



**The Department of General Services Failed
to Provide Information the DC Council
Needed to Make Informed Decisions on the
Scope and Cost of Modernizing the Duke
Ellington School of the Arts**

May 31, 2016

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A Report by the Office of the District of Columbia Auditor
Kathleen Patterson, District of Columbia Auditor



Why ODCA Did This Audit

The audit was conducted pursuant to D.C. Code § 38-2973.05, which requires the Auditor to monitor compliance with statutes, regulations, and policies regarding the school modernization program. This audit follows a comprehensive audit of the school modernization program covering fiscal years 2010-2013, ["The District's School Modernization Program Has Failed to Comply with D.C. Code and Lacks Accountability, Transparency and Basic Financial Management."](#)

What ODCA Recommends

Based on our examination of the Duke Ellington School of the Arts, ODCA makes these six recommendations designed to bring greater fiscal discipline to the District's school modernization program, increase transparency, and improve compliance with law, regulation, administrative policies, contracts and best practices.

1. The Council should amend D.C. Code Section 38-2803(d) to require greater detail in planning for school modernizations and the Mayor should comply with current and updated capital plan requirements.
2. The Mayor should direct DCPS and DGS to conduct all substantial discussions and negotiations involving site selection, educational specifications, and architectural designs for modernizations of DCPS schools in a fully transparent manner so that District taxpayers and community residents may know why decisions are made and who made them.
3. If the Mayor continues to contract for program management for school modernizations, she should consider directing DGS to select multiple program management firms.
4. The Mayor should require DGS to reform its method of procurement for school modernization to bring budget, community discussion, design, and construction into alignment and avoid cost escalations and repeated design revisions. The Council should require *substantially complete* designs based on final education specifications before approving construction contracts for school modernizations.
5. The Mayor and Council should direct DCPS to explore more efficient utilization of the renovated Duke Ellington School, by potentially increasing enrollment or opening space to other educational programs.
6. DGS should ensure that their policy and procedure manual is in alignment with recognized best practices in capital construction.

May 31, 2016

The Department of General Services Failed to Provide Information the DC Council Needed to Make Informed Decisions on the Scope and Cost of Modernizing the Duke Ellington School of the Arts

What ODCA Found

- The Department of General Services (DGS) and The District of Columbia Public Schools (DCPS) failed to provide timely information to policy makers so they could make informed decisions on the location and desired level of investment for a new performing arts high school.
- DCPS did not finalize Educational Specifications for Duke Ellington School of the Arts before DGS proposed the project for inclusion in the FY 2012 District's Capital Improvement Plan (CIP) adopted by the Council.
- DGS based initial and subsequent cost estimates for Duke Ellington on significantly different projects that did not take into account the costs required for a performing arts school.
- DCPS, DGS, and the Executive Office of the Mayor were not transparent while considering alternate sites for Duke Ellington—sites that might have cost less and/or better served the needs of the student population.
- DGS and D.C. Partners for the Revitalization of Education Projects, LLC (DC PEP) did not timely and accurately assess the need for and the cost of underground parking and other elements of the school at the Georgetown location.
- DGS and DC PEP did not provide updated cost information, milestone data and implementation timeframes in the CIP. DC PEP did not provide updated project costs and budgets to DGS and were not held accountable.
- The Project has seen significant delays as DGS and DC PEP have missed many of the benchmark dates laid out in the CIP and supporting documents. DGS and DC PEP underestimated the amount of time the design phase would take, causing a delay in schedule. Delays in meeting deadlines has contributed to the construction phase's guaranteed maximum price still not being agreed upon.
- DGS has failed to require DC PEP to comply with its contractual obligations to the District government with regard to the Duke Ellington project. DGS failed to require its program manager to provide project management services consistent with the contract.
- DGS (and its predecessor, OPEFM) made decisions early on in the School Modernization Program that deprived the District of the use of competition as a tool to control costs.
- From its inception, the School Modernization Program has relied on a single program management firm, DC PEP, rather than multiple program management firms.
- The decision by DGS (and its predecessor, OPEFM) to use Design-Build procurement without competition on cost may have contributed to higher costs in the Duke Ellington School of the Arts modernization.
- The existing DGS Procedure and Delivery Manual is unclear and contradictory and does not provide guidance that promotes accountability. It has also not been followed consistently on the Duke Ellington Project.

