s). Any equipment repair or replacement not covered by a manufacturer's warranty will be billable as time and materials.

Classroom TBA	Unit Price	Total Price
Interactive Display		
1 InFocus INF7530eAG  75" Jtouch Plus, 4K, 10pt Touch, AG, OPS Bay, Android, Whiteboard, Browser, Casting	\$3,290.00	\$3,290.00

* Price Includes Accessories

** Rounded to the Nearest Whole Penny



Wall Mount					
	1	Chief LSA1U	Large Fusion Fixed Wall Display Mount	\$125.58	\$125.58
	1	Valley VAL-IKIT 1	Specific Heavy Duty Mounting Hardware	\$13.08	\$13.08
Patch Cables					
	6	Techflex, Inc. CCPT5X - EA	3/4in to 1 3/16in Flexo Clean Cut Tubing PER FOOT	\$0.54 **	\$3.24
Labor, Permits, and Fees					
	1	Valley Incoming Freight	Incoming Freight	\$171.25	\$171.25

Project Summary

Equipment:	\$3,603.15
Misc. Parts Adjustment:	\$72.06
Labor:	\$569.32
Grand Total:	\$4,244.53

Client: Steve Guditus

Date

Contractor: Valley Communications Systems, Inc.

Date

Terms and Conditions

PAYMENTS (If NOT Amended Above)

30% Payable with signed Sales Agreement/Purchase Order, Future Payments per Progress Billing and/or Final Billing.

Quote Valid for 30 days. Please include a copy of this quote with your purchase order. Quote does not include taxes (if not listed above). Quote does not include permits or fees that may be required. Valley Communications Systems, Inc. warrants the installation performed by Valley for 30 days from date of installation, unless you have a valid Service Contract or if stated otherwise above. After the 30 day warranty, any work performed will be billed at standard labor rates. All service will take place during normal working hours.

Customer Responsibilities

1. Designate a key customer representative to act as project manager. This individual will coordinate the activities of internal customer departments and services required for successful completion of the project.
2. Installation and termination of Fire alarm system, and/or interconnect, as needed.

* Price Includes Accessories

**Rounded to the Nearest Whole Penny



Valley Communications Systems

Page 3 of 4

Proposal No.

V-25105 - 0

3. Provide Valley Communications personnel prompt and unrestricted access to work areas for the duration of the project.
4. Provide adequate and secure space for storage of equipment, cable, hardware, and tools during the installation. This space will be as close as possible to the work area.
5. Provide conditioned 120 VAC power, conduit, back boxes and other raceway as necessary to operate equipment to be installed. If permanent power is not available at time of installation, temporary service will be supplied.
6. Computer Hardware, Internet connectivity, as well as the installation of all supporting computer software and drivers, all LAN provisioning, switches, routers, network connections, servers, operating systems and systems integration required to effectively run your installed interactive or other hardware device(s) and display equipment, unless specifically stated otherwise, is the exclusive responsibility of the Customer.
7. Provide any cutting, patching, painting or fire-safing as required.
8. All conduits, ductwork, and cable trays needed for cable runs will be free and clear, and supplied with a pull string.
9. Building Vibration can impact AV Systems, including audio noise and visual image degradation. Valley Communications is not responsible for building vibration. If required, dampening devices are available at an additional charge.
10. Valley will add a 2% surcharge for Credit Card Purchases.

Be sure to follow Valley on



bit.ly/vcs-in

State Contracts: OFF40, FAC64, ITT50 (MA) 13PSX0090, B-05-019 (CT) | State Licenses: 7159-C (MA) CT-C5-192407 (CT) RI-TSC-46 (RI) | Affirmative Action / EOE

JPT

1B-1.7 Report
120617

Roger™ Touchscreen Mic

[Overview](#)
[Use Cases](#)
[Training](#)
[Literature](#)
[Evidence](#)
[Support](#)

This exciting and easy to use wireless teacher microphone is the core component of the Roger for Education portfolio and gives students and teachers alike the opportunity to master various modern classroom activities with ease.



Maximum performance

With the best speech-in-noise performance and documented improvements of up to 35% over Dynamic FM and 54% over other FM systems¹, the Roger Touchscreen Mic is a class above the rest.

[See Evidence](#)

¹ Professor Thibodeau, Linda, PhD (2013), Comparison of speech recognition with adaptive digital and FM wireless technology by listeners who use hearing aids, University of Texas, Dallas, USA, International Journal of Audiology



Automatic microphone modes

For optimal use with minimal manual interaction, Roger Touchscreen Mic features an automatic microphone function which conveniently switches from an individual talker to a small group interaction mode, based on the orientation of the device. This allows students and teachers to keep up with the ever-changing learning environments.

Zero hassle

With its intuitive indicator lights and user-friendly interface Roger Touchscreen Mic allows both teachers and students to actively participate in the modern classroom

<https://www.phonakpro.com/us/en/products/wireless-accessories/roger-touchscreen-mic/overview-roger-touchscreen-mic.html>

with ease.



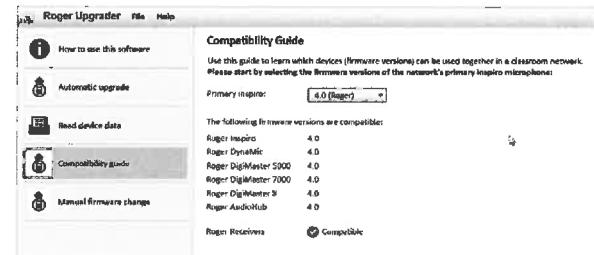
Full compatibility

The Roger Touchscreen Mic is compatible with almost every hearing instrument, cochlear implant and bone-anchored hearing device. It also allows multiple receivers and microphones to be connected in a network with simple touch commands. The Roger Upgrader software helps you to upgrade the firmware and manage multiple devices.

Roger™ Upgrader

The free Roger Upgrader software is designed to ensure the Roger compatibility of Phonak classroom devices, such as microphones, Dynamic SoundField, Hubs.

[Download Roger Upgrader for free](#)



Child Hearing Assessment Tool

This tool allows to complete and manage different listening and hearing assessments in one convenient place.

Related products



Roger™ Pass-around

This microphone is designed to enhance classroom discussions so that not only teachers but all students are heard clearly. It is the optimal size for kids and teens.

[Order Now](#)



Roger™ Multimedia Hub

This versatile transmitter used in a Roger network features audio mixing which allows a teacher's voice to be heard simultaneously with an audio signal.

[Order Now](#)

Roger Dynamic SoundField



[Learn More ›](#)

Roger™ Repeater

This accessory can be used with a Roger for Education primary transmitter as a range extender.

[Order Now](#)

Roger™ Charging Rack



This accessory is small and lightweight. It allows up to 4 devices to be charged simultaneously and provides a charging spot for multiple devices.

[Learn More ›](#)



Roger™ WallPilot

This wall-mounted device automatically connects students' Roger receivers, and teachers' microphones, to the room's existing Roger network.

[Order Now ›](#)

Components

Roger™ Receivers



When connected to hearing aids or cochlear implants, these receivers allow your clients to hear sounds transmitted by a Roger microphone.

[Learn More ›](#)

Shop online



Log in and easily place orders for your store or clinic.

