

THE COUNCIL OF THE CITY OF NEW YORK

Hon. Corey Johnson
Speaker of the Council

Hon. Mark Treyger
Chair, Committee on Education



Report of the Finance Division on the
Fiscal 2019 Preliminary Capital Budget,
the February 2018 Proposed Amendment to the FY2015-2019 Five-Year Capital Plan, and the
Fiscal 2018 Preliminary Mayor's Management Report for the
Department of Education and the School Construction Authority

March 26, 2018

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School Construction Authority Overview

The Department of Education (DOE) provides primary and secondary education to over one million pre-Kindergarten to grade 12 students in over 1,800 schools. The School Construction Authority (SCA) was established by the New York State Legislature in 1988 to build new public schools and manage the design, construction, and renovation of capital projects in New York City's public school buildings. In 2002, state legislation consolidated management of the Department of Education's (DOE's) capital program under the SCA. The SCA is the agency accountable for new school construction and major repairs and renovations to schools. SCA selects and acquires sites for new schools, including leases, and supervises major capital upgrades of existing DOE facilities.

State law requires the DOE to produce a Five-Year Capital Plan in addition to the City's Capital Plan and budget for the DOE. SCA coordinates the development of the DOE's Five-Year Capital Plan. Based on a June 2014 Memorandum of Understanding (MOU) between the City Council Speaker, the Chancellor, and the Mayor, the DOE is required to submit a proposed annual amendment to the Fiscal 2015-2019 Five-Year Capital Plan (the Five-Year Capital Plan) to the Council no later than March 1st of each year. The DOE also customarily submits a proposed amendment in November; the DOE did so this year on November 28, 2017. The DOE then submitted its revised Proposed Amendment on February 28, 2018.

This report provides a review of DOE's Fiscal 2019 Preliminary Capital Budget and Capital Commitment Plan. The report's main focus is the DOE's February 2018 Proposed Amendment to the Fiscal 2015-2019 Five-Year Capital Plan (the Proposed Amendment). This includes detailed descriptions of the three major sections of the Proposed Amendment: Capacity, Capital Investment, and Mandated Programs. Where relevant, discussion of the SCA's Fiscal 2018 Preliminary Mayor's Management Report (PMMR) is included.

Figure 1. SCA Operating Expenditures and Personnel

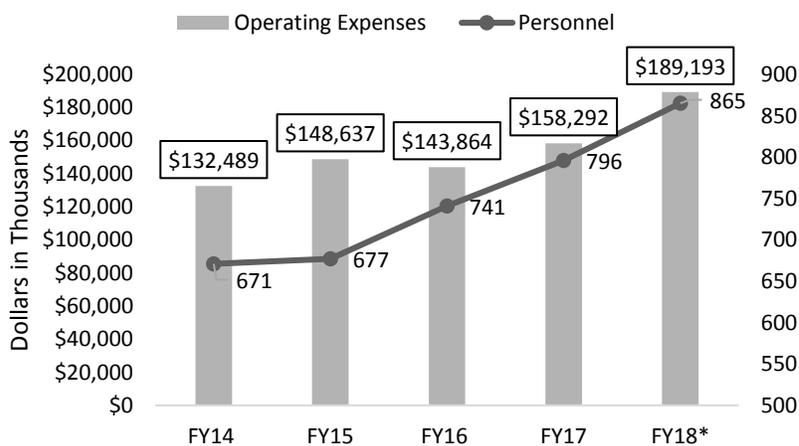


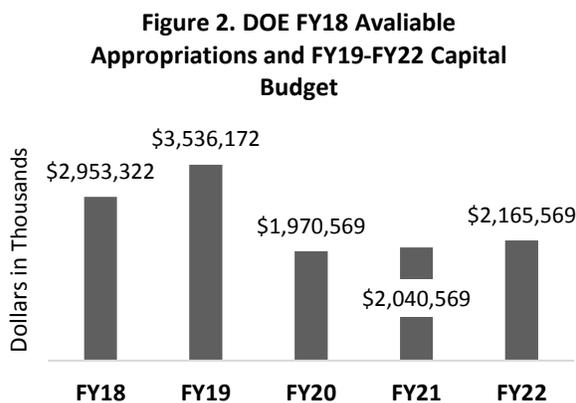
Figure 1 shows the SCA's headcount and operating expenditures by fiscal year. For Fiscal 2018, SCA currently has 808 employees, and a budgeted headcount of 865. SCA's operating budget is not included in the City's Expense Budget. SCA funds its operations with capital funding, which the Office of Management and Budget approves each year.

*Personnel for FY18 as of February 2018 Financial Plan; Operating Expenditures for FY18 are Adopted.

DOE Capital Budget and Commitment Plan

The Capital Budget and Commitment Plan determine the funding levels available to the DOE for its Five-Year Capital Plan. The legislation that established the SCA exempted the DOE from the City's line-by-line annual Capital Budget. Instead, the City provides lump sum allocations for education capital expenditures, and the DOE determines how the funds will be used, subject to scope approval by the City. Details of planned projects are listed in the DOE's Five-Year Capital Plan and individual projects must be shown in the Five-Year Plan in order for the SCA to proceed.

Capital Budget Summary



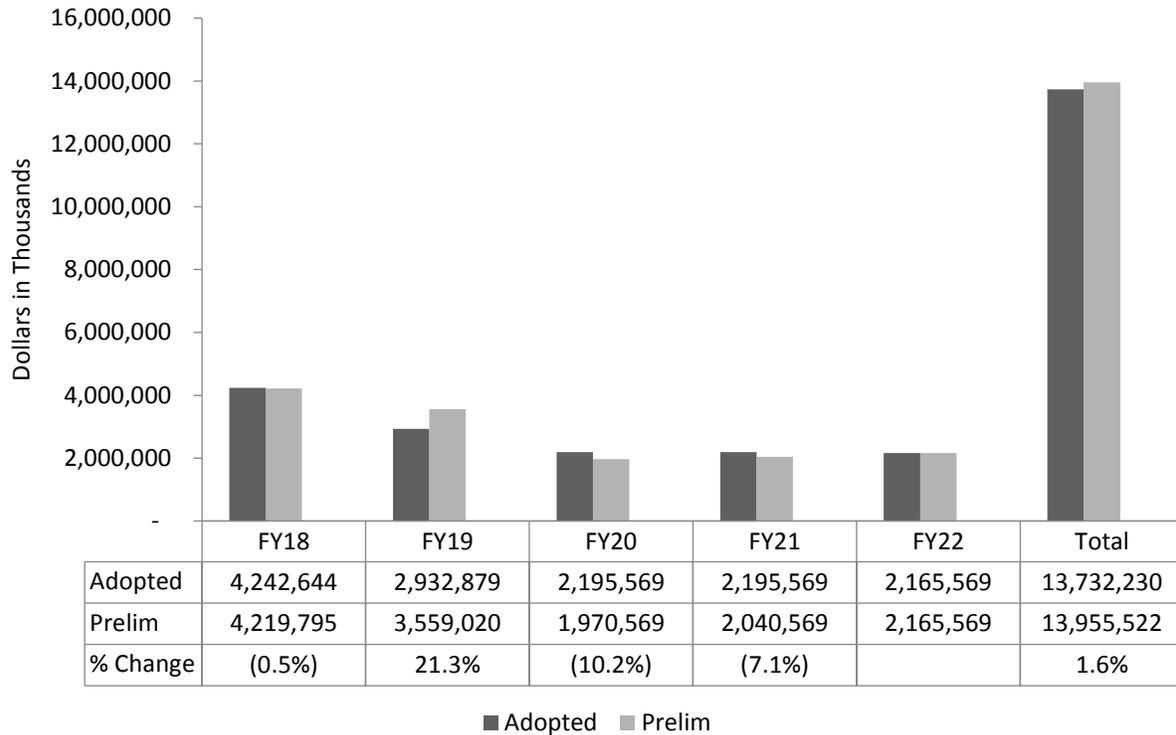
As shown in Figure 2, the DOE's Fiscal 2019 Preliminary Capital Budget includes \$9.7 billion in Fiscal 2019-2022.¹ This represents approximately 21 percent of the City's total \$45.9 billion Capital Budget for 2019-2022. Available appropriations for Fiscal 2018, as of November 30, 2017, total \$2.95 billion. This includes \$1.08 billion in reauthorized prior appropriations and \$3.44 billion in Fiscal 2018 appropriations, less \$1.57 billion actual commitments in the current fiscal year.

Preliminary Capital Commitment Plan

The Fiscal 2019 Preliminary Capital Commitment Plan (which is the plan to spend the appropriations in the Capital Budget) includes \$13.96 billion in Fiscal 2018-2022 for the DOE. This represents approximately 18 percent of the City's total \$79.6 billion Preliminary Commitment Plan. DOE's Preliminary Commitment Plan for Fiscal 2018-2021 is 1.6 percent more than the \$13.73 billion scheduled in the Adopted Commitment Plan, an increase of \$223 million, as shown in Figure 3. This is largely due to a \$72 million increase for pre-K capacity, and a \$145 million increase for facility replacements. In addition, the Preliminary Commitment Plan moved some planned commitments from Fiscal 2020 and 2021 into Fiscal 2019; this advanced funding included \$320 million for new K-12 capacity and \$60 million for physical education space. These changes are discussed in further detail under the relevant sections of the report.

¹ The Capital Budget provides the required appropriations for Fiscal 2019 and planned appropriations for the subsequent three-year capital program. Appropriations represent the legal authority to spend capital dollars and are what the Council votes on at budget adoption. The Capital Budget is significantly less the Capital Commitment Plan because it does not include the current appropriations for Fiscal 2018 or the amount of funding that may be reappropriated or rolled into Fiscal 2019 in the Executive and Adopted Budget.

Figure 3. DOE Capital Commitment Plan

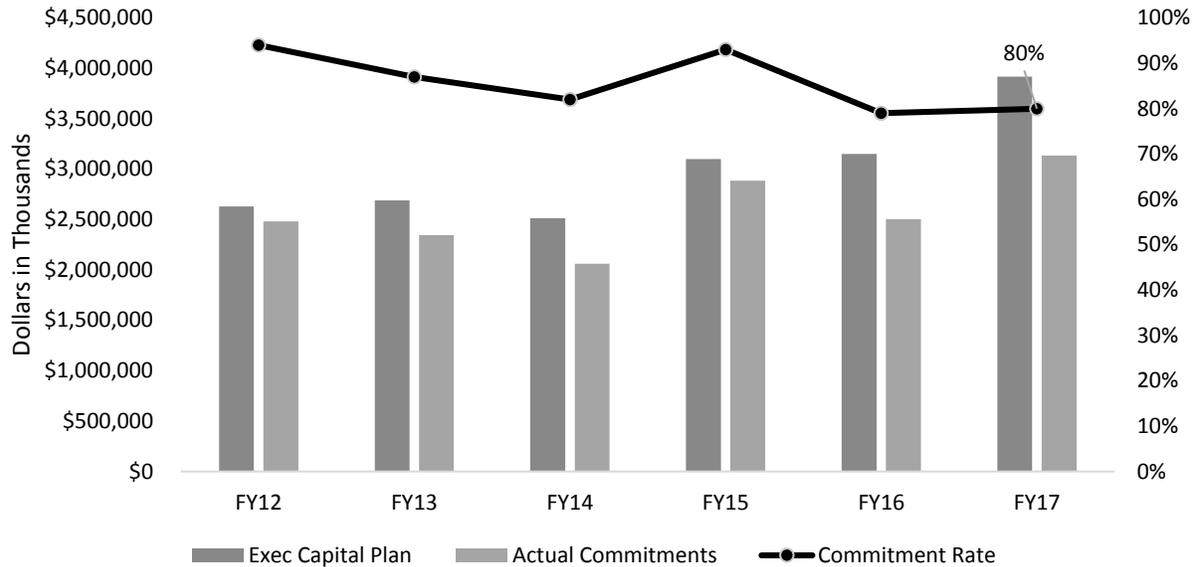


The Commitment Plan typically frontloads planned commitments for capital projects in the first year or two of the plan; this is true for DOE but only marginally so. The DOE Commitment Plan shows 30 percent of total planned commitments in the first year, Fiscal 2018, and 26 percent of planned commitments in the second year, Fiscal 2019 (with approximately 15 percent of planned commitments in each of the outyears)

Figure 4 shows DOE’s capital commitment plan as of the Fiscal 2014-2017 Executive Budget and the actual commitments in the corresponding fiscal year. The chart also shows the capital commitment rate: the percentage of the capital plan committed per fiscal year.² DOE does commit most of its planned commitments in any given year. In Fiscal 2017, DOE committed approximately \$3.1 billion, 80 percent of their \$3.9 billion planned commitments. However, DOE will end the year with some unmet commitment targets and appropriations available to be rolled into Fiscal 2019.

² Note planned commitments are higher than the agency’s “target commitments.” Target commitments are a management tool used by OMB; they are “the actual aggregate levels that the managing agencies are expected to commit and against which their performance will be measured at the end of the fiscal year,” and are not broken out between City and non-City funds.

Figure 4. DOE Capital Commitment Rate



Because the law authorizing the SCA exempt them from the City’s line-by-line Capital Budget, the structure of the DOE’s Capital Budget and Commitment Plan is different from most other City agencies. Almost all of the funding for each DOE Five-Year Capital Plan is included in one budget line (analogous to a unit of appropriation in the expense budget). Rather than representing specific projects, project IDs under this budget line reflect spending for each fiscal year. For example, funding for most of the DOE’s current Fiscal 2015-2019 Five-Year Capital Plan is in budget line E-2364, “Sixth Five-Year Educational Facilities Capital Plan.” This budget line currently has \$13.14 billion, or 94 percent, of DOE’s Preliminary Capital Commitment Plan for Fiscal 2018-2022.

Since some projects funded in the DOE’s fixed five-year capital plans continue beyond the final fiscal year of the plan, the DOE’s Capital Budget includes budget lines for previous Five-Year Capital Plans. Uncommitted funds from these capital plans continue to roll into the next fiscal year, which is part of DOE’s overall Capital Commitment Plan roll. There are also budget lines for City Council additions to DOE’s Capital Budget and a budget line for each Borough President’s additions. The Fashion Institute of Technology (FIT) is funded through DOE, so it has budget lines in DOE’s Capital Commitment Plan. Finally, there are some relatively small budget lines based on project type (i.e. E-2500 “School Facilities Capital, Hurricane Sandy & Nor’easter”).

Since details of school capital projects are not included in the City’s Capital Budget, they must be included in the DOE’s Five-Year Capital Plan, which is the focus of this report.

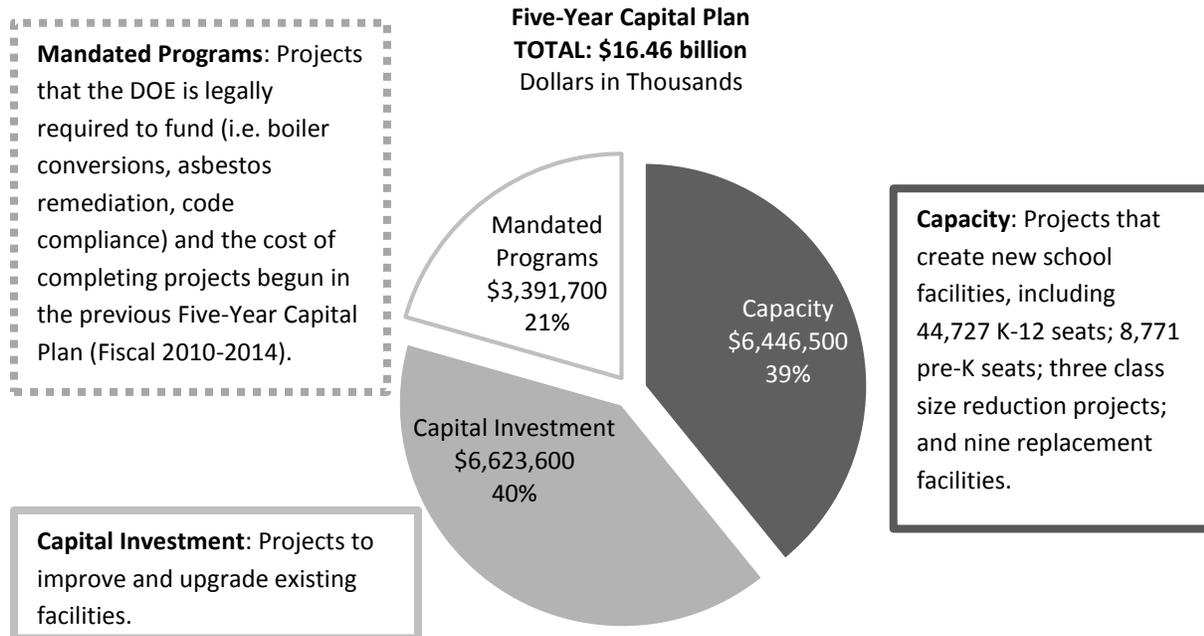
Revised Proposed Amendment to the Five-Year Capital Plan

On February 28, 2018, the DOE and SCA released a Proposed Amendment to the Fiscal 2015-2019 Five-Year Capital Plan, also referred to as the Proposed Amendment or February Plan.³ The

³ The Proposed Amendment released in February 2018 supersedes the Proposed Amendment released in November 2017.

following provides an overview of the Proposed Amendment and then examines its three major categories: Capacity, Capital Investment, and Mandated Programs. Figure 5 shows the funding levels for these three major categories in the Proposed Amendment. Of the total \$16.46 billion Capital Plan, approximately \$8.44 billion, or 51 percent, has already been committed in Fiscal 2015-2017.

