Barnstable Public Schools

2015 Capital Improvement Budget Summary
Superintendents Message

We are here this evening to present a 5-year vision for the Barnstable Public Schools facilities. This capital budget plan preserves our infrastructure and assets, while also meeting the needs of our students in grades PreK-12 and the ever-changing demographics within our community. While not all councilors were able to attend the tours of our preschool and elementary schools due to their schedules, I would like to acknowledge and thank those councilors who were able to visit our schools—President Jessica Rapp-Grassetti, Vice-president Ann Canedy, and councilor Phil Wallace. For the three of you—this presentation may be a bit redundant. We will present a total of 8 school and district projects totaling $3,029,000. We continue to preserve our assets that we have as our community demographics changes and grows. Similar to our operating budget, we need to review how we allocate our resources to our infrastructure.

The process utilized to identify and select these proposed projects included the following stakeholders:

- A review of the previous year(s) requests
- Solicited input from principals and staff
- Input from Town, Fire, Health and Building departments
- Independent Engineering Studies
- Contracted architects
- Facilities Department Assessment & Needs
- Superintendent and Finance Review

Tonight, we have staff from our finance, early learning center, as well as architects, and our facilities director to answer any of your questions.

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Project Description</th>
<th>Cost</th>
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<tbody>
<tr>
<td>1. 2014-092</td>
<td>SCH-15-1 Barnstable Early Learning Center</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>3. 2014-094</td>
<td>SCH-15-3 Barnstable High School Fire Intrusion &amp; Communication Improvements</td>
<td>$200,000</td>
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<td>4. 2014-095</td>
<td>SCH-15-4 Technology Infrastructure Improvements</td>
<td>$204,000</td>
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<td>5. 2014-096</td>
<td>SCH-15-5 Barnstable United – Chiller Pipe Upgrades</td>
<td>$200,000</td>
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<td>6. 2014-097</td>
<td>SCH-15-6 District wide – Exterior Door and Hardware Upgrades</td>
<td>$100,000</td>
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<td>7. 2014-098</td>
<td>SCH-15-7 District wide – Kitchen Equipment Upgrades</td>
<td>$50,000</td>
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<td>8. 2014-099</td>
<td>SCH-15-8 Barnstable United – Pump Set Improvements</td>
<td>$75,000</td>
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<td><strong>Total</strong></td>
<td></td>
<td><strong>$3,029,000</strong></td>
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**Order: 2014-092**

**SCH-15-1 Barnstable Early Learning Center**

**Scope:**
Our priority project is a proposed Barnstable Early Learning Center, which is the first phase of a 3-year plan to address space needs in our PreK-3 programs. This request will fund the construction of a 7,500 square foot six classroom preschool center located at the Hyannis West School campus.

**Justification:**
Barnstable Public Schools has closed five schools over the last ten years. The reduction in schools, a result of declining enrollment, has resulted in overcrowding and students being educated in inappropriate spaces in our elementary schools. Currently, three of our elementary schools (BWB, Centerville, Hyannis West) house 5 portable trailers, some of which have been in place for 40+ years. Classroom instruction including technology and special education is taking place in these inadequate spaces with mold, poor ventilation and leaking windows.

We are grateful to the town council for appropriating $125,000 from the Capital Trust Fund last April to remove these portable trailers and conduct an alternative space assessment study. Over the last 3 years, we have seen an upsurge in enrollment at our elementary schools, in spaces that are already on stages and in locker rooms, thus necessitating an additional classroom at West Villages and next year the addition of 2 classrooms at Centerville.

**Why Do We Need an Early Learning Center?**
First, and foremost our integrated pre-school program is not a "nice to have" program as we are mandated to provide educational services beginning at 2.9 years of age to kindergarten for identified students with disabilities. Increased needs for our students with disabilities as well as the changing demographics of our students continues to be a priority in the district.

The current space is inadequate---a child and parents first introduction to public school education in Barnstable. There is no quiet space for testing, no space for children who require motor development. We want to attract young families to Barnstable and we are positioning the district for next year and future years to come in Barnstable including the potential of universal preschool.

Educationally, research has shown that children who attend a quality pre-school program outperform those who did not in education, economic performance and crime prevention. Two studies, which have shown to reduce grade repetition and the number of students placed in special education. Maryland (44% less likely to have repeated a grade than their peers) and Chicago (41% less likely to require special education services than their peers). The notion of pay now or pay later.