[Go to Phonak Store ›](#)

Solutions

Client profiles

<https://www.phonakpro.com/us/en/products/wireless-accessories/roger-touchscreen-mic/overview-roger-touchscreen-mic.html>

Products

- Hearing aids
 - Overview
 - Filter Phonak Hearing Aids
- Wireless accessories
 - Overview
 - Filter Wireless Accessories
- Other Products
 - Overview
 - Noahlink Wireless
 - iCube II

Support

- Product Support
- Hearing aids

Marketing

- Images & Logos
- Special Programs
- Physician Information Program
- Marketing Services
 - Overview
 - Marketing Tools
- Practice Development
 - Overview
 - Literature

Resources

- Information & Forms
- Literature

PHONAK
life is on

Life-changing solutions

[About Phonak](#) | [Press Center](#) | [Blog](#) | [Careers](#)



United States Change ›

Life-changing solutions	Wireless accessories	Evidence
First-Time Users (mild to moderate)	Bluetooth®	Inside Audiology
Experienced Users (mild to moderate)	Other Support	Audiology Newsletter
Pediatric (0-18)	Target Fitting Software	Audiology Blog
Tinnitus	Contact Support	Testimonials
Cost-Conscious		Downloadable Forms
Single-Sided Deafness		Government Services
Government Services	Training & Events	Training & Tests
Overview	Phonak Learning	Phoneme Perception Test
Solutions	Training Sessions	LiSN-S
Training	Upcoming Sessions	Counseling Tools
Evidence	Past Sessions	Adult
Literature	Phonak Events	Pediatric
	Upcoming events	Family-Centered Care
	Past events	
	Product Training	Apps for Your Clients
	Hearing Aids Training	Tinnitus Balance App
	Other Training	Guide App
	Pediatrics	Leo Interactive Stories



[Contact](#) | [Impressum](#) | [Privacy Policy](#) | [Environmental Policy](#) | [Terms of Use](#)

Phonak – A Sonova brand

[Store](#)
[Overview](#)

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Masconomet					
Air conditioning for data closets	92,000				
Replace five AED defibrillators and add five AED defibrillators	31,000				
Central Office generator tie-in	30,000				
Rekey all door locksets	30,000				
Electrical alterations	70,000				
Increase gas piping size	98,000				
Mobile bleachers	13,500				
Auditorium Speakers	10,000				
Roof Repairs	140,000				

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Security cameras	38,000				
Skid Steer loader replacement	55,000				
Tennis courts preservation and mobile bleachers	35,000				
Wood shop safety enhancements	35,500				
TOTAL MASCONOMET REGIONAL SCHOOL	\$678,000	\$0	\$0	\$0	\$0
Subtract Masconomet Funding	(128,500)				
Subtotal	\$549,500	\$0	\$0	\$0	\$0
Masconomet Total Middleton % Charge = 35.08%	\$192,765	\$0	\$0	\$0	\$0



FY19 Capital Budget

Item	Amount	Notes
A/C for data closets	\$92,000	Preservation: Specialized Liebert air conditioning (A/C) systems are required to protect electronics in data centers. The Middle School A/C does not work and the High School A/C is 12 years old. An A/C failure in these areas on a warm day could cause serious damage to tech equipment.
AED (defibrillator)	\$31,000	Safety: Replace 5 AEDs, add 5 AEDs to meet state requirements for minimum distance to an AED, add maintenance contract for all 10 AEDs.
Central office generator tie-in	\$30,000	Safety: Connect central office / command center to generator so that systems, including phones, will operate during power failures. Preservation: Connect the data centers to generator, as well, to preserve electronic systems.
Door rekey	\$30,000	Safety: Replace all locksets and rekey using best practices. Last rekeyed 16 years ago. Propose to fund from \$32,168 remaining from “fire suppression system upgrade” from May, 2017 warrant article. (Possible Funding: existing Warrant Article Reallocation)
Electrical alterations	\$70,000	Preservation: Before the Electrical alterations for the warrant article can take place, we must finish diagnosing the electrical problem. Propose funding from district stabilization fund. (Funding: Stabilization Fund)
Increase gas piping size	\$98,000	Preservation: Small gas pipe size is causing low flow, intermittent firing problems with our HVAC units (Habeeb report: G.1.1, G.4.1, and I.10.1).
Mobile bleachers	\$13,500	Safety: Replace 8 portable bleachers that are not code compliant. (Funding: Athletic Revolving)
Auditorium speakers	\$10,000	Preservation: replace two auditorium speakers which are broken and add a center speaker.
Roof repairs	\$140,000	Preservation and Safety: Parts of the roof have been compromised. There are leaks and areas that are unsafe to walk on. This work is intended to preserve the roof until a bond measure and potential School Building Authority (SBA) funds can fund a full roof replacement (no earlier than 2021).
Security cameras	\$38,000	Safety: Replace our last four end-of-life analog cameras. Add seven cameras in targeted areas to increase security, as recommended by local law enforcement and our security team.
Skid steer	\$55,000	Safety: Replace skid steer loader (e.g. a bobcat), used for snow removal on paths and grounds maintenance work.
Tennis courts	\$35,000	Preservation: Repair cracks in courts; new surface will be added as part of bond measure. Propose to fund from athletic revolving account. (Funding: Athletic Revolving Fund)
Wood shop	\$35,500	Safety: non-skid flooring, dust inhalation, and minor utility upgrades
TOTAL	\$678,000	



FY19 Capital Budget Town Assessment Calculation

The following sources reduce the FY19 capital budget funding request to the towns from \$678,000 to \$549,500.

Table 3: FY19 Capital Budget Funding Offsets

Item	Amount	Notes
AED (defibrillator)	-\$15,000	Discounts and donation from Ernie Whiton & Zoll, Inc (maker of defibrillators).
Door rekey	-\$30,000	Repurposing of funds from last year's article
Electrical alterations	-\$35,000	From Stabilization Fund
Tennis courts/ Mobile bleachers	-\$48,500	From Athletic Revolving Fund
TOTAL	-\$128,500	

Net Impact	\$549,500	Town Warrant Article Funding
-------------------	------------------	-------------------------------------

Warrant Article Assessment. Funding of warrant articles for Masconomet require the approval of the School Committee and all three towns. Below is the assessment allocation for Masconomet's FY19 Capital budget based on the current October 1 enrollments.

Town	Percent	Warrant Article
Boxford	37.88%	\$208,151
Middleton	35.08%	\$192,765
Topsfield	27.04%	<u>\$148,584</u>
		<u>\$549,500</u>

Information related to capital project debt service payments appear on the following page.

Earlier this year, the School Committee created the District Capital Investment Task Force, which is charged with creating a responsible long-term strategic capital improvement plan that ensures the Masconomet campus meets the evolving instructional needs of students and preserves the taxpayers investment. The taskforce is comprised of the following members:

Hagan Rivers of Boxford (Chair)
John Spencer (Topsfield)
Kosta Prentakis (Middleton)
Susan Givens (Assistant Superintendent for Finance and Operations)
Dorothy Flaherty (Middle School Principal)
Douglas Batchelder (Director of Operations)

For more information, please visit the website at: <https://www.masconomet.org/Page/557>



Debt Service Schedule

The District issued bonds for \$30,125,000 for the construction of the High School, waste water treatment plant, and renovation of the Middle School and field house in 2001. The total appropriation for principal and interest on these bonds for FY19 is \$2,374,065. The District will also receive \$1,291,498 in funding from the state to pay for a portion of these costs.