Figure 5. February 2018 Proposed Amendment to the DOE Fiscal 2015-2019



DOE Capital Funding Sources

New York State funds approximately 50 percent of the City’s education capital costs through Building Aid. The City receives Building Aid funding in the operating budget, and this revenue finances debt service on education capital projects, or indirectly frees up City tax-levy to pay debt service. However, the Capital Budget, Capital Commitment Plan, and Proposed Amendment indicate that the City provides a majority of education capital funding. This is because most of the bonds currently being issued to finance DOE capital projects are City-backed bonds, such as General Obligation, or GO, bonds. There are State-backed bonds issued to finance DOE capital projects: Building Aid Revenue Bonds, or BARBs. In addition, the DOE receives some federal capital funding for projects related to Hurricane Sandy.

The City is also budgeting for approximately \$783 million in State capital funding for education through the Smart Schools Bond Act (SSBA), though the City has not yet been able to access any of these funds. The City plans to use this funding for the removal of transportable classroom units (\$300 million), the construction of pre-K capacity (\$100 million), and for connectivity/classroom technology (\$383 million). The City submitted its Smart Schools Investment Plan (SSIP) to the State in 2016 and the State has yet to approve this plan. While the DOE Capital Plan also has City funding allocated for these purposes, the specific projects to be funded by SSBA funding cannot

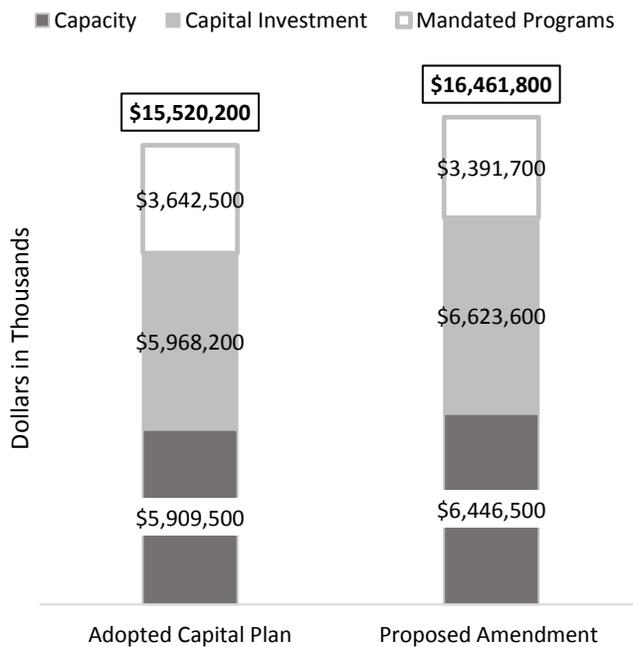
begin until the State approves the City’s SSIP, as SSBA guidelines require that all expenditures be based on an approved plan.

Changes from Adoption

The February Plan totals \$16.46 billion, an increase of \$942 million or approximately six percent from the adopted Capital Plan. The increase is due to:

- \$320 million for new capacity (K-12 seats);
- \$72 million for pre-K capacity;
- \$145 million for facility replacement;
- \$268 million in Resolution A, or discretionary capital, allocations made by the City Council and Borough Presidents for Fiscal 2018; and
- \$105 million for physical education space, as agreed to in the Fiscal 2018 Adopted Budget.

Figure 6. Capacity Funding Variance



Beyond these additions, funding is transferred among categories in the Proposed Amendment; these changes are discussed in the relevant subsections. Figure 6 provides an overview of the changes included in the Proposed Amendment. Appendix A on page 33 shows the funding variance between the Adopted Capital Plan and Proposed Amendment for all categories and subcategories of projects.

The Proposed Amendment lists all projects added and cancelled since the first proposed Fiscal 2015-2019 Capital Plan (released in November 2013). There have been 119 projects canceled. Most of the canceled projects were reclassified or deemed unnecessary, however, for 17 of the canceled projects, the reason is

“alternate project prioritized.” Components of a building that are deemed to be in worse condition and in need of attention are prioritized.

When a project is canceled the SCA sends a notification letter to school staff indicating that the project will no longer move forward and provides contact information for someone that school staff may contact with any questions.

Capacity Projects

Capacity projects include all projects to create, expand, or replace school buildings. In the Proposed Amendment there are \$6.45 billion allocated for Capacity projects, or 39 percent of the total. Of this, approximately \$2.83 billion were committed in Fiscal 2015-2017, with \$3.6 billion remaining. There are four subcategories, as shown in Figure 7.

Figure 7. Capacity Funding in Proposed Amendment
Dollars in Thousands

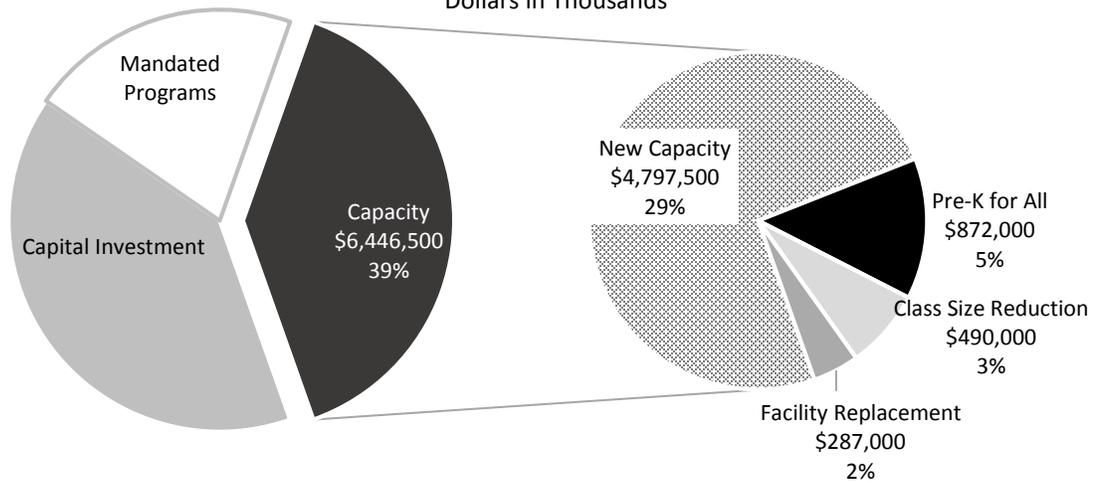
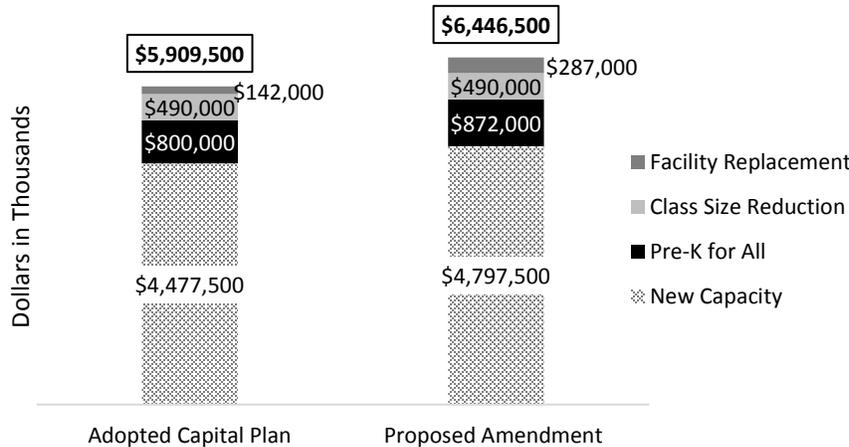


Figure 8. Capacity Funding Variance



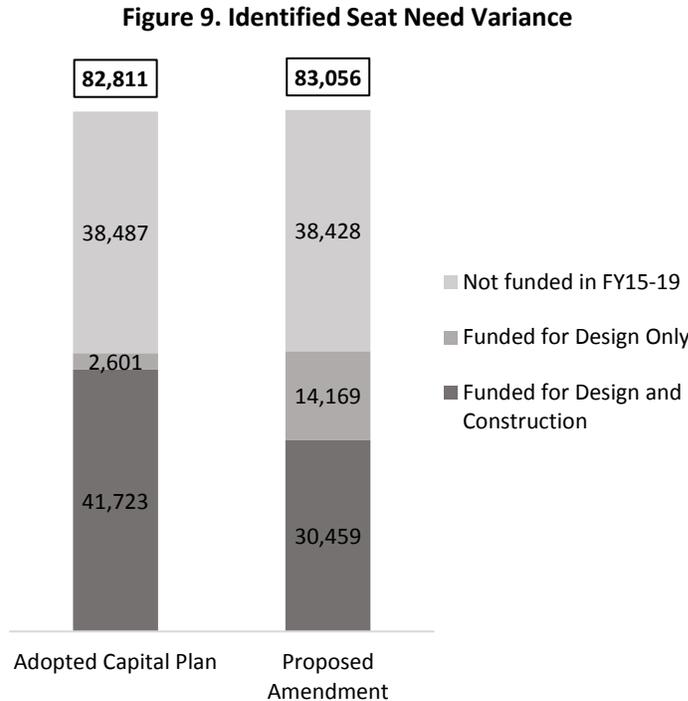
The Proposed Amendment would increase funding for capacity by \$537 million, or over nine percent. This increase includes \$320 million for K-12 capacity, \$72 million for pre-K capacity, and \$142 million for replacement projects, as shown in Figure 8.

New Capacity Program: \$4.8 billion

New Capacity includes all projects that create K-12 school seats, and as previously mentioned, increased by \$320 million, or seven percent, from the Adopted Capital Plan. The increase is due to the identification of six new projects, discussed in detail below.

The DOE and SCA determine how many new schools to build and/or lease by determining an “identified seat need.” They project the number of additional K-8 school seats needed at the sub-district level (geographic units within the community school districts), and the number of 9-12 school seats needed at the borough level, using three primary inputs: the Enrollment, Capacity, and Utilization Report (the Blue Book), enrollment projections, and housing projections. Based on these inputs and qualitative adjustments, the SCA estimates that the DOE needs an additional 83,056 new K-12 seats citywide by 2019 to appropriately accommodate all students.

Of this identified need, 44,628 seats are at least partially funded in the Proposed Amendment. It is unclear exactly how DOE and SCA determine which new school projects to fund (site availability is a factor) but there is a correlation between a district’s identified need and the number of funded seats. Appendix B on page 34 lists all of the identified K-12 capacity need by school district



and sub-district, as well as the seats funded in the Proposed Amendment and the unfunded need. The 10 school districts without any planned capacity projects are not listed in Appendix B.

As shown in Figure 9, the Proposed Amendment includes funding for 44,628 new K-12 seats across 88 projects, of which 14,169 seats across 27 projects are funded for design only. The cost of constructing these seats is not currently included in the Proposed Amendment; it is anticipated the cost of construction for these projects will be included in the next five-year capital plan covering Fiscal 2020-2024. The remaining 61 projects with 30,459

seats are funded for design and construction. In addition, as announced by the Mayor last year, the Fiscal 2018 Ten-Year Capital Strategy plans funding in Fiscal 2020-2024 for the 38,428 seats unfunded in the current Five-Year Capital Plan.

Table 1 shows the breakdown of capacity projects by building type; most projects are small primary schools.

Building Type	Number of Projects
Small Primary School (grades pre-K-5)	61
Large Flexible School (primary, middle, or two co-located schools)	21
Middle/High School (grades 6-12 or 6-12)	6
TOTAL	88

New Capacity: Changes from the Adopted Capital Plan

Then Proposed Amendment adds eight new capacity projects, but also removes four unlisted projects previously scheduled to begin design in Fiscal 2018. These proposed changes leave 88 new capacity projects. As shown in Figure 9, the net increase of funded seats is 304. This is the result of not only the K-12 capacity projects added and removed, but also a revised forecast capacity for many projects.

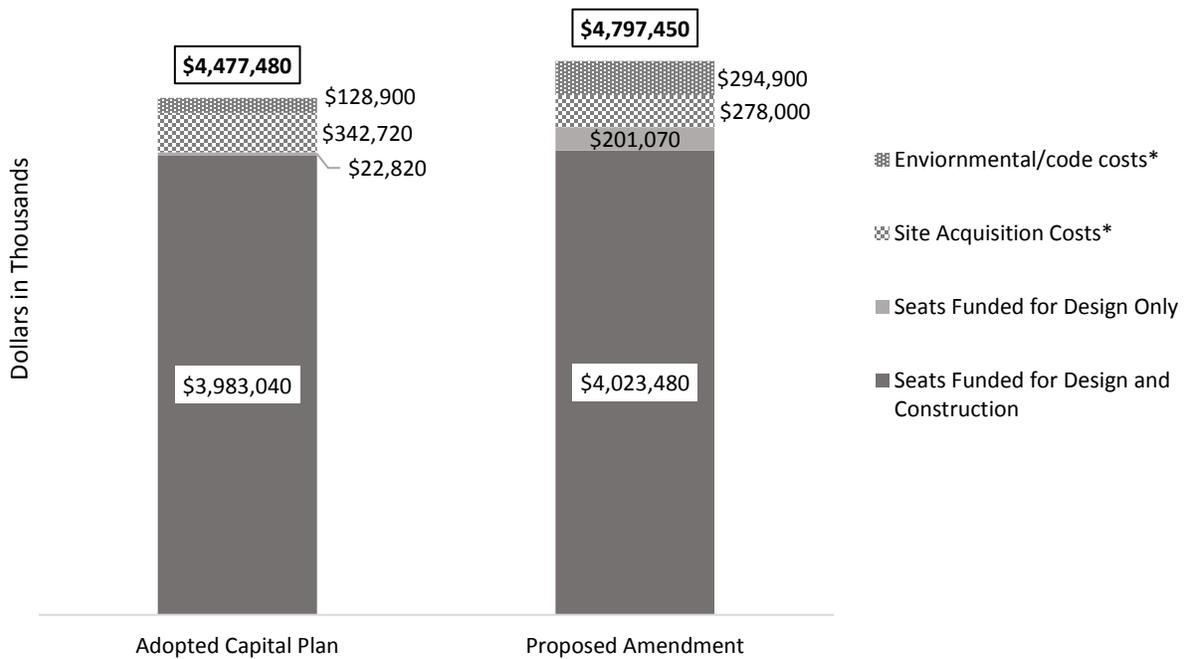
The 27 projects with 14,169 seats funded for design only in the Proposed Amendment include:

- three projects that were already only funded for design in the Adopted Capital Plan;

- four projects new in the Proposed Amendment funded for design only; and
- 20 projects where funding for construction was removed from the Proposed Amendment.

Funding for the construction of these projects will be included in the DOE’s next Five-Year Capital Plan (Fiscal 2020-2024). SCA changed the project schedules after taking into account factors that affect pre-construction activities, including the site acquisition process, coordination with other City agencies, and developer schedules. As Figure 10 demonstrates, most of the funding for new K-12 capacity in the Proposed Amendment is associated with projects funded for both design and construction.

Figure 10. K-12 Capacity Projects, Funding Variance



* These costs are budgeted as separate categories but if there are site acquisition and/or environmental/code costs associated with a specific project, the amount of needed funding moves to that project’s budget. Therefore, there may be additional site acquisition and environmental/code costs included in the funding for specific seats.

The changes described above largely account for the \$320 million increase in funding for new capacity. Specifically, the variance is due to:

- \$117.8 million required in Fiscal 2018-2019 for the eight new capacity projects;
- \$30.5 million no longer required for the four unsited projects removed from the plan; and
- \$194.3 million net increase in the funding required for projects in the adopted plan (including an additional \$41.9 million required for a project funded for design only in the Adopted Capital Plan that is funded for both design and construction in the Proposed Amendment).