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Background

The District is currently undertaking a massive capital investment program to rehabilitate and modernize its public school system. The program, which followed the passage of the School Modernization Financing Act of 2006¹ (Modernization Act), came after years of infrastructure deterioration, citizen complaints, costly litigation, and even a system-wide shutdown of the schools due to fire code violations. The legislation's goal was a long-term investment in the District's future, using tax dollars to create state-of-the-art school facilities.

Such a large capital undertaking required a significant management apparatus. A year after the Modernization Act became law, the District of Columbia Public Education Reform Amendment Act of 2007 (PERAA)² established the Office of Public Education Facilities Modernization (OPEFM), placing OPEFM in charge of planning, design, construction, and maintenance of school facilities in the District. OPEFM continued to fulfill this role until 2011, when legislation transferred all of the assigned duties, appropriated funds, and personnel to the Department of General Services (DGS),³ which currently oversees all DCPS modernization projects.

D.C. Council hearings over the last year have highlighted the failure of DGS and its contractors to fulfill all of their statutory, regulatory, and budget requirements. At a hearing on July 8, 2015, the Office of the District of Columbia Auditor (ODCA) presented the findings of a comprehensive audit of the school modernization program covering fiscal years 2010-2013. In her testimony, the Auditor detailed the DGS "failure to adhere to provisions of the D.C. Code regarding school modernization, failure to monitor and secure cost savings, and failure to provide basic financial management, which has created the risk that we have not obtained maximum value for the taxpayer dollars expended in the four-year period."⁴

At the July hearing, the Auditor also shared concerns about the high per-square-foot cost for the renovation of the Duke Ellington School of the Arts, a performing arts high school located in Ward 2 and operated by DCPS as a 501(c)3 nonprofit organization in partnership with the Kennedy Center for the Performing Arts and The George Washington University.⁵ At a follow-up hearing on November 2, 2015, public witnesses noted the escalation in costs projected for the project, and the fear that expenditures for other schools may be "crowded out" by the increasing Duke Ellington costs.⁶

The Council has charged the Auditor with monitoring compliance with statutes, regulations, and policies regarding the school modernization program by requiring a report to the public that "shall include a school and project specific audit of all expenditures for school facility capital improvements,

¹ B16-250; D.C. Law 16-123 (effective June 8, 2006).

² D.C. Law 17-9 (effective June 12, 2007).

³ The Fiscal Year 2012 Budget Support Act of 2011 (D.C. Law 19-21, effective September 14, 2011) established the Department of General Services and transferred all operations and responsibilities from OPEFM to DGS. This portion of the Act was codified at D.C. Code § 10-551.04.

⁴ Patterson, Kathleen. "[Testimony Before The Council of the District Of Columbia Committee on Transportation and the Environment and the Committee on Education Joint Public Oversight Roundtable](#)." The Office of the District of Columbia Auditor. July 8, 2015.

⁵ *Ibid.*

⁶ District of Columbia Council. *Joint Public Hearing, Committee on Education, David Grosso, Chairperson & Committee on Environment & Transportation, Mary M. Cheh, Chairperson*. November 2, 2015. Video available at: <http://dccouncil.us/granicus/archive/>

maintenance, repairs, and operating costs and an assessment of whether the District has met the process, quality, schedule and cost objectives of the Facilities Master Plan and Capital Improvement Plan and Budget.” The District’s Master Facilities Plan (MFP),⁷ describes each facility in the District along with when and to what extent it will undergo improvement. This report focuses on the Duke Ellington modernization.

Statutory, Regulatory, and Adopted Policies and Procedures Requirements

Because the full modernization of a school—which often consists of significant demolition, redesigning, refinishing, and the addition of new space—is a substantial financial and time investment coupled with a large scale construction project, DGS undertakes each modernization project in phases. The five phases of each project are outlined in the DGS 2013 Procedure and Delivery Manual: initiation, planning, design, construction, and close-out.⁸ Each phase has numerous goals, guidelines, procedures, approvals, and deliverables that DGS staff members and the project manager, have an obligation to follow or produce. These include drafting and approving a scope of work and comprehensive cost estimates in the initiation phase, reviewing site conditions for air quality and ground pollution in the planning phase, and instructing the general contractor to provide daily update reports during the construction phase.⁹

DGS is also subject to requirements governing modernizations included in D.C. Official Code § 10–551.01 and the District of Columbia Municipal Regulations (DCMR) Chapter 27-47. DGS contracts for management of school modernization projects with a joint venture partnership of McKissack & McKissack and Brailsford & Dunlavey operating as D.C. Partners for the Revitalization of Education Projects, LLC (DC PEP). DC PEP performs overall day-to-day program management of each modernization project by serving as the primary point of contact with contractors and tracking invoices for payment by the District.¹⁰ DGS is responsible for managing the modernization of District schools on behalf of DCPS.