Masconomet Regional School District			
<i>Debt Amortization Schedule - Summary</i>			
<i>Ch. 71 Sec. 16(d), voted on 10/6/97 and 3/17/99</i>			
Fiscal Year	Principal	Interest	Total
2000-01	270,000	550,503	820,503
2001-02	290,000	532,278	822,278
2002-03	615,000	985,153	1,600,153
2003-04	650,000	953,030	1,603,030
2004-05	890,000	1,567,353	2,457,353
2005-06	1,125,000	1,308,914	2,433,914
2006-07	1,170,000	1,253,970	2,423,970
2007-08	1,220,000	1,196,851	2,416,851
2008-09	1,275,000	1,146,151	2,421,151
2009-10	1,465,000	917,331	2,382,331
2010-11	1,470,000	900,151	2,370,151
2011-12	1,515,000	850,051	2,365,051
2012-13	1,575,000	793,989	2,368,989
2013-14	1,635,000	734,364	2,369,364
2014-15	1,700,000	671,795	2,371,795
2015-16	1,780,000	599,745	2,379,745
2016-17	1,845,000	528,225	2,373,225
2017-18	1,920,000	454,015	2,374,015
2018-19	2,000,000	374,065	2,374,065
2019-20	2,085,000	283,200	2,368,200
2020-21	1,405,000	182,250	1,587,250
2021-22	1,470,000	112,000	1,582,000
2022-23	755,000	37,750	792,750
	<hr/> 30,125,000	<hr/> 16,933,132	

**Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan**

	2019	2020	2021	2022	2023
--	-------------	-------------	-------------	-------------	-------------

Department: Town Buildings -

Senior Center/Old Town Hall

Exterior

Facilities Assessment and Architectural Services - Old Town Hall; \$20,000 budgeted at the May 2015 Town Meeting - **PROJECT ON HOLD PENDING FEASIBILITY STUDY**

Rehabilitation of Front of Old Town Hall*: 1) Replace Front Stairs for ADA, AAB Compliance and Navigability; 2) Residing and repainting; 3) Replace windows and doors; 4) Repair/replace basement windows; Total estimated project cost is \$135,000. Funding allocated as part of Warrant Article #27, from the May 2013 (FY14 Town Meeting) in the amount of \$22,000 will be applied to the Senior Center/Old Town Hall project. - **PROJECT ON HOLD PENDING FEASIBILITY STUDY**

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Senior Center/Old Town Hall					
Interior					
Interior Painting of Walls, Trim and Doors					3,000
Interior Painting of Walls, Trim, Doors, Ceilings: Ceilings are approx. 20' high requires professional w/ staging and historical building expertise			4,500		
Refinishing hardwood flooring and Miscellaneous woodwork. Last done over 14 years ago.				7,000	
Security System: Cameras, Intercom, Remote Door Release Materials and Labor	1,100				

**Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan**

	2019	2020	2021	2022	2023
Senior Center/Old Town Hall					
Other					
My Senior Center - Sign in system		7,500			
Computer Lab Upgrades: 4 Desktop Units (6 donations in 2000) - Under Information Technology Capital Plan					
Upgrades to kitchens and bathrooms including kitchen equipment upgrade - commercial Freezer, refrigerator, etc. All current commercial equip. donated in 2006		8,000			
Upgrades to bathrooms			8,000		

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Council on Aging - Vehicles					
Replacement of 2009 Wheelchair COA Passenger Van (seats 18) New 25 Passenger/CDL			80,000		
<i>Possibly of 80% grants in 2019/2020: Town share \$16K - \$19K</i>					
<i>Obtained 80% grants for 2007 and 2009 vans.</i>					
SUBTOTAL SENIOR CENTER/OLD TOWN HALL:	\$16,600	\$4,500	\$80,000	\$8,000	\$10,000

Vehicle Inventory

2017 COA Passenger Van (seats 14)

2009 COA Passenger Van (seats 18)

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
--	-------------	-------------	-------------	-------------	-------------

Department: Town Buildings
Memorial Hall -Exterior

Memorial Hall Parking Lot (5,800 Square Yards): 1)

Bituminous concrete 1.5" overlay; 2) New granite curbing installed; 3) Regrade areas of parking lot; 4) Drainage structures for building gutters; 5) Loam and seed shoulders: Total project estimate \$73,850;
Granite curb completed \$21,600; Regrading complete \$6,000; Loam and seed shoulders complete \$2,250;
Remaining tasks include bituminous overlay and drainage structures = \$44,000 - **PROJECT ON HOLD**

PENDING FEASIBILITY STUDY

New Landscaping Front and Rear of Memorial Hall -
PROJECT ON HOLD PENDING FEASIBILITY STUDY

SUBTOTAL: MEMORIAL HALL EXTERIOR	\$0	\$0	\$0	\$0	\$0
---	-----	-----	-----	-----	-----

**Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan**

	2019	2020	2021	2022	2023
Department: Town Buildings					
Memorial Hall - General Interior					
Boiler replacement - Change from oil to natural gas boiler - PROJECT ON HOLD PENDING FEASIBILITY STUDY					
Central Air Conditioning - PROJECT ON HOLD PENDING FEASIBILITY STUDY					
Elevator - Handicap Access - PROJECT ON HOLD PENDING FEASIBILITY STUDY					
Sprinkler System - PROJECT ON HOLD PENDING FEASIBILITY STUDY					
SUBTOTAL: MEMORAL HALL GENERAL INTERIOR	\$0	\$0	\$0	\$0	\$0

**Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan**

	2019	2020	2021	2022	2023
Department: Town Buildings					
Memorial Hall					
Second Floor Renovations					
Town Administrator's Office - Renovate and Expand -					
PROJECT ON HOLD PENDING FEASIBILITY STUDY					
Upstairs Conference and Corner Room - PROJECT ON					
HOLD PENDING FEASIBILITY STUDY					
Men's Room Renovation - PROJECT ON HOLD PENDING					
FEASIBILITY STUDY					
Hallways - PROJECT ON HOLD PENDING FEASIBILITY					
STUDY					
SUBTOTAL: MEMORAL HALL SECOND FLOOR					
RENOVATIONS	\$0	\$0	\$0	\$0	\$0
SUBTOTAL MEMORIAL HALL:	\$0	\$0	\$0	\$0	\$0
TOTAL TOWN BUILDINGS	\$16,600	\$4,500	\$80,000	\$8,000	\$10,000

Lance D MacInnis Electrician
po box 1255
middleton, MA 01949 US
508 726 0802
lmacinnis1@gmail.com



ADDRESS
susan gannon
Middleton COA
po box 855
Middleton, ma 019449

ESTIMATE 1093

DATE 02/21/2018

P.O. NUMBER

SALES REP

ACTIVITY	QTY	RATE	AMOUNT
Labor installation of 4 new arlo web cams in senior center	1	1,100.00	1,100.00

