Middleborough Public Schools

Director of Buildings, Grounds & Operations

3 Year

Preventive Maintenance Plan

Fiscal Year 2014-2015

INTRODUCTION

December 2014

Throughout the 2013-2014 fiscal year the Facilities Department employees have demonstrated initiative and dedication in their many roles supporting the Middleborough Schools programs and events. Maintenance personnel, custodians and crossing guards perform their daily responsibilities with pride and commitment to the community they serve.

The establishment of the Director of Buildings, Grounds and Operations position combined with the existing work ethic of the facilities staff will continue to make improvements in all facets of building systems; provide school officials with information on the condition and maintenance needs of the school buildings; stabilize and improve operations and maximize our employees' skills and resources with the goal of enhancing our ability to meet community needs.

The major goal of the Facilities Department is to maintain healthy, comfortable buildings and safe productive environments for all who work in and use our facilities. The three (3) licensed trades maintenance personnel and seventeen (17) custodians that make up the facilities team in the district ensure the school buildings and grounds are clean and ready for use at all times. This requires doing reactive and corrective maintenance and planning capital improvements on five (5) school buildings and two (2) administrative buildings.

The Middleboro High School, Nichols Middle School, Mary Goode, Henry Burkland, Memorial Early Childhood Center, Flora Clark -Superintendents office and 13 Forest street - the future location of the Facilities Maintenance office. With additional maintenance responsibilities at the School Street School - READS Collaborative, the Lincoln D Lynch School – Massasoit College, the Town Hall, the Library, the Town Annex and the historic Green School. In addition, facilities personnel assist faculty and staff, committees or other school facilities user groups in many ways.

This includes gathering equipment for a specified set up for an event and assisting event organizers prepare the spaces for use. The custodians make themselves available throughout the scheduled event for any task needing completed. Then they work together cleaning up after these "set-ups" which can consume a large portion of the weekly cleaning schedule planned at each of the schools in the district. At the Burkland Elementary school, the in-door pool is just another item on their list of responsibilities. Two (2) custodians are currently assigned the title of CPO – Certified Pool Operator to ensure water conditions are as required by the local health department for public use.

The general or reactive maintenance performed on a daily basis are those concerned with the proper operation of the various components of the buildings themselves. These encompass a broad range of maintenance tasks to include responding to all emergencies, 24 hours a day and snow removal to ensure normal school operations are not impacted. It is a common occurrence the facilities staff perform more tasks behind the scene of school operations than most people know about.

We are thankful to be a part of such an endeavor to educate the generations of Middleborough children and proud of our schools and our students. We are committed to your success and we welcome your ideas and involvement.

James Harding
Director of Buildings, Grounds & Operations

GENERAL

Essential Need:

Without a reliable routine planned maintenance program and a scheduled preventive maintenance plan a school district cannot effectively maintain its facilities. This program is not a short term commitment but an ongoing continued work task, assessment of conditions, and developing and implementing preventive and corrective measures. The results of such a program can affect the District's facilities by reduction of overall costs, lessening impacts on the educational process, providing stable conditions, increased years of reliable service, and the ability to adequately budget.

Communication:

The prime uses of such a program are the development of adequate communication to assess each school and the condition of facilities. A well-developed program brings the schools staff and the district's maintenance department together to find and resolve maintenance problems and to have a record of what has happened and needs to happen. It is very important that schools staff and new employees understand how the system works and what part they play.

Faculty and staff need to know they have a voice and share in the responsibility to help keep the buildings safe and working properly by reporting repairs, stopping vandalism and making recommendations for improvement. If we don't know there is a problem, we cannot make repairs or plan improvements.

Uniqueness:

Schools are unique and exceptional from other building types due to their intense use and abuse throughout the year, the young occupants, and special design requirements for the education system. Rigid standards and extra precautions must be taken to ensure life safety when planning repairs. These buildings are seasonal with long periods of use and short periods of limited occupancy.

All of these factors make any needed maintenance difficult to do without interfering with the educational process and therefore some maintenance repairs and capital projects must be done after school hours or during vacation periods. As a result, a back log of work orders exist and improvement projects may take more time to complete regardless if the project is done in-house by our maintenance staff or contracted with a local vender.

Training:

Although we have skilled licensed trades personnel, (electrician, plumber, HVAC) they are required to be knowledgeable and skilled in other trades in order to provide general maintenance to buildings mechanical, electrical and plumbing (MEP) systems. Cross training occurs by virtue of the many repairs that are performed on a daily basis. Planning for additional training to support any new building technologies will be explored to ensure the facilities maintenance team is current with school building system needs.

The custodial staff, with their years of experience, will also be included in on available training that could provide them with new cleaning techniques or equipment to be more efficient and productive. Crossing Guards have been trained by the Plymouth County Sheriff's Department and annual refresher training may be scheduled to ensure safety education and procedures are current.

FACILITIES DEPARTMENT STAFF

Director of Buildings, Grounds & Operations

James Harding

Maintenance

Scott Beech – Electrician

James Hutchinson – Master Plumber

Mark MacLeod – Refrigeration HVAC Technician

MHS – Custodians

Matt Tarkanian – Head Custodian

Joanne Tarkanian

David Bernabeo

Steve Gonsalves

Bob Shogam – 4 hours

NMS – Custodians

Garrett Perry – Head Custodian

Jack Lindskog

Steve Boucher

John Noska

Bob Shogam – 4 hours

MKG – Custodians

Mike Henderson – Head Custodian

Scott Hallgren

Ron Vaughan

HBB – Custodians

Mark Covell – Head Custodian

Mike Carver

Bruce Anderson

MECC – Custodians

Chris Stiner – Head Custodian

Mike Sousa

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   b. Current Procedure - report repair need to secretaries office to input work order
   c. Usage – basic maintenance repairs – not emergencies
   d. Some maintenance needs are complete as they are discovered with no work order request submitted. Many repairs are reported verbally – can be forgotten
   e. Current process to report maintenance need
      i. Not convenient
      ii. Not accurate account of work performed
      iii. No Accountability to repair need
   f. Second or Third year proposal to open SchoolDude to all MPS employees
   g. Improve awareness of SchoolDude program
      i. MPS employees need to know they have a voice
      ii. Report maintenance repair need
      iii. Understand volume of maintenance needs backlog

6. **First Year Main Goals** **Page 4**
   a. Make connections with Facilities staff; MPS and Middleboro Town key personnel
   b. Assess MPS building systems – develop data for maintenance needs,
      i. NMS
         1. Two (2) boilers down – planned for replacement FY14-15
         2. Media Center & Auditorium Roof Top Units – offline – repaired 2014
         3. One hot water tank – offline – planned for replacement FY14-15
      ii. MECC
         1. Main chiller – off line – repaired
         2. Auditorium roof top unit – offline
         3. Hallway roof top unit – offline
   c. Evaluate Facilities operations and procedures - current
      i. Custodial - currently
         1. Professional Development
            a. LIKARR provide professional development training

b. Equipment review – recommend equipment upgrades

2. Uniform supply ordering needs to reduce cost
    a. Cleaning chemical stations
        i. Reduce cost – chemicals are concentrated
3. Improve custodial equipment and supply order procedure
    a. Review and plan custodial equipment replacement
    b. Establish "Ship to address" – Deliver order to each building

ii. Maintenance - currently
1. Reactive maintenance is the normal routine
2. Minimal time for preventive maintenance
3. Cross training in general building maintenance needs required
4. Working out of storage trailer in alleyway of Mary Goode school
5. Maintenance equipment stored throughout the district
    a. in many cases unused
6. Distracted labor to
    a. receive and deliver custodial supplies - Currently stored at the Lincoln D Lynch school basement
    b. Vandalism – cost town tax payers thousands of dollars annually
    c. Resulting in lost time for maintenance repairs or projects

iii. Grounds Crew - currently
1. None – as a result grounds are not cared for or improved on for normal school operation, events and seasonal needs
2. Contributes to the lacking aesthetic appearance or curb appeal of the MPS properties
3. Speculation on ramifications – ultimately the tax base may suffer. Prospective home buyers with family's may see the school properties as unwelcoming and decide to establish a home elsewhere.

iv. Crossing Guards - currently
1. Reorganized crossing guard stipend positions
2. Established training through Plymouth Sheriff's Department
3. Middleborough Police to swear in crossing guards as Auxiliary Police to provide traffic control to increase safety at school crossing locations

d. Budget Review
i. Budget familiarization – accounts payable
ii. Procurement process – MCPPO IG office training
iii. Review of key service contracts for renewal
1. Elevator Monthly Maintenance
2. State Elevator Inspection
3. Fire Alarm System Testing and Inspection
    a. All buildings covered – labor and materials
4. Fire Sprinkler System Testing and Inspection
5. Kitchen Hood Fire Suppression System Test and Inspection
6. Fire Extinguisher Annual Inspection
7. Pest Control
    a. Integrated pest management program
        i. State beginning to do annual inspections
        ii. Fines for non-compliance
        iii. All building IPM programs updated Oct 2014

8. Trash Disposal
9. Emergency Generator Annual Service
10. Security Alarm Service and Monthly Monitoring

e. Plan, implement and complete approved capital projects from FY2012 to present
- Upgrade fire alarm panel at HS — Dec 2014
- Install rubber surface in stairwells 2&3 at HS
- Install drop ceilings in select hallways at HS
- Install 6 Roof Top Heating and AC Units at HBB — Oct 2014
- Complete planned School Street School capital maintenance repairs
  - Basement water proofing steps
    - Foundation waterproofing at ground level — Aug 2014
    - Install gutters and downspouts — Dec 2014
  - Plan future capital repairs to support READS Collaborative

f. Plan and complete administrative priority projects required to support education program changes and upgrades
- Upgrade vacant classroom for SPED Program — Aug 2014
- Landscaping improvement at MKG & HBB — Aug 2014
- Install panic buttons at all secretaries offices — Oct 2014
- Two way radio inventory improvement – DERT — Oct 2014
- Building signage for emergency responders — Dec 2014
- Renovate Futures Classroom at High School — Dec 2014
- Install power supply to HS Bright Links projectors — Ongoing
- Miscellaneous – Research HBB environment options — Ongoing

7. Second and Third Year Main Goals **Page 10**

a. Establish Facilities maintenance office
   i. Complete move of maintenance staff and equipment to new location
      1. Maintenance staff adapted to working in storage containers where equipment stored – weather reliant
      2. Maintenance supplies and equipment stored – in many cases unused throughout the district
      3. Continue to perform reactive maintenance as we identify and initiate preventive maintenance procedures on building systems
      4. Preventive Maintenance Program
         a. Definition
         b. Purpose
         c. Objective
         d. Scope
         e. Description
         f. Goals
         g. Equipment data collection form – example
         h. Roof data collection form – example

b. Continue to evaluate facilities maintenance operations and procedures
   i. Custodian
      1. Assist head custodians to develop cleaning routines per building
      2. Review cleaning products and equipment needs

a. Select proper cleaning products and dispensers
b. Plan repairs or replacement of custodial equipment
c. Develop equipment preventive maintenance plan
d. Improve custodial supply purchase process
e. MPS level cleaning – current and desired level

3. Identify custodial staffing needs
    a. Sub custodians –Increase hourly wage from $10 to $12
        i. Head custodian to train with cleaning procedure
    b. Professional development to focus on industry standard cleaning procedures – decades of in-house training improved on
    c. Labor needs and resource alternatives
4. Custodial Schedule Per School Building
5. Middleborough Public School Building & Custodial Information
    a. Name, location, age of building, square footage, custodial FTE
6. National Guidelines for Custodial Cleaning
7. Custodial Duties & Responsibilities Plan

ii. Maintenance
1. Maintenance team
    a. Research opportunities for professional development
    b. Cross training
    c. SchoolDude work order system
    d. Uniform shirts and sweat shirts for
        i. Safety
        ii. Create sense of team spirit
        iii. Professional appearance

iii. Crossing Guards
1. Create procedure for stipend position annual renewal
2. Improve payroll processing procedures
3. Establish annual training through Plymouth Sheriff's Department
4. Middleborough Police training swear in as Auxiliary Police to provide traffic control to increase safety at school crossing locations
5. Institute a uniform policy for a professional appearance
    a. High visibility vest, hats, gloves
    b. Must wear proper attire while in the performance of duties as crossing guard
        i. No cut off pants of any kind, no sweat pants, or shirts with improper logo displayed

iv. Grounds Personnel
1. Grounds work – plan using OT for custodians, outsource to landscaping co, utilizing volunteers until grounds position approved and established

c. BUILDINGS
1. Maintenance procedures - buildings
    i. Reactionary over 90 % of the time, planned repairs 10%
    ii. Need to improve additional time for PM scheduling
    iii. Building envelope repairs as priority over interior improvements
    iv. Roof evaluations
    v. MIIA Insurance rebates for preventive maintenance measures
    vi. Maintenance budget funding requirements

vii. Labor resources – PTA, Bristol Plymouth Regional Vocational and MPS student organizations
viii. Key control process
ix. Security Alarm system procedures
x. Continue to develop 3 to 5 year capital plan
xi. Continue to develop energy conservation program, research rebate incentives and Grant initiatives, and climate controls; measure effectiveness through savings realized.