**What is the Impact if We Do Nothing?**
- Six pre-school classrooms are currently located in a wing at Centerville Elementary School.
- If we do not move these classrooms out of Centerville, there is a potential for 35 children in 2nd grade beginning in September 2014.
- The Department of Elementary and Secondary Education could cite the district for noncompliance for delivery of instruction in inadequate spaces.
- Moving pre-school classrooms into the high school will displace students from the Cape Cod Child Development Head Start Program.

In the next few slides, you will see instruction taking place in inadequate spaces, the increase in enrollment at our elementary schools, and the staff concerns and challenges they face in educating our students.
<table>
<thead>
<tr>
<th>School</th>
<th>Enrollment</th>
<th>Percentage of Total Net Floor Area per Standard</th>
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<tbody>
<tr>
<td>Barnstable West Barnstable</td>
<td>276</td>
<td>68%</td>
</tr>
<tr>
<td>Centerville</td>
<td>284</td>
<td>76%</td>
</tr>
<tr>
<td>West Villages</td>
<td>462</td>
<td>83%</td>
</tr>
<tr>
<td>BCHMCPS</td>
<td>294</td>
<td>86%</td>
</tr>
<tr>
<td>Hyannis West</td>
<td>340</td>
<td>89%</td>
</tr>
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Source: TBA Space Needs Assessment Initial Findings, November 25, 2013
Order: 2014-093  $200,000

SCH-15-2 Barnstable Intermediate Façade & Roof Improvements

Scope:
Extensive Capital required (~$4M) to fund costs for extensive exterior repairs initially identified in Exterior Evaluation Study performed by Gale Associates in December 2009. We are currently in the process of conducting additional existing conditions studies with CBI Consulting, Inc., to verify and quantify areas in need of redesign and repair. Areas under evaluation include, PVC roofing, roof and window flashings, Roof Top Unit (RTU) curb and weatherproofing, and EFIS exterior wall construction. This is a multi-year project which received initial capital funding in FY’14 for engineering evaluation, specification and bid document development. Funding from Order 2014-093 will allow us to continue with bid solicitation and initial repair work.

Justification
If allowed to go unchecked and unrepaired, building envelope will continue to deteriorate, allow leakage and create the opportunity for water damage and the potential health and environmental quality issues. The Barnstable Intermediate School is also a designated Red Cross Shelter which makes it imperative that this building not only is maintained as a quality learning center for our students but safe shelter for our community as well.
Order: 2014-094

$200,000

SCH-15-3 Barnstable High School Fire Intrusion & Communication Improvements

Scope:
Upgrade of existing Simplex system, current system is outdated, (panel, smokes, heats, pull, horn strobes, PA speakers, etc.) This capital request includes improvement and modifications to intrusion, fire alarm, sprinkler, PA, and clock systems. This is a multi-year phased project (3 year), Phase 1 was an approved FY14 project which included a complete test verification of entire system (Additional door magnets, smokes, sprinklers, PA, clocks and panel.) This inspection yielded a work plan to upgrade main panel, additional detector upgrades, annunciator panels, horn strobes, smoke hatch repairs, fire curtain relays/systems, restoration to intrusion system and additional security system upgrades.

Justification:
We are consistently experiencing significant faults and issues with the existing fire, intrusion, and communication system(s). Some areas of the building do not have sufficient audible/visual coverage. Due to the proprietary nature of the existing system, maintenance of the system has presented a challenge for private contractors (past and present). Simplex has “never” worked on the system. Hyannis Fire Department has strongly recommended upgrades and/or replacement with concerns for reliability and compliance to standards. The approval of this request will allow us to continue to make much needed improvements to the BHS fire, intrusion and security systems.
Order: 2014-095

SCH-15-4: Infrastructure Improvements for the BPS Network: Access to Internet Digital Resources in a Mobile Environment

Scope:
The proposed infrastructure improvements is in the second phase of a three year plan that will continue to fund the construction of a managed, enterprise, and secured wireless network. This project will see the instillation of approximately 300 access points throughout the 444,000 square foot Barnstable High School with connections to controllers via newly installed Cat 6 cabling. Barnstable High School is the third largest building on Cape Cod and Access points must be configured to our existing internal connections in order to manage and provide security to our network. The access points selected are a business or enterprise solution, which allows many connections to each access point. Project funding will also fund an air conditioning system in the server rooms.