TOTAL **\$1,100.00**

Accepted By

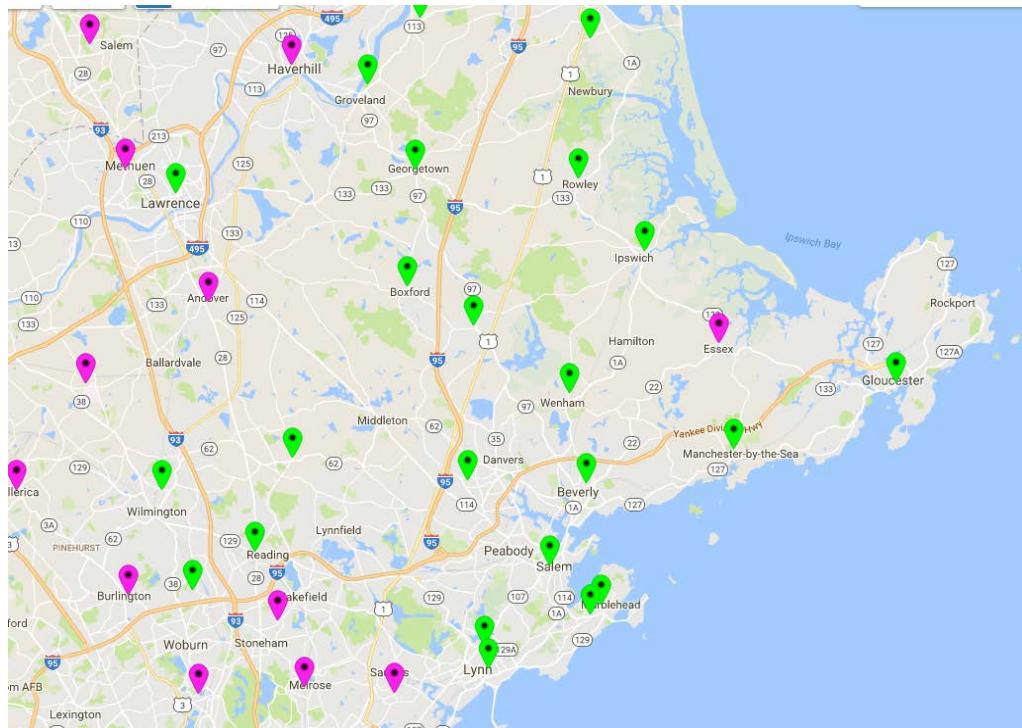
Accepted Date

MySeniorCenter Overview and Pricing Proposal

MySeniorCenter is a touchscreen-based check-in, tracking and reporting system, specifically designed for Senior Centers.



Based in Acton, MySeniorCenter works with 240 of the COAs in Massachusetts, including 13 of the 19 communities in the North Shore Association (NSACA):



Key Benefits

By 2019, 1 in 5 Middleton residents will be 60 or older. In 2012, it was 1 in 8. In order to meet the increased needs, the Center can eliminate efficient processes with MySeniorCenter. Here are some of the key benefits:

- Eliminates the long hours spent tabulating sign-in sheets and creating reports
- Provides accurate counts of seniors and the activities they enjoy
- Simplifies scheduling resources for events and classes
- Provides a mechanism for planning meals and trips
- Tracks volunteer and staff hours
- Easily produce mailing labels per household
- Includes a camera so pictures can be kept on file of each senior
- Produces reports required by the Executive Office of Elder Affairs at the click of a button
- Streamlines transportation booking and reporting
- Records and sends voice messages to any list of seniors (trip reminders, class cancellations, weather alerts, etc.)
- Includes web-based registration when we're ready
- Will allow the COA to share data with Veterans Affairs, Police, Fire, Board of Health and Food Pantry for a holistic view of Seniors in Middleton
 - Because MySeniorCenter is web-based, we can provide access to personnel in other departments for better coordination on our at-risk citizens

MySeniorCenter ROI/Savings

MySeniorCenter provided ROI data from their MA customers categorized by hours saved and grant opportunities:

- *Hours*
 - A typical Center with 60 visitors per day saves 2+ hours per day and 8 hours at the end of the month
 - End of year reporting is reduced from 15 days to 1/2 day for EOEA
 - Calendars can be generated with the click of a button
 - Transportation sheets can be printed daily with no manual effort or writing saving 1+ hour per day
 - That all adds up to a savings of roughly 19-person weeks per year (assuming 40 hours per week) at a medium-sized Center
- *Granting opportunities*
 - Centers are able to apply for an additional 4 or more grants every year due to the readiness of data/reports
 - If a typical grant is worth \$10,000 - \$30,000, that's an opportunity increase of \$40,000 - \$120,000

Xavus Solutions
 PO Box 55071 #30713
 Boston, MA 02205-5071
 (508)613-2289x103
 tina@myseniorcenter.com



QUOTE

ADDRESS	SHIP TO	QUOTE #	s-090917-4711
Susan Gannon Middleton Council on Aging P.O. Box 855 8 Maple Street Middleton, MA 01949	Susan Gannon Middleton Council on Aging 38 Maple Street Middleton, MA 01949	DATE	01/22/2018

P.O. NUMBER	STATE	TERMS
-------------	-------	-------

ACTIVITY	QTY	RATE	AMOUNT
MySeniorCenter System Configuration with All in One Computer/Touchscreen and MySeniorCenter Management System and MySeniorCenter Touchscreen application. Includes one omni-directional scanner, one webcam, and 900 standard MySeniorCenter keytags.	1	10,000.00	10,000.00
Web-based training and remote configuration	1	750.00	750.00
Complimentary upgrade to On Site Installation Services - MA CUSTOMERS ONLY	1	0.00	0.00
Shipping and handling	1	120.00	120.00
Voice Connect PREMIUM - unlimited calls	1	0.00	0.00
MCOA Member Discount	1	-3,370.00	-3,370.00
,	1	0.00	0.00

Annual maintenance fee in subsequent years for the configuration listed above is \$1800 beginning in year 2. Any changes to the configuration listed above may increase the annual maintenance fee. Maintenance includes updates to the software, access to technical support, nightly database backups and periodic web-based refresher training.

Please sign and fax back to 508-834-4125 (or scan/email to tina@myseniorcenter.com).	TOTAL	\$7,500.00
--	-------	-------------------

Accepted By

Accepted Date

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Flint Public Library					
Carpeting			50,000		
Furnishings					
Building System Upgrades		15,000			
Replacement PCs for Public Computers		5,000	5,000	5,000	5,000
SUBTOTAL: FLINT PUBLIC LIBRARY	\$0	\$20,000	\$55,000	\$5,000	\$5,000

Notes:

Carpeting

Furnishings

The Friends Group will help with furnishings. Currently we are requesting funds to have a slat board mounted.

Building System Upgrades

Electrical, HVAC and roof maintenance have occasional expensive repairs which are beyond the operating budget allowance. The library needs to upgrade the lighting within the library with energy efficient LED lighting especially the lighting in the 20' ceiling.

Technology

The library will replace/update computers for public and staff use as equipment becomes outdated or broken. The library maintains 16 public access computers; 11 staff computers; 6 printers, 2 scanners and a fax machine. Four Children's Room computers need to be replaced in FY 19. We hope to work with the town's new IT department to upgrade as needed and keep technology running smoothly.