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a. Facilities Department – Maintenance & Custodial Supplemental Staffing
    i. Sub Custodians
    ii. Summer High School student workers
    iii. Bristol Plymouth High School Trades – Electrical, Carpentry, HVAC and Plumbing

10. Additional Objectives **Page 30**

b. Facilities Operations Budget Review
    i. Establish facilities budget review procedure and needs assessment
    ii. Continue to review facilities service contracts
    iii. Review equipment needs for facilities department annually
        1. Custodial
        2. Maintenance
        3. Vehicle
c. Create a Middleborough Public Schools Website Presence for Facilities Department
d. Update custodial, maintenance and crossing guard job descriptions
e. Professional Development & Reinforcement Training
    i. Establish Monthly training – OSHA, Safety, CDC protocol FLU, Colds, other illnesses, blood borne pathogens, Universal precautions regarding self-care
f. Mechanical Rooms and storage areas protocol – keep clean and limit access
g. MIIA Insurance – improve cost reductions for town operations through rebate and incentives pertaining to establishing and documenting ongoing:
    ii. Building preventive maintenance performed by
        1. In-house maintenance staff
        2. Service contracts and venders
    iii. Creating safety programs and training for personnel
        1. OSHA Standards
        2. Cleaning standards
        3. Professional Development
h. Improve communications and relations with cooperative town department
    iv. Park Department
        1. Mow and line athletic fields at HS and NMS
        2. Assist with other grounds maintenance when labor is available

3. Battis field – high school usage
4. Explore options for increasing areas of assistance to MPS

v. Department of Public Works
1. Snow removal of parking lots
2. Assist with repairs and improvements when labor is available
3. Explore options for increasing areas of assistance to MPS

vi. Building Department
1. Building inspections for certification of occupancy
2. Permits for building improvements
3. Review in cooperation town building repair project work

vii. Fire Department
1. Safety inspections
2. Fire Drills

viii. Police Department
1. Security alarm support – false alarms
2. Emergency and non-emergency response to school needs
3. Lock down drills and training
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Facilities Department Mission Statement and Maintenance Goals

Mission Statement:

The mission of the Facilities Department is working together as a team to provide a high degree of support services needed to ensure a safe, clean, and productive learning environment to satisfy all students, staff & community. The Facilities team is dedicated to be responsive to the needs of the district, strives for excellence in their daily tasks, individual responsibility, and caring about others with the belief that they are an integral part of the educational process for the students of the Middleborough Public Schools.

The Facilities Department is responsible for the daily operation and maintenance of 5 school buildings, with some responsibilities to town buildings, Battis Field and 2 school buildings, the school street school and the Lincoln D Lynch School, leased to READS Collaborative and Massasoit. We believe a successful facilities maintenance program is one that is customer oriented, cost effective, and current with technological advances.

Maintenance Goals:

1. To maintain a safe and clean learning environment in every school
2. To use resources effectively and efficiently
3. To establish efficient and effective operation
4. To provide quality customer service to the school community students, staff and guest
5. To establish an effective preventive maintenance program
6. To develop capital planning needs

Facilities Department Organization and Staffing Responsibilities:

Organization:

All **Middleborough Public Schools** maintenance personnel, including the custodians and crossing guards take direction from the Superintendent, Business Manager and Director of Buildings, Grounds & Operations, per the following organization chart:

Superintendent
Business Manager
Director of Buildings, Grounds & Operations
Master Plumber
Electrician
HVAC
Custodian
Crossing guard

Staffing Responsibilities:

Director of Buildings Grounds & Operations: Responsible for the Middleborough School buildings systems operation and maintenance activities and provides leadership and supervision for the district maintenance, custodial and crossing guard personnel. Provides direction on maintenance issues through team collaboration and assists the facilities staff with needed resources when available.

Master Plumber: Installs, maintains and makes all necessary repairs involving plumbing that includes plumbing fixtures, and hot water systems in school buildings. Provides recommendations for complex or costly plumbing repairs or improvement, and arranges for the moving of furniture, supplies, materials and equipment, etc. throughout the Middleborough district school buildings.

Electrician: Performs the electrical maintenance services and repairs at all district school buildings. Provides recommendations for complex or costly electrical repairs or improvement, and arranges for the moving of furniture, supplies, materials and equipment, etc. throughout the Middleborough district school buildings.

HVAC: Conduct regular preventative maintenance inspections of isolated heating and ventilation units, including boilers, gas and electrically operated air-conditioning equipment, and make necessary adjustments or repairs. Provides recommendations for complex or costly HVAC system repairs or improvement, and arranges for the moving of furniture, supplies, materials and equipment, etc. throughout the Middleborough district school buildings.

Custodian: is responsible for cleaning and caring for buildings and facilities in order to ensure that municipal school buildings are maintained to a high standard of healthy, safe and sanitary condition at all times and performing minor maintenance and other miscellaneous duties. Reports all maintenance repair needs to building system or custodial equipment and arranges for the moving of furniture, supplies, materials and equipment, etc. throughout the Middleborough district school buildings.

Crossing Guard: is responsible for the safety of school children going to and returning from school, at school crosswalks. This involves maintaining control of children, supervising children while they cross roadways, directing traffic in and out of schools, and controlling traffic along school roadways.

Facilities Department Maintenance Priorities:

Priorities: Middleborough Public Schools has established the following priorities for Facilities Department response to requested work:

- **Emergency** – eminent life safety threat or operational disruption that could cause the closure of schools.
- **Safety/Health/Security/ADA** - identified problem that could result in injury if not corrected in a timely manner.
- **Preventive Maintenance** – scheduled inspection or routine maintenance tasks that if not completed, could result in failure of a facility system or equipment item.
- **Unscheduled Repair – Reactive Maintenance** - action required in repairing a facility system, equipment item, or building component that is not functioning properly, or was damaged.
- **Event Support** – upon request, the facilities department will assist MPS officials with organizing special events and programs. As much advance notice as possible is requested so that this support can be organized with other planned work requirements.

Work Order Process – SchoolDude Maintenance Direct:

Middleborough Public Schools currently processes maintenance work requests through the SchoolDude online maintenance program. The SchoolDude maintenance management program has been in use at the MPS district since 2012, a relatively short time for the program to be made popular. SchoolDude is a user friendly computerized maintenance management system (CMMS) online software program with more potential for data collection than is being used. The program collects information from submitted work order request that can be reviewed at any time and assist with maintenance repair budgeting and capital planning opportunities.

In any case, the process to input a maintenance need must be consistent throughout the district. The current procedure to input a work order for the majority of MPS staff is when a maintenance need is observed, it is reported to the principal's office so it can be entered into SchoolDude to be addressed. The request is prioritized and assigned to the appropriate maintenance person, custodian or contractor. This procedure works if the individual follows the procedure and the office staff input the information into SchoolDude. Too often maintenance needs are deferred by faculty until a school break or end of school year. It is then a long list of repair needs is submitted to the principal's office to be addressed.

It is important for many reasons to submit a work order for a maintenance need as soon as possible. The maintenance need is accounted for, assigned to someone to address, and the action taken is entered before the work order is closed. The work orders are currently prioritized at this time as most urgent while the other repair needs are completed when labor is available. The future goal for prioritizing the work orders would be most urgent and number of days the request was in the system. The best scenario is less than 30 days in the system and that is hard to achieve. Some work orders will have the number of days reaching beyond 12 months due to the time schedule and involved labor, and or cost.

Although the program has been available to MPS staff to report a maintenance need, the usage of the SchoolDude maintenance management system is not where it can be. Most maintenance requests reported to the facilities department are general building repairs. Emergency repairs are quickly reported over the two way radio system and responded to. With only 1500 work orders complete since the program was purchased in 2012 and with an average backlog of 135 work orders in progress, the available data does not accurately reflect the volume of repair work being completed.

Due to the aging building systems and a motivated maintenance team, it is common practice for facilities maintenance staff to complete a repair as it is discovered with no work order being submitted. Additional limitations on data collection are created when facilities team members are visible in the buildings. The friendliness and approachability of the maintenance staff make it easy for MPS employees to verbally communicate a repair request.

That request is either completed with no work order submitted or the request was forgotten. Not to the fault of the facilities staff person. There may be other issues being addressed at the time and the request may have been temporarily put aside until a reminder of the task is presented. The goal for the maintenance technician or custodian that identifies a facility problem at his/her school, to always submit a work order or ask the work order be submitted while a repair is planned and progresses.

In order to keep the school buildings safe for all who work and use them, all MPS employees share in the responsibility of reporting maintenance repairs. By reporting maintenance repair needs, faculty and staff help the facilities team keep the building systems functioning properly and the building occupants safe and comfortable. Over the next year, increasing the awareness of the SchoolDude maintenance program

to faculty and staff should provide more information on needed building repairs. It is essential that a repair need is reported as soon as possible and not have it wait until a school break or end of the school year. This allows the maintenance team to address minor repairs sooner and plan resources for more complicated repairs.

As mentioned above, the current procedure for an MPS employee to report a maintenance repair need does not take advantage of the online convenience of the program and some repairs may linger or go unreported. Again, the number of requests currently recorded in the program does not reflect the accurate volume of work performed. This can hurt the maintenance staff when additional labor is needed for staffing in the maintenance department, budgeting needs and minimizes the deterioration of building systems as they go unreported in SchoolDude.

On the other hand a repair can fall into limbo for many reasons most being time available in the schedule and cost. Maintenance repairs are currently scheduled around the education program needs. Facilities maintenance staff and custodians adjust their work schedules to accommodate the needs of the school to complete the repair.

The age and use of the school buildings is unique in that the window of opportunity to address a repair is small. The sooner the repair need is reported, the sooner the repair can be scheduled and completed. Unfortunately there are a number of repairs known or reported that are on the present list of "to do's" but are not complete due to scheduling of the space, volume of reactive maintenance and larger projects being completed in house. In addition, these projects and improvements are planned as part of the daily maintenance schedule which can absorb a large portion of the weekly intended repair work. Staying on top of as many maintenance repairs to avoid a ripple effect in repairs, is the daily objective for facilities maintenance staff.

In the coming years, it may be more beneficial to the facilities maintenance department to open up the access and allow faculty and staff the opportunity to report a repair need from their own computers. This will take some time to organize, input each person into the system, plan annual updates to staff, and develop procedures for faculty and staff to follow when placing a maintenance request.

In the meantime, we can improve awareness of the SchoolDude program by periodic emails to illustrate the current procedures so the MPS employees have the most current information. The email will offer employees a reminder should there be a maintenance request lingering. Each MPS employee sharing the responsibility of maintaining our school buildings by reporting a maintenance need keeps the building systems functioning properly and safe. Having MPS employees able to easily communicate the repair to the facilities office would be just one of the steps toward improving and sustaining above average building conditions.

First Year Main Goals

During my first year working at Middleborough Public Schools establishing the newly established Director of Buildings, Grounds & Operations position began with making connections to key MPS and town personnel. This process included learning some of the rich history of the Town of Middleborough that residents are very proud of. This pride is not only of their town history but of their sports teams and culture as well. Community involvement with PTA, school functions and traditional holiday celebrations make it a pleasure to be a part of such camaraderie. I look forward to learning more about Middleborough residents and its history over the years to come.

Buildings:

Collecting data on current building system condition and maintenance needs requires seeing each building and system up close. The intent is to identify building systems that are worn, in need of repair or replacement, and prioritize critical repairs for safety and security. As the initial review progressed, the information gathered indicated the need for a preventive maintenance program.

For example, At Nichols Middle School there are two (2) boilers and one (1) hot water tank that are offline and in need of replacement. Two (2) roof top heating and AC units were not functioning in the media center and the auditorium. At the Memorial Early Childhood Center, the main chiller was offline with two (2) roof top heating and AC units were not functioning as well. Numerous roof top exhaust fans were not operational and air filters throughout the varying air circulation systems in the district were well beyond a proper replacement date.

In order to establish a sustainable preventive maintenance program, all building systems will need to be evaluated, repaired and reviewed for proper maintenance scheduled needs. Although currently in process, accomplishing this task will continue over multiple-years due to the age of most MPS building systems and volume of deferred maintenance.

Personnel:

In evaluating the facilities operations and procedures it was apparent that facilities staff have not only gone above and beyond when needed, they have adapted to many school official and administrative position turn overs; budget restriction and reductions in labor; a lack of proper supply line for cleaning chemicals and paper products; no plan to replace worn or outdated equipment and all while the education programs in the district continued to expand and accommodate administrative educational goals, state mandates and community needs.

Custodians:

The one thing the custodial staff does not lack is camaraderie in each building. It is apparent the custodial staff assigned to each building is proud of their assigned school and will do anything that is needed to sustain normal school operations. To build on the established camaraderie and expand it to a district sense of pride, offer immediate employee identification for school building guests, and create a team spirit between all custodians, uniform shirts and sweat shirts have been purchased.