Funding required in the current Five-Year Capital Plan for capacity projects usually increases when the total estimated cost of a project increases. The total estimated cost of a project may increase for a variety of reasons. Once a site has been identified the total estimated cost may include site acquisition costs and/or site-specific environmental costs (see Figure 10), the design may increase the total estimated cost, and/or issues that arise during the construction process may increase the total estimated cost.

New Capacity Projects: Cost and Completion Timelines

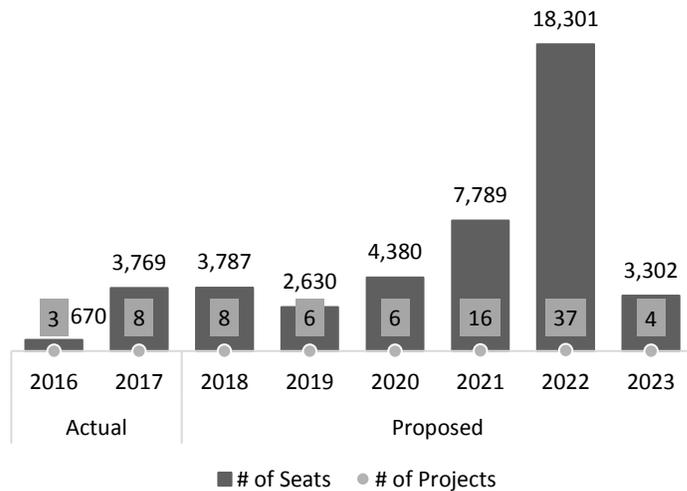
The factors that ultimately determine the cost of any particular project may include site acquisition costs, building design, construction schedule considerations, varying market prices across neighborhoods, and other site-specific conditions. The Capital Plan does not indicate what methods the SCA employs to control the cost per seat and does not explain the variation in actual spending on completed projects. The SCA conducts a current market analysis to judge bids and awarded contract prices. In addition, the SCA hired a Director of Cost Control and is reviewing design standards and building materials in order to achieve cost savings.

Appendix C on page 36 lists all 88 K-12 capacity projects with their anticipated/actual schedule, budget, and estimated cost per seat; this list also indicates new projects and projects funded for design only in the Proposed Amendment. While the average cost per seat is approximately \$127,000, the cost per seat ranges widely. Of the 88 capacity projects, 21 with 7,859 seats are, or are projected to be, in leased space. The construction cost per seat in leased space is, on average, lower than that in City-owned space: \$59,000 compared to \$142,000. The range of per-seat costs for capacity projects in leased space: \$45,000 to \$137,000, is also smaller than the range for capacity projects on City-owned sites: \$5,000 to \$340,000. The per-seat cost for leased space does not include the cost of the actual leases, which are funded in the expense budget.

As shown in table 2, the average time for a K-12 capacity project completion, based on the schedules in the Proposed Amendment, is approximately four years. Leased projects have slightly shorter average timelines than capacity projects on City-owned property.

<i>Time in Months</i>	Leased Projects	Owned Projects	All Projects
Avg. Design Time	15	20	19
Avg. Construction Time	25	33	31
Avg. Completion Time (Design + Construction)	40	53	50

**Figure 11. FY15-19 Capital Plan
K-12 Capacity Projects Completion Timeline***



* By calendar year of completion. In almost all cases a building completed in a calendar year will be ready for occupancy in the Fall of that year (i.e. a school completed in 2018 will open in Fall 2018).

Figure 11 shows the scheduled completion dates for New Capacity projects funded in the Proposed Amendment by the number of projects and seats. Only 11 of the projects representing 4,439 seats have already been completed. The majority of K-12 capacity projects in the Proposed Amendment are projected to be completed in Fiscal 2020-2023, after the last fiscal year of the current plan—that is, after the point in time by which these seats are needed. Figure 11 does not include K-12 capacity projects funded in the Fiscal 2010-2014 Five-Year Capital Plan that have or will be completed from Fiscal 2015 onward.

Planning and Siting for New Capacity

Of the 88 K-12 capacity projects in the Proposed Amendment, 25 projects with a forecast capacity of 12,821 seats, 29 percent of all funded seats, are unsited. Of the 61 K-12 projects funded for design and construction in the Proposed Amendment, eight projects with a forecast capacity of 3,822 seats, 13 percent of seats funded for both design and construction, are unsited. This means the majority of unsited seats are funded for design only in this five-year capital period. While it may be feasible for the SCA to site these additional seats before the end of the capital plan period (Fiscal 2019), as shown in Figure 11 and previously discussed, SCA will not finish construction most of the seats until Fiscal 2020-2023.

The 38,428 seats unfunded in the Proposed Amendment, which are expected to be funded in the Fiscal 2020-2024 Five-Year Capital Plan (per the Mayor’s commitment in the Ten-Year Capital Strategy), will be completed between Fiscal 2021 and Fiscal 2027 based on the current timelines for design and construction. In addition, it is all but certain there will be an additional identified seat need for the period of the next Five-Year Capital Plan; that is, the City’s school system will have additional seat need by 2024 beyond the 83,056 identified seat need in the Proposed Amendment.

In March 2018, the City Council released a report “Planning to Learn: The School Building Challenge” outlining challenges with the current system for planning and siting new schools and recommendations for addressing these challenges. These recommendations included improvements to the current school capacity planning methodology and timeline, additional tools for expediting school siting and construction, and the use of non-construction strategies to

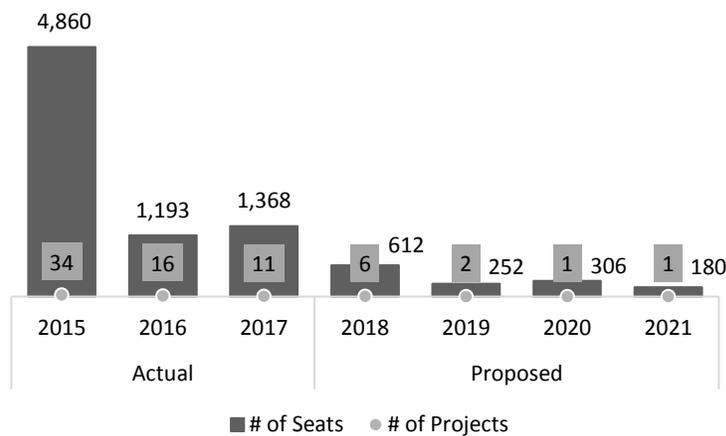
alleviate existing overcrowding. Please see the full report for a detailed discussion of the existing school planning and siting process and the recommendations.

Pre-Kindergarten for All: \$872 million

This funding supports the creation of pre-K seats and, as previously mentioned, increased by \$72 million, or nine percent in the Proposed Amendment. Pre-Kindergarten capacity is created by building stand-alone pre-K buildings, adding pre-K classrooms in new buildings that are being constructed for elementary school use, or by leasing space for pre-K centers. The SCA expects to create 8,771 pre-K seats in total, up from an estimated 8,300 in the Adopted Capital Plan. There are 71 projects currently identified, up from 67 projects.⁴ The \$72 million increase in the budget for pre-K capacity is due to the addition of these four projects.

The average estimated cost per pre-K seat is approximately \$100,000.⁵ As with k-12 capacity projects the cost per seat for each project ranges widely, from \$7,000 to \$341,000, and the plan does not explain why projects go forward even when the per-seat cost is so far above average. SCA estimates an average cost of \$164,000 per seat in pre-K projects it expects to build, six projects, and \$87,000 per seat in pre-K projects it expects to lease, 65 projects. See Appendix D on page 38 for a full list of pre-K capacity projects, which has the cost per seat and estimated completion date for each project, and highlights the four new projects added in the Proposed Amendment.

**Figure 11. FY15-19 Capital Plan
Pre-K Capacity Projects Completion Timeline**



The average time to complete a pre-K capacity project is approximately 17 months total: 8 months for design and 9 months for construction. Figure 11 shows the scheduled completion dates for Pre-Kindergarten projects in the Proposed Amendment by the number of projects and the number of seats. In contrast to new K-12 capacity, SCA has completed most of the pre-K capacity projects; in total, they have completed 61 projects with 7,421 seats. The remaining 10 projects with 1,350 seats will be complete by 2021.

** By calendar year of completion. In almost all cases a building completed in a calendar year will be ready for occupancy in the Fall of that year (i.e. a school completed in 2018 will open in Fall 2018).*

⁴ Note this includes four physical locations counted as eight projects, because SCA is constructing each of these four projects two phases.

⁵ This excludes seven projects for which the total estimated cost includes the cost of additional work after initial occupancy.

Planning and Siting for Pre-K, Including 3-K

Of the 71 pre-K capacity projects identified in the Proposed Amendment, only three projects representing 396 seats, or less than five percent, were not sited as of the release of the Proposed Amendment. However, SCA does not currently forecast a pre-K capacity need in its capital plan and it is unclear how SCA plans for pre-K capacity needs. Pre-K capacity planning is necessarily different from K-12 capacity planning, since approximately half of pre-K seats are provided by community based organizations (CBOs) through contracts with DOE. However, the SCA and DOE should make their planning process for pre-K capacity, and any related data, clear in the Capital Plan; this is one of the recommendations in the Council’s previously mentioned “Planning to Learn” report.

A clear planning process for pre-K seats is particularly important as the City expands pre-K to three-year-olds through the 3-K for All initiative. 3-K capacity is being provided in similar ways to pre-K: through stand-alone 3-K centers, by adding 3-K classrooms in DOE elementary schools, and through Early Childhood Education Centers run by CBOs contracting with DOE. The first two school districts with 3-K programs: District 7, South Bronx, and District 23, Brownsville, are districts where DOE schools have available capacity. However, as 3-K expands to more school districts it will be challenging to find space in existing DOE facilities for 3-K classrooms. Additional capital investment may be needed to build standalone 3-K centers, or additional pre-K centers serving both three- and four-year-olds. In addition, it is unclear if leases currently held by the Administration for Children’s Services (ACS) for EarlyLearn centers will be transferred to the DOE, and if there will be additional capital costs for the renovation and/or maintenance of those spaces.

Class Size Reduction: \$490 million

This funding, which remains unchanged from the Adopted Plan, is intended for 4,900 new seats targeted to reduce class size. These seats are in addition to those funded under the New Capacity program. A group with representatives from the SCA, DOE’s Offices of Space Planning and Student Enrollment, and the DOE’s Division of Operations identified the projects using criteria such as overutilization, unfunded seat need, and geographic isolation. The SCA identified three Class Size Reduction projects in January 2016, which are listed in Table 3 below; the three projects are only associated with 1,386 seats. No additional projects have been identified in this Proposed Amendment. Given that only \$236 million is required in the Proposed Amendment for these three projects, and projects have not been identified in over two years, it is unclear why excess funding in this category has not been reallocated to other project areas or moved to the outyears (i.e. Fiscal 2020 and beyond). In addition, it is unclear exactly how the projects identified will reduce class size.

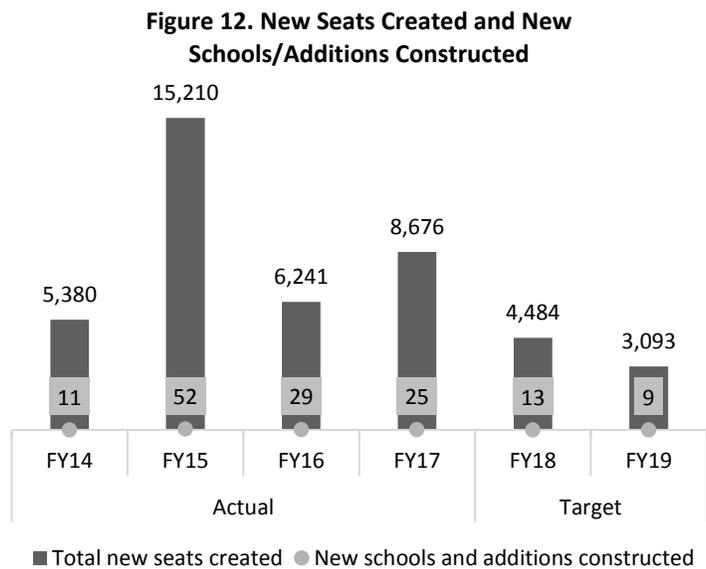
School District	Council District	School	Boro	Forecast Capacity	Est. Compl	Total Est. Cost	Req'd FY 15-19	Needed to Complete	Cost Per Seat
11		P.S. 19 ADDITION	X	400	Jul-20	\$70,610	\$64,760	\$5,860	\$176.53
29		P.S. 131 ADDITION	Q	384	Jul-21	\$75,840	\$69,230	\$6,610	\$197.50
78K		EAST NY FAMILY ACADEMY	K	602	Jun-21	\$111,290	\$101,510	\$9,780	\$184.87
TOTAL				1,386		\$257,740	\$235,500	\$22,250	\$185.96

Facility Replacement Program: \$287 million

This funding provides for the development of seats for schools that must vacate their current locations, either due to a lapsed lease or building conditions. Seats are provided through new construction or alternative leasing opportunities, similar to new capacity. Funding for Facility Replacement is doubling from the Adopted Capital Plan, up \$145 million, due to the identification of two additional Facility Replacement projects. These two additional projects are highlighted in Appendix E on page 40, which lists all nine Facility Replacement projects in the Proposed Amendment. Their total estimated cost is \$301 million, of which \$289 million is required in the current five-year capital plan period. Sites have been identified for all nine projects.

Performance Indicators Related to Capacity

Figure 12 shows performance indicators related to the creation of new capacity. The number of new seats created and new schools and additions constructed spiked in Fiscal 2015 due to the implementation of Pre-Kindergarten for All, which required significant new pre-K capacity to come online in a very short period of time. Targets for new seats created and new schools and additions constructed are largely based on the planned completion date of projects in the Proposed Amendment. From Fiscal 2014-2017 a total of 35,507 pre-K-12 seats across 117 new buildings were created.



New seats are created not only through projects funded in the capacity section of the Capital Plan, but also through Capital Task Force (CTF) projects. CTF projects are small capital projects typically undertaken by DOE’s Division of School Facilities (DSF) or Job Order Contract (JOC) contractors. They change capacity through room conversions (depending on the type of room conversion, CTF projects can also reduce capacity). According to the Blue Book, the net capacity increase from CTF projects for school year 2013-2014 was 318; for school year 2014-15 was 544; for school year 2015-16 was 489; and for school year 2016-17 was 286. In order to better align these performance indicators with the Capital Plan, the PMMR should disaggregate new school seats and buildings by the same categories used in the Capital Plan (i.e. new K-12 capacity projects, pre-K capacity projects, class size projects, replacement projects, or through CTF projects). The PMMR should also report on capacity lost (i.e. CTF projects and lost capacity associated with facilities replacement projects).

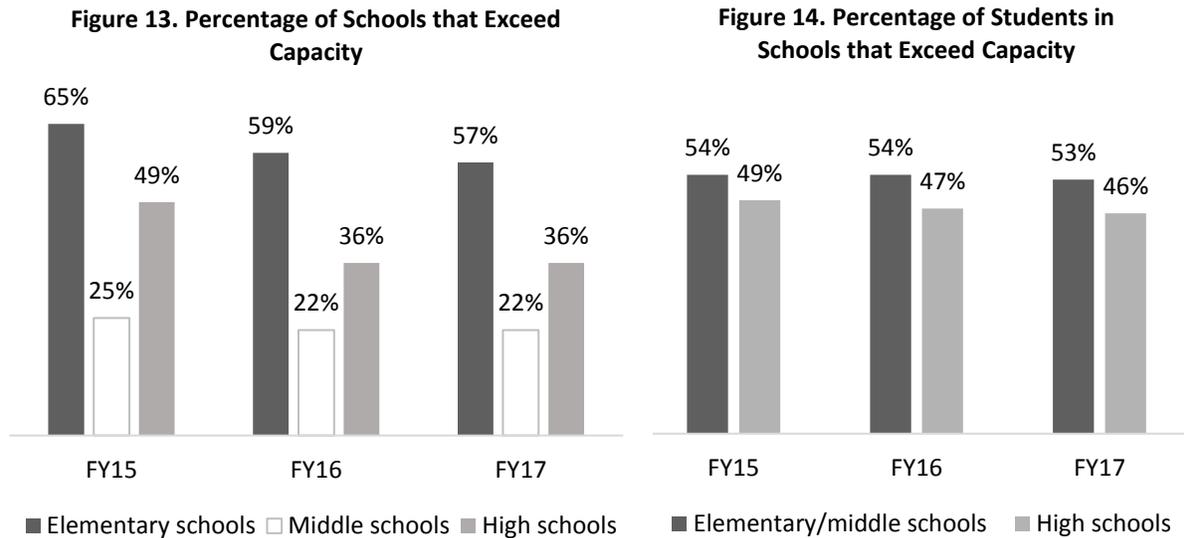
Table 4 shows performance indicators related to the construction cost of new capacity. According to the SCA the overall cost increase for school capacity projects per square foot was fueled by several factors, including inflation, market conditions, and new regulatory requirements.