According to § 10–551.01, DGS bears responsibility for ensuring that its staff and contractors (including the project manager, the Architect-Engineer (A-E) who designs the building, and the construction company) adhere to all procedures and requirements by “approving and authorizing decisions at every stage of modernization and construction, including planning, design, procurement, and construction.”¹¹ Similarly, Chapter 27-4725 of the DCMR identifies DGS’s responsibilities in monitoring contractors’ compliance with the agency’s rules and regulations, including those in the Procedure and Delivery Manual. These responsibilities include monitoring whether goods and services are delivered and completed on schedule, ensuring inspection procedures are followed, and authorizing contract payments.¹²

⁷ See D.C. Code § 38-2973.05.

⁸ DC Department of General Services, Capital Construction Division. “Procedure and Delivery eManual.” District of Columbia Government. June 28, 2013. p. 1.

⁹ *Ibid.* p. 3.

¹⁰ Department of General Services. “Program Management Services Agreement by and between Department of General Services and DC Partners for the Revitalization of Education Projects for the DCPS Portfolio Contract Number DCAM-14-NC-0046A.” District of Columbia Government. March 24, 2014.

¹¹ D.C. Code § 10–551.01.

¹² 27 DCMR § 27-4725.1-2.

Capital Improvement Planning Process

DGS must also submit annual information to the Council for budgeting purposes under the District's Capital Improvement Plan (CIP)—a document that examines all capital projects scheduled to take place over the upcoming fiscal year as well as the next five fiscal years. According to the FY 2016 District Budget and Financial Plan, the first step of the annual CIP process requires each District agency to provide the Chief Financial Officer's Office of Budget and Planning (OBP) with information regarding "ongoing projects (e.g. increases or decreases in funding or planned expenditures), as well as requests for new projects."¹³ Further, the CIP instructions call for agencies to provide "detailed information on a project's expenditure requirements, physical attributes, implementation timeframe, feasibility, and community impact." In addition, agencies provide "project milestones, estimated costs, FTE details, expenditure plans, operating budget impacts, and a prioritized list of potential capital projects." For DCPS school modernizations, DGS prepares a submission using budget, schedule, and design information with the assistance of the agency's contractors.

Following these steps, the Mayor's budget staff and representatives of the Office of the City Administrator, Chief Financial Officer, DGS, the Office of the Chief Technology Officer, and others review each individual budget request as part of the Capital Budget Team (CBT). After reviewing all agency capital requests with regard to scope of work, projected cost, and financing alternatives, the CBT evaluates the projects individually and the Deputy Mayors and City Administrator "use a scoring model with a defined set of criteria for all projects proposed by agencies for additions (enhancements) to the budget." "The Mayor's Office of Budget and Finance uses the collective recommendations of the CBT and the strong model results to formulate a recommendation in the form of a CIP." The CBT then submits the proposed CIP to the Mayor for approval and inclusion in the proposed budget, which the executive transmits to the Council, who may make changes before submitting it back to the Mayor for final sign-off and submission to Congress.¹⁴

On paper, this process appears to be a structured, objective way to determine which projects merit inclusion in the CIP and, therefore, appropriations in the annual capital budget. As envisioned, projects that demonstrate strong benefits to the District and accurately modeled costs are included, while those that do not evidence clear planning are not. If the information is inaccurate or incomplete, there is a risk the CIP may include a project or budget change that will cost the District and its taxpayers more than the agency depicted in its submission.