In addition, reviewing the custodial staff for skills and experience uncovered a history of informal training on education building cleaning standards, cleaning chemical handling, OSHA safety standards and equipment maintenance. The need to have all custodians in the district properly trained came in the form of a Professional Development Program from LIKARR Maintenance Systems.

The training included cleaning procedures for schools with a top down approach, floor care, bathroom sanitizing, proper chemical handling and applications for specific surfaces and or situation. Other modules of the program included working safely in a school environment, training in material safety data sheets (MSDS) which explains the active ingredient in the chemical, the safe dilution and what to do in an emergency if swallowed or splashed in the eye. The training would not be complete without the proper way of handling blood borne pathogens, and custodial equipment review.

With the equipment review complete for the district, the recommendations for equipment purchasing and replacement is under review. Although some low cost items have been purchased or currently on order not all equipment recommendations could be purchased due to the cost. In order to provide

equipment where none existed or replace aging equipment that has failed or is failing, the needed custodial equipment will be planned for in the annual budget process and capital planning.

Maintenance:

The three (3) maintenance staff, comprised of a licensed electrician, plumber and HVAC technician, understands their role and the importance in keeping the school buildings systems operations normal. The maintenance team has a regular routine of reactive maintenance that requires each to become cross trained in general building maintenance. This occurs by virtue of the volume of daily needed repairs and projects across the district. As a result, preventive maintenance is difficult to schedule because the reactive maintenance monopolizes a large portion of the weekly repair needs. This also limits the available time that can be dedicated to address the backlog of repairs and school official priority projects.

The productivity of repairs is further inhibited because the facilities maintenance personnel currently work out of a cramped office space at the Burkland Elementary School and is used in part as storage for some maintenance supplies and tools. Maintenance equipment and some tools are stored throughout the district and in many cases unused due to the accessibility and location. In addition, an unheated storage container located in the alleyway of the Mary Goode Elementary School acts as a workshop for some maintenance repairs which can only be completed if weather permits.

Although the maintenance team is faced with obstacles that inhibit repair progress, they continue to perform above and beyond to ensure school programs and building operations are functioning properly. Not only are maintenance staff performing needed repairs in each school building, they are also available to receive supply deliveries from vendors at the Lincoln D Lynch School where the supplies are stored. When requested by custodians, the maintenance staff fills a supply request by gathering items stored at the Lincoln D lynch building and distribute them to each school building. Although this is helpful, they are skilled and licensed tradesman and this is not the best use of their time. This monthly task distracts maintenance staff from performing needed repairs and completing projects.

As we move forward, a plan to organize and improve the supply ordering and delivery process will be created that would take some, if not all of this responsibility from the skilled maintenance tradesman. The idea is to introduce a uniformed supply system for paper and cleaning products to improve efficiency and reduce cost but not sacrifice quality in equipment or cleaning product. To begin this change, chemical stations were installed in strategic custodian closets for convenient access while cleaning. These chemicals are concentrated and not only will save space; it will save money through the measured dispensing system. These chemicals are ordered from the vendor and shipped to each school as needed. Paper products will soon follow this method.

Each chemical station can hold up to four (4) chemicals at a time. Each for a different purpose and are measured through the dispensing mechanism automatically based on the chemical selected on the dial. These are the only chemicals the facilities staff can use to clean the buildings surfaces with. These are safe chemicals that are ecofriendly and come with MSDS (material safety data sheets). The MSDS is state mandated to ensure no unsafe cleaning chemicals are used around children. All other chemicals are not allowed in school buildings.

With that said in order to ensure only these chemicals are used in the building, a plan to expand the availability of these cleaning chemicals for use in classrooms to spot clean would be prudent. Spray bottles with a general cleaner that is safe to use around children will be provided to each classroom. In doing so could further benefit the building environment and all who work and use the school facilities.

Grounds Maintenance:

Unfortunately the MPS district does not have a grounds crew to police and care for the school properties. Due to previous budget needs, the grounds positions were eliminated which placed the responsibility of basic grounds care on the custodians. The custodians could not maintain both the buildings and the grounds with current staffing and as a result both the buildings and grounds suffered. As a remedy and to assist with the athletics program and provide some grounds maintenance the Middleboro Park Department is contracted to care for the two athletic fields at the High School and Nichols Middle School only.

This has not been the ideal situation for the school properties in the district and as a result the rest of the school properties ground maintenance needs are not cared for on a regular basis or improved on for major school events and seasonal needs as best as it could be. The appearance of the school properties landscaping lacks curb appeal which can have an impact on enrollment. The school properties should be maintained to provide a clear view for safety and create a welcoming look to all who enter the facilities.

With no labor hours dedicated to grounds or grounds equipment maintenance, minimal grounds care or improvements are being completed. Outsourcing grounds maintenance is cost prohibitive. It would be less expensive to establish two grounds crew positions to care for school properties and grounds equipment. Establishing a grounds crew for the district would provide the schools with the needed maintenance during the growing season. In the winter months these positions would be responsible for managing snow removal and have additional responsibilities on the inside of the buildings working with maintenance or custodians.

There is a clear need of a grounds position to perform grounds maintenance for the school properties that include seasonal clean up, landscaping improvements, plantings, tree and lawn care, and snow removal. In addition, the grounds crew would be responsible for the preventive maintenance of all school owned grounds equipment which is currently minimal. The equipment is used until it breaks. This can be costly as each Kubota tractor cost over $15,000 each and we have at least one at each school. The grounds crew position will be explored with FY15 budgeting process.

Crossing Guard:

The crossing guards hired for the 2014-15 fiscal year have received training through the Plymouth Sheriff's Department. They are all dedicated to the safe crossing of the students in route to school. Each crossing guard is equipped with a safety vest, stop sign and whistle. Although they are not there to direct traffic, the crossing guard manages traffic to keep cross walks safe for school children. To improve on the crossing guard's authority and to facilitate safety at each crosswalk the MPD would like to swear the crossing guards in as auxiliary policeman.

Budget Review:

Getting to know the facilities operations budget and accounts payable process is a task in itself. The procurement process for public entities and the MCPPO at the IG office training is learning a new language. This will take time to absorb and become proficient at. The learning curve is steep but will level off in time. The support and leadership of the business manager throughout this learning process has not only been valued, it has been pivotal in getting some capital projects accomplished.

In reviewing the overall facilities operations budget account numbers and amounts budgeted, the maintenance needs of each school building will be determined based on historical spending for completed repairs. This will include maintenance supplies and general repairs. The budget process

cannot be without taking into account the age of each building as a factor. The aging buildings may require additional funding due to increased repair needs caused by aging systems. Each building system can be assessed that may predict potential needed repairs and if funding these repairs can be either absorbed in the operations budget or designated for capital planning.

Key service contracts that monitor safety and security systems, provide climate control or trash removal are items in the budget that must be funded and should be considered fixed cost. Most of the service contracts are annual with a one year renewal option which provides an out if the quality of service is not to satisfaction. Otherwise, with a service contractor that does provide quality service for a reasonable price will be looked upon favorably for renewal and even a potential for a multi-year contract that will offer minimal disruption to preventive maintenance being accomplished. This will be an ongoing process to ensure all contracts are monitored for quality of service and cost.

	MIDDLEBOROUGH PUBLIC SCHOOLS - Service Contract Information		
#	**SYSTEM**		**COMPANY**
1	Elevators		Atlantic Elevator
2	Fire Alarm		SimplexGrinnell
3	Fire Sprinkler		SimplexGrinnell
4	Ansul Fire System		SimplexGrinnell
5	Fire Extinguisher		South Eastern Fire Equipment
6	Kitchen Hood Cleaning		Industrial Team Cleaning
7	Waste Removal		Allied/Republic
8	Pest Control		Environmental Health Service
9	Emergency Generators		South Shore Generator
10	Security Alarm - HS/Comlex		Watch 24
	MECC		SIGNET
	NMS		SimplexGrinnell
11	HVAC – Chillers & RTU		ARDEN Engineering
			Specialized Heating and Air Conditioning
12	Boiler Inspection-Cleaning		BOSCO Industrial Corp
			AALANCO Service Corp
			Kennedy & Sons Mechanical Contractors
13	Security Camera		Watch 24
	Access Doors		Watch 24
14	MKG Pool Repair		Shipmate Underwater Service
15	Custodial Supplies		LIKARR
			Milhench
			MD Stetson
			Custodial Supplies
16	Grease Trap Service		Bay State Sewage Disposal

The following service contracts have been reviewed and negotiated for FY 2014-15:

1. Elevator Monthly Maintenance
2. State Elevator Inspection
3. Fire Alarm System Testing and Inspection
    a. All buildings covered – labor and materials
4. Fire Sprinkler System Testing and Inspection
5. Kitchen Hood Fire Suppression System Test and Inspection
6. Fire Extinguisher Annual Inspection
7. Trash Disposal
8. Pest Control
    a. Integrated pest management
        i. State beginning to do annual inspections
        ii. Fines levied for non-compliance
        iii. All building IPM programs updated Oct 2014
9. Emergency Generator Annual Service
10. Security Alarm Service and monthly monitoring

In conjunction to the facilities operations budget review, the first year and even into the second year is to plan, implement and complete approved capital projects from FY2012 to present. These projects include the following:

- Install 6 Roof Top Heating and AC Units at HBB — Oct 2014
- Upgrade fire alarm panel at HS — Dec 2014
- Install rubber surface in stairwells 2&3 at HS — Feb 2015
- Install drop ceilings in select hallways at HS — TBD
- Complete planned School Street School capital maintenance repairs
    - Basement water proofing steps
        - Foundation waterproofing at ground level — Aug 2014
        - Install gutters and downspouts — Jan 2015
    - Plan future capital repairs to support READS Collaborative — TBD

In addition, it is normal for facilities maintenance to be called upon to complete administrative priority projects required to support education program changes and upgrades. Some of these projects include:

- Upgrade vacant classroom for SPED Program — Aug 2014
- Landscaping improvement at MKG & HBB — Aug 2014
- Install panic buttons at all secretary's offices — Oct 2014
- Two way radio inventory improvement – DERT — Oct 2014
- Building signage for emergency responders — Dec 2014
- Renovate Futures classroom – create 2 interior classrooms — Dec 2014
- Install power supply to all Bright Links projectors – all schools — Ongoing
- Miscellaneous – Research HBB environment options — Ongoing

Second and Third Year Main Goals:

Establish the Facilities Maintenance Office

The office building is located at 13 Forest Street Middleborough and has been an ongoing project over the past year. The building is a small house that has lacked proper maintenance for years. Water infiltration caused structural problems in a couple of areas which has been corrected. Mice and squirrels became very comfortable living there and they have been encouraged to leave.

On a positive note, prior to the school taking ownership of this building in Oct 2013, the town installed a new roof, siding and windows to prevent water from entering the building. Unfortunately the damage on the inside was not repaired. The maintenance staff is updating the electrical service, plumbing and heating. Once this is complete, the contractor will be completing the install of the insulation, sheet rock, and carpeting. We will be installing internet and an alarm system as well. The long anticipated move into a home of our own will help us get more organized with maintenance needs, communication and capital projects planning.

With the establishment of the Facilities office, the maintenance staff will have an actual workshop to plan and complete building repairs within the district. For many years the maintenance crew have adapted to working out of a cramped office space shared with supplies and equipment. In addition, other repairs were performed out of a storage trailer in the alleyway of the Mary Goode School. This was of course, weather reliant. Now the repairs can be made in a shop with equipment long stored across the district with some of the equipment unused.

The development of a Preventive Maintenance Program can begin to be formally created. However, this will be an ongoing process that will most likely take 3 to 5 years to complete simply due to the age of building systems needing more reactive repairs than preventive. There is a lot of information from each building and system that we need to collect, analyze and input into the SchoolDude maintenance software and capital planning spreadsheet. Available labor from maintenance staff to perform the information gathering and any preventive maintenance is limited at this time. Planning and implementing a viable preventive maintenance program will take some time and effort with the current circumstances regarding available labor and budget restrictions but it can be done with persistence.

With that said, the maintenance personnel are skilled in their trades but two are newly hired into the school system, replacing retired maintenance staff. Losing two key personnel during this phase of establishing the facilities department has created some challenges regarding building information and history. The loss of this experience of the retirees will be felt as we move forward in our plan to create an effective preventive maintenance and capital plan.

In the meantime, the maintenance staff has already begun implementing preventive maintenance to building systems as best as they can. Lubricating moving parts, changing filters, prepping systems for seasonal changes while addressing a myriad of scheduled and unscheduled maintenance needs and administrative priority project work has their work day schedule full.

Preventive Maintenance

Defined: Preventive maintenance (P.M.) generally refers to routine inspections, adjustments, lubrication and cleaning of fixed and movable equipment, machinery and appliances utilized in the daily operation of a facility. Performing regular routine preventive maintenance keeps equipment in good running order, reducing the possibility of equipment failure thus insuring and extending expected equipment life. Through regular preventive maintenance, potential problems can be detected early thus reducing down time and preventing more expensive repairs.

Purpose: The purpose of the Preventive Maintenance Plan is to develop and implement an efficient and effective systematic system for maintaining maintenance of facilities.