The construction bid price for school capacity projects per square foot reflects the construction cost per square foot at the time the project is bid out—that is, projects bid in the fiscal year are used to determine this indicator. The construction cost per square foot reflects the construction cost per square foot at the time of the school opening—that is, projects completed in the fiscal year are used to determine this indicator. Therefore, these indicators reflect the overall upward trend in construction price per square foot, as project bid prices per square foot are higher than completed projects' cost per square foot (the projects being completed in a particular fiscal year would have been bid 2-3 fiscal years earlier). Figures are listed as not available (NA) when no facilities of those types finished construction during those particular fiscal years, though it is unclear why early childhood has been listed as NA for the past four fiscal years. According to the PMMR, most new schools and additions are constructed on time.

Performance Indicators	Actual				Target	
	FY14	FY15	FY16	FY17	FY18	FY19
Construction bid price for school capacity projects per square foot (\$)	\$630	\$771	\$752	NA	\$700	\$700
Average new school construction cost per square foot						
Early childhood (\$)	NA	NA	NA	NA	*	*
Elementary (\$)	\$552	\$631	\$657	\$732	*	*
Intermediate (\$)	\$604	NA	\$573	\$777	*	*
High school (\$)	NA	\$498	NA	\$817	*	*
New schools and additions - construction funds committed as a percent of initial authorized budget (%)	92.6%	92.9%	93.0%	100.0%	100.0%	100.0%
Scheduled new seats constructed on time (%)	100%	100%	96%	NA	100%	100%

While the PMMR does list the number of new seats and new schools constructed every year, it does not list the approximate amount of new school space created in terms of square footage. The PMMR should report this data as well, given square foot is the unit price reported for a new school construction. In addition, square footage created is also a useful data point in terms of assessing increased demands on the DOE expense budget in terms of school facilities.

Figures 13 and 14 shows performance indicators related to capacity. Comparisons are only made starting at Fiscal 2015 because in Fiscal 2014 and prior years the formula used to calculate capacity (in the Blue Book) was significantly different; it was revised in Fiscal 2015 to more accurately reflect the capacity of school buildings. There was little to no change in these indicators from Fiscal 2016 to 2017. These indicators are based on data from the Blue Book, discussed in further detail in the next section.



Source: Preliminary Mayor's Management Report for Fiscal 2018.

The desired direction for these trends is downward; as DOE works to decrease overutilization the proportion of schools that exceed capacity and students in schools that exceed capacity should also decrease, however, the PMMR does not include targets for these indicators reflecting the desired trend.

Enrollment, Capacity, and Utilization Report (Blue Book)

School Type	Enrollment*	Target Capacity*	Utilization Rate (%)
Elementary	382,538	369,711	103%
Middle	143,587	177,972	81%
PS/IS	115,063	117,499	98%
High School	264,985	284,937	93%
IS/HS	50,849	55,671	91%
Citywide Special Education	54,201	25,691	89%

Table 5 shows capacity and overutilization by school type in the 2016-17 school year. This data, which is more detailed than that reported in the PMMR, demonstrates that elementary schools are particularly overutilized.

Table 6 shows detailed information on capacity and utilization by school district and borough in the 2016-17 school year; utilization rates over 100 percent, indicating overutilization, are highlighted. Data on utilization is one factor the SCA uses to project the number of new seats needed, so some correlation between districts that are overutilized and districts that have a high capacity need is expected. Overutilization is particularly high in Queens, as well as a few districts in the Bronx and Brooklyn. However, according to the Blue Book calculations, at the citywide level the school system is not overutilized,

and at the borough level only Queens and Staten Island face overutilization. Even within underutilized school districts there are overutilized schools, and vice versa.

Table 6. Enrollment, Capacity, and Utilization by District				
School District/ Borough	Enrollment*	Target Capacity*	Utilization Rate (%)	Overutilized Schools
1	13,116	16,585	79%	9
2	66,110	72,357	91%	52
3	24,462	28,670	85%	16
4	16,732	18,910	88%	18
5	16,589	20,111	82%	14
6	24,028	26,698	90%	21
Manhattan	161,037	183,331	88%	130
7	24,252	27,909	87%	23
8	31,760	35,466	90%	29
9	36,170	38,995	93%	41
10	56,337	54,722	103%	64
11	40,875	40,934	100%	46
12	26,969	29,766	91%	23
Bronx	216,363	227,792	95%	226
13	25,312	29,617	85%	13
14	22,476	28,749	78%	14
15	33,444	32,407	103%	36
16	9,106	17,487	52%	5
17	26,211	36,260	72%	15
18	17,812	26,192	68%	7
19	25,592	33,379	77%	14
20	49,734	39,344	126%	41
21	38,060	37,725	101%	32
22	35,391	33,046	107%	29
23	13,313	18,288	73%	9
32	13,354	20,741	64%	6
Brooklyn	309,805	353,235	88%	221
24	59,016	51,795	114%	54
25	36,907	30,405	121%	39
26	34,551	28,618	121%	34
27	45,127	44,629	101%	45
28	41,945	38,578	109%	42
29	26,480	29,451	90%	19
30	40,843	39,884	102%	38
Queens	284,869	263,360	108%	271
Staten Island (D31)	62,100	61,061	102%	49
Citywide	1,034,174	1,088,779	95%	626

* K-12 (does not include pre-K).

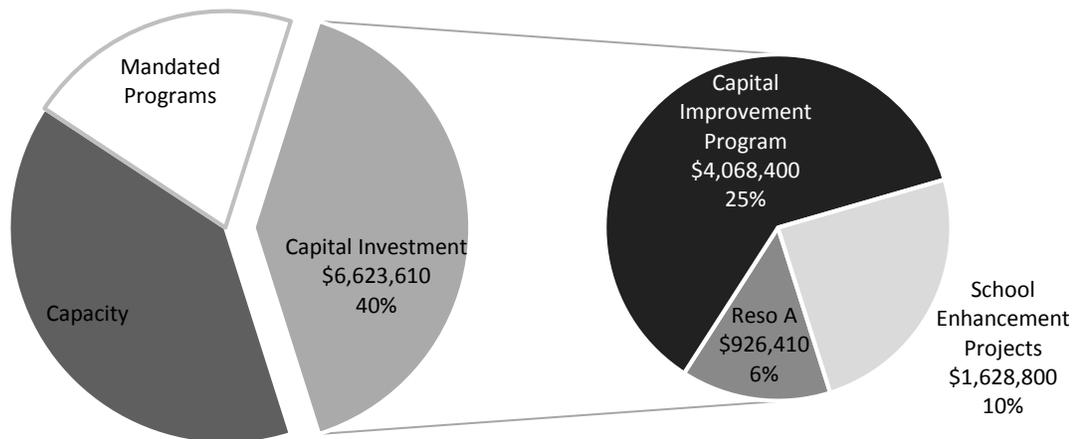
While the data in Tables 4 and 5 might at first glance suggest remedying overutilization includes the redistribution of students from overutilized schools/districts to underutilized schools/districts, it is important to note that the accuracy of the formula used to calculate capacity in the Blue Book is still contested. The Blue Book Working Group, while responsible for many of the changes included in the 2014-15 Blue Book calculation, asked for additional changes

to the formula that the DOE did not adopt. Most notably, the target class sizes in the Blue Book calculations do not reflect the smaller class sizes required by the Contracts for Excellence law passed in 2007.⁶ Further, transporting children within and among school districts to evenly distribute student enrollment across existing school buildings is neither practical nor desirable for a host of reasons.

Capital Investment

Capital Investment, which is \$6.6 billion in the Proposed Amendment, includes all projects undertaken to improve and upgrade existing facilities. Projects supported with discretionary funding allocated by Borough Presidents and City Council Members, commonly referred to as Reso A funding, fall into the Capital Investment category, rather than in the project category that corresponds to the type of funded project. Beyond Reso A funding, Capital Investment includes two categories, the Capital Improvement Program and School Enhancement Projects. Overall, the Proposed Amendment would increase funding for Capital Investment by \$655 million, or 11 percent, due to increases in all three categories discussed in further detail below.

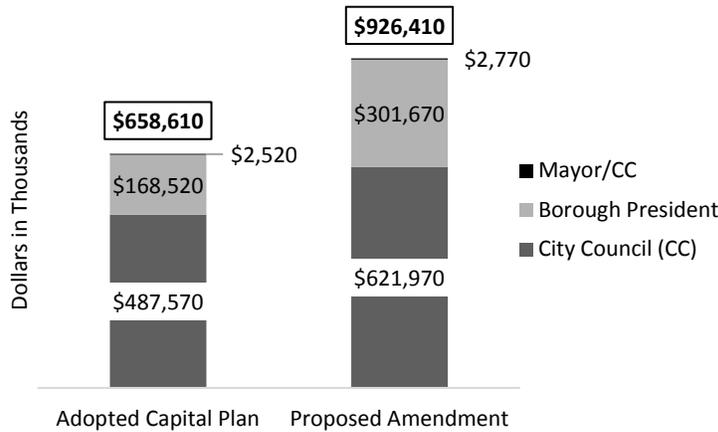
Figure 15. Capital Investment Funding
Dollars in Thousands



⁶ Yasmeeen Khan, "How Squeezed Are the Schools? We May Get a Better Picture," WNYC, Jul 28, 2015, <http://www.wnyc.org/story/city-make-changes-how-it-accounts-space-schools/>.

Reso A: \$926 million

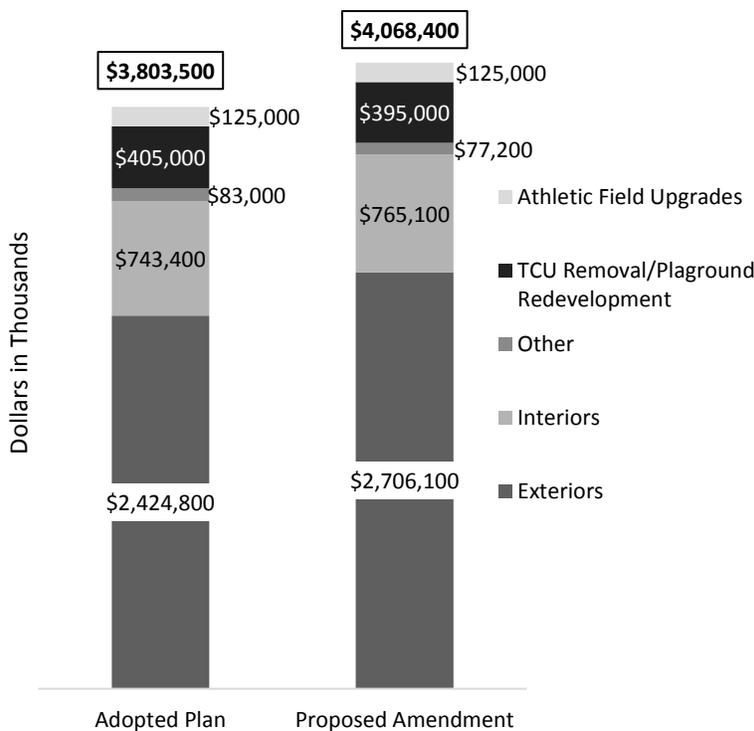
Figure 16. Reso A Funding Variance



As Figure 16 shows, the Proposed Amendment reflects a \$268 million increase in Reso A funding included in the Fiscal 2018 Adopted Budget. Reso A funding comprises six percent of the entire DOE Capital Plan. Projects funded by the Council in Fiscal 2018 include technology (such as smart boards and laptop carts) and renovations to auditoriums, gymnasiums, libraries, and science labs.

Capital Improvement Program: \$4.1 billion

Figure 17. Capital Improvement Program (CIP) Funding Variance



The Capital Improvement Program (CIP) provides critical infrastructure work in existing buildings, including repairing damage caused by Super Storm Sandy, interior and exterior repairs, the removal of transportable classroom units (TCUs), and athletic field upgrades. The Proposed Amendment would grow CIP funding by approximately seven percent, an increase of \$265 million. This is reflected in Figure 17, which shows changes to CIP in the Proposed Amendment.

The DOE and SCA use the Building Condition Assessment Survey (BCAS) to determine what CIP projects to fund. The BCAS is an annual survey conducted by architects, electrical engineers, and mechanical engineers to determine the baseline condition of all of the DOE’s facilities. Buildings’ main systems and components are rated on a scale of 1-5 (see table at right). The 2016-2017 BCAS report for every DOE school building can be found on the DOE website under the “Statistics and Budget” section of each school’s website.

BCAS Rating	Description
1	Good
2	Between Good and Fair
3	Fair
4	Between Fair and Poor
5	Poor

CIP funding allows SCA to address only the most critical repair needs, building elements rated “poor” (5) on the BCAS, though in some cases those rated “fair” (3) or “fair to poor” (4) are also included. The PMMR includes information on the proportion of school buildings rated in each category, shown in Figure 18. The data indicates that budgeted funding is enough to maintain schools in a state of good repair, as almost no buildings are in “fair to poor” or “poor” condition.

Figure 18. School Building Ratings

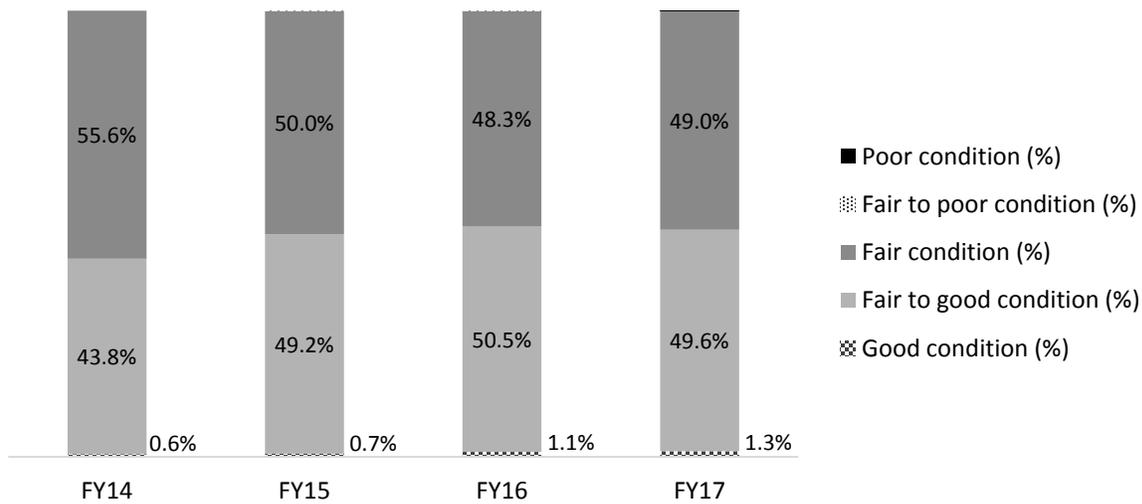


Figure 19. Capital Improvement Project Performance Indicators

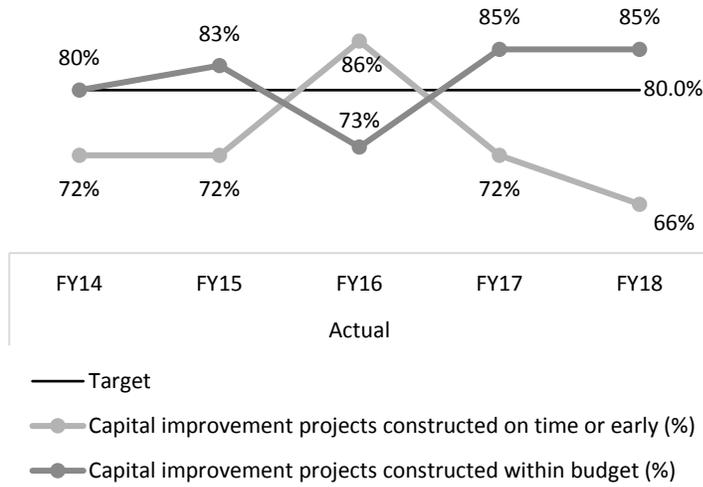


Figure 19 shows performance indicators related to capital improvement projects. These PMMR indicators include all non-capacity projects managed by SCA except for emergency projects.