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Department: Administration - General					
Health Department					
Replace Health Department 2014 Ford Fusion vehicle with 2018 Ford Explorer with tow package for mobile clinic trailer				24,500	
Building Commissioner					
Replace Building Commissioner 2014 Ford Fusion vehicle with 2018 Ford F-150 pick up truck				29,000	
Police Department					
Funding for consultant to administer an assessment center to hire a replacement for the retiring Police Chief	20,000				
Town Planner					
Consultant support for redrafting of zoning as a result of the completion of the master plan	25,000				
Town Clerk					
Eight electronic polling books at \$1,590 per unit	12,720				
Replacement of voting booths	9,367				
Subtotal Administration - General	\$67,087	\$0	\$0	\$53,500	\$0

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
General Government Information Technology Capital Plan					
5 Year Replacement Protocol file/print server at COA					4,000
Flint Public Library - Server upgrade	6,000				
Flint Public Library - Upgrade wireless access points	7,000				
Flint Public Library - Upgrade HP network switches	3,600				
Council on Aging - Computer Lab Upgrades: 4 Desktop Units (6 PCs were initially donated in 2000)	5,000				
Internal and External Fiber Communications Network for MH, Police, Fire, DPW, COA					295,000
5 Year Replacement Protocol for Police Department Server		30,000			
5 Year Replacement Protocol for file/print server at DPW building			4,000		
5 Year Replacement Protocol for file/print server at Fire Station			4,000		
5 Year Replacement Protocol for Memorial Hall Main Server			27,000		
Replace Assessor Patriot Server	3,680				
Information Technology Subtotal	\$25,280	\$0	\$30,000	\$35,000	\$299,000

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Financial Administration					
Free Cash transfer to reduce the tax rate	100,000	50,000			
Funding for GASB 45 (Other Post Employment Benefits Stabilization Fund)	50,000	50,000	50,000	50,000	50,000
Appropriation to Stabilization Fund	50,000	50,000	50,000	50,000	50,000
Pension Stabilization Fund					
Capital Stabilization Fund					
<u>Special Education (SPED) Stabilization Fund</u>					
Subtotal Financial Administration	\$200,000	\$150,000	\$100,000	\$100,000	\$100,000
TOTAL ADMINISTRATION:	\$292,367	\$150,000	\$130,000	\$188,500	\$399,000

**Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan**

	2019	2020	2021	2022	2023
Other Warrant Articles					
Essex Tech - Capital Improvement Assessment (portion of total \$838,834 FY18 Middleton Essex Tech assessment)		\$16,121			
Total Other Warrant Articles	\$16,121	\$0	\$0	\$0	\$0

Town of Middleton
Fiscal Year 2019-2023
Five Year Capital Budget Plan

	2019	2020	2021	2022	2023
Net Fiscal Year 2019-2023 Five Year Capital Budget Plan - By Category					
Articles/Special Projects	100,000	0	0	0	0
DPW/Recreational Facilities	585,700	916,000	958,500	755,000	595,000
Police	100,700	180,100	125,700	86,000	22,000
Fire	892,750	497,000	105,000	90,000	650,000
Elementary Schools	209,000	428,500	299,000	3,600,000	1,090,000
Masconomet	192,765	0	0	0	0
Town Buildings: Senior Center/ Old Town Hall and Memorial Hall	16,600	4,500	80,000	8,000	10,000
Flint Public Library	0	20,000	55,000	5,000	5,000
Administration	292,367	150,000	130,000	188,500	399,000
Other Warrant Articles	16,121	0	0	0	0
ALL DEPARTMENTS TOTAL	\$2,406,003	\$2,196,100	\$1,753,200	\$4,732,500	\$2,771,000



TOWN OF MIDDLETON

Office of the Town Clerk

TO: Andrew Sheehan, Town Administrator
FROM: Ilene Twiss, Town Clerk
DATE: January 26, 2018
SUBJECT: Capital Budget Back-Up - Poll Pads – Electronic Polling Books

I am proposing an article for the Town Clerk's FY 19 Capital Budget to acquire funding for Poll Pads – Electronic Polling Books. The Poll Pad is Electronic Poll Book Technology that is based on the iPad. The Poll Pad is replacing the outdated and inefficient paper Voter List that is often the cause of long lines at the polls and inefficient election record keeping. Long lines on Election Day continue to be a problem, especially in high-turnout elections like the 2016 General Election. Along with Massachusetts, more State Legislatures are adding Same Day Registration rules and extended Early Voting periods, resulting in the need to expedite the process and bring us into the 21st century. Poll Pads have proven to make the check-in process quicker and easier. Our goal is to make the voting process as smooth as possible for Middleton voters.

"North Andover just finished up a 2,700 person Special Town Meeting Tuesday. Wanted to share that LHS used us as a demonstration site for their Poll Pads and the whole check in process was amazing. Brenda at LHS was fantastic. We got that many people checked in and all my workers loved them. Without the poll pads we would still be checking people in. We will be uploading everything into VRIS this afternoon to update voter history which would have taken days. My 92 year old warden loved the technology and had no trouble using it. Brenda and crew were fantastic and I am looking forward to getting them for future use here. Not a glitch."

Joyce Bradshaw -North Andover Town Clerk

Proposed Budget Price for Poll Pads – Electronic Polling Books:
\$12,720.00



POLL PAD SALES ORDER

LHS ASSOCIATES, INC.

10 MANOR PARKWAY UNITB

SALEM, NH 03079

P: 888-547-8683 F: 603-212-0028

DATE 12/27/2017

TO Ilene Twiss, Town Clerk
Town of Middleton
48 South Main Street
Middleton, MA 01949
978-774-6927

SHIP TO Ilene Twiss, Town Clerk
Town of Middleton
48 South Main Street
Middleton, MA 01949
978-774-6927

SALESPERSON	SHIPPING METHOD	FIRST ELECTION DATE	DELIVERY DATE	
Brenda L'Italien	LHS	TBD	TBD	
QTY	ITEM #	DESCRIPTION	UNIT PRICE	LINE TOTAL
8	PP-002	Poll Pad "lite" Ipad Air Wi-Fi 16gb, i360 Stand, Stylus, Transport Case, First One Year License, MDM Enrollment, 1 year Command Central License	\$ 1,200.00	9,600.00
Upgrades & Add Ons				
8	PP-004	Star Micronics TSP654II Direct Receipt Printer- Monochrome	\$ 300.00	\$ 2,400.00
8	PP-003	Poll Pad Custom Battery base Upgrade	\$ 90.00	\$ 720.00
		-	\$ -	\$ -
		-	\$ -	\$ -
Activation & License Fees				
		-	\$ -	\$ -
		-	\$ -	\$ -
			TOTAL	\$12,720.00
Annual License Charges				
8	Year 2: Software and Application Warranty		\$ 250.00	\$ 2,000.00
8	Year 3: Software and Application Warranty		\$ 250.00	\$ 2,000.00

* Pricing includes Delivery, Acceptance Testing, Two (2) Hours of Clerk/Staff Training and 24/7 Technical Support.