Objective: The primary objective of the Preventive Maintenance Plan is to provide direction for maintenance in a manner, which will maximize equipment operational readiness.
The intermediate objectives are as follows:

a. Establish uniform maintenance standards and criteria.
b. Minimize cost by reducing unnecessary damage to building systems and equipment.
c. Schedule, plan, manage, and track maintenance

Scope: The Preventive Maintenance Plan as described here is fully applicable to all **Middleborough Public Schools Facilities** in assisting to maintain the facility as designed levels of reliability.

Description: The Preventive Maintenance Plan provides simple and standard guidelines for maintenance personnel to plan, schedule and perform preventive maintenance of facility systems and equipment. It also represents an effective means for utilizing available manpower and budget resources in support of maintenance.

2014-2015 Preventive Maintenance Plan Goals:

1. Update Equipment Inventories for all locations
2. Identify PM requirements for MEP systems and equipment
3. Commit at least 10 percent of maintenance resources to scheduled preventive maintenance tasks for FY 15. Increase percentage incrementally in FY 16 & 17 until all PM for building systems are implemented.

The following sample P.M. document is designed to give maintenance staff the assistance necessary to perform basic routine P.M. checks and tasks. These checks are to be performed throughout the school building, both interior and exterior, including the grounds.

EXAMPLE - Equipment Data Collection Excel Format:

1. **Item Number –** Enter a unique item number such as: AC-SCHS-001 i.e. (AC) Air Conditioner at (SCHS) Middleborough High School - Unit # 001

2. **Description –** Enter the technical description of the unit: i.e. Air Conditioner.

3. **Model Number –** Enter the model number on the unit or supplied by the manufacturer.

4. **Serial Number –** Enter the serial number on the unit or supplied by the manufacturer.

5. **Notes –** Enter any notes that will be informative to the district.

6. **Manufacturer Name –** Enter the name of the unit manufacturer i.e. Carrier

7. **PM Classification Description –** Enter the classification of the system/equipment i.e. HVAC/Services (See NMGCT Groups/Classifications and Types)

8. **PM Type Description –** Cooling Generating Systems(See NMGCT Groups/Classifications and Types)

9. Area Number – District specific, i.e. Room 102.

10. **Area Description –** Enter area where the unit is located, I.e. Roof, Mechanical Room.

11. **Location –** Enter the name of the school site, as listed in Maintenance Direct i.e. Middleborough High School

12. **Building Description –** Enter the name of the building at the school site/location as listed in Maintenance Direct i.e. Gym. Disregard if buildings are not used in Maintenance Direct.

EXAMPLE - Roof Data Collection Excel Format

Item Number – Enter a unique item number such as: RF-SCHS-MTL i.e. (RF) Roof, (SCHS) Middleborough High School, (MTL) Metal

Description: Enter a roof type i.e. Metal, Asphalt, Single-ply, Bitumen (BUR).

Notes – Enter the total roof square footage of the roof.

Manufacturer Name – Enter the name of the manufacturer and installer of the roof.

PM Classification Description – Enter: **Roofing/Shell**

PM Type Description – Enter: **Roofing Coverings**

Area Number – District Specific

Area Description – Main Roof

Location: Enter the name of the school site, as listed in Maintenance Direct i.e. Middleboro High School

Building Description – Enter the name of the building at the school site/location as listed in SchoolDude Maintenance Direct i.e. Gym. Disregard if buildings are not used in Maintenance Direct.

EXAMPLE - Preventive Maintenance Schedule:

MAINTENANCE EQUIPMENT	INTERVAL	MAINTENANCE CHECKS AND DUTIES	COMMENTS
AIR COMPRESSORS:	Daily Daily Daily Monthly Quarterly Quarterly	Check for proper operation Drain moisture from separators Drain moisture from Tank Check oil level Check V-belt tension Clean filter intake	Tank pressure\all compressors run Drain till moisture disappears Drain till moisture disappears Adjust level as needed Adjust level as needed Adjust belt with 2" flex Wash or blow out as required
AIR CONDITIONING:	Daily Weekly Monthly Quarterly Annually	Check operation Check cooling towers Check air cooled condensers Check - adjust V-belts Clean A/C coils	Cooling properly Fan running\water level proper All fans run\coils clean Adjust belts with 2" flex Vacuum\wash finned coils
AIR HANDLERS:	Quarterly Quarterly Quarterly Quarterly Quarterly	Lubricate bearings Check air filters Check roll filters Lubricate motors Check V-belts	Use 4 to 6 pumps of grease Change as needed Change as needed Oil & lube sparingly Adjust belt with 2" flex
BLEACHERS:	Weekly Monthly Annually	Check operation & alignment Inspect units for damage & loose parts Clean and lubricate undercarriage assembly	Repair or report all problems Repair or report all problems Grease slides-lube rollers
BOILERS: Hot water Steam Boiler	Daily Daily Daily Weekly	Check water temp & water pressure Check water level, blow sight glass, water feeder, and mud legs Check for oil leaks Boiler air pumps - check oil reservoir	Temp 120°-200°\Pres 12 - 25 lbs. Check for proper level Blow out till water is clear Repair or report promptly Fill with special oil only
BUILDINGS:	Daily Daily Weekly	Check all windows & doors Check all fire & safety devices Check interior & exterior of building	Repair or report all damage Repair or report all problems Repair or report all problems
CIRCULATING PUMPS:	Daily Weekly Quarterly Quarterly	Check operation Lead - lag sequence\rotate pumps Check couplings Lubrication	Running & pump discharge press. Manually switch pumps Not loose or slipping Oil & lube sparingly
ELECTRIC MOTORS:	Weekly Quarterly Quarterly	Check operation Lubricate Clean air over vents	They run, not noisy or overheating Oil & lube sparingly Clear all dirt from motor
EMERGENCY LIGHTS:	Weekly Weekly	Check emergency light operation Check battery water level	Repair or report all problems Add distilled water if needed
HOT WATER HEATERS:	Daily Monthly	Check water temperature Drain bottom of tank	Use gauge or thermometer Blow out till water is clear

PERSONNEL

Custodian:

With current full time employee (FTE) staffing levels and working with the head custodians over the next year, together we will set up regular periodic and scheduled routines of cleaning for all areas and surfaces of the buildings. In conjunction, companies like LIKARR Maintenance Systems will continue to provide custodians with professional development in the following areas: floor care and bathroom sanitization. Purchasing new custodial equipment and performing preventive maintenance on current equipment will provide some counterbalance of labor needed to clean the buildings and help improve the level of cleaning as defined by the National Guidelines for Custodial Cleaning.

To explain, the National Guidelines of Custodial Cleaning have five levels of cleaning. It states that Level one (1) cleaning is typically found in hospital environment and is a spotless building where each custodian is responsible for cleaning 14,000 square feet of living space. Level five (5) cleaning is where minimal cleaning is performed and it results in an unhealthy education environment and each custodian is responsible to clean 80,000 square feet of living space. However, this guideline does not take into account the "non-cleaning" activities such as function setups, cafeteria cleaning, errands and snow removal to name a few. This guideline is attached later in this report that defines each level.

According to this guideline, the Middleborough School buildings are at a level of cleaning that is between a level three (3) and level four (4) standards where the custodians are responsible for 33,000 to 50,000 square feet of cleaning space. This is a level of cleaning that rests between an "acceptable" cleaning level and a "not so clean" level. In addition, the cleaning standard is further reduced due to time off requests that at times leaves only one (1) custodian in the building at night. When there is an absence of a FTE, staffing levels can be limited to the point there is one person in the building at night and in some cases, only one all day. This may be a safety factor needing consideration during budget request meetings. (See Custodian Assignment Spread Sheet)

Based on the information provided in the National Guidelines regarding square footage per FTE, the MPS has the appropriate number of custodians. However, this standard does not take into account the "non-cleaning" activities performed on a daily basis. It is because the level of cleaning is impacted by the non-cleaning tasks that are present on a daily basis it needs to be taken into consideration for labor needs. By adjusting the amount of square footage each custodian is responsible for to 25,000 that does take the "non-cleaning" tasks into account, the MPS custodial staff is short by at least three (3) custodians in the district. As illustrated in Tables 1 and 2, when the square footage is adjusted the information indicates there is an immediate need for custodial staff.

Where the aging of the buildings contribute to the appearance and ability to maintain a consistent cleaning standard, along with non-cleaning responsibilities the level cleaning standard is understandable and not as a result of effort. Although the MPS custodians have done a good job maintaining the buildings and grounds with the current staffing levels and budget constraints, the standard of cleaning has not remained at a level appropriate for an education environment. The cleaning standard needs to improve throughout the district so the desired standard can be maintained properly.

To provide assistance with the intent to reduce labor with some cleaning tasks, some strategic custodial equipment will be purchased, repaired or replaced. Some of these needed repairs and replacements of custodial equipment is in process. Other equipment needs will be part of budget planning over the next three years. As new equipment arrives and put into use a preventive maintenance plan for custodial equipment will be created.

It is understood that funding is not readily available to add custodial positions in the near future but to achieve the level of cleaning desired, additional custodial positions are needed to offer proper support for the MPS education programs and to maintain higher standards of cleaning.

Custodial Supplies:

As mentioned earlier, the cleaning chemicals have been replaced with cleaning chemical stations that house four (4) ecofriendly cleaning chemicals. The concentrated cleaning chemicals were one of the first steps in the right direction to improve the cleaning standard in the school buildings. The custodians need appropriate chemicals and equipment to effectively do their job. Paper products and dispensing systems are currently being looked at to reduce costs and labor associated with replenishing these paper products throughout the district.

New paper towel and toilet paper dispensers will be installed this year that will reduce custodial supply cost, labor and waste associated with these items. The current dispensers hold household style toilet paper and tri-fold paper hand towels. These dispensers are failing and allow direct access to the paper product with no limitations on dispensing. The planned dispensers will dispense one paper towel at a time and has the ability to use 100% of the product. The same is true for the toilet paper dispensers. There will be three rolls of commercial style toilet paper in the "wagon wheel" dispenser that will be placed in most student bathrooms. All the paper on the role has to be used before the dispenser will allow a new roll to rotate into the opening for use. Having multiple rolls will reduce the labor needed to change out paper products from daily to weekly.

The custodial supply ordering process will be organized and improved for the cleaning chemicals, paper products, and small equipment needs that will be directly shipped to the school that ordered them and not to a remote location where they will be stored until skilled maintenance staff can retrieve needed supplies for the head custodians who requested them. By making this change in the supply chain, needed custodial supplies will be delivered in a timely manner that minimizes impact to cleaning due to a lack of product.

Substitute Custodians:

The use of substitute custodians has been pivotal in assisting full time custodians with cleaning school buildings in the district covering for a full time employee (FTE). Professional Development training and standards of cleaning will continue to be distributed by the head custodian for the substitute custodians to follow. The current pay for a substitute custodian is $10.00 an hour for filling in for an absence at times is a last minute request. This is below what the gym supervisors get paid and is an inequity that should be reviewed with the scope of work for each position an outlining factor in the decision for improving pay for substitute custodians to at least match the gym supervisor pay.

We may be benefiting these temporary employees with additional income as well as an opportunity for each of them to be hired full time in the future but it benefits the school system as well. The substitute custodians are a low cost labor resource for the schools and they are also a resource when custodial positions open up due to retirement. This does not make up for a full time employee and overtime is used when necessary to support school operations.

In moving forward with professional training that puts all custodians on the same page on what to clean, how to clean and what to use to clean for an education system; new equipment that provides the custodians with the opportunity to be more efficient; strategically using overtime and substitute custodians, PTA member volunteers, and community members from COA, the intended level of cleaning

desired can be realized. For the MPS this would be a solid level 3 cleaning where classroom spaces are clean and bathrooms sanitized routinely and leaning toward a level 2 cleaning standard where hallways are routinely buffed and shined as well.

The following documents are to support the information regarding the custodial schedule per building, building and square footage per custodian, the national guidelines for cleaning levels and template for custodial duties and responsibilities. Examining all the data together with non-cleaning responsibilities indicate the need of additional positions for future budget reviews.