Commendably, the percentage of capital projects constructed within budget increased significantly in Fiscal 2017 and is currently exceeding the target for Fiscal 2018. The opposite is true for the percentage of capital improvement projects constructed on time or early, which declined in Fiscal 2017 and is currently 14 percentage

points below the target. Though there appears to be an inverse correlation between the percent of CIPs constructed on time and the percent of CIPs constructed within budget over the last three fiscal years, SCA does not believe the two statistics are related for all CIP projects. According to SCA, over half of the projects in Fiscal 2016 were related to the PCB lighting replacement program (discussed in further detail under mandated programs), which was completed five years ahead of schedule. This accounts for the significant increase in the portion of projects completed on time/early in Fiscal 2016.

Actual				4-Month Actual	
FY14	FY15	FY16	FY17	FY17	FY18
119	109	94	88	96	106

Table 7 shows the final performance indicator related to capital improvement projects. The total backlog of hazardous building violations has steadily decreased over the four years, though

the four-month actual is up from Fiscal 2017.

Exteriors: \$2.7 billion

The major components of a building’s exterior are roofs, parapets, windows, and masonry. If the BCAS rating for any of these four major components was “poor,” the other major exterior components rated “fair to poor” might be included in capital work. The single greatest cause of accelerated deterioration of existing facilities is water infiltration. As such, this capital work focuses on making schools watertight. In the Proposed Amendment, funding for Exteriors is increased by \$281 million, or 12 percent. Appendix A on page 33 lists funding for the components of the Exteriors program in the Proposed Amendment and their change from the Adopted Plan.

Interiors: \$765 million

Components of the Interior program include electrical upgrades, plumbing, low-voltage electrical systems, and mechanical systems that need to be replaced rather than repaired. Interior work in occupied buildings is challenging, as the SCA must perform the most intrusive work over the summer months, after normal school hours, and during holidays to ensure the safety of students and teachers and minimize disruption to instruction. This is not always the most cost-effective

means of performing the required work. In the Proposed Amendment, funding for Interiors is increased by \$2 million, or three percent. Appendix A on page 33 lists funding for the components of the Interiors program in the Proposed Amendment and their change from the Adopted Plan. Note funding for “Safety Systems” under Interiors is mostly for exterior doors, in contrast to funding for “Safety and Security,” discussed in further detail under Facility Enhancements on page 25.

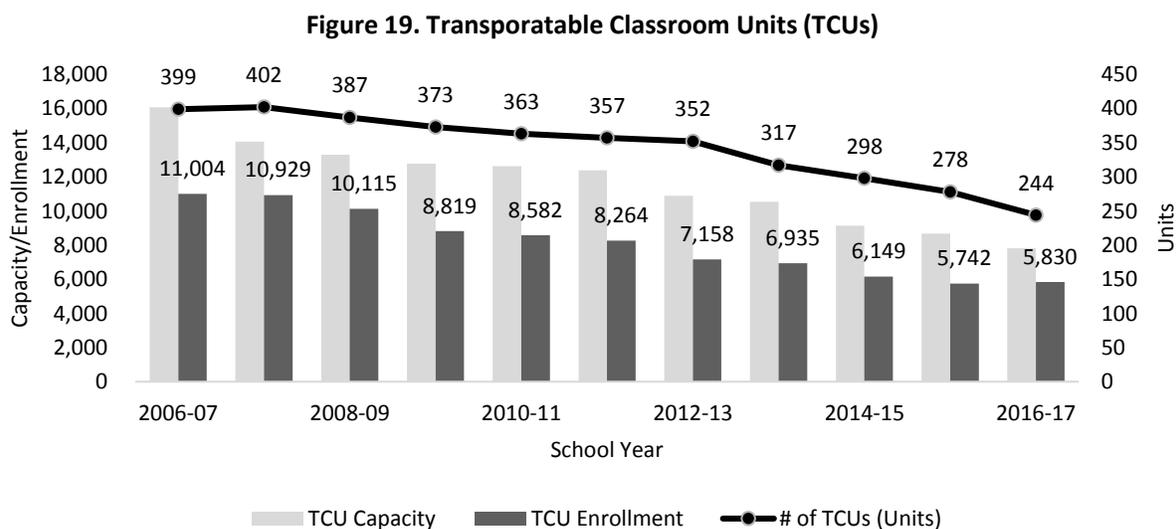
The “AC Retrofit” category under interiors is not for electrical upgrades related to air conditioning; this type of work is funded in the “Air Conditioning” category under facility enhancements. Rather, this category under Interiors is for three specific projects: one related to Hurricane Sandy repairs and two associated with code compliance.

Transportable Classroom Unit (TCU) Removal/Playground Redevelopment: \$395 million

SCA has committed to removing TCUs across the City and \$395 million is allocated for the removal of all units. The Proposed Amendment would decrease the allocation for TCU Removal by \$10 million, or approximately two percent, but leave the number of TCUs slated for removal unchanged. Several New Capacity projects in the form of additions have or will be created on sites that currently contain TCUs. Over 50 TCUs have or will be removed as a result of these additions, and in these cases the costs of the TCU removal are included with the addition project.

To date, 164 TCUs have been removed and 70 of the approximately 190 remaining TCUs have a removal plan. TCU removal plans and schedules are coordinated with each school and reflect the area’s capacity and desires of the school community. The Council has expressed concern that TCUs with removal plans are the easiest to remove and the SCA will face increasing challenges in identifying removal plans for the remaining 120 TCUs without removal plans.

Figure 19 shows the number of TCU units and their enrollment over the past 11 years, which has consistently declined. However, the DOE does not report the number of special education students or high school students in TCUs so it does not present a complete picture of enrollment in TCUs.



Source: DOE’s report to the New York City Council pursuant to the requirements in Local Law 122 of 2005, 2006-17.

School Enhancement Projects: \$1.6 billion

School Enhancement Projects consist of two main program categories: Facility Enhancement and Technology, which are discussed in detail below.

Facility Enhancements: \$974 million

Facility Enhancements projects include Facility Restructuring, Safety and Security, Middle School Science Lab Upgrades, Accessibility, Physical Fitness Upgrades, Library Upgrades, Auditorium Upgrades, and Bathroom Upgrades. Overall, the Proposed Amendment would increase funding allocated to Facility Enhancements by \$100 million or approximately 11 percent. This is largely due to the addition of \$105 million for the Universal Physical Education Initiative announced at Fiscal 2018 budget adoption and discussed in further detail below. Appendix A on page 33 shows funding for the components of the Facility Enhancements category in the Proposed Amendment and the change from the Adopted Plan.

Facility Restructuring: \$388 million

Facility Restructuring funds projects that enable changes to instructional offerings in particular buildings. This includes classroom conversions that can change capacity (i.e. Capital Task Force, CTF, projects previously discussed), the construction of School Based Health Centers (SBHCs), electrical upgrades, cafeteria renovations, and the creation of community school features. Funding for electrical upgrades related to the Air Conditioning Initiative, \$50 million, was previously included in this category but has been separated into its own category in the Proposed Amendment. Not including this change, the Proposed Amendment decreases funding for Facility Restructuring by approximately \$20 million, or five percent.

Building	School	Project Budget	STH population
X151	I.S. 151	\$2,327,644	224
X104	P.S. 199	\$2,476,765	210
X098	I.S. 98	\$2,429,054	125
R460	Wagner HS	\$2,280,443	105
TOTAL		\$9,513,906	664

The Adopted Capital Plan added \$19.5 million for SBHCs in schools with high concentrations of students in temporary housing. Four projects have been identified, listed in Table 7 with the approximate number of students in temporary housing (STH)

at each school. These projects are expected to be complete by Fall 2018. SCA is working with DOE and the Department of Health and Mental Hygiene (DOHMH) to identify additional sites and service providers.

Air Conditioning: \$50 million

In April 2017, the Mayor announced that the City would install air conditioners (AC) in every DOE public school classroom by 2022, which the City Council called for in the Fiscal 2018 Preliminary Budget Response. Window AC units are not capital-eligible, and were therefore funded through a \$28.75 million allocation in the expense budget. This category in the Capital Plan is for capital work required to complete this initiative, which may include installation/replacement of switchboards, electrical panels, receptacles, grounding work, additional electrical service, and the distribution of the electrical service. This type of work may be necessary in buildings where more than a single replacement or installation of ACs is needed.

Funding for electrical work related to air conditioning remains unchanged in the Proposed Amendment (it was included under Facility Enhancements in the Adopted Capital Plan). Though

no capital funding was added to the budget for the AC initiative, SCA expects the City will provide additional capital funding for Fiscal 2019 through 2022 to complete the AC initiative. The SCA has identified 16 electrical upgrade projects to allow for the installation of air conditioner units, listed in Table 8 below with the number of regular classrooms without AC (or working AC). SCA is also using funding in this category to supplement Reso A-allocated funding at M440 and Q041.

School District	Building	School	Regular Classrooms w/o AC as of 9/30/17	Fiscal Year - construction start	Total Budget
06	M152	P.S. 152	22	2018	\$1,268,746
11	X089	P.S. 89	2	2019	1,003,622
15	K051	I.S. 51	17	2018	1,438,094
15	K142	J.H.S. 142	22	2018	193,400
15	K230	P.S. 230	18	2018	1,422,784
20	K186	P.S. 186	1	2019	1,003,622
24	Q019	P.S. 19	49	2018	185,446
24	Q087	P.S. 87	0	2018	23,858
28	Q144	P.S. 144	32	2018	185,446
29	Q176	P.S. 176	3	2019	1,003,622
30	Q111	P.S. 111	0	2017	2,051,645
31	R016	P.S. 16	11	2018	750,640
32	K111	I.S. 111	0	2018	1,408,173
78Q	Q435	Martin Van Buren HS	56	2018	185,446
78X	X430	Walton HS	0	2019	\$1,003,622

In addition, there are 253 electrical upgrade projects related to AC being evaluated and executed by DSF. Most of these projects cost less than \$100,000 and only require minor electrical distribution and/or outlet work in fewer than eight rooms per building.

When the Mayor made the announcement about AC in April 2017 he committed to fund AC in all spaces used for instruction, not just regular classrooms. However, the DOE and SCA have not been funded to provide AC in any spaces besides regular classrooms, and it is unclear how much additional funding would be required to provide AC in these spaces. There are 2,235 physical education or public assembly spaces without AC or working AC, out of a total of 5,163. There are also 2,610 specialty instruction spaces without AC or working AC, out of a total of 9,553.

Pursuant to a Fiscal 2018 term and condition, the DOE and SCA provided data on the progress of AC installation. As of September 30, 2017, 594 regular classrooms had gotten ACs, bringing the total number of regular classrooms with AC to 33,637. Of the 10,591 classrooms without AC (or without working AC), 582 were in-progress.

The DOE and SCA initially prioritized summer school sites for installations, and then classrooms were prioritized by ease of upgrade. Buildings with less than eight classrooms that need AC are the easiest to upgrade because subpanels are estimated to be required for every eight new outlets installed.

Universal Physical Education Initiative: \$105.5 million

This funding is new in the Proposed Amendment, because it was added to the Fiscal 2018 Adopted Budget. In June 2017, the Mayor announced a Universal Physical Education initiative to

ensure all students have access to appropriate physical education space by 2021, which the City Council called for in the Fiscal 2018 Preliminary Budget Response. In the first phase of the initiative, the SCA is exploring options to construct new gymnasiums, renovate schoolyards, or convert existing space for schools that do not currently have sufficient access to indoor physical education space. There are approximately 200 schools without adequate physical education space; this funding is expected to cover projects at some of these schools and survey the rest. The SCA has already identified three schools that will receive a new standalone gym annex: P.S. 81 in Queens, P.S. 18 in Brooklyn, and P.S. 6 in the Bronx. In addition, two schools will be getting gymnasiums through an addition/annex funded in the Capacity program: P.S. 254 in Brooklyn and P.S. 340 in the Bronx. The Fiscal 2018 Adopted Budget also included \$1.8 million in expense funding to cover 21 leases of gymnasium space.

Safety & Security: \$100 million

Funding for Safety and Security is unchanged in the Proposed Amendment. The Safety and Security program includes network-based video surveillance, ID-card access control, radio communications, and metal detection. The SCA is also continuing the implementation of Internet Protocol Digital Video Surveillance (IPDVS), which allows authorized school officials to view live and archived camera images directly on their computer stations and provides remote viewing capability to authorized personnel from borough and central offices.

The funding provides a technical refresh of those IPDVS systems that have been in use for at least 10 years and therefore have reached the end of their useful lives. The complete technical refresh upgrade, which is being done in 138 buildings, includes replacement of all of the existing analog cameras with megapixel digital cameras that provide much greater image quality than cameras installed in earlier years, replacement of the servers and main viewing stations, and a software upgrade. This project may also include changes to the number and/or placement of cameras to increase surveillance coverage. Whenever feasible, existing cabling and conduit is re-utilized.

In addition, 221 buildings where IPDVS has been in use for 8-10 years are receiving a limited upgrade to improve system performance including lifecycle replacement of the video surveillance server(s) and main viewing station, and installation of a software version compatible with current Windows operating systems. This limited upgrade does not include any camera replacements or modifications.

Finally, 17 buildings will receive new installations. As of January 2018, IPDVS has been implemented in 710 buildings serving 1,123 schools with 28,998 cameras.

Middle School Science Lab Upgrades: \$50 million

Funding for Middle School Science Lab Upgrades is unchanged in the Proposed Amendment. The previous Five-Year Capital Plan covering Fiscal 2010-14 completed science facilities in all buildings housing high school students. The Proposed Amendment continues DOE's effort to facilitate quality instruction in the sciences by providing middle school students with grade appropriate science facilities in their buildings. As with the high school science lab initiative, this program will ensure that buildings with middle schools will have at least one lab; it will not ensure that all schools have their own lab. The Proposed Amendment identifies science lab upgrade projects at 28 schools.

Accessibility: \$128 million

Funding for Accessibility is unchanged in the Proposed Amendment. The Accessibility program allows the SCA to provide additional accessible facilities throughout the City. A committee comprised of staff from the SCA, DOE's Space Management Group, Division of School Facilities (DSF), Office of Student Enrollment, Division of Specialized Instruction, and the Office of the General Counsel work to identify specific projects with a goal of equity in access across districts.

Of this funding, \$27.6 million is for projects to ensure buildings that are identified as emergency shelters are accessible. Pursuant to a settlement in a class action lawsuit the City was required to provide a minimum of 60 accessible emergency shelters. The DOE anticipates completing accessibility projects related to this requirement at 71 buildings by Fall 2018. The scope of work for these projects are primarily extending partitions; raising grab bars, mirrors, sinks, and toilers; and installing new doors and hardware; 10 buildings are also receiving ramps. SCA anticipates starting design on projects related to shelter accessibility at 53 additional buildings before the end of Fiscal 2018. The City's Office of Emergency Management (OEM) coordinates the identification of emergency shelter sites.

The number of accessible schools varies widely across school districts, and some districts have no schools that are fully accessible to students in certain grades. While the BCAS does include indicators on the accessibility of school buildings, the DOE's Office of Space Planning is currently undertaking a more detailed and nuanced accessibility survey of public high school buildings called "Building Accessibility Profiles." This profiles are available for partially accessible buildings in Manhattan and Staten Island that house high school grades; the data is included in the DOE's high school directories and posted online. DOE is working to create Building Accessibility profiles for all public school buildings. Approximately \$10 million of the accessibility program is being used on small, low-cost projects that can increase the accessibility of partially accessible buildings. These smaller projects are identified in part by the Building Accessibility Profiles, and the DOE is prioritizing schools in districts with fewer accessible options.

In addition, many schools used as poll sites are not fully accessible and the City's Board of Elections uses temporary ramps to make these sites temporarily accessible for elections. These ramps are not designed for permanent deployment and SCA believes they would create a safety issue over time if they remained installed year-round.

Physical Fitness Upgrades: \$30 million

Physical Fitness Upgrades includes \$14.8 million for three swimming pool projects and \$15.1 million for gymnasium upgrades; this is in addition to the other categories of spending related to physical education.