Duke Ellington Budget in the CIP

When the Duke Ellington project first appeared in the CIP in FY 2012, DGS projected that the estimated full funding cost¹⁵ to modernize Duke Ellington would be \$71 million.¹⁶ Two years later, the CIP

¹³ Office of the Chief Financial Officer. FY 2016 Proposed Budget and Financial Plan, Volume 5: FY 2016 to FY 2021 Capital Improvements Plan (Including Highway Trust Fund). District of Columbia Government. July 17, 2015. p. 5-25, Available at: http://cfo.dc.gov/sites/default/files/dc/sites/ocfo/publication/attachments/part1_%202016_DCBudget_V5_0.pdf

¹⁴ *Ibid.*

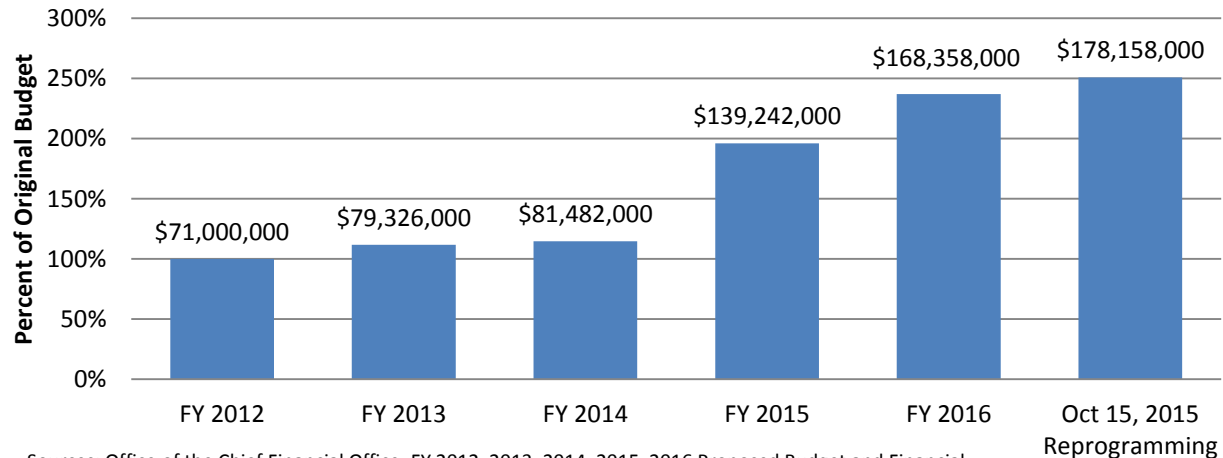
¹⁵ When referring to full funding cost, ODCA is referring to the budgetary authority approved by the Council for the fiscal year noted.

¹⁶ Office of the Chief Financial Officer. FY 2012 Proposed Budget and Capital Plan, Volume 6: FY 2012 to FY 2017 Capital Improvements Plan (Including Highway Trust Fund). District of Columbia Government. August 10, 2011. p. GA0 – 69. Available at:

registered the total project cost at \$81.5 million.¹⁷ In the FY 2015 CIP, the projected full funding cost again increased to \$139.2 million.¹⁸ And in the most recent CIP, estimated full funding costs expanded to \$168.4 million.¹⁹ On October 15, 2015, Mayor Muriel Bowser submitted a request to the D.C. Council to reprogram an additional \$9.8 million in funds for Duke Ellington, bringing the total up to \$178.2 million in budget authority. Figure 1 below demonstrates how Duke Ellington’s projected cost has increased with each subsequent CIP and with the latest reprogramming.

Figure 1: Duke Ellington Budget Authority FY 2012 - Oct 15, 2015

Duke Ellington's Budget Increased Year after Year



Sources: Office of the Chief Financial Office. FY 2012, 2013, 2014, 2015, 2016 Proposed Budget and Financial Plans. District of Columbia Government. Available at: <http://cfo.dc.gov/node/289642>. October 15, 2015 reprogramming from Council of the District of Columbia. Legislative Information Management System (LIMS). Available at: <http://lims.dccouncil.us/Legislation/REPROG21-0114>

These increases mirror overall cost increases in the District’s capital plans for school construction. Figure 2 below demonstrates how significantly budgets have grown since they were first included in the CIP. The projected cost for Ellington more than doubled and so, too, did the total costs for 35 other school projects included in the FY 2016 CIP when compared with their initial projected 6-year costs.

http://cfo.dc.gov/sites/default/files/dc/sites/ocfo/publication/attachments/ocfo_volume_6_fy_2012_fy_2017_capital_appendices_web.pdf

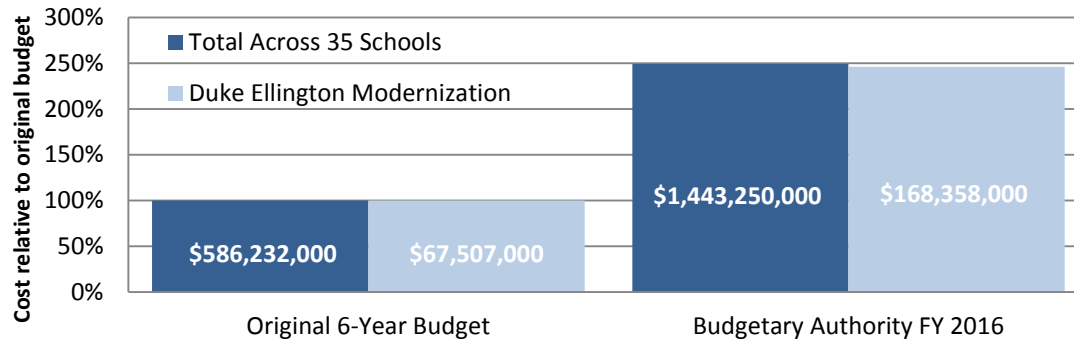
¹⁷ Office of the Chief Financial Officer. FY 2014 Proposed Budget and Financial Plan, Volume 6: FY 2014 to FY 2019 Capital Improvements Plan (Including Highway Trust Fund). District of Columbia Government. August 8, 2013. p. 120 – GA0. Available at: http://cfo.dc.gov/sites/default/files/dc/sites/ocfo/publication/attachments/DCOCFO_Volume_6_Final_r.pdf

¹⁸ Office of the Chief Financial Officer. FY 2015 Proposed Budget and Financial Plan, Volume 6: FY 2015 to FY 2020 Capital Improvements Plan (Including Highway Trust Fund). District of Columbia Government. August 7, 2014. p. 109 – GA0 Available at: http://cfo.dc.gov/sites/default/files/dc/sites/ocfo/publication/attachments/DCOCFO_Volume_6_web.pdf

¹⁹ Office of the Chief Financial Officer. FY 2016 Proposed Budget and Financial Plan, Volume 5: FY 2015 to FY 2020 Capital Improvements Plan (Including Highway Trust Fund). District of Columbia Government. July 17, 2015. p. 83 – GA0. Available at: http://cfo.dc.gov/sites/default/files/dc/sites/ocfo/publication/attachments/part1_%202016_DCBudget_V5_0.pdf

Figure 2: Ellington and Total DCPS CIP Original vs. FY 2016

Ellington is typical of the cost increases across the DCPS portfolio



Source: Office of the Chief Financial Officer. FY 2016 Proposed Budget and Financial Plan, Volume 5: FY 2016 to FY 2021 Capital Improvements Plan (Including Highway Trust Fund). District of Columbia Government. July 17, 2015. Available at: http://cfo.dc.gov/sites/default/files/dc/sites/ocfo/publication/attachments/part1_%202016_DCBudget_V5_0.pdf

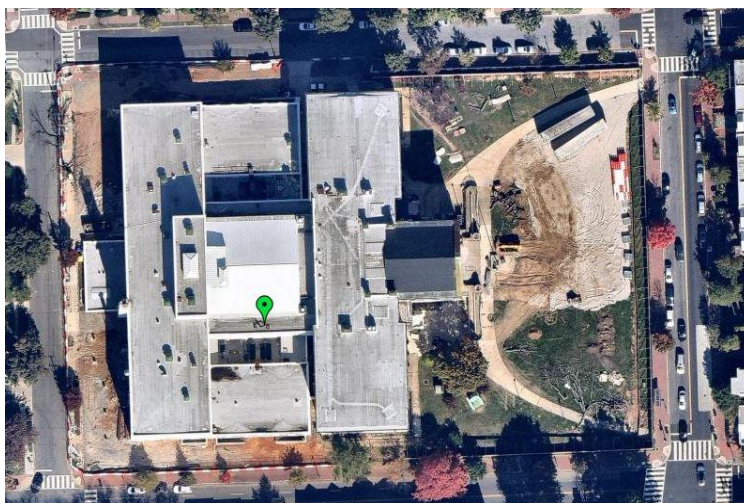
For the 35 individual school projects in the FY 2016 CIP, ODCA totaled the line item for each project's original 6 year budget and compared it to the project's budgetary authority in FY 2016. This excluded a number of cross school and administrative capital improvements such as boiler repairs, window replacement, and IT infrastructure upgrades.

Objectives and Methodology

The objectives of this report were to examine:

1. The cost increases that took place in the modernization project for Duke Ellington School of the Arts (Duke Ellington), covering the project's first three phases under the DGS guidelines—initiation, planning, and design;
2. Whether DGS was transparent during the process, and;
3. Whether DGS and DC PEP followed all required statutes, regulations, and procedures, as well as construction contracting best practices.

²⁰To accomplish the report's objectives, ODCA requested relevant documentation from DGS and DC PEP, including the Duke Ellington project contracts, change orders, monthly budgets, site surveys, meeting minutes (including those of the project's School Improvement Team (SIT)—a committee formed by school staff members, parents, interested neighborhood representatives, and representatives from DCPS), feasibility assessments, requests for proposals (RFPs), and all correspondence related to the project. We analyzed these documents and



compared the procedures and steps identified within them against requirements outlined in the District of Columbia Code, the District of Columbia Municipal Regulations (DCMR), DGS's Procedure and Delivery Manual, and DC PEP's contract to determine whether DGS and DC PEP have met the requirements of the law, the manual and the contract. Additionally, we compared the procedures that DGS used with generally accepted best practices from nationally recognized project management organizations including the Project Management Institute (PMI) and the Construction Management Association of America (CMAA).

Because this is a program evaluation and not an audit, ODCA did not conduct a data reliability assessment or otherwise verify the data collected from cited sources beyond ensuring that it was correctly transcribed in this report. Therefore, the numbers in this report should be regarded as unaudited figures. ODCA did not conduct the examination as an audit as defined by the Government Accountability Office's Generally Accepted Government Auditing Standards.

²⁰ Image of Duke Ellington School of the Arts courtesy of NearMap. Taken October 25, 2014.

Results of the Auditor's Analysis

I. The Department of General Services (DGS) and The District of Columbia Public Schools (DCPS) failed to provide timely information to policy makers so they could make informed decisions on the location and desired level of investment for a new performing arts high school.

DCPS did not finalize Educational Specifications for Duke Ellington School of the Arts before DGS proposed the project for inclusion in the FY 2012 CIP adopted by the Council.

DGS did not base the initial estimate of the total cost of the Duke Ellington School of the Arts modernization project in the fiscal year (FY) 2012 CIP on “detailed information on a project's expenditure requirements” as required by the CIP planning process. The project's Educational Specifications (ed specs) were not completed prior to the submission of the project's initial budget in April 2011.²¹ Ed specs are a critical written document produced by DCPS for each school modernization project that provides a detailed outline of needed classroom elements and educational components (such as lab stations in science classrooms, space for lockers, location and number of blackboards or whiteboards, and in the case of Duke Ellington, dance studios, art classrooms, and a performance theater).

The ed specs remained incomplete as DGS engaged the architect-engineer (A-E), and as a result designs provided by the A-E did not reflect the educational elements needed in the school, despite the fact that the Request for Proposal (RFP) for the A-E stated, “...the selected firms will be provided with an Educational Specification for the school which will serve as the program of requirements and the basis for the design submissions.”²² According to the schedule described in that RFP, the narrowing of potential firms during the design competition was to occur on or around September 17, 2012.²³ The Final Draft ed specs were dated October, 2012.²⁴ In their initial design competition proposal, the eventual A-E contractor (a joint venture between Lance Bailey Associates and CGS) stated:

The Ed Spec provided with the competition is an excellent initial effort and our Design Team has carefully followed its prescriptions. There has, however, been much we have learned about Ellington that we feel should be considered as additions to the Ed Spec program....Our proposal, design fees and accompanying budget have chosen a midline between the high and low ranges of the program (but always meeting the Ed Spec as the baseline). Awaiting the later opportunity to engage the stakeholders in much greater detail we have made reasonable assumptions and interpretations but have not necessarily provided all of the “bells and whistles” that some might envision. Such

²¹ As part of our review of documents, ODCA requested all draft and final educational specifications for Duke Ellington. DGS provided two documents. One, labelled “Draft 2,” was dated August 2012 and another, labelled “Final Draft,” was dated October 2012. We followed up with DGS to request “Draft 1” and any other documents, but were told that the documents provided to us were the only ones DGS had in their records.

²² Department of General Services. “Request for Proposals: Architectural/Engineering Services, Duke Ellington School of the Arts.” District of Columbia Government. July 9, 2012. p. 3. Available at: http://dgs.dc.gov/sites/default/files/dc/sites/dgs/service_content/attachments/duke_ellington-rfp.pdf

²³ *Ibid*, p. 7.

²⁴ District of Columbia Public Schools. “Educational Specification: Duke Ellington School of the Arts. Final Draft.” District of Columbia Government. October 23, 2012.

elements include sophisticated electronically tunable acoustics systems; motorized stage rigging; upgraded A/V, video, projection, sound and recording systems, etc. – **amenities that can add thousands and even millions of dollars to project costs** (emphasis is added).²⁵

As this report demonstrates, millions of dollars in additional costs were, in fact, added, underscoring the A-E contractor's point that they did not have sufficient detail to provide a timely and accurate estimate.

This also does not follow best practices with regard to construction planning. According to the Project Management Institute (PMI) —a leading national membership association for construction project, program and portfolio management— project requirements (such as educational specifications) should be completed in the planning of a project, not during design execution.²⁶ Based on the information provided by DGS, the educational specifications for the Duke Ellington modernization did not meet these guidelines prior to engaging a prospective A-E to design the school's renovation nor had the planning been completed before submission in the FY 2012 CIP.

DGS based initial and subsequent cost estimates for Duke Ellington on significantly different projects that did not take into account the costs required for a performing arts school.



²⁷In a 2015 document titled “*Ellington Budget White Paper*” detailing the cost changes to Duke Ellington, DGS indicated that the original estimate for the project's cost provided by DC PEP and the initial assumption for the total project cost of \$71,000,000 were based on “internal cost estimates for all high schools provided by Universal Research Services (URS),” a subcontractor with DC PEP.²⁸ This estimate assumed a static student population of 500 students and a final

square footage of 167,500, resulting in a cost per square foot of \$424. None of these figures reflect the current Duke Ellington project, which estimates a student population of approximately 600, square footage of 279,524, and total cost of \$178.2 million (or \$639 per square foot) according to the project's recent monthly budgets.

The DGS paper also acknowledged that the “initial assumption was for a renovation project comparable to [Woodrow] Wilson [Senior High School]” but that the project was a “first of its kind for DCPS” and that DC PEP had “no real comparable schools to model the budget from.”²⁹ Nonetheless, in an August

²⁵ Lance Bailey Associates-CGS. “Competition Design Proposal: Duke Ellington School of the Arts.” December 21, 2012. p. 28.

²⁶ The Project Management Institute. A Guide to the Project Management Body of Knowledge (PMBOK Guide), Fourth Edition. 2008. p. 105.

²⁷ Unless otherwise noted, all photos credit of: 21st Century School Fund (2015).

²⁸ Department of General Services. “Ellington Budget White Paper.” District of Columbia Government. July 6, 2015.

²⁹ *Ibid.*

24, 2015 letter to the D.C. Auditor³⁰ the program management partnership noted that its record includes more than \$8 billion in planning and program management of public K-12 schools across the country and that “this body of work offers the benefit of a national perspective on the capital programs we have implemented in the District.”³¹

As a performing arts high school distinct from a high school such as Wilson, the renovated building for Duke Ellington would need additional elements—such as sound-insulated musical performance rooms, a dance studio, make-up and dressing rooms, a costume room, a scene construction shop, and a box office for ticket sales, among others ultimately identified in the educational specifications.³² What appears to be the most recently-completed performing arts high school among others in the United States—the Ramon C. Cortines School of Visual and Performing Arts in Los Angeles—opened in 2008,³³ serves roughly 1,600 students and totaled \$172 million in construction costs.

Another issue not explicitly addressed in the course of planning the renovation was space utilization. Ellington has an unusual schedule in that students attend academic classes in the morning and performing arts classes in the afternoon. Substantial portions of the facility are unused a large proportion of the time. As a result, the total number of square feet built per student in the current plan is 466—significantly higher than Wilson and other performing arts high schools.³⁴ Similar programs in Boston, Cleveland, Pittsburgh, and Dallas have space utilization ranging from 136 square feet per student (Pittsburgh) to 240 square feet per student (Dallas).³⁵ Most are relatively small programs, serving fewer than 1,000 students, though the Los Angeles high school mentioned above, the Ramon C. Cortines School