TABLE 1 - Middleborough Public School Building & Custodial Staffing Information: 30,000 Square Feet Per Custodian

	School Name	Address			Year	Current	Sq Ft
				Sq Ft	Built	# FTE	Per FTE
1	Middleborough High School	71 East Grove St		129,925	1971	**4.5**	28,872
2	John T. Nichols Middle School	112 Tiger Drive		144,454	1997	**4.5**	32,101
3	Mary K Goode Elementary School	31 Mayflower Ave	Bldg 1	45,414	1957		
			Bldg 2	46,491	1974		
4	Henry Burkland Elementary School	41 Mayflower Ave	Bldg 3	85,909	1957		
		Renovation post fire			1989		
				177,814		**6**	29,636
5	Memorial Early Childhood Center	219 North Main St	Bldg 1	41,605	1919		
			Bldg 2	26,189	1956		
		Renovation			2007		
				67,794		**2**	33,897
6	School Street School	6 School Street		10,163	1907		
	READS Collaborative						
7	Lincon D Lynch School	49 Union Street		16,459	1938		
	Massasoit College						
8	Flora Clark School	30 Forest Street		2,566	1930		
	Superintendents Office						
9	13 Forest Street	13 Forest Street		1,851	1900		
	Facilities Maintenance Office						

TABLE 2 - Middleborough Public School Building & Custodial Staffing Information: 25,000 Square Feet Per Custodian

	School Name	Address			Year	Current #	Sq Ft
				Sq Ft	Built	Custodians	Per FTE
1	Middleborough High School	71 East Grove St		129,925	1971	**5**	25,985
2	John T. Nichols Middle School	112 Tiger Drive		144,454	1997	**5**	28,891
3	Mary K Goode Elementary School	31 Mayflower Ave	Bldg 1	45,414	1957		
			Bldg 2	46,491	1974		
4	Henry Burkland Elementary School	41 Mayflower Ave	Bldg 3	85,909	1957		
		Renovation post fire			1989		
				177,814		**7**	25,402
5	Memorial Early Childhood Center	219 North Main St	Bldg 1	41,605	1919		
			Bldg 2	26,189	1956		
		Renovation			2007		
				67,794		**3**	22,598
6	School Street School	6 School Street		10,163	1907		
	READS Collaborative						
7	Lincon D Lynch School	49 Union Street		16,459	1938		
	Massasoit College						
8	Flora Clark School	30 Forest Street		2,566	1930		
	Superintendents Office						
9	13 Forest Street	13 Forest Street		1,851	1900		
	Facilities Maintenance Office						

	Building Location	Title	Name	Day/Night		Start Time		End Time		Work Hours	Lunch
	MECC										
1		**Head Custodian**	**Cris Stiner**	Day		6:30 AM	AM	3:00 PM	PM	8:30	30
2			Mike Sousa	Night		12:30 PM	PM	9:00 PM	PM	8:30	30
	MKG										
1		**Head Custodian**	**Mike Henderson**	Day		6:00 AM	AM	2:30 PM	PM	8:30	30
2			Scott Hallgren	Night		12:30 PM	PM	9:00 PM	PM	8:30	30
3			Ron Vaughn	Night		2:30 PM	PM	11:00 PM	PM	8:30	30
	HBB										
1		**Head Custodian**	**Mark Covell**	Day		6:00 AM	AM	2:30 PM	PM	8:30	30
2			Mike Carver	Night		12:30 PM	PM	9:00 PM	PM	8:30	30
3			Bruce Anderson	Night		2:30 PM	PM	11:00 PM	PM	8:30	30
	NMS										
1		**Head Custodian**	**Garrett Perry**	Day		6:30 AM	AM	3:00 PM	PM	8:30	30
2			Jack Lindskog	Day		11:30 AM	AM	8:00 PM	PM	8:30	30
3			Steve Boucher	Night		2:30 PM	PM	11:00 PM	PM	8:30	30
4			John Noska	Night		2:30 PM	PM	11:00 PM	PM	8:30	30
5			Bob Shogam	4 hrs		2:00 PM	PM	6:00 PM	PM	4:00	n/a
	MHS										
1		**Head Custodian**	**Matt Tarkanian**	Day		6:00 AM	AM	2:30 PM	PM	8:30	30
2			Jo-Anne Tarkanian	Day	M&F	2:00 PM	PM	10:30 PM	PM	8:30	30
					T,W, Th	11:00 AM	AM	7:30 PM	PM	8:30	30
3			David Bernado	Night		2:00 PM	PM	10:30 PM	PM	8:30	30
4			Steve Gonsalves	Night		2:00 PM	PM	10:30 PM	PM	8:30	30
5			Bob Shogam	Night		6:30 PM	PM	10:30 PM	PM	4:00	n/a

National Guidelines for Custodial Cleaning

- Based on information from the **National Custodial Staffing Guidelines** and the **International Sanitary Supply Association (ISSA)** a five-tiered system was developed to determine what the cleaning expectation of one full time custodian during an eight hour shift.

- **Assumptions:** These cleaning recommendations do not take into account for two hours of cafeteria cleaning, errands, deliveries, function setup, sidewalk snow removal, personal breaks and other normal school distractions. Based on these assumptions, there would be a reduction of 2.5 hours of productive cleaning for every daytime custodian (8 staff or 20 hours) and 1 hour reduction in productive cleaning for every evening custodian (18 staff or 18 hours).

- At a minimum, 38 hours of productive cleaning would be lost per day or a total of 5 staff. Now, the average cleaning per S.F per custodian would increase to about 32,000 SF.

- **Level one cleaning**: Results in a **spotless building** and is usually found in a hospital and hotel setting. It also assumes that the custodian has proper equipment, supplies and specialized training. Cleaning capacity at this level is approximately **14,000 square feet** for an eight hour shift.

- **Level two cleaning**: Results in an **above average** standard and is usually only performed in the kitchen and rest room areas. Hallways would be routinely buffed. Cleaning capacity at this level is approximately **23,000 square feet** per an eight hour shift.

- **Level Three Cleaning**: Results in an **acceptable** cleaning practice for most schools. Not every area of the building would shine but the educational space is clean, well-kept and restrooms sanitized. Cleaning capacity at this level is approximately **33,000 square feet** per eight hour shift.

- **Level Four Cleaning**: Results in a **not so clean** educational space. Classrooms are only cleaned every other day, carpets every third or fourth day, major mopping, buffing and dusting only takes place three times per year. This level of cleaning would not be accepted in the industry. A custodian at this level could clean approximately **50,000 square feet** of space per eight hour shift.

- **Level Five Cleaning**: Results in an **unhealthy** education space. Trash removal, minor vacuuming, mopping and bathroom cleaning may only take place once per week. This custodian can clean up to **80,000 square feet** of educational space.

Custodial Duties & Responsibilities Plan

The head custodians have a clear understanding of the needs and idiosyncrasies of the building they are assigned to. Over the next year I will be working with each of them to develop a plan similar to the example below that defines a scheduled work routine to improve the cleaning standard. In doing so, we will also discuss and plan for the acquisition of custodial equipment and professional development needs to support the desired outcome in the best interest of the schools.

Based on the building information above, the square footage per custodian is roughly 33,000 of assigned cleaning area which indicates the current cleaning standard is at level three. As stated in the National Guidelines, this does not include the "non-cleaning" tasks mentioned in the assumptions above. It does not effectively explain in more than two words, (event set-up) the effort it takes to support school functions and events which can consume a large portion of the weekly cleaning schedule. Again the custodians know the importance their position plays in supporting these functions and events and often volunteer to participate on their own time to assist.

In any case, it is a positive endeavor to welcome the community into school buildings to participate in student organized events or functions that invite parents and families for a night of entertainment or public forum for Annual Town and monthly School Committee meetings. It is because the buildings are so busy, not just educating the students but being a part of the community that creates a deviation in the level of cleaning. As a result, the strain on labor places the true level of cleaning at less than a level 3 and rests somewhere between a level 3 and level 4. We can do better. The need for additional custodial positions throughout the district is explained throughout this report but the purpose of this section is to illustrate changing how cleaning is performed to utilize available labor more efficiently. The following is a template that the head custodians and I will work from in developing cleaning routine schedules.

EXAMPLE - ROUTINE SCHEDULED CLEANING TASKS

Daily:

- Empty trash receptacles.
- Sweep entrances, lobbies and corridors.
- Spot sweep floors and spot vacuum carpets.
- Clean drinking fountains.
- Sweep and damp mop or scrub toilet rooms.
- Clean all toilet fixtures and replenish toilet supplies.
- Deposit of all trash and garbage generated in or about the building.
- Dust horizontal surfaces that are readily available and visibly require dusting.
- Spray buff resilient floors in main corridors, entrances and lobbies.
- Clean elevators.
- Remove carpet stains.
- Police sidewalks, parking areas and driveways.
- Sweep loading dock areas and platforms.
- Sanitize doors handles throughout building

Three Times a Week:

- Sweep or vacuum stairs.

Weekly:

- Sanitize bathroom floors in toilets and health units.
- Test emergency generator
- Wash inside and out or steam clean trash cans
- Completely sweep and / or vacuum carpets.

Every Two Weeks:

- Spray buff resilient floors in secondary corridors, entrances and lobbies.
- Dust mop and spray buff hard and resilient floors in office space.

Monthly:

- Thoroughly dust furniture.
- Sweep storage space.
- Spot clean all wall surfaces within 70" of the floor.
- Replace burned out and flickering lamps (light bulbs) (Monthly)
- Supervise elevator maintenance service. (Monthly)
- Supervise pest control maintenance service (Monthly)

Every Two Months:

- Damp wipe toilet waste paper receptacles.
- Damp wipe stall partitions.
- Damp wipe doors.
- Damp wipe windowsills & frames.
- Shampoo entrance & elevator carpets.

Three Times a Year:

- Dust wall surfaces within 70" of the floor.
- Dust vertical surfaces & under surfaces.
- Clean metal & marble surfaces in lobbies.
- Wet mob or scrub garages.

Two Times a Year:

- Wash all interior and exterior windows and other glass surfaces.
- Strip and apply four coats of finish to resilient floors in toilets.
- Strip and refinish main corridors and other heavy traffic areas.
- Shampoo carpets in corridors and lobbies.

Once a Year:

- Wash all Venetian blinds and dust six months from washing.
- Vacuum or dust all surfaces in the building above 70" from the floor including light fixtures.
- Vacuum all drapes in place.
- Strip and refinish floors in offices and secondary lobbies and corridors.
- Clean balconies, ledges, courts, areaways and flat roofs.
- Shampoo carpets throughout the building.

Once Every Three Years:

- Repaint classrooms and corridors.

Maintenance

The maintenance team is responsible for the smooth operations of the school buildings. In order to understand the many systems and repair needs, researching opportunities for additional training or professional development will be part of the improvement to procedures for school building operations. This will be in addition to the cross training of maintenance staff that occurs naturally by virtue of all the repairs and projects associated with education building maintenance.

Performing building maintenance will be facilitated by increasing awareness of The SchoolDude maintenance software program, the hope is to have repairs reported as they occur and addressed as soon as possible. The practice of making a list of repairs needed in classrooms cannot wait until the end of the year to be reported or written on a piece of paper or mentioned to maintenance staff on the fly.

Inputting all MPS building repair needs will increase usage and begin to accurately reflect work performed. It is important for data collection for all maintenance requests to go through the SchoolDude Maintenance Direct program. Over the next two years, a plan to open the access of the SchoolDude program to all faculty and staff will be explored and discussed. Providing the access may assist the maintenance department staff by accounting for labor needs through the volume of repairs performed weekly, monthly and annually.

The maintenance personnel were also included in the uniform shirt order this year. The shirts were embroidered with the MPS logo in white on a navy blue shirt. Having a uniform shirt helps students, faculty, parents and vendors quickly identify a MPS employee for assistance if needed. Establishing uniformity was to create a professional appearance and develop a sense of team spirit among the Facilities staff throughout the district.

Crossing Guards:

With the changes established in the hiring of crossing guard that removed the custodians from performing this additional responsibility while working in the capacity of a custodian, all crossing guards are hired from the community and trained by the Plymouth County Sheriff's Department. To reinforce safety measures and provide training to any newly hired crossing guard, an annual training can be established with the Plymouth County Sheriff's office.

These are stipend positions that require a procedure for annual renewal for each person. In addition, the payroll process is currently input without documentation from each crossing guard and that will change to a sign in sheet that will be submitted to the Facilities Maintenance office for processing.

Lastly, the Middleborough Police would like to swear in all crossing guards as Auxiliary Police. This will add authority and provide traffic control to increase safety at school crossing locations. To improve the appearance of crossing guards, a plan to institute a uniform procedure for a professional appearance that include;

- High visibility vest, hats, gloves
- Must wear proper attire while in the performance of duties as crossing guard
    - i. No cut off pants of any kind, no sweat pants, shirts with advertisement or improper logo displayed

Grounds Personnel:

Until a grounds crew can be established for the MPS properties, the grounds maintenance will continue to be completed by planning to use OT for custodians and volunteers from PTA will be solicited to perform minor projects that improve the curb appeal. In researching other options to accomplish the grounds maintenance, outsourcing this responsibility to a landscaping company is cost prohibitive. A review of these positions will be discussed in budget approval meetings.

BUILDINGS

The majority of maintenance repairs that overshadows any planned improvement or preventive maintenance are the corrective or reactionary response at least 90% of the time. The need to improve the time available to allocate for preventive maintenance measures is clear. Addressing the backlog of deferred and corrective maintenance, planning and completing capital projects is necessary to organize future needed repairs more efficiently.

By working from the outside in or exterior to interior, it is essential to care for the building envelope by making it weather resistant. Water infiltration through the building envelope the damage moisture creates can impact a buildings ability to operate in many ways. The weather in New England wreaks havoc on building's roof, windows, doors, exterior walls, and foundations by wear and tear. Therefore it is important to make evaluate and make repairs to prevent New England weather from entering the building. These areas include the following:

- Exterior door replacement – security and weather resistant
- Exterior window replacement – security and weather resistant
- All exterior brick walls repaired, cleaned and sealed – weather resistant
- Foundation repairs
- Basement windows and vents
- Roof drainage to send rain water away from building - should include in landscaping design
- Storm drains may need to be installed on the some school properties.