Bathroom Upgrades: \$100 million

Unlike projects in the Capital Improvement Program (CIP), Bathroom Upgrade projects are not chosen as result of standardized ratings (because these bathrooms are "functional" the BCAS does not identify them as in need of repair). Bathroom Upgrade projects were initially identified by principals and custodians. The Council expressed concern that this selection process did not ensure bathrooms with the greatest need for upgrade are addressed. In response to these concerns the DOE now also uses ratings from SchoolStat to revise the priorities for planned bathroom upgrades. The DOE's SchoolStat team reviews half of the bathrooms in use at each

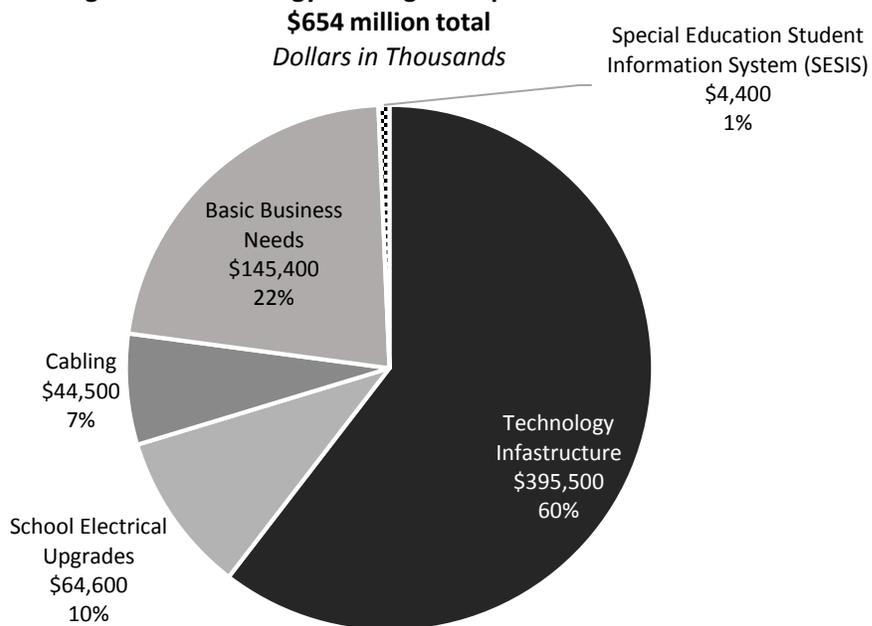
school twice a year and bathrooms are rated on a scale of 1-5 in three categories: cleanliness, repair, and fixtures. Cleanliness and repair scores less than 3 and fixture scores below 4.2 are considered substandard. However, because the SchoolStat rating is an aggregate rating of multiple bathrooms, it may not reflect the condition of the specific bathrooms that will receive upgrades. This means SchoolStat ratings do not clearly reflect individual bathrooms most in need of repair.

Overall funding for Bathroom Upgrades remains unchanged in the Proposed Amendment. As of February 2018, 696 bathrooms at 347 schools have been upgraded, and there are 282 bathrooms at 134 schools in-progress. The cost of these projects totals \$77.8 million, so there is \$22.2 million funding remaining in the bathroom upgrade program that has not been spent or assigned to specific projects. DOE is working to identify additional bathroom upgrades projects before the end of this Five-Year Capital Plan.

Technology: \$654 million

This funding, which is unchanged in the Proposed Amendment, is for increasing bandwidth connectivity in schools as well as increasing capacity to support more widespread and intensive use of web-enabled devices. Investment in bandwidth is necessary for to the implementation of Computer Science for All and associated programs. In addition, the New York State Education Department is transitioning to computer-based testing (CBT) and schools must ensure students using CBT do not experience technical issues during assessments. The City’s recent lift of the ban on student cell phones in schools also places additional demand on the DOE’s internet infrastructure.

Figure 20. Technology Funding in Proposed Amendment



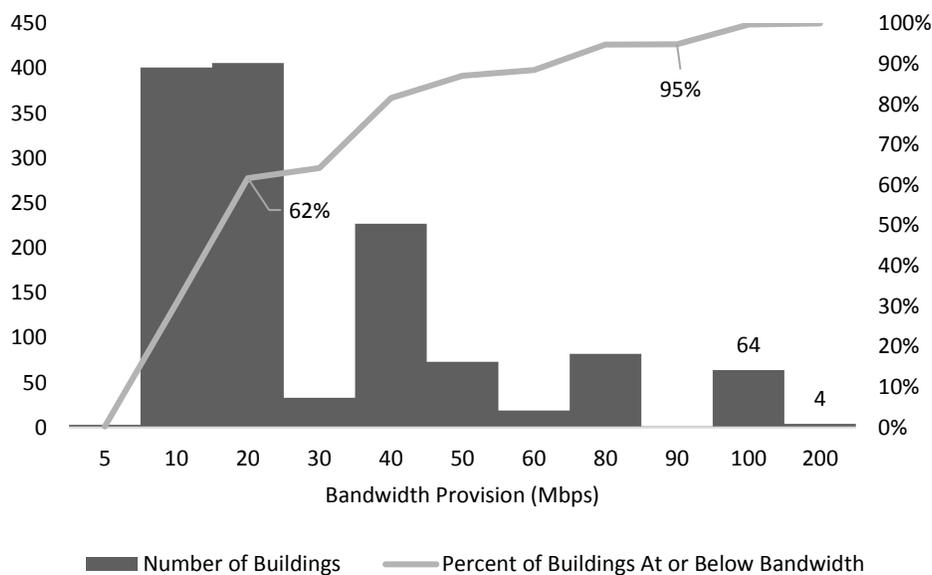
As shown in Figure 20, 60 percent of the Technology funding is for the improvement of school buildings’ technology infrastructure, including wireless capability. By the end of the Fiscal 2010-2014 Capital Plan, all school buildings had Metro Ethernet Virtual Private Line (WBPL), which is an all-fiber optic network service with connection speed ranging from 10 Megabits per second

(Mbps) to 50 Mbps. This technology is now out of date, and the current Capital Plan is investing in school buildings’ infrastructure connections to bring minimum speed up to 100 Mbps. This will allow the DOE to meet the new State and Federal Communications Commission (FCC) requirement of 100 Mbps per 1,000 students.

In order to bring the minimum speed up to 100 Mbps, DOE is switching from Verizon’s network, which has a top speed of 50 Mbps, to Lighttower, which has a top speed of 100 Mbps and according to DOE can be further scaled up. Lighttower is already the Internet Service Provider (ISP) for all DOE schools.

DOE anticipates all schools will have an upgraded fiber circuit by the end of Fiscal 2019 (June 30, 2019). As of February 2018, 42 percent of the network, or 572 buildings, have been switched to Lighttower. At least an additional 559 are scheduled to be complete by the end of this calendar year, which will bring the portion of buildings switched to the new network to 94 percent. DOE is also observing schools’ bandwidth to determine if more immediate improvements need to be made to the existing Verizon circuit before they are switched to Lighttower.

Figure 21. Bandwidth Provision in DOE Buildings, February 2018



Source: Data provided by DOE on file with the Council.

As of February 2018, the current bandwidth provision is still below 100 Mbps in 95 percent of schools, as shown in Figure 21. Of the 1,245 buildings below 100 Mbps, 490 are buildings already switched to Lighttower’s network. More than half of buildings, 810, are at or below 20 Mbps, including 222 already switched to Lighttower. Increasing the bandwidth provision in schools is not only a matter of upgrading the network, but also upgrading other core components of technology infrastructure. For example, funding for technology infrastructure includes funding to support the complete overhaul of the Wide Area Network (WAN). The current WAN infrastructure was completed in 2005, and does not accommodate the new standard of 1,000 Mbps per 1,000 students.

Approximately 17 percent of Technology funding is for cabling and electrical upgrades. Many of DOE’s buildings require modernized electrical systems that can provide the electrical capacity necessary for a digital learning environment. Similarly, many existing cables were installed when schools used much less data and had fewer connected devices, and upgraded cabling is necessary to enable schools to utilize the latest educational technologies.

Finally, 23 percent of the Technology funding is for basic business needs that support student information systems, network security, and organizational efficiency and for the Special Education Student Information System (SEGIS), the system DOE uses to track services provided to special education students. This \$4.4 million in capital funding for SEGIS compliments additional expense funding for system upgrades included DOE’s Fiscal 2018 budget.

While the DOE Central Budget and Capital Plan supports maintenance of the network and related infrastructure, technology devices in schools are typically purchased using school budget funding or by Reso A allocations from Council Members and Borough Presidents.

Mandated Programs

Mandated programs include a number of categories, shown with their funding level in the Proposed Amendment in Figure 22. Mandated Programs also includes \$8.4 million for Lead Paint Removal and \$8.2 million for Emergency Lighting, which are each less than one percent of the Capital Plan.

Figure 22. Funding for Mandated Programs
Dollars in Thousands

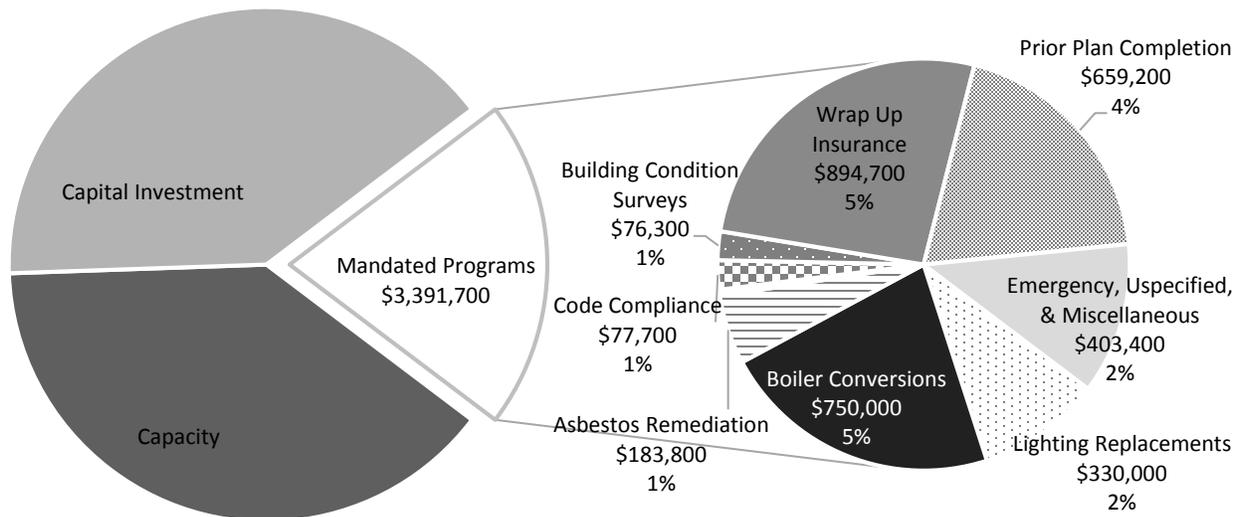
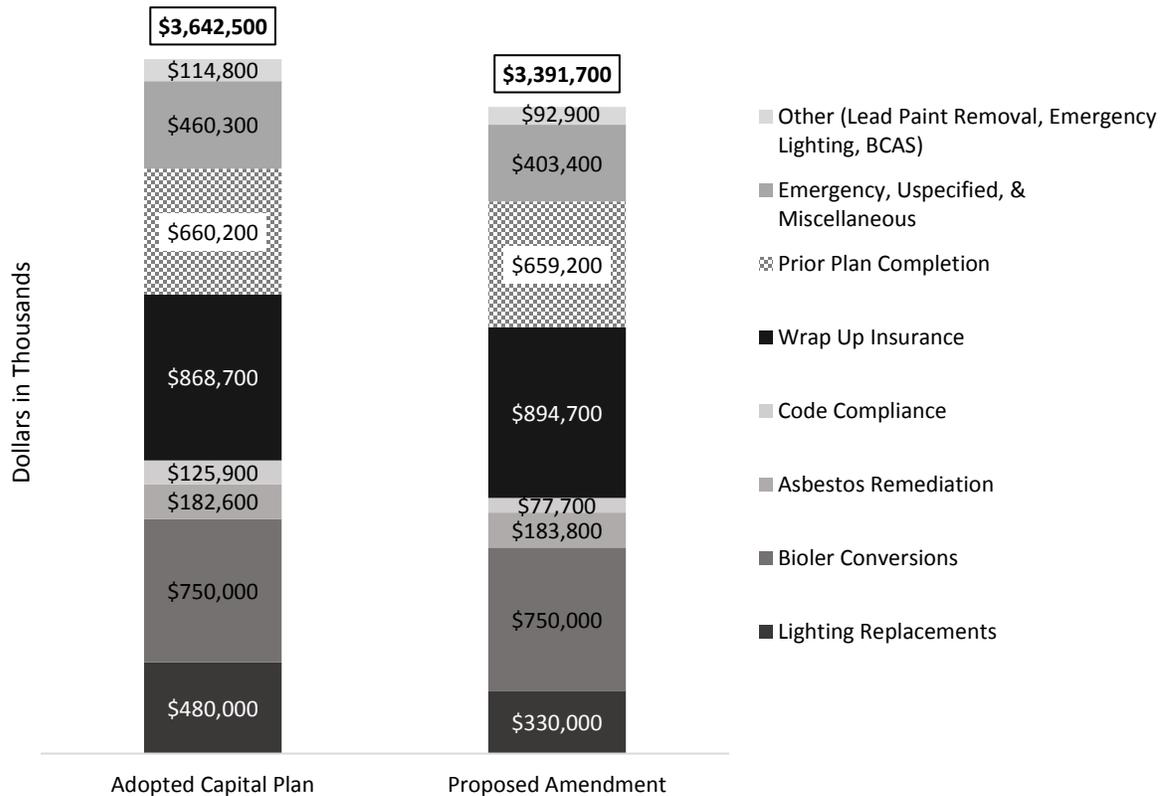


Table 23. Mandated Programs Funding Variance



The Proposed Amendment would decrease funding for Mandated Programs by \$251 million, or seven percent, as shown in in Figure 23. Appendix A on page 33 lists funding for the components of the Mandated Programs section in the Proposed Amendment and their change from the Adopted Plan. Reasons for major changes in funding for the subcategories under Mandated Programs are discussed below.

Lighting Replacements: \$330 million

Pursuant to a court order, the DOE was required to remove all PCB-containing light fixtures from New York City public school buildings by December 21, 2016. This has been completed. The total cost of the program, which included lighting projects at 765 buildings, was approximately \$800 million. This funding is down significantly in the Proposed Amendment, \$150 million or 31.2 percent, due in part to a shift of \$42 million to Capital Investment for non-mandated lighting fixture projects. The rest of the decline is due to actual cost coming in approximately \$110 million less than budgeted now that the PCB lighting project is complete.

Boiler Conversions: \$750 million

This funding, which is unchanged from the Adopted Plan, is to convert boilers at 110 out of 350 buildings currently using Number 4 oil, a highly polluting form of heating oil. This level of spending paces boiler conversions to be completed by 2030 as the legislative mandate to eliminate use of Number 4 oil by 2030.

Asbestos Remediation: \$184 million

The SCA's Asbestos Abatement program is federally mandated by the Asbestos Hazard Emergency Response Act (AHERA) of 1986. Every public and private school building must be inspected once every three years, the location of any asbestos documented, and a plan developed for the continuous management of the asbestos. Asbestos in a loosely bound (friable) condition must be removed. Asbestos in a construction area must also be removed prior to being disturbed for construction or maintenance activities. The cost of asbestos abatement is included in the individual project costs for building projects where asbestos is present. This funding provides for abatement of disturbed asbestos where no related major capital projects are planned. This proposed funding level is approximately the same as in the Adopted Capital Plan.

Lead Paint Removal: \$8.4 million

Lead paint abatement is mandated by the EPA and the New York City Department of Health and Mental Hygiene (DOHMH) regulations. The target population includes pre-K, Kindergarten, special education, and first grade students. Similar to asbestos abatement, lead abatement is included as part of individual capital projects that affect surfaces that may contain lead paint. This funding category provides for lead paint abatement in buildings where no related major capital projects are planned. The Plan does not include information about the prevalence of lead paint in school buildings. This proposed funding level is approximately the same as in the Adopted Capital Plan.

Emergency Lighting: \$8.2 million

This category funds the program to bring all school buildings into compliance with the emergency lighting requirements of Local Law 41/78 (Fire Safety in Places of Public Assembly), Local Law 16/84 (Fire Safety in Buildings), and Local Law 26/04 (Power Source for Exit Signs). These laws establish minimum standards for emergency lighting, exit lighting, emergency power, and elevator safety. The laws apply retroactively to most school buildings. Documentation showing compliance is filed at the Department of Buildings when assessments for compliance are completed. Proposed funding for Emergency Lighting has declined by \$14.2 million, or 64 percent, from the Adopted Capital Plan, due to a change in the implementation.