Justification:
There has been a mobile explosion across the nation; mobile devices are changing the face of education. In addition to mobile learning, there are other pressures that districts are feeling regarding the demand for "big bandwidth" and wireless access for the educational process. State and national directives are the driving force behind the increased technology skills identified in the MA Common Core curriculum standards, the national shift for online high stakes testing, and the Ma online assessment system (EDWIN).

In essence, we are future-proofing our network to accommodate the increased needs of student access for the next five years, at a minimum. Technology must be leveraged in the educational realm to provide more engaging and powerful learning experiences.

The explosion of wireless technologies has created a new dimension in education. This project will have a significant educational impact on BPS. The use of mobile learning devices provides "anytime, anywhere" access to resources, can have a tremendous impact on teaching, learning, and student collaboration.
Order: 2014-096 $200,000

SCH-15-5 Barnstable United Chiller Pipe Upgrades

Scope: The 128,000 square feet Barnstable United Elementary School located in Marstons Mills houses all fourth and fifth grade students in the district. This building constructed in 1994 is heated and cooled by 60 unit ventilators that regulate and ventilate temperatures and humidity in all classroom and support spaces. Funding from this project will be used to remove and replace existing non-hazardous insulating material and where absent install high efficiency insulation on the air conditioner chiller piping throughout both crawl and ceiling spaces that feed the unit ventilators in the building and repair and seal all exterior areas which allow outside humid air to infiltrate closed air spaces creating excessive condensation on interior structural members and components. This project will be done in collaboration with Cape Light Compact and will qualify for rebates from our utility companies.

Justification: Existing chiller pipe insulation is inadequate and has failed resulting in excessive condensation/moisture issues in the interior of the building. Climate conditions during the summer combined with condensation leaks have created issues with mold on ceiling tiles, attic, above ceiling spaces and classroom areas.

Mitigation and deep cleaning costs of approximately $10K annually has been reallocated from the districts preventative maintenance budget to temporarily alleviate conditions at this site.

Postponement of this project will result in additional moisture damage to buildings interior spaces, ceiling cavities, floor tiles, wall surfaces, ceiling coverings and ultimately accelerated deterioration of the building and its useful life.
Order: 2014-097  $100,000

SCH-15-6 Exterior Door and Hardware Upgrades

Scope:
Replace remaining outdated locks, door closures, hinges and exterior door hardware components at Centerville, West Villages, BWB, BCHMCPS and HYW.

Justification:
Approval of this project will provide a consistent and standardized key/lock scheme for the Barnstable Public Schools and it will complete a multi-year district wide effort. The project also includes upgrades and replacements to hardware sets on many doors, upgrades to these mechanisms assures proper door operation and provides higher levels of security to normally locked school building areas. The areas for these improvements have been identified and reviewed in conjunction with building security studies performed by the Barnstable Police Dept., Bureau of Homeland Security and Facilities Dept.
Order: 2014-098

SCH-15-7 Kitchen Equipment Upgrades

Scope:
Continued campus wide replacement and upgrade of kitchen equipment to be done as a collaborative effort (Over a five year period) between Food Services & BPS Facilities. Upgrades for FY’15 include the replacement of steam kettle station at BHS (3 units which utilize a dedicated 350,000 BTU boiler for hot water). These units would be replaced with (2 units) more efficient equipped with individual on demand natural gas boilers. All equipment is Energy Star rated and purchases are in conjunction with the Cape Light Compact’s Rebate/Incentive Programs.

Justification:
Existing equipment in most schools is nearing the 20 year end of service life. Menu requirements are changing, necessitating the need for updated equipment sets. Upgrades of the aged equipment will also help to offset energy costs district wide.
Order: 2014-099 $75,000

SCH-15-8 Pump Set Improvements

Scope:
Rebuild/replacement HW circulation pumps used for providing heating hot water throughout entire building. These pump units are one of the key elements in keeping our schools warm during the heating season. The systems are designed with built in redundancy (2 to 3 pumps/heating loop); this request considers replacement of all pumps. Additionally all pumps will be fitted with premium motors and variable frequency drives (VFD) for optimum efficiency. This project will be done in collaboration with Cape Light Compact assuring that we apply for all applicable rebates and incentives.

Justification:
Pump sets are at end of life; need to replace/rebuild pump sets used to circulate water for heat. Failure to replace and upgrade could result in loss of heating during heating season causing significant water/freeze damage and loss of facility use. Replacement of equipment with more efficient equipment will help to offset increasing utility costs.