Interior improvements can be planned at the same time and completed during exterior repairs but resources should be focused on the exterior repairs. Setting this as priority would provide more confidence the interior improvements will not be damaged prematurely. Once building exteriors of all MPS buildings are up to date and weather tight, additional repairs and improvements needed on the inside can upturn with confidence. A priority list of areas for the interior improvements can be determined and planned at a later date but the following are the general areas for review and improvement not in the order of priority; bathrooms; meeting and common areas; front office, classrooms, and then office spaces.

Recent roof evaluations have determined all MPS school buildings are in good shape. Only the Lincoln D Lynch building needs a roof replacement. All the other flat roofs will need to be revitalized over the next few years as budget allows by adding 6" roofing tape over all existing seams and make any repairs to visible or potential leak points. This will extend the life of the roof significantly. In doing so a benefit from MIIA provides rebate incentives for performing preventive maintenance to flat roofs at least 2 times a year. During these seasonal inspections the roof is checked for damage, debris and to ensure roof drains are clear. Playground safety inspections performed monthly, professional development and OSHA work safety training are other areas when established will reduce insurance premiums with submission of training description and sign in sheet.

In order for the goal of improving building operations and appearance to succeed, a commitment to a process with a consistent intent to plan an ongoing procedure until all building systems are up and running, by providing a commitment to both administrative and financial support. The following is an excerpt from the Association of Physical Plant Administrators (APPA) and points out the level of financial commitment needed to properly fund the facilities maintenance budget needs.

> *"Costs for correcting facilities deficiencies obtained from an audit and a calculation of the current replacement value allows modeling of the variables for annual and total funding needs and the rate of backlog reduction. For example, if only 1 percent of the current replacement value is available, the change in the Facilities Condition Index (FCI) can be calculated, or a determination to achieve an FCI of 5 percent in 10 years can produce a calculation of annual capital renewal needs.*
>
> *A rule of thumb for the annual reinvestment rate is 1.5 to 3.0 percent of current replacement value. However, experience is showing a preference for the upper end of the range (2.0 to 3.0 percent) to prevent further accumulation of a deferred maintenance backlog. As noted earlier, this is separate from funding required to eliminate immediate critical needs of deferred maintenance. A capital renewal plan must include funding for two factors: deferred maintenance backlog reduction and component renewal. This concept is fundamental to capital renewal funding planning."*

Labor to perform many of these repairs will be expensive. In order to supplement some of the labor for some improvements will be researched for additional resources. For minor repairs and beautification, assistance will be sought through the local PTA and Bristol Plymouth Regional Vocational School for volunteers, fund raising and affordable labor. Inquiring of our own student body to assist in beautification projects that would include seasonal clean up, spring and end of summer planting of flowers, mural painting at front offices of each school buildings, landscaping design improvements and furniture moving during summer to kick off the cleaning season as a community,

For example with volunteers assisting with furniture moves, the custodians would be able to dedicate more time into detail cleaning of each classroom. When furniture is replaced into each classroom, the hallways will have the appropriate time available to have floor maintenance performed and properly apply a glossy finish coat well in advance of the first day of school.

Security Systems

Since we are heading into a time where lock down drills, security cameras and card access at strategic entry doors are providing security to all who work and use our school buildings. An additional initiative for safer schools is to establish a key control procedure. All building keys should be approved by supervising authority and accounted for through documentation in the form of a key signature form that includes procedure for reporting broken or lost keys, and any cost that may be associated with the replacement.

Exterior door keys will be restricted to essential personnel; all other MPS employees will be funneled through the card access doors located at various locations near parking areas. Faculty will have access to all classroom doors, but not facilities areas that include storage areas, custodial closets and mechanical rooms. Obviously, the door hardware will have to be reviewed and planned for upgrade. The re-keying of Mary Goode and Henry Burkland Elementary schools have already been completed and keys to essential personnel assigned.

With all that is going on in the country relating to violence it is coming more pressing to implement security improvements. From building envelope repairs to ensure egresses are securable and weather tight, to electronic surveillance systems MPS is dedicated to the safety of all who work and use the school facilities.

Procedures to provide oversight to these systems are part of the preventive maintenance plan. The security alarm system for example will have a process that is reviewed annually for the following:

1. Security alarm – procedure to update access permissions
    i. Update personnel access needs by person
    ii. Establish individual codes
    iii. Annual review of alarm access permissions

Limiting key assignment, updating security alarm access permissions, updating security codes on a routine bases to eliminate any potential shared codes; using card access scheduling to restrict access and reduce false burglar alarms that MPD respond to and installing surveillance cameras are necessary steps among others that need to be taken and implemented in order to provide a program designed to add security for a safe environment to work and learn in.

CAPITAL PLANNING

The development of a 3 to 5 year capital plan will be ongoing as we gather information about aging building systems and administrative priority projects planned to upgrade technology and other building systems. Prioritizing capital projects will be determined by need and available funding.

As mentioned above, due to the aging building systems that requires constant attention limit available time to perform scheduled maintenance repairs according to the program. Although we have capable but challenged maintenance staff, we are not ready to fully implement a preventive maintenance program. The following are some restrictions that when taken care of would allow a more progressive implementation of the program. When the most urgent repair and higher cost improvements are complete, the funds available in future budgets can be utilized for needed capital repairs.

1. Current back log of general, administrative priorities and capital projects
2. Immediate attention required or Emergency repairs
3. Labor hours limited by number and skill sets of maintenance personnel
4. Availability to schedule a repair in a classroom

In order for the program to be successful the back log of approved capital projects and general repairs need to be completed. With that said, additional capital improvements and repairs can be planned in accordance to their urgency, available funding and available schedule. Planning each improvement will take time to complete but we are planning on being consistent with the momentum. All attempts to find additional labor resources will be made to facilitate as many repairs and improvements approved when funding is available. Additional capital planning will continue as the approved projects are completed. Any new requests will be prioritized as critical needs until the backlog of capital projects have been complete. This will allow for proper planning and oversight for planned repairs.

The need to constantly review and update Facilities Operation budget requirements is essential to sustain achieved progress. Ensuring budget amounts are both responsible and accurate to each line item; all expenses will be considered as reoccurring annually or a onetime purchase. In doing so, a total

amount can be determined as a fixed cost. This cost will represent the minimum funds needed to sustain facilities maintenance operations. The variable is the aging building systems that can have a significant impact on amounts budgeted. Attempting to predict maintenance budget amounts for this reason will be challenging. As repairs and improvements gain ground over the backlog of needed repairs, a shift in reactive maintenance and system failures should diminish especially for the newer buildings. It is at this point that estimating budget funding appropriate for maintenance repairs should be more stable and reliable. The following tables show the number of current capital projects and a listing of deficiencies per building.

Energy Conservation Plan and Position

The Energy Conservation position currently reports to the Director of Buildings, Grounds & Operations and is responsible for gathering and coordinating energy data from all school buildings in order to promote energy conservation throughout the district. Facilities management, in cooperation with the Energy Conservation Coordinator will work with facilities staff to develop procedures to ensure efficient MEP system operation.

The energy coordinator will also be responsible for researching building automation systems associated with building heating and cooling systems and interfacing with maintenance, operations to develop and implement energy conservation policies and procedures.

The work performed by the Energy coordinator includes:

- Developing and maintaining an energy conservation database for MPS
- Auditing schools during occupied and unoccupied periods in an attempt to improve energy efficiency of the buildings and encourage staff to conserve energy
- Supporting conservation efforts by identifying and recommending energy efficient equipment controls
- Identify buildings with poor energy efficiency and energy conservation measures for potential energy saving opportunities
- Implement energy conservation programs
- Exploring grant opportunities and participation in federal and state energy conservation program
- Plan to upgrade and maintain building automation and controls systems

Continue to Develop Energy Conservation Plan:

1. Implementing low cost energy improvements
    i. Through Granite City – received 300 LED bulbs free - HS and NMS
    ii. Exterior lighting – wall packs – High Pressure Sodium 150w to >22w each fixture
    iii. Gym lighting replacement – High Pressure Sodium to T5 fixtures
    iv. Improving hallway lighting at HS as drop ceilings are replaced

Continuing to develop the Middleborough schools energy conservation plan will coincide with capital planning. Many systems are original to the buildings making this initiative worth investing time and available funding to. For example some of the projects such as exterior lighting could have as little as a two year return on investment. If we are going to spend the money on lighting energy anyway, it makes sense to upgrade the most cost effective energy system that produces a short rate of return. The savings can then be applied to other needs in the district.

Upgrading climate controls in school buildings that already have them to a web based system, and installing controls in buildings without them is another initiative that would benefit the district. Having a web based energy system would provide maintenance staff with alerts of trouble and the ability to make adjustments from a remote location. The energy controls for the heating and cooling systems at NMS and MECC should be upgraded to an online access program. These controls are currently located on a PC and they are aging. The upgrade will allow internet access to these controls and safeguard the program by having it located on the server and not one computer.

Identify the low hanging fruit that produces energy savings would help select projects worth investing in that have a short term on the return on investment. Occupancy sensors, variable speed drives on circulator pumps and motors, timers, self-adjusting lighting in stairwells, storage areas, gymnasiums, offices and classrooms will be the goal over the next 3 years.

Researching energy conservation initiatives and rebates will be ongoing. All improvements to mechanical systems will take into account energy conservation. As an example, gym lighting at HBB are being upgraded that will remove the orange lighting currently in place for more traditional lighting fixtures. These fixtures will reduce energy consumption significantly and provide better lighting. In addition, exterior lighting in the form or wall packs are being replaced with LED lighting fixtures. Again these are fixtures that will reduce energy consumption and provide better lighting.

Facilities and Energy Management Summary 2005-2012

The Energy Management program started in FY2006 has produced at least $100,000/year in avoided costs. The savings are used to fund the school budget needs. Because energy management is an integral part of facilities maintenance, preventive maintenance and environmental management, the part-time Energy Manager will need to work closely with the Director of Facilities and his staff (maintenance and custodians). The program would not be successful without this collaboration and cooperation of all MPS staff and faculty. Using FY2005 as a base year and FY2012 utilities cost, the program saved about $2.5 million in avoided energy costs. The combination of monitoring energy use, installation of cost effective measures, best practices in operation and maintenance contribute to the sustained energy and operational savings. With the current utility cost increases recently experienced in the New England area, it is more important now than ever to promote energy conservation among the MPS staff and faculty. The statistics are emailed out monthly on both energy conservation and recycling.

Facilities Department Personnel Recommendations

The acknowledgement for the need of additional positions is felt throughout the district offices that are doing what they can within the current budget and labor restrictions. It is with clear understanding of the limited funding through a tight budget that the staffing recommendations for the facilities department may take years to implement or not at all. The development of a productive and efficient facilities department to support all the education programs and functions will require a review for additional facilities department staffing needs for annual budget review process to fund needed positions. Until an increase in staff are approved the facilities department will continue to:

- Improve operations through strategic equipment purchases to reduce labor
- Utilize volunteer and substitute labor to supplement planned maintenance
- Research additional low cost labor resources through PTA, student body and volunteers

The following recommendations are made with the acknowledgment of the need to be creative with the current available labor and other resources due to budget constraints. In order to be as efficient and

productive as we can as a department, combining efforts throughout the district facilities maintenance staff to provide program support and project completion when needed will continue.

In a more perfect situation with unlimited funding, a fully staffed Middleboro Public School Facilities Maintenance Department may one day approve some or all of the recommended positions and look like the following;

Management

- **Supervisor of custodians – night**. The addition of a night supervisor would provide the custodians someone they can communicate with for supply needs, equipment issues, fill in for staffing shortages and also oversee the evening operation at all school buildings in regard to maintaining cleaning standard and event and function support. In the meantime the head custodians will participate in leadership and supervisory training, establish a routine to check on work assigned based on the cleaning schedule.

- **Maintenance Manager/Foreman** - Establishing a Maintenance manager or foreman would provide additional supervision to the maintenance staff, assigning tasks, evaluating skills of maintenance staff and support the Director BGO in capital planning, maintenance repairs and school official priority projects. Until the position is created and filled, this responsibilities rest with the DBGO.

Maintenance

- **Electrician apprentice /handyman** – The addition of a second electrician to work independently or together on a project would reduce the work order back log and address the many electrical issues currently experienced throughout the district and town buildings. One project could be outsourced for $15,000 and competed in 2 weeks or completed in house and take months for one person to complete.

- **Boiler technician or pipe fitter** – The heating season is long in New England. Due to the size of the building systems, age and usage there are many issues that come up on a daily basis. Having a qualified boiler mechanic would reduce cost associated with heating through contracting services for repairs or preventive maintenance.

- **Maintenance Personnel Contract Update** - Changing the current contract from salaried personnel to hourly that would provide overtime pay for labor worked over 40 hours for the maintenance crew as others receive, would have a positive result in maintenance repairs being complete as well as in moral. The current compensation agreement for additional hours worked does not help either the school system or the employee in the long run. Even though the repair is completed with additional hours that are converted to compensation time that saves the school and town money, the reality is the compensation reduces the amount of general repairs made when combined with other time off requests.