Code Compliance: \$77.7 million

Similar to Emergency Lighting, this category is an ongoing program to bring all school buildings into compliance with safety-related regulations. Though many DOE schools pre-date the New York City Building Code, code requirements related to life and fire safety systems apply retroactively and buildings not in compliance must be retrofitted accordingly. Proposed funding for Code Compliance declines by \$48.2 million, or 38 percent, from the Adopted Capital Plan.

Building Condition Surveys: \$76 million

This section of the Capital Plan funds the BCAS surveys previously described in the Capital Improvement Project section of this report, annual surveys used to assess the condition of school buildings. Proposed funding for Building Condition Surveys is down \$5 million, or six percent, from the Adopted Capital Plan. This decrease largely reflects actual costs for the completed fiscal years of the Capital Plan; while the SCA budgets \$18 million annually for these surveys, actual costs in Fiscal 2015-2017 ranged from \$12 million to \$15 million.

Wrap-Up Insurance: \$869 million

The SCA maintains an Owner Controlled Insurance Program that provides insurance coverage for the SCA, contractors, and subcontractors working on SCA projects. The SCA negotiates and purchases coverage for Worker's Compensation and Employer's Liability, General Liability, Excess Liability, and Builder's Risk, rather than having contractors and subcontractors secure their own insurance. The SCA attributes part of its success in using a high percentage of Minority and Women-owned Business Enterprise (MWBE) contractors to this program. The cost of this program is uncertain and based on the ultimate loss experienced. Funding for Wrap-Up Insurance is up \$26 million, three percent, from the Adopted Capital Plan. There is one performance indicator in the PMMR related to insurance losses; Table 9 shows this indicator. The PMMR does not include an indicator on the safety of school construction projects.

FY14	FY15	FY16	FY17
4.66%	6.62%	3.47%	NA*

*Insurance losses for Fiscal 2017 are not yet available.

Prior Plan Completion Cost: \$659 million

Some projects funded in the Fiscal 2010-2014 Plan are still in progress during the current Capital Plan period, Fiscal 2015-2019. While construction contracts are obligated in the Fiscal 2010-2014 Plan, other costs, such as furniture and equipment and change orders, may occur during the current Plan period. This funding covers these costs for projects in the Fiscal 2010-2014 Plan completed after the end of Fiscal 2014. This proposed funding level is approximately the same as in the Adopted Capital Plan.

Emergency, Unspecified & Miscellaneous: \$403 million

This lump sum funding allows the SCA to respond to emergencies and unforeseeable needs without having to divert funds from other projects. By law this amount cannot exceed five percent of the total estimated cost of the Five-Year Capital Plan; in this proposed amendment it is approximately two percent of the total cost of the Five-Year Capital Plan. The proposed funding level is down \$57 million, or twelve percent.

Appendices

A. Funding, Proposed Amendment v. Adopted Capital Plan

<i>Dollars in Thousands</i>	Adopted Capital Plan	Proposed Amendment	Difference	% Change
Capacity	\$5,909,500	\$6,446,500	\$537,000	9.09%
New Capacity	4,477,500	4,797,500	320,000	7.15%
Pre-K for All	800,000	872,000	72,000	9.00%
Class Size Reduction	490,000	490,000	0	0.00%
Facility Replacement	142,000	287,000	145,000	102.11%
Capital Investment	\$5,968,200	\$6,623,600	\$655,400	10.98%
Reso A	\$658,600	\$926,410	\$267,810	40.66%
City Council (CC)	\$487,570	\$621,970	134,400	27.57%
Borough President	168,520	301,670	133,150	79.01%
Mayor/CC	2,520	2,770	250	9.92%
Capital Improvement Program	\$3,803,500	\$4,068,400	264,900	6.96%
Exteriors	\$2,424,800	\$2,706,100	281,300	11.60%
Flood Elimination	359,700	370,900	11,200	3.11%
Reinforcing Support Elements	20,300	25,300	5,000	24.63%
Reinforcing Cinder Concrete Slabs	19,500	17,400	(2,100)	(10.77%)
Roofs	423,100	496,200	73,100	17.28%
Parapets	372,300	459,400	87,100	23.40%
Exterior Masonry	1,036,500	1,081,400	44,900	4.33%
Windows	193,400	255,500	62,100	32.11%
Interiors	\$743,400	\$765,100	\$21,700	2.92%
Low-Voltage Electrical System	144,600	158,500	13,900	9.61%
Interior Spaces	61,600	56,000	(5,600)	(9.09%)
Climate Control (excludes mandated program)	66,200	58,000	(8,200)	(12.39%)
Air Conditioning Retrofit	11,300	4,200	(7,100)	(62.83%)
Boiler Conversions (excludes mandated program)	41,300	31,100	(10,200)	(24.70%)
Elevators & Escalators	8,900	15,900	7,000	78.65%
Floor	4,400	7,200	2,800	63.64%
Electrical System (excludes Facility Restructuring)	38,200	52,300	14,100	36.91%
Lighting Fixtures (excludes Mandated Program)	0	41,500	41,500	n/a
Heating Plant Upgrade	326,800	276,500	(50,300)	(15.39%)
Domestic Piping (excludes Mandated Program)	31,400	56,700	25,300	80.57%
Safety Systems	6,100	7,200	1,100	18.03%
Other	83,000	77,200	(5,800)	(6.99%)
TCU Removal/Playground Redevelopment	405,000	395,000	(10,000)	(2.47%)
Athletic Field Upgrades	125,000	125,000	0	0.00%
School Enhancement Projects	\$1,528,400	\$1,628,800	\$100,400	6.57%
Facility Enhancements	\$874,000	\$974,400	\$100,400	11.49%
Facility Restructuring	397,700	388,100	(9,600)	(2.41%)
Universal Physical Education Initiative	0	105,500	105,500	n/a
Air Conditioning Initiative*	50,000	50,000	0	0.00%
Safety & Security	100,000	100,000	0	0.00%
Middle School Science Lab Upgrades	50,000	50,000	0	0.00%
Accessibility	127,600	127,600	0	0.00%
Physical Fitness Upgrades	28,800	29,900	1,100	3.82%
Library Upgrades	3,200	2,600	(600)	(18.75%)

<i>Dollars in Thousands</i>	Adopted Capital Plan	Proposed Amendment	Difference	% Change
Auditorium Upgrades	16,700	20,700	4,000	23.95%
Bathroom Upgrades	100,000	100,000	0	0.00%
Technology	\$654,400	\$654,400	0	0.00%
Next Generation Voice and Data Upgrade	246,900	246,900	0	0.00%
Next Generation Access Points Upgrade	101,800	101,800	0	0.00%
Next Generation School Data Wiring Upgrade	46,800	46,800	0	0.00%
School Electrification Upgrades	64,600	64,600	0	0.00%
Ancillary Technology Facilities Upgrade	44,500	44,500	0	0.00%
Non-Infrastructure Projects	145,400	145,400	0	0.00%
Technology - SESIS	4,400	4,400	0	0.00%
Mandated Programs	\$3,642,500	\$3,391,700	(\$250,800)	(6.89%)
Lighting Replacements	480,000	330,000	(150,000)	(31.25%)
Boiler Conversions	750,000	750,000	0	0.00%
Asbestos Remediation	182,600	183,800	1,200	0.66%
Lead Paint Removal	11,300	8,400	(2,900)	(25.66%)
Emergency Lighting	22,400	8,200	(14,200)	(63.39%)
Code Compliance	125,900	77,700	(48,200)	(38.28%)
Building Condition Surveys	81,100	76,300	(4,800)	(5.92%)
Wrap Up Insurance	868,700	894,700	26,000	2.99%
Prior Plan Completion	660,200	659,200	(1,000)	(0.15%)
Emergency, Unspecified, & Miscellaneous	460,300	403,400	(56,900)	(12.36%)
TOTAL	\$15,520,200	\$16,461,800	\$941,600	6.07%

* Funding for the Air Conditioning Initiative was previously included under "Facility Restructuring."

B. Identified Seat Need by School District and Sub-District

School District	Sub-District	Identified Seat Need	Funded Seats	Unfunded Seats
2	Tribeca / Village	1,970	1,928	42
	Chelsea / Midtown West *	1,262	1,222	40
	<i>Subtotal District 2</i>	3,232	3,150	82
3	Upper West Side	692	692	0
5	West Harlem	245	245	0
7	Concourse *	456	456	0
	Melrose	572	0	572
	<i>Subtotal District 7</i>	1,028	456	572
8	Soundview	572	0	572
	Throgs Neck	456	344	112
	<i>Subtotal District 8</i>	1,028	344	684
9	Highbridge South	572	0	572
10	Spuyten Duyvil / Riverdale / Fieldston / North Riverdale *	456	456	0
	Kingsbridge / Norwood / Bedford Park *	3,384	2,104	1,280
	Fordham / Belmont	572	0	572
	University Heights	1,280	388	892
	<i>Subtotal District 10</i>	5,692	2,948	2,744
11	Van Nest / Pelham Parkway	1,920	548	1,372
	Woodlawn/Williamsburg	572	0	572

School District	Sub-District	Identified Seat Need	Funded Seats	Unfunded Seats
	<i>Subtotal District 11</i>	2,492	548	1,944
12	Tremont/West Farms *	1,484	912	572
13	Park Slope / Prospect Heights *	640	640	0
	DUMBO/Navy Yard/Fort Greene *	2,777	1,953	824
	<i>Subtotal District 13</i>	3,417	2,593	824
14	Williamsburg / Greenpoint *	1,563	991	572
15	Sunset Park	2,610	997	1,613
	Park Slope *	2,744	1,464	1,280
	Carroll Gardens /Gowanus /Red Hook *	2,192	1,464	728
	<i>Subtotal District 15</i>	7,546	3,925	3,621
19	Cypress Hills / East New York	1,000	1,000	0
20	Owls Head Park / Bay Ridge *	3,337	2,037	1,300
	Dyker Heights *	4,647	1,920	2,727
	Borough Park/Kensington/ Bensonhurst *	2,338	912	1,426
	<i>Subtotal District 20</i>	10,322	4,869	5,453
21	Coney Island	476	0	476
	Gravesend	1,504	924	580
	Gravesend / Ocean Parkway	456	0	456
	<i>Subtotal District 21</i>	2,436	924	1,512
22	Flatlands / Midwood	476	0	476
	Mill Basin	824	416	408
	<i>Subtotal District 22</i>	1,300	416	884
24	North Corona / South Corona / Lefrak City/ Elmhurst *	5,288	3,200	2,088
	Maspeth / South of Woodside	1,853	728	1,125
	Middle Village	1,786	773	1,013
	Glendale, Ridgewood	476	0	476
	<i>Subtotal District 24</i>	9,403	4,701	4,702
25	Beechhurst / College Point / Whitestone	3,066	1,464	1,602
	Flushing / Murray Hill / Willets Point *	2,057	600	1,457
	<i>Subtotal District 25</i>	5,123	2,064	3,059
26	Oakland Gardens / Fresh Meadows *	1,464	456	1,008
	Bayside / Auburndale	1,040	468	572
	<i>Subtotal District 26</i>	2,504	924	1,580
27	Howard Beach / Lindenwood	640	516	124
	Ozone Park / South Ozone Park / Richmond Hill/ Woodhaven *	1,096	456	640
	<i>Subtotal District 27</i>	1,736	972	764
28	South Jamaica / Rochdale / Kew Gardens	476	0	476
	Rego Park / Forest Hills / Kew Gardens / Jamaica *	3,162	1,920	1,242
	<i>Subtotal District 28</i>	3,638	1,920	1,718
30	East Elmhurst / Jackson Heights	1,397	912	485
	Woodside / Sunnyside	1,550	725	825
	Long Island City / Ravenswood *	2,028	1,720	308

School District	Sub-District	Identified Seat Need	Funded Seats	Unfunded Seats
	Astoria / Steinway *	1,000	1,000	0
	<i>Subtotal District 30</i>	5,975	4,536	1,439
31	West Shore	456	0	456
	New Dorp *	476	456	20
	North Shore	2,416	1,281	1,135
	<i>Subtotal District 31</i>	3,348	1,737	1,611
	Subtotal PS, IS, and PS/IS Buildings	75,776	40,688	35,088
	Queens IS/HS	6,880	3,595	3,285
	Staten Island IS/HS	400	345	55
	Subtotal IS/HS and HS Buildings	7,280	3,940	3,340
	All Seats Total	83,056	44,628	38,428

*14,169 seats identified above are funded for design in this plan and construction in the next plan.

C. New Capacity Projects

Dollars in Thousands

		District	School	Boro	Forecast Capacity	Est. Compl	Total Est. Cost	Cost Per Seat	
*		02	I.S. 323	M	1,016	May-18	\$181,400	\$178.54	
*	D	02	P.S./I.S. @ WESTERN RAILYARDS	M	766	Sep-22	\$106,290	\$138.76	
*		02	P.S. 464	M	450	Apr-22	\$54,040	\$120.09	
*	D	02	P.S. @ HUDSON SQUARE	M	462	Jun-23	\$34,190	\$74.00	
	L	02	PROJECT #1	M	456	Jun-22	\$21,840	\$47.89	
*		03	THE RIVERSIDE SCHOOL	M	692	Sep-17	\$110,390	\$159.52	
*	L	05	TEACHER'S COLLEGE COMMUNITY SCHOOL ANNEX	M	245	Sep-18	\$20,000	\$81.63	
	D	07	PROJECT #1	X	456	Jun-22	\$36,150	\$79.28	
*		08	P.S. 14 ADDITION	X	344	Sep-18	\$70,990	\$206.37	
*		10	P.S. 46 ADDITION	X	500	Jun-19	\$120,000	\$240.00	
	D	10	PROJECT #1	X	824	Jun-23	\$61,770	\$74.96	
	L	D	10	PROJECT #2	X	456	Jun-22	\$20,920	\$45.88
		10	PROJECT #3	X	484	Jun-22	\$48,400	\$100.00	
*		10	P.S. 33 ANNEX	X	388	Sep-21	\$72,790	\$187.60	
*		10	P.S. 340 ANNEX	X	296	Sep-21	\$65,920	\$222.70	
*		11	P.S. 97 ADDITION	X	548	Apr-21	\$93,290	\$170.24	
*		12	P.S. @ 1559 BOONE AVENUE	X	458	Jul-22	\$50,250	\$109.72	
	L	D	12	PROJECT #2	X	454	Jun-22	\$20,850	\$45.93
		13	PROJECT #1	K	632	Jun-22	\$42,840	\$67.78	
		D	13	PROJECT #3	K	656	Jun-22	\$50,630	\$77.18
*		13	THE DOCK STREET EDUCATIONAL COMPLEX	K	333	Jul-16	\$41,470	\$124.53	
*	D	13	I.S. 653	K	640	Jun-21	\$126,150	\$197.11	
*	L		P.S. @ ALBEE SQUARE WEST	K	332	Apr-22	\$45,460	\$136.93	
	L	D	14	PROJECT #1	K	612	Jun-22	\$28,010	\$45.77
		D	14	PROJECT #2	K	379	Aug-21	\$34,030	\$89.79
*		15	P.S. 32 ADDITION	K	436	Jul-20	\$102,810	\$235.80	