SOFTWARE LICENSE AND SERVICE AGREEMENT
THIS COMPUTER SOFTWARE AND DATABASE SERVICE AGREEMENT IS DATED: 12/27/2017

-BETWEEN-

KNOWINK

Phone: 314-282-5465

Email: pollpad@knowink.com

Website: www.knowink.com

"The Licensor"

-AND-

LHS ASSOCIATES, INC.

Phone: 978-683-0777

Email: ma@lhsassociates.com

Website: www.lhsassociates.com

"The Service Provider"

-AND-

"THE CUSTOMER"

Town of Middleton

48 South Main Street

Middleton, MA 01949

978-774-6927

Number of Poll Pads Purchased:

8

Total Purchase Price Including Additional Products:

\$ 12,720.00

Annual Warranty Fee: \$ 2,000.00

Start Date of Agreement: TBD

End Date of Agreement: TBD

THIS IS A COMPUTER SOFTWARE LICENSE AND SERVICE AGREEMENT. This Agreement shall be on the terms and conditions set forth herein which shall constitute the entire agreement of the parties.

1. ENGAGEMENT

- a) The Customer agrees to pay the Service Provider, as set forth above, a one-time installation and set up fee for the services provided to the Customer in setting up the Poll Pads and for initial training and site support.
- b) The Customer agrees to pay the Total Purchase Price and Annual Warranty Fee per Poll Pad delivered with the KNOW INK Poll Pad Software as set forth above.
- c) The Customer hereby agrees to engage the Service Provider to provide the Customer with services consisting of annual support, maintenance and software updates as the Customer & Service Provider may agree upon (the "Services"), and the Service Provider hereby agrees to provide said Services to the Customer.
- d) The Customer agrees to comply with the terms and conditions of this Agreement and agrees not to use the Software in any way beyond the scope of this Agreement.

2. TERM OF AGREEMENT

- a) The term of this Agreement will begin on the date of this Agreement and will continue in full force for the term period as specified above under "THE CUSTOMER" section of this Agreement and is subject to earlier termination as otherwise provided in this Agreement, with the said term being capable of extension by mutual written agreement of the parties.
- b) The Customer agrees to only use the software during the term of this Agreement and any renewals thereof.
- c) The Customer agrees to return the original and all existing copies of the Software within five (5) days after

the termination of this Agreement.

3. PERFORMANCE

- a) The Service Provider agrees to provide annual support and maintenance to Customer's electronic Poll Pads and provide software updates and new releases, as necessary.
- b) Service Provider agrees to physically or remotely answer a service call request within eight (8) hours of being called for service.
- c) The compensation for computer servicing and maintenance is limited to labor charges only. If parts or upgrades are needed to complete the annual support and maintenance at any given time the Customer shall have the right to purchase the part[s] or upgrade[s] needed from another source as recommended by Service Provider. The Limit of Liability and warranty of said part[s] or upgrade[s] would be the responsibility of Customer if purchased from an outside source and in no way should be put upon the Service Provider.
- d) Within one year of the start date, the Service Provider will assist the Customer in obtaining the Apple Enterprise Development License or will provide a mechanism to install any new version(s) of the application.
- e) In the event the Service Provider is unable to provide the services set forth herein, the Service Provider will assist the Customer in supporting the Poll Pad software without the on-going assistance of the Service Provider.

4. COMPENSATION

- a) For the Services provided by the Service Provider under this Agreement, the Customer will pay to the Service Provider compensation as stated under "THE CUSTOMER" section of this Agreement for the contract duration as specified.
- b) Customer shall pay compensation of the service contract as agreed upon herein to the Service Provider and as set forth in 'THE CUSTOMER" section.

5. ADDITIONAL COMPENSATION AND TAXES

- a) The Customer will provide additional compensation for all computer hardware parts replaced or software modifications that are requested by the Customer. Customer will be invoiced for payment at the conclusion of the service call when performed.
- b) The Customer agrees to pay, upon demand, any and all sales, use, or other similar tax which may be assessed on the Service Provider by any governmental agency on any aspect of the transaction contemplated herein.

6. ASSIGNMENT

- a) The Service Provider may assign or otherwise transfer the obligations incurred pursuant to the terms of this Agreement to the Licenser without the prior written consent of the Customer.

7. CAPACITY/INDEPENDENT CONTRACTOR

- a) It is expressly agreed that the Service Provider is acting as an independent contractor and not as an employee in providing the Services hereunder. The Service Provider and the Customer acknowledge that this Agreement does not create a partnership or joint venture.

8. MODIFICATION OF AGREEMENT

- a) Any amendment or modification of this Agreement or additional obligation assumed by either party in connection with this Agreement will only be binding if evidenced in writing signed by each party or an authorized representative of each party.

9. TIME OF ESSENCE/BREACH

- a) The making of payments at the times they respectively become due shall be considered as the essence of

the Agreement, and in case of failure so to do, or in case the Customer shall fail to make any other payment due to the Service Provider, the Service Provider shall have the right to cancel the Agreement, and to declare due the entire amount unpaid.

b) If after any default in this Agreement the Service Provider shall place any matter arising out of or concerning this agreement with an attorney, either to collect damages or in response to legal action brought by the Customer, the Customer shall pay all of the Service Provider's reasonable legal fees, including court costs.

10. ENTIRE AGREEMENT

a) This Agreement is the complete and exclusive statement of the mutual understandings of the parties. It is agreed that there is no representation, warranty, collateral agreement or condition affecting this Agreement other than was expressly stated herein.

11. SEVERABILITY

a) In the event any provision of this Agreement shall be invalid, illegal or unenforceable in any respect, such a provision shall be considered separate and severable from the remaining provisions of this Agreement, and the validity, legality or enforceability of any of the remaining provisions of this Agreement shall not be affected or impaired by such provision in any way.

12. TERMINATION OF THIS AGREEMENT

a) The Service Provider may terminate this Agreement at any time giving the Customer 90-days written notice. The Service Provider also retains the right to terminate this License, at any time, should the Customer violate any of the provisions set forth herein regarding the software's use.

13. GOVERNING LAW

a) It is the intention of the parties to this Agreement that this Agreement and the performance under this Agreement, and all suits and special proceedings under this Agreement, be construed in accordance with and governed, to the exclusion of the law of any other forum, by the laws of the State of Missouri. The Agreement

IN WITNESS WHEREOF, the parties have duly executed this Service Agreement:

12/27/2017

CUSTOMER AUTHORIZED SIGNATURE:

DATE:

PRINT NAME & TITLE OF AUTHORIZED
SIGNER:

ACCEPTED BY KNOWINK

AUTHORIZED SIGNATURE:

DATE:

PRINT NAME & TITLE OF AUTHORIZED
SIGNER:

townclerk

From: Brenda L'Italien [bcm@lhsassociates.com]
Sent: Wednesday, December 27, 2017 11:26 AM
To: townclerk
Subject: Re: Poll Pad Proposal
Attachments: POLL PAD PROPOSAL MIDDLETON MA.pdf

Ilene I have attached a proposal for you for 8 Poll Pads. If you would like to add the Full Connectivity portion, (real time viewing from any computer on election day), it is an additional flat fee of \$1,850.00. This is only an additional service, does not need any extra hardware and can be added at any time. Let me know if you need anything else.