  When available vacation, sick time and compensation hours are used, the labor available to complete daily repairs is reduced. Most times the compensation is not taken by the maintenance staff because they know they have to come in for a repair or emergency. In other words there is no down time for the maintenance staff that is slow enough so they can take time off that is due them.

Custodian – Three (3) positions needed over 3 to 5 years

The current custodial staffing in each building leaves the head custodian alone for most of the morning once he opens the building and preps it for the arrival of staff, faculty and students. The next custodian comes in late morning to assist with building operations and lunch schedule cleaning. The final custodian arrives early afternoon around 2:30 pm to begin classroom, bathroom, and hallway cleaning. The head custodian goes home for the day soon after, but often stay to assist with an event, a cleaning need, or fill in for an absent custodian taking vacation or sick time. The final custodian works with a second custodian until 7 pm cleaning assigned areas if they are not occupied with a school event. Then the evening custodian is alone to complete cleaning and secures the building.

Even though there seems to be coverage throughout the day, the level cleaning drops because the square footage per FTE increases at different points in the day. Events and immediate cleaning needs take away from assigned routine cleaning. The morning custodian is alone so he is responds to many cleaning needs in the building throughout the day, receives deliveries, moves furniture, escorts contractors and performs cleaning of a portion of the building.

The head custodian by virtue of working during the day is limited to the actual amount of cleaning that he can perform and probably should not be counted in on the number of custodians for the level cleaning. In this case, the square footage per FTE would increase and be more accurate and reduce the standard level that would indicate the need for additional positions at night to complete the necessary cleaning that would elevate the schools cleaning standard to a higher level.

- One (1) Custodian at the high school – There are four (4) FTE and one (1) FTE shared at NMS that are assigned to the high school but because the volume of events and functions, absenteeism coverage – vacation and sick time- the shortage of labor is increased and cleaning standard suffers. The addition of one (1) FTE would provide four (4) additional needed hours to the HS and NMS – both buildings would be positively impacted, some pressure would be off the head custodian for scheduling issues and cleaning standard would improve.

- One (1) Custodian ad the Nichols Middle School - By changing the shared position at the HS to a FTE, the impact would add four (4) hours to the shared FTE at the NMS by default. Instead of 4.5 custodians, NMS would have five (5) custodians to improve cleaning standards.

- One (1) Custodian at MECC – there are only two (2) custodians currently at the MECC. One works during the day, the other at night. They work as a team caring for the building and the cleaning needs. However, the strain on the either one of them comes with any time off the other takes. Snow removal is another issue that immediately indicates the need for an additional person. As it is now, both come in before the buses are moving to perform snow removal before the staff and faculty arrive and school opens. They then clean the building as usual, and one will have to stay until school operations complete and secure the building.

- Establish one (1) custodian position that is shared between MKG and HBB

Grounds personnel

- Currently there are no grounds personnel to care for the school properties. The landscaping has become overgrown and in need of attention to promote a welcoming appearance for community members and potential residence. These positions would be responsible for maintaining the grounds equipment in the district. Each Kubota tractor cost over $16,000 and minimal preventive maintenance is performed. Establishing the two (2) grounds positions for the district would provide PM to all equipment, beautify and maintain landscape at each school property, seasonal clean up, and in the winter – snow removal, maintenance and custodial support in the buildings.

- Outsourcing is cost prohibitive. To hire a landscaping company to perform the basic maintenance needed for the school properties during growing season would cost over $100,000.

Crossing Guards

- Currently there are seven (7) crossing guards working for the MPS
- Paid by the hour at $25.00/hr
- Two (2) additional positions would provide backup in case of absence
- Annual review of crossing times and locations to ensure children safety traveling to and from school

Facilities Department – Maintenance & Custodial Paid Supplemental Staffing

Substitute Custodians – Review for potential increase in wages per hour currently $10.00. Compare with other stipend positions.

Summer employment - hire High School students in good academic standing for summer cleaning of buildings, grounds care and maintenance projects

Bristol Plymouth Regional Vocational School Trades Classes – Utilize when available, student labor for construction projects planned in school buildings that include electrical, carpentry, HVAC and plumbing trades.

Additional Objects:

Facilities Operations Budget Review:

- Establish facilities budget review procedure and needs assessment
- Continue to review facilities maintenance service contracts
- Review equipment needs for facilities department annually
  - Custodial
  - Maintenance
  - Vehicle

Middleborough Website Presence for the Facilities Maintenance Department

The development of a website presence on the Middleborough School website will provide access to information, updates and quick links for maintenance office hours of operation, mission statement, school dude maintenance request procedures, reports, and contact information.

Update custodial, maintenance and crossing guard job descriptions

- Develop annual review of position requirements
- Establish annual performance reviews

Professional Development – reinforcement training

- **Custodial**
  - Contracted LIKARR Maintenance Systems
    - Best practices in cleaning
    - Bathroom sanitization
    - Floor Care
    - Equipment Preventative Maintenance
    - OSHA Safety
      - Hazardous waste handling
      - Blood borne pathogens
- **Maintenance personnel**
  - Licensure training
  - Building maintenance seminars
  - Cross training in-house maintenance crew
- **Additional training / licensure / certifications**
  - Trade skill
- **Safety Training** - Establish the Facilities Department Safety Program to increase awareness and improve safe work practices throughout the workforce with regular inspections and training.

Mechanical Rooms and Storage Areas

- Remove clutter and clean out the mechanical rooms and storage areas
- Remove unused or unwanted items in these areas to free up needed space
- Notification of excess furniture located at each school to all MPS staff, town offices before offering to charitable organizations or as recyclables or waste.

MIIA Insurance – improve cost reductions for town operations through rebate and incentives pertaining to establishing and documenting ongoing:

- Building preventive maintenance performed by
  - In-house maintenance staff
  - Service contracts and venders
- Creating safety programs and training for personnel
  - OSHA Standards
  - Cleaning standards
  - Professional Development

Improve communications and relations with cooperative town departments

The Town of Middleborough offices and service departments seem to be working together both on and off the clock in order to improve town and school operations. Even with restricted budgets, assistance is provided if resources are available. The communications between school and town offices thus far have been respectful and most accommodating with school department requests. With many improvements needed for both the school and town

departments, having such a synergistic relationship is an asset to have when improvements to better the town as a whole are approved.

The continued backing from Town and School officials in both administrative and financial endeavors is appreciated and the corner stone for progress in improving town operations, town and school owned properties and energy conservation upgrades. Without their support and commitment, many improvements would not be possible.

- Park Department
  - Mow and line athletic fields at HS and NMS
  - Assist with other grounds maintenance when labor is available
  - Battis field – high school usage
  - Explore options for increasing areas of assistance to MPS
- Department of Public Works
  - Snow removal of parking lots
  - Assist with repairs and improvements when labor is available
  - Explore options for increasing areas of assistance to MPS
- Building Department
  - Building inspections for certification of occupancy
  - Permits for building improvements
  - Review in cooperation town building repair project work
- Fire Department
  - Safety inspections
  - Fire Drills
- Police Department
  - Security alarm support – false alarms
  - Emergency and non-emergency response to school needs
  - Lock down drills and training
  - Safety reviews of buildings security procedures
  - Traffic control at major school crossings when labor is available

SPECIAL RECOGNITION FOR RECENT RETIREES

Daniel Lavine	Licensed Plumber	October 2013
Gary Bradford	Nichols Middle School Custodian	December 2013
Gene Connolly	Maintenance Foreman	March 2014
Ronald Vaughan	Mary K Goode Elementary School Custodian	January 2015

SPECIAL RECOGNITION FOR FACILITIES STAFF OVER 25 YEARS OF SERVICE

Mike Henderson	Head Custodian - Mary Goode Elementary	1984 – 30 years of service
Mark Covell	Head Custodian - Henry Burkland Elementary	1982 – 32 years of service

CURRENT CAPITAL PROJECTS FY 2012 to 2018

Department/Category	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
SCHOOL DEPARTMENT:							
FLORA CLARK BUILDING:							
FACILITIES MAINTENANCE OFFICE							
MEMORIAL EARLY CHILDHOOD CENTER:							
Emergency Generator				$50,000			
MEMORIAL EARLY CHILDHOOD CENTER TOTALS			$0	$50,000	$0	$0	$0
ELEMENTARY HBB:							
ELEMENTARY MKG:							
Replacement of (1957) windows at MKG subject to 49% state reimbursment grant	$500,000						
Replace (2) burners ar HBB $17,000 each	$34,000						
Install security cameras at HBB/MKG	$75,000						
Partial work to enlarge (grading) and repaving at MKG and HBB schools		$50,000					
Replacement of (1) boiler with new burner at HBB		$80,000					
Replace (1) burner on existing boiler at HBB @ $17,000		$17,000					
Replacement of HVAC roof top units at HBB cafeteria - 2 units @ $50,000		$100,000					
Replacement of HVAC roof top units at HBB auditorium - 3 units @ $50,000		$150,000					
Feasibility study on boilers at HBB MKG to convert system from steam heat to HW		$20,000					
Bathroom renovations HBB/MKG ($20,000 x 4)			$80,000				
Replace (3) burners ar MKG $17,000 each			$51,000				
Replacement of HVAC roof top units at HBB office - 1 units @ $50,000			$50,000				
Upgrade lunch tables at elementary schools (20) at $1,000 ea			$20,000				
Install central computer controlled HVAC system at Mary K. Goode				$200,000			
Bathroom renovations HBB/MKG ($20,000 x 4)				$80,000			
Install central computer controlled HVAC system at Burkland School					$200,000		
Complete repaving of parking lot at MKG - HBB schools						$75,000	
Replace bleachers at HBB with motorized bleachers						$60,000	
Upgrade fire alarm system at HBB/MKG							$100,000
ELEMENTARY COMPLEX TOTALS	$609,000	$417,000	$201,000	$280,000	$200,000	$135,000	$100,000
NICHOLS MIDDLE SCHOOL:							
NICHOLS MIDDLE SCHOOL TOTALS	$0	$0	$0	$0	$0	$0	$0
MIDDLEBOROUGH HIGH SCHOOL:							
Partial replacement of floor tiles in stairwells 1 & 4	$30,000	$30,000	$30,000	$30,000			
Upgrade interior lighting for new lighting requirements (T12 bulbs		$100,000					
will not be manufactured after 2012 being replaced with T8s)							
Reconstruction of walkway and supporting structure(s) (study			$300,000				
Upgrade security cameras			$25,000				
Replace/upgrade fire alarm systems			$50,000				

Ceiling Tiles (8 hallways @ $10,000)			$20,000	$60,000			
Stage lights and control box				$50,000			
Bathroom renovations				$80,000			
Partial replacement of floor tiles				$30,000			
Replace Tennis Courts				$36,000			
Resurface Track				$50,000			
Classroom furniture replacement (2 rooms 30 desks/chairs @$20,000)				$40,000			
Platform Risers				$50,000			
Partial replacement of floor tiles				$30,000			
Classroom furniture replacement (2 rooms 30 desks/chairs @$20,000)				$40,000			
Replace lunch tables (20 round tables @ $200 and 160 chairs @ $25)				$8,000			
Bathroom renovations				$80,000			
Partial replacement of floor tiles					$30,000		
Classroom furniture replacement (2 rooms 30 desks/chairs @$20,000)					$40,000		
Replacement of first floor and locker room windows					$150,000		
Gymnasium floor (poured)						$200,000	
Install central computer controlled HVAC system						$200,000	
Replace two (2) boilers with new burners (or 4-6 new smaller boilers) $80,000 ea						$480,000	
Replace/repair Auditorium Seats and Carpet						$75,000	
Upgrade intercom system							$75,000
Replace bleachers with motorized bleachers							$100,000
New Sprinkler System							$1,000,000
MIDDLEBOROUGH HIGH SCHOOL TOTALS			$415,000	$634,000	$220,000	$575,000	$1,175,000
LINCOLN D. LYNCH SCHOOL:							
Basement Waterproofing			$30,000				$30,000
Replacement of roof (1991)				$225,000			$225,000
LINCOLN D. LYNCH SCHOOL TOTALS			$30,000	$225,000			$255,000
SCHOOL STREET SCHOOL:							
Basement Waterproofing			$30,000				
SCHOOL STREET SCHOOL TOTALS:			$30,000	$0	$0	$0	$0
SCHOOL SYSTEM-WIDE:							
Security cameras, DVRs & Monitors - elementary schools	$35,000						
Security cameras, DVRs & Monitors - NMS school	$35,000						
Security cameras, DVRs & Monitors - High school	$35,000						
Access Control Card Readers - all schools	$35,000						
Replacement of special needs vehicle - 20 passenger	$45,000						
Replacement of special needs vehicle - 12 passenger van		$30,000					
Replacement of (1991) maintenance vehicle and plow (1 Ton, 4WD)			$50,000				
Replacement of special needs vehicle - 20 passenger bus w/wheelchair lift			$55,000				