Dollars in Thousands

			District	School	Boro	Forecast Capacity	Est. Compl	Total Est. Cost	Cost Per Seat
			15	PROJECT #1	K	262	Jun-22	\$26,300	\$100.38
		D	15	PROJECT #6	K	420	Jun-22	\$60,990	\$145.21
*	L		15	EDUCATIONAL CAMPUS @ 500 19TH STREET §	K	378	Sep-17	\$23,540	\$62.28
*	L		15	P.S. 516 SUNSET PARK AVENUES ELEMENTARY SCHOOL	K	113	Jul-16	\$11,600	\$102.65
*			15	P.S. @ 4302 4TH AVENUE	K	332	Jun-22	\$92,920	\$279.88
*			15	P.S./H.S. @ SCHERMERHORN STREET	K	382	Jun-22	\$2,050	\$5.37
*			15	P.S. @ 836-841 5TH AVENUE	K	404	Apr-21	\$89,850	\$222.40
*		D	15	I.S. @ 21-31 & 35 DELEVAN STREET	K	646	Jun-22	\$62,350	\$96.52
*	L		15	P.S. @ 736 48TH STREET	K	224	Sep-18	\$16,490	\$73.62
*			15	P.S. @ 4525 8TH AVENUE	K	328	Sep-21	\$83,740	\$255.30
*			19	P.S./I.S. @ 3269 ATLANTIC AVENUE	K	1,000	Sep-20	\$127,560	\$127.56
*			20	P.S. 127 ADDITION	K	364	May-21	\$92,060	\$252.91
		D	20	PROJECT #1	K	608	Jun-22	\$47,660	\$78.39
	L		20	PROJECT #2	K	640	Jun-22	\$28,980	\$45.28
		D	20	PROJECT #4	K	605	Jun-22	\$45,310	\$74.89
	L		20	PROJECT #6	K	456	Jun-22	\$20,730	\$45.46
		D	20	PROJECT #7	K	456	Jun-22	\$34,080	\$74.74
*			20	P.S. 746	K	976	Mar-20	\$128,940	\$132.11
	L	D	20	PROJECT #3	K	308	Jun-22	\$14,290	\$46.40
	L		20	PROJECT #5	K	456	Jun-22	\$20,960	\$45.96
*			21	P.S. 97 ADDITION	K	468	Jun-21	\$68,120	\$145.56
*			21	P.S. 101 ADDITION	K	456	Jun-19	\$90,960	\$199.47
*			22	P.S. 254 ADDITION	K	416	Jun-21	\$64,940	\$156.11
*			24	P.S. 19 ADDITION	Q	640	Sep-18	\$113,870	\$177.92
*			24	P.S. 49 ADDITION	Q	333	Sep-17	\$44,640	\$134.05
*			24	I.S. 125 ADDITION	Q	728	Sep-17	\$117,660	\$161.62
*			24	P.S. 143 ADDITION	Q	980	Sep-20	\$125,070	\$127.62
*			24	P.S. 128 ADDITION	Q	440	Jun-20	\$45,110	\$102.52
		D	24	PROJECT #1	Q	723	Jun-22	\$56,220	\$77.76
*			24	I.S. 419	Q	646	Sep-21	\$124,400	\$192.57
*	L		24	P.S. 143 ANNEX	Q	211	Sep-18	\$12,460	\$59.05
*			25	P.S. 24 ADDITION	Q	600	Sep-18	\$113,370	\$188.95
*			25	P.S. 129 ADDITION	Q	548	Sep-20	\$67,150	\$122.54
*		D	25	P.S. 169 ADDITION	Q	410	Jun-22	\$45,100	\$110.00
	L	D	25	PROJECT #1	Q	506	Jun-22	\$31,490	\$62.23
*		D	26	P.S. 46 ADDITION	Q	456	Jun-22	\$68,400	\$150.00
*			26	P.S. 332	Q	468	Sep-17	\$100,440	\$214.62
*			27	P.S. 66 ADDITION	Q	124	Sep-19	\$42,140	\$339.84
*			27	P.S. 335	Q	516	Sep-17	\$108,730	\$210.72
	L	D	27	PROJECT #2	Q	332	Jun-22	\$15,090	\$45.45
*			28	P.S. 303 ADDITION	Q	484	Sep-19	\$97,450	\$201.34
*			28	P.S. 144 ADDITION	Q	590	Sep-19	\$72,410	\$122.73

Dollars in Thousands

			District	School	Boro	Forecast Capacity	Est. Compl	Total Est. Cost	Cost Per Seat
*		D	28	P.S. 196 ADDITION	Q	250	Jun-22	\$37,500	\$150.00
*			28	P.S. 206 ADDITION	Q	392	Jun-22	\$43,150	\$110.08
	L	D	28	PROJECT #1	Q	204	Feb-21	\$18,730	\$91.81
	L		30	PROJECT #2	Q	436	Jun-22	\$19,550	\$44.84
*			30	P.S. @ PARCEL C	Q	572	Jun-21	\$102,060	\$178.43
*			30	P.S. @ PARCEL F	Q	612	Jun-21	\$93,130	\$152.17
*			30	P.S. 398	Q	476	Jun-19	\$94,310	\$198.13
*			30	I.S. @ 38-04 48TH STREET	Q	725	Jun-22	\$74,180	\$102.32
*		D	30	I.S. @ 44-59 45 AVENUE	Q	536	Jun-22	\$71,190	\$132.82
		D	30	PROJECT #3	Q	1,000	Jun-23	\$90,340	\$90.34
*	L		31	FOREST AVENUE COMMUNITY EDUCATIONAL COMPLEX	R	224	Sep-16	\$27,490	\$122.72
*			31	P.S. @ 357 TARGEE STREET	R	748	Jun-22	\$113,430	\$151.64
*		D	31	P.S. @ 450 NEW DORP LANE	R	456	Jun-22	\$50,250	\$110.20
*	L		31	I.S. 82	R	309	Jun-17	\$15,140	\$49.00
*	L		78Q	I.S./H.S. 336	Q	507	Sep-18	\$27,770	\$54.77
*			78Q	FRANCIS LEWIS HS ANNEX	Q	555	Jul-21	\$74,920	\$134.99
*		D	78Q	CARDOZO HIGH SCHOOL ANNEX	Q	548	Jun-22	\$71,790	\$131.00
*			78Q	H.S. @ 51-30 NORTHERN BOULEVARD	Q	1,016	Jun-23	\$111,790	\$110.03
*			78Q	ACADEMY OF AMERICAN STUDIES	Q	969	Jun-21	\$121,020	\$124.89
*			78R	CURTIS HIGH SCHOOL ANNEX	R	345	Jul-17	\$101,180	\$293.28
TOTAL						44,628		\$5,675,420	

Highlighted projects are new in the Proposed Amendment.

* School with existing site identified. Total Estimated Cost includes site acquisition costs when applicable.

L Proposed Leased Facility.

D Funded for design only in this Plan.

D. Pre-Kindergarten Projects

Dollars in Thousands

		District	School	Boro	Forecast Capacity	Est. Compl	Total Est. Cost	Cost per Seat
*	L	02	PRE-K CENTER @ 2-26 WASHINGTON ST	M	108	Sep-15	\$13,340	\$123.519
	L	02	PRE-K CENTER @ WEST 57TH STREET	M	72	Sep-19	\$7,990	\$110.972
*		02	PRE-K CENTER @ 2 LAFAYETTE STREET	M	36	Aug-16	\$8,760	\$243.333
*	L	02	PRE-K CENTER @ 355 EAST 76 STREET	M	180	Sep-19	\$35,010	\$194.500
*	L	02	PRE-K CENTER @ 252 EAST 57 STREET	M	144	Sep-18	\$19,010	\$132.014
*	L	02	PRE-K CENTER @ 1683 3RD AVENUE	M	90	Sep-18	\$15,000	\$166.667
*	L	07	PRE-K CENTER @ 105 WILLIS AVENUE	X	90	Jul-15	\$8,610	\$95.667
*	L	07	PRE-K CENTER @ 535 UNION AVENUE	X	180	Jul-15	\$13,160	\$73.111
*	L	09	PRE-K CENTER @ 1434 OGDEN AVENUE	X	90	Aug-15	\$10,570	\$117.444
*	L	10	PRE-K CENTER @ 3560 WEBSTER AVENUE	X	90	Sep-16	\$8,040	\$89.333
*	L	10	PRE-K CENTER @ 5500 BROADWAY	X	54	Sep-16	\$5,870	\$108.704
*	L	10	PRE-K CENTER @ 2490-2500 WEBSTER AVE	X	198	Sep-17	\$16,290	\$82.273
*	L	10	PRE-K CENTER @ 3605 SEDGWICK AVE	X	36	Sep-16	\$5,290	\$146.944
*	L	10	PRE-K CENTER @ 2510 MARION AVENUE +	X	36	Sep-16	\$13,310	\$50.074
*	L	10	PRE-K CENTER @ 2510 MARION AVENUE +	X	234	Sep-15	\$210	

Dollars in Thousands

		District	School	Boro	Forecast Capacity	Est. Compl	Total Est. Cost	Cost per Seat
*	L	13	DOCK STREET EDUCATIONAL COMPLEX	K	72	Jul-16	\$5,970	\$82.917
*	L	15	EDUCATIONAL CAMPUS @ 500 19TH ST §	K	288	Aug-15	\$5,270	\$18.299
*	L	15	PRE-K CENTER @ 219 25TH STREET	K	72	Sep-17	\$12,050	\$167.361
*	L	15	PRE-K CENTER @ 305-307 THIRD AVENUE	K	54	Aug-16	\$10,000	\$185.185
*		15	PRE-K CENTER @ 168 8TH STREET	K	180	Aug-21	\$23,030	\$127.944
*	L	15	PRE-K CENTER @ 173 25TH STREET §	K	108	Aug-15	\$8,780	\$81.296
*	L	15	PRE-K CENTER @ 131 UNION STREET	K	36	Sep-16	\$7,330	\$203.611
*		20	PRE-K CENTER @ 8501 5TH AVENUE	K	18	Sep-15	\$6,140	\$341.111
*	L	20	PRE-K CENTER @ 2165 71ST STREET	K	90	Aug-16	\$21,120	\$234.667
*	L	20	PRE-K CENTER @ 550 59TH STREET	K	162	Aug-16	\$9,970	\$61.543
*		20	PRE-K CENTER @ 369 93RD STREET	K	252	Sep-18	\$43,520	\$172.698
*		20	PRE-K CENTER @ 140A 58TH STREET	K	126	Sep-15	\$16,700	\$132.540
*	L	20	PRE-K CENTER @ 1423 62ND STREET	K	324	Aug-17	\$34,710	\$107.130
*	L	20	PRE-K CENTER @ 1258 65TH STREET	K	126	Jul-15	\$12,310	\$97.698
*	L	20	PRE-K CENTER @ 21 BAY 11TH STREET +	K	54	Sep-16	\$11,780	\$41.667
*	L	20	PRE-K CENTER @ 21 BAY 11TH STREET +	K	234	Sep-15	\$220	
*	L	20	PRE-K CENTER @ 1355 84TH STREET +	K	90	Sep-15	\$12,430	\$79.198
*	L	20	PRE-K CENTER @ 1355 84TH STREET +	K	72	Sep-16	\$400	
*	L	20	PRE-K CENTER @ 1668 46TH STREET	K	180	Jul-15	\$7,130	\$39.611
*	L	20	PRE-K CENTER @ 7401 FORT HAMILTON PARKWAY §	K	270	Sep-15	\$14,780	\$54.741
*	L	21	PRE-K CENTER @ 2202 60TH STREET	K	108	Jul-15	\$5,300	\$49.074
*	L	21	PRE-K CENTER @ 385 AVENUE W §	K	126	Sep-15	\$3,960	\$31.429
*	L	21	PRE-K CENTER @ 1223 CONEY ISLAND AVENUE	K	72	Jul-17	\$10,910	\$151.528
*	L	21	PRE-K CENTER @ 10 BOUCK COURT	K	180	Aug-16	\$17,780	\$98.778
*	L	21	PRE-K CENTER @ 1215 AVENUE X	K	108	Aug-15	\$5,400	\$50.000
*	L	22	PRE-K CENTER @ 3610 GLENWOOD RD §	K	144	Sep-15	\$14,860	\$103.194
*	L	22	PRE-K CENTER @ 1340 EAST 29TH ST §	K	252	Sep-15	\$15,650	\$62.103
*	L	22	PRE-K CENTER @ 1139 CONEY ISLAND AVE	K	144	Jul-15	\$13,050	\$90.625
*	L	24	PRE-K CENTER @ 70-24 47TH AVENUE	Q	90	Sep-17	\$4,190	\$46.556
*	L	24	PRE-K CENTER @ 56-01 61ST STREET §	Q	162	Sep-15	\$7,250	\$44.753
*	L	24	PRE-K CENTER @ 54-25 101ST STREET	Q	54	Sep-18	\$3,320	\$61.481
	L	24	PRE-K CENTER @ 111TH STREET	Q	306	Sep-20	\$41,450	\$135.458
*	L	24	PRE-K CENTER @ 104-14 ROOSEVELT AVE	Q	72	Sep-17	\$12,940	\$179.722
		24	PRE-K CENTER @ CORONA AVENUE	Q	18	Sep-18	\$4,940	\$274.444
*	L	24	PRE-K CENTER @ 46-16 76TH STREET	Q	108	Aug-15	\$15,860	\$146.852
*	L	24	PRE-K CENTER @ 44-15 JUDGE STREET	Q	144	Jun-15	\$6,050	\$42.014
*	L	24	PRE-K CENTER @ 68-20 MYRTLE AVENUE	Q	180	Jul-15	\$7,880	\$43.778
*	L	24	PRE-K CENTER @ 107-17 NORTHERN BLVD	Q	77	Jul-16	\$5,700	\$74.026
*	L	24	PRE-K CENTER @ 106-02 NORTHERN BLVD	Q	36	Aug-16	\$4,190	\$116.389
*	L	24	PRE-K CENTER @ 108-18 ROOSEVELT AVE	Q	54	Sep-18	\$5,970	\$110.556
*	L	24	PRE-K CENTER @ 57-06 99TH STREET	Q	36	Sep-17	\$6,440	\$178.889
*	L	24	PRE-K CENTER @ 98-22 55 AVENUE	Q	54	Sep-17	\$360	\$6.667
*	L	25	PRE-K CENTER @ 14-45 143RD STREET	Q	108	Jul-16	\$3,850	\$35.648
*	L	25	PRE-K CENTER @ 123-07 22ND AVENUE	Q	144	Sep-17	\$6,680	\$46.389

Dollars in Thousands

		District	School	Boro	Forecast Capacity	Est. Compl	Total Est. Cost	Cost per Seat
*	L	28	PRE-K CENTER @ 89-14 PARSONS BLVD	Q	72	Jun-15	\$7,430	\$103.194
*	L	28	PRE-K CENTER @ 132-10 JAMAICA AVE	Q	90	Jun-15	\$11,980	\$133.111
*	L	28	PRE-K CENTER @ 83-30 KEW GARDENS RD	Q	72	Aug-15	\$7,360	\$102.222
*	L	29	PRE-K CENTER @ 168-42 JAMAICA AVE	Q	126	Jun-15	\$18,220	\$144.603
*	L	29	PRE-K CENTER @ 100-01 SPRINGFIELD BOULEVARD	Q	162	Jul-15	\$8,730	\$53.889
*	L	30	PRE-K CENTER @ 96-10 23RD AVENUE	Q	108	Jun-15	\$11,170	\$103.426
*	L	30	PRE-K CENTER @ 32-52 37TH STREET +	Q	126	Jul-17	\$10,270	\$27.525
*	L	30	PRE-K CENTER @ 32-52 37TH STREET +	Q	270	Sep-15	\$630	
*	L	30	PRE-K CENTER @ 27-35 JACKSON AVENUE	Q	180	Sep-17	\$11,210	\$62.278
*	L	31	FOREST AVENUE COMMUNITY EDUCATIONAL COMPLEX	R	90	Sep-15	\$21,890	\$243.222
*	L	31	PRE-K CENTER @ 1 TELEPORT DRIVE	R	144	Sep-15	\$15,450	\$107.292
*	L	31	PRE-K CENTER @ 120 STUYVESANT PLACE	R	108	Aug-15	\$19,260	\$178.333
TOTAL					8,771		\$811,680	

Highlighted projects are new in the Proposed Amendment.

* School with existing site identified. Total Estimated Cost includes site acquisition costs when applicable.

L Proposed Leased Facility.

+ Four Pre-Kindergarten projects being completed in two phases. In calculating the cost per seat for these projects, the forecast capacity and budgets from the two project lines were combined.

§ Total estimated cost includes cost of additional work after initial occupancy.

E. Facility Replacement Projects

Dollars in Thousands

		District	School	Boro	Actual / Est. Compl	Total Est. Cost
*	L	10	P.S. 315	X	May-17	\$20,950
*		24	P.S. 19 MINISCHOOL	Q	Sep-18	\$14,220
*		25	P.S. 24 ADDITION	Q	Sep-18	\$9,260
*		30	P.S. 2 MINISCHOOL	Q	Sep-21	\$45,000
*		75Q	P.S. 256 ANNEX	Q	Sep-20	\$23,060
*		75R	I.S./H.S. @ 715 OCEAN TERRACE	R	Sep-21	\$100,000
*		75R	D75 REPLACEMENT @ 15 FAIRFIELD STREET	R	Sep-20	\$58,150
*	L	78M	WEST END SECONDARY SCHOOL	M	Feb-19	\$19,350
*	L	78X	SOUTHERN BOULEVARD COMMUNITY CAMPUS	X	Jul-16	\$11,420
Total						\$301,410

Highlighted projects are new in the Proposed Amendment.

* School with existing site identified. Total Estimated Cost includes site acquisition costs when applicable.

L Proposed Leased Facility.