--
Brenda L'Italien (Merritt)
Senior Manager
Brand Development & Innovation
LHS Associates, Inc.
10 Manor Parkway, Unit B
Salem, NH 03079
(978)651-2511-Direct line
(603)212-0027-Direct fax



CONFIDENTIALITY NOTICE: This document and the attached files, if any, are intended only for the addressee and may contain information which is privileged, confidential, or otherwise protected from disclosure. If this email has been sent to you by mistake, please inform us by reply email and then delete the email, destroy any printed copy, and do not disclose or use the information in it. Any review, use, transmission, or dissemination of this message and/or any attached files is prohibited. There is no warranty that this email is error-or virus-free. This email is copyrighted.

townclerk

December 26, 2017 at 1:59 PM

Good afternoon Brenda,

Hope this finds you well. I'd like to see if you could provide a quote to purchase eight (8) Poll Pads. I am currently putting together my FY 19 Budget and would like to include this purchase if possible.

I look forward to hearing from you.

Thank you,



The Poll Pad: Electronic Poll Book

The Poll Pad solution provides a seamless voter check-in and verification process for election authorities across the country.

- Instantly know voter status: Voters can be looked up by quickly scanning the barcode on state-issued identification cards or by typing three letters of first and last name.
- One secure application: Both Election Day officials and voters cannot exit the application without a password. This prevents user error from creating a line slow-down or other potential security issue.
- Import up-to-date voter registration information: Using ePulse, the Poll Pads can import up-to-date information minutes before the polling places open, allowing election workers to identify last-minute registrations, if someone has already voted, and other required info.

ePulse: Election Management System (OPTIONAL)

ePulse is a secure, web-based election day management and reporting tool. ePulse enables officials to:

- Monitor polling place activities: Know when election workers have clocked in, the status of Poll Pads and printers, and even automated timecard management for all election workers.
- Real-time voter turnout: See up-to-the-minute voter turnout percentages, even what sources of ID were used.
- Live trouble management and tracking: The Poll Pad has secure text messaging and video communications built into the iPad application and ePulse, allowing device-to-device or ePulse-to-device communications. You can message each device in a polling place, an entire jurisdiction, or just one specific device. If an election worker is reporting a problem, they can pick up the iPad and show election officials the length of a line or other visual aids to help identify and resolve any potential issues on Election Day.

System Implementation: Problems Solved with Real Cost Savings We exist to improve elections for both voters and election authorities. Our past 45 years of experience combined with our 3 years providing the Poll Pad solution to New England community's means we understand firsthand the real problems that LHS and the Poll Pad can solve. Our Poll Pad solution provides the following solutions to problems many City's and Town's experience:

- Reduced time looking up each voter
Reduced cost—eliminate paper voter logs and the time spent preparing and producing them.
- Reduced cost—no more time spent scanning result into the State Computer. Results are directly uploaded and elections validated in minutes as opposed to days or even weeks.
- Elimination of voter fraud—scans ID card barcodes and knows when someone has voted already.
- Automation of election worker timecards—no more manual logs and hours spent calculating time.





POLL PAD®

ANY LINE, ANY TIME, SOLUTION



Poll Pad e-poll book

- Processes voters on ONE system in seconds
- No external signature pads or scanners
- Most advanced & secure operating system (FIPS 140-2 certification)
- Syncs & backs up data in real time
- Quickly uploads into the VR database
- Ease of use, intuitive & friendly design

Simple Easy Affordable

- Sets up Easily & Seamlessly
- All in One Solution
- Any Line - Any Time
- Created by an Election Director

Supported by:



Powered by:



All in One Solution

The iPad-based electronic Poll Pad is the next generation of electronic polling books for voters & election officials.

Early Voting: Process voters throughout early voting period on Poll Pad and run reports for upload into your VR database. Speed up check in for registered voters by scanning Drivers Licenses or Voter ID cards on Poll Pad.

Town Meetings: Speed up check-in without the need for bulky voting lists. Eliminate the need for alphabetical lines. Receive Quorum results instantly without counting names.

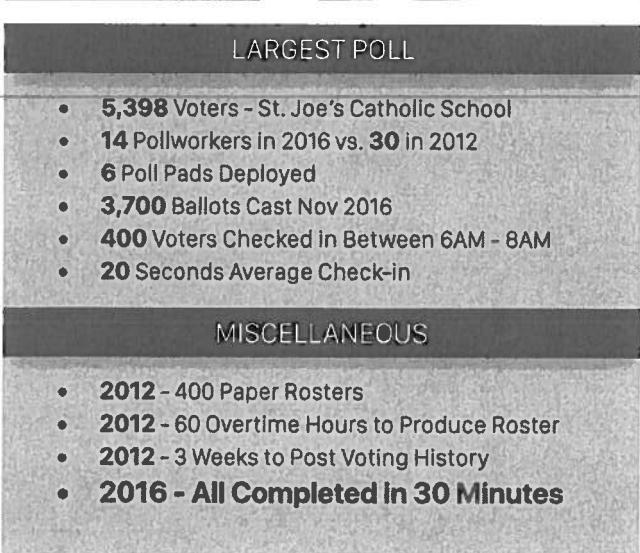
Same Day Registrations: Eliminate paper forms by processing new registrants on the Poll Pad. Print compact receipts for wet signature & storage. Data is formatted for upload into your VR database.

Consolidate & Save: Reduce your election day costs by consolidating precincts into fewer polling places. Save election costs & time with accurate data uploads to your VR database & lower employee overtime.



SUCCESS in Numbers

Jefferson County, MO | CASE STUDY



LHS Associates, Inc.
10 Manor Parkway, Unit B
Salem, NH 03079
(888)547-8683
www.lhsassociates.com



#1 Electronic
Poll Book
in Massachusetts

53 Customers
184,178 Units Deployed
300,000+ Early Voters Processed

"I thought the poll pads were fantastic. So fast and easy and the voters absolutely loved seeing their name/address/DOB on the screen. It gave them a sense of assurance that their vote was being counted."

-Timothy Spanos, City Clerk, Peabody, MA

Poll Pad Nation



The Nation's Leading
Electronic Poll Book

370 Election Authorities
18 States
Plus the District of Columbia (Washington, D.C.)

20,000+ Units Deployed

"All political subdivisions will be saving money on this. Judges will love them, and voters will really love them because they can go to any line they want to."

-Rich Chrismer, Elections Director, St. Charles, MO

The first system to be piloted in New Hampshire

"We are happy to be on the cutting edge of this technology. It will increase accuracy while processing voters more quickly. Bedford is paving the way for the future."

- Lori Radke, Town Clerk, Bedford, NH

Rhode Island Pilot Program 2016

- Bristol
- Burrillville
- Cranston
- Cumberland
- East Providence
- Middletown
- North Kingston
- North Providence
- North Smithfield
- Pawtucket
- Portsmouth
- Providence
- Richmond
- Warwick
- Westerly
- West Greenwich
- West Warwick

"Based on the lessons learned in 2016 pilot we plan on expanding the program statewide during the 2018 elections."

- Secretary of State Nellie Gorbea, Rhode Island



TOWN OF MIDDLETON

Office of the Town Clerk

TO: Andrew Sheehan, Town Administrator
FROM: Ilene Twiss, Town Clerk
DATE: January 26, 2018
SUBJECT: Capital Budget Back-Up Poll Master I Voting Booths

I am proposing an article for the Town Clerk's FY 19 Capital Budget to acquire funding to replace the current Voting Booths. Given the age (30+ years) of our current voting booths, the need for repairs and maintenance have increased. These issues have and will continue to impact the proper execution of our elections. Over the years, there have been advancements in many features of these voting booths that will benefit the election process. These voting booths are both vital to providing efficiency for elections and protecting the privacy and safety of voters.

Proposed Budget Price for Poll Master I Voting Booths:
\$9,367.00





QUOTE - PRICES GOOD FOR 30 DAYS

10 Manor Parkway Unit B
Salem, MA. 03079
P-888-547-8683 F-603-212-0028

Quote Date: 01/31/2018

Quote # 008508

Quote	Billing	NE Cust NO	CT T Cust NO	CT R Cust NO
Quote # 008508 Date 01/31/2018 Sales Rep JOHN L Delivery UPS REGULAR DELI Payment by BILL TO CUSTOMER	Middleton Memorial Hall Ms. Ilene Twiss Town Clerk 48 South Main Street Middleton MA 01949 P- 978-774-6927 F-	101840		

Product ID	Description	Price	Quantity	Extension
E20-01	POLLMaster I VOTING BOOTH W/LIGHT	\$224.50	38	\$8,531.00
P01-53	POLLMaster ADA W/LIGHT	\$219.00	2	\$438.00

Shipping Weight:	Sub-total:	\$8,969.00
Discount Rate:	Discount:	\$0.00
Tax Rate:	Tax:	\$0.00
Shipping Cost: \$398.00	Quote Total:	\$9,367.00

Signed: _____ **Date:** _____ **Thank You For Your Purchase**

Essex North Shore Agricultural and Technical School District
FY 2019 Preliminary Assessments

Community	Enrollment 1-Oct-16	Enrollment 1-Oct-17	Participation Percentage	\----- Foundation -----/		Transportation Assessment	Service Assessment	Capital Assessment	FY 2019 Assessment	Inr(decr) from FY 2018 Assessment
				Enrollment	Required Minimum					
				Contribution	Assessment					
Beverly	123	127	11.684%	1,703,732	95,025	32,995	213,723	40,145	2,085,620	64,422
Boxford	16	18	1.656%	241,918	13,468	4,676	30,291	5,690	296,043	6,380
Danvers	130	147	13.523%	1,963,264	109,981	38,188	247,362	46,464	2,405,259	240,344
Essex	21	20	1.840%	266,330	14,965	5,196	33,657	6,322	326,470	(34,126)
Gloucester	98	107	9.844%	1,459,584	80,060	27,799	180,066	33,823	1,781,332	170,020
Hamilton	14	13	1.196%	173,866	9,727	3,377	21,877	4,109	212,956	(18,193)
Lynnfield	19	23	2.116%	307,199	17,209	5,975	38,706	7,270	376,359	38,171
Manchester	5	6	0.552%	80,522	4,489	1,559	10,097	1,897	98,564	29,353
Marblehead	20	28	2.576%	375,151	20,950	7,274	47,120	8,851	459,346	130,353
Middleton	38	51	4.692%	685,477	38,160	13,250	85,826	16,121	838,834	208,347
Nahant	6	10	0.920%	145,690	7,482	2,598	16,829	3,161	175,760	77,196
Peabody	269	284	26.127%	3,291,335	212,489	73,781	477,913	89,771	4,145,289	171,435
Rockport	14	23	2.116%	336,418	17,209	5,975	38,706	7,270	405,578	161,087
Salem	181	183	16.834%	1,825,618	136,910	47,540	307,924	57,840	2,375,834	(36,566)
Swampscott	20	21	1.932%	281,059	15,713	5,456	35,340	6,638	344,206	14,644
Topsfield	14	16	1.472%	214,326	11,972	4,157	26,926	5,058	262,439	31,633
Wenham	10	10	0.920%	129,976	7,482	2,598	16,829	3,161	160,046	(4,103)
Total	998	1,087	100.000%	13,481,465	813,291	282,394	1,829,192	343,593	16,749,935	1,250,397

Town of Middleton Debt Service -February 2018 Update

Fiscal Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Town Debt Service																	
Howe Manning School Construction	940,380	937,905	939,905	938,155	937,455	940,655	937,755	940,103	937,275	941,275	937,725	938,500	938,525	937,800	941,250	938,875	
Howe Manning School Bond Premium Offset	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Subtotal	\$940,380	\$937,905	\$939,905	\$938,155	\$937,455	\$940,655	\$937,755	\$940,103	\$937,275	\$941,275	\$937,725	\$938,500	\$938,525	\$937,800	\$941,250	\$938,875	
Flint Public Library Addition/Renovation	332,705	320,705	307,065	298,488	289,793	280,745	271,698	262,650	253,368	239,085							
Less CPA Contribution	(53,360)	(57,762)	(56,719)	(58,988)	(61,347)	(63,801)	(66,353)	(69,007)	(71,768)	(74,638)							
Subtotal	\$279,345	\$262,943	\$250,346	\$239,500	\$228,446	\$216,944	\$205,345	\$193,643	\$181,600	\$164,447							
Land Acquisition - 11 South Main Street (Lois Lane) Property	\$42,425	\$41,375	\$40,325	\$44,000	\$42,400	\$40,800											
Less CPA Contribution	(42,425)	(41,375)	(40,325)	(44,000)	(42,400)	(40,800)											
Subtotal	\$0	\$0	\$0	\$0	\$0	\$0											
Natsue Way Land Purchase @ \$450,000 - Part of March 16, 2017 Issuance	42,092	46,375	45,500	44,625	43,750	42,875	42,000	41,125	40,250	39,200	38,150	37,100	36,050				
Fuller Meadow Roof Rehabilitation @ \$862,000 - Part of March 16, 2017 Issuance	95,111	91,375	89,625	82,875	81,250	79,625	78,000	76,375	74,750	72,800	70,850	68,900	66,950				
Continuing Disclosure Fee	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	
Town Debt Service: Subtotal Principal and Interest																	
	\$1,358,928	\$1,340,598	\$1,327,376	\$1,307,155	\$1,292,901	\$1,282,099	\$1,265,100	\$1,253,246	\$1,235,875	\$1,219,722	\$1,048,725	\$1,046,500	\$1,043,525	\$939,800	\$943,250	\$940,875	\$2,000

Town of Middleton Debt Service -February 2018 Update

Fiscal Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Other Debt Service																	
<i>Masconomet Projection (Based on estimated student enrollment, FY2023 debt paid entirely from SBAB annual grant)</i>	384,138	379,817	377,707	103,750	101,908												
<i>Essex Tech Projection (Based on estimated student enrollment through 2042)</i>	42,275	85,826	85,826	85,826	85,826	85,826	85,826	85,826	85,826	85,826	85,826	85,826	85,826	85,826	85,826	85,826	
<i>Regional Schools Debt Service: Subtotal Principal and Interest</i>	\$426,413	\$465,643	\$463,533	\$189,576	\$187,734	\$85,826	\$85,826	\$85,826	\$85,826	\$85,826	\$85,826	\$85,826	\$85,826	\$85,826	\$85,826	\$85,826	



End of existing scheduled debt service