Replacement of 2001 Int.wheelchair mini-bus with new mini-bus with tracking			**$90,000**				
Replace 2003 Chevy Blue Bird mini-bus with 20/30 passenger bus				$50,000			
Replace 2004 Chevy Expcut with 20/45 passenger bus					$60,000		
Replacement of special needs vehicle - two (2) 12 passenger vans @ $30,000 ea					$60,000		
Replace 2001 Int. wheelchair mini-bus with half bus with lift/tracking for 4 chairs						$70,000	
Replace 2004 Chevy wheelchair mini-bus with 20/30 passenger bus							$50,000
SCHOOL SYSTEM-WIDE TOTALS			$140,000	$50,000	$60,000	$0	$0
INFORMATION TECHNOLOGY SCHOOLS:							
Computers, Printers, Fileserver Replacement for Staff/Classrooms	$125,000	$125,000	$75,000	$200,000	$225,000	$225,000	$225,000
Instructional Technology/LCD Projectors	$25,000	$25,000	$25,000	$50,000	$50,000	$50,000	$50,000
Computer Network Infrastructure (Network Switching Equipment)	$25,000	$25,000	$75,000	$100,000	$75,000	$75,000	$75,000
INFORMATION TECHNOLOGY SCHOOLS TOTALS			$175,000	$350,000	$350,000	$350,000	$350,000
TOTAL SCHOOL			**$1,320,000**	**$1,364,000**	**$830,000**	**$985,000**	**$1,625,000**
TOTAL TOWN			**$1,021,678**	**$1,603,024**	**$1,251,277**	**$1,115,312**	**$955,492**
Total Capital Projects			**$2,341,678**	**$2,967,024**	**$2,081,277**	**$2,100,312**	**$2,580,492**

		Middleborough High School		
		2015 (+)	2014	2014
Item #	Location	Capital Projects in Request	Capital Projects in Construction	Capital Projects Completed
1	Roof			
2	Boiler Room	Water heating replacement		
		Emergency Generator Replacement		
		Neumatic control system replacement		
		Make up air system repairs		
3	Interior	Drop ceiling replacement	Drop Ceiling replacement 100%	Drop Ceiling replacement 10%
		Interior lighting upgrades	Interior lighting upgrades	Interior lighting upgrades
		Stairwell tread replacement	Stairwell tread replacement	Stairwell tread replacement
		Bathroom renovations		
4	Furniture			
5	Exterior	Exterior door replacement		
		Exterior masonry wall repair & seal		
		Window repair/replacement		
		Loading platform repair - upgrade		
		Window wall replace - auto shop		
6	Safety	Exterior lighting upgrades		
		Fire Alarm panel replacement	Fire Alarm panel replacement	
		Security camera install		
		Walking bridge repair		
		Bullet proof glass - reception area		
7	Auditorium	Auditorium upgrade		
		Seating		
		Carpet		
		House lighting		
		Sound system		
		Performance curtain		
		Performance lighting		
8	Equipment	Custodial Equipment		
		Buffers - low speed		
		Burnishers - hi speed		
		Floor Scrubbers		
		Power washer		
		Snow blower		
		Maintenance Equipment		
9	Vehicle	Dump Truck replaccement		
		Kabota Tractor		
10	Gym	Floor replacement		
		Gym curtain		
		Gym basketball hoop cranks		
11	Field	Install field irrigation system		
		Barn building repairs		
		Field barrier post replacement		
		Replace 6 Tennis court surface		
		Track surface repair		
		Upgrade/install field lighting		
12	Parking Lot	Parking lot seal coat & line		
		MHS - Entrance sign with lighting		
		Signage		
13	Landscaping	Design improvements		
		Tree removal		

		Nichols Middle School		
		2015 (+)	2014	2014
Item #	Location	Capital Projects in Design	Capital Projects in Construction	Capital Projects Completed
1	Roof	Roof repairs - media center		
2	Boiler Room	Hot water heating replacement		
		2 Boiler replacements		
		Climate control program - web based		
		Emergency generator upgrade		
		Exterior lighting controls		
3	Interior	Carpet replacement - classrooms		
4	Furniture	Chair and table glides		
5	Exterior	Window replacement - media center		
6	Safety	Bullet proof glass install - reception area		
		Security Camera improvement		
		Exterior lighting upgrades		
		Exterior door security improvements		
7	Auditorium	Performance curtain		
		Sound system upgrade		
8	Equipment	Custodial equipment		
		Auto scrubber floor machine		
		Buffers		
		Burnisher		
		Carpet cleaner		
		Snow blower		
		Maintenance Equipment		
9	Vehicle	Kabota tractor		
10	Gym			
11	Field	Irrigation system repairs/replacement		
		Athletic field repair - upgrade drainage		
12	Parking Lot	Parking lot repair, seal and line		
		Signage		
13	Landscaping	Design improvements		
		Tree removal		

		Mary K Goode Elementary		
		2015 (+)	2014	2014
Item #	Location	Capital Projects in Design	Capital Projects in Construction	Capital Projects Completed
1	Roof	Roof drains and down spout improvement		
		Roof repairs		
2	Boiler Room	Central AC installation		
		Upgrade climate controls - web based		
		Emergency generator upgrades		
		Crawl space repairs		
		Ventilation		
		Cement flooring		
		Spray foam insulation		
3	Interior	VCT floor tile replacement		
		Hallways		
		Classrooms		
		Cafeteria		
		Drop ceiling repairs		
		Bathroom renovations		
4	Furniture	Chair and table glides		
5	Exterior	Seal foundation along building - like SSS		
		Exterior masonry wall repair & seal		
		Mansard replacement		
		Main entrance overhang repair		
		Exterior door replacement		
		Handicap ramp replacement		
		Exterior lighting upgrades		
		Brick wall repair - alleyway		
		Gate install - alleyway		
6	Safety	Security camera upgrades		
		Bullet proof glass - reception areas		
7	Auditorium	Cafeteria stage curtain replacement		
		PA system upgrades		
8	Equipment	Custodial equipment		
		Auto scrubber floor machine		
		Buffers		
		Burnisher		
		Carpet cleaner		
		Snow blower		
9	Vehicle	Kubota Tractor		
10	Gym	Lighting upgrade		
		Curtain		
11	Field			
12	Parking Lot	Parking lot design - front		
		add sidewalk leading to school		
		Barrier fence - post and beam		
		line painting		
		Parking lot lighting		
		Install drainage - storm drains		
		Add flashing school zone signs		
		Signage		
		Parking lot design - rear		
		Add green spaces		
		Install drainage - storm drains		
13	Landscaping	Design improvements		
		Tree removal		

		Henry B Burkland Elementary		
		2015 (+)	2014	2014
Item #	Location	Capital Projects in Design	Capital Projects in Construction	Capital Projects Completed
1	Roof	Roof drains and down spout improvement		
		Roof repairs		
2	Boiler Room	Central AC installation		
		Emergency generator upgrades		
		Heating univent upgrades		
		Upgrade climate controls - web based		
		Hot water heating system replacement		
		Replace domestic hot water heating system		
3	Crawl Space	Ventilation		
		Cement flooring		
		Spray foam insulation		
4	Interior	Bathroom renovations	Bathroom renovations 20%	Bathroom renovations 5%
		Drop ceiling repairs		
		Locker painting/replacement		
		VCT floor tile replacement		
		Hallways		
		Classrooms		
		Cafeteria		
5	Furniture	Chair and table glides		
6	Exterior	Seal foundation along building - like SSS		
		Exterior door replacement		
		Exterior lighting upgrades		
		Exterior window replacement		
		Mansard replacement		
		Main entrance overhang repair		
		Exterior masonry wall repair & seal		
		Rear step replacement		
7	Safety	Security camera upgrades		
		PA system upgrades		
		Bullet proof glass - reception areas		
8	Auditorium	Auditorium stage curtain replacement		
		Sound System Upgrade		
9	Equipment	Custodial equipment		
		Auto scrubber floor machine		
		Buffers		
		Burnisher		
		Carpet cleaner		
		Snow blower		
10	Vehicle	Kubota Tractor		
11	Gym	HBB Gym locker room plan		
		Gym lighting upgrades		
12	Pool	Replace handicap lift		
		Replaced bathroom/shower particians		
		Repair main shower valve cabinet		
		Replace main shower valve		
		Repair shower walls and floor tile		
		Repair pool ventilation		
		Repair pool boiler - sections leaking		
13	Field			
14	Parking Lot	Parking lot design - front		
		Add sidewalk leading to school		
		Barrier fence - post and beam		
		Line painting		
		Parking lot lighting		
		Install drainage - storm drains		
		Add flashing school zone signs		
		Side gate repairs		
		Install drainage - storm drains		
		Parking lot design - rear		
		Add green spaces		
		Repair gym landscaping - erosion		
		Rear gate install		
		Side gate repairs		
15	Landscaping	Design improvements		
		Tree removal		

		Memorial Early Childhood Center		
		2015 (+)	2014	2014
Item #	Location	Capital Projects in Design	Capital Projects in Construction	Capital Projects Completed
1	Roof	Slate roof replacement - safety issue		
2	Boiler Room	Boiler repair - sections leaking		
		Climate controls update - web based		
3	Interior	Interior door replacement - cafeteria		
4	Furniture	Chair and table glides		
5	Exterior	Install sidewalk to side of gym		
		Exterior lighting upgrade		
		Exterior masonry wall repair & seal		
6	Safety	Security camera upgrades		
		Bullet proof glass - reception areas		
7	Auditorium			
8	Equipment	Custodial equipment		
		Auto scrubber floor machine		
		Buffers		
		Burnisher		
		Carpet cleaner		
		Snow blower		
		Maintenance equipment		
9	Vehicle	Kubota Tractor		
10	Gym	Gym Floor replacement		
11	Field			
12	Parking Lot	Parking lot seal coat, line		
13	Landscaping	Design improvements		
		Tree removal		

		School Street School - READS Collaborative		
		2015 (+)	2014	2014
Item #	Location	Capital Projects in Design	Capital Projects in Construction	Capital Projects Completed
1	Roof			
2	Boiler Room	Boiler replacement		
3	Interior	Remove sheetrock outer wall basement		
		Stairwell window replacement		
		Floor refinshing		
		Plaster repairs		
		Painting		
4	Furniture			
5	Exterior	Install gutters and downspouts	Install gutters and downspouts	
		Exterior masonry wall repair & seal		
		Basement window replacement		
		Exterior lighting upgrades		
		Interior lighting upgrades		
		Repair and paint side entry		
		Completed August 2014		Painting upper fascia
		Completed August 2014		Seal foundation along building
6	Safety			
7	Auditorium			
8	Equipment			
9	Vehicle			
10	Gym			
11	Field			
12	Parking Lot	Parking lot replacement & line		
13	Landscaping	Landscaping Design		
		Tree removal		

		Lincoln D Lynch - Massasoit		
		2015 (+)	2014	2014
Item #	Location	Capital Projects in Design	Capital Projects in Construction	Capital Projects Completed
1	Roof	Roof replacement		
2	Boiler Room	Install climate controls - web based		
		Boiler replacement		
3	Interior	Interior lighting upgrades		
4	Furniture			
5	Exterior	Plan early 2015	Replacement of front entry landing	
		Exterior door replacement		
		Basement window replacement		
		Exterior window replacement		
		Exterior lighting upgrades		
		Exterior masonry wall repair & seal		
6	Safety			
7	Auditorium			
8	Equipment			
9	Vehicle			
10	Gym			
11	Field			
12	Parking Lot	Parking lot replacement & line		
		Tree removal		
13	Landscaping	Landscaping Design		
		Tree removal		

		Flora Clark Administrative Building		
		2015 (+)	2014	2014
Item #	Location	Capital Projects in Design	Capital Projects in Construction	Capital Projects Completed
1	Roof			
2	Boiler Room			
3	Interior			
4	Furniture			
5	Exterior	Rear step replacement		
		Front landing repair		
		Seal foundation along building - like SSS		
6	Safety			
7	Auditorium			
8	Equipment			
9	Vehicle	Courier Vehicle		
10	Gym			
11	Field			
12	Parking Lot	Parking lot repair seal & line		
		Parking lot burm repair/ replace		
13	Landscaping	Landscaping Design		
		Tree removal		

		Facilities Maintenance Department Office		
		2015 (+)	2014	2014
Item #	Location	Capital Projects in Design	Capital Projects in Construction	Capital Projects Completed
1	Roof			
2	Boiler Room			
3	Interior			
4	Furniture			
5	Exterior			
6	Safety			
7	Auditorium			
8	Equipment			
9	Vehicle			
10	Gym			
11	Field			
12	Parking Lot	Install parking lot		
13	Landscaping	Landscaping Design		
		Tree removal		

	Middleborough Public School District		
	2015 (+)	2014	2014
Item #	Capital Projects in Design	Capital Projects in Construction	Capital Projects Completed
1	Paint crossing guard crossings - cross section lines		
2	Scheduled December 2014	Install building signage for emergency responders	
3			
4			
5			
6			
7			
8			
9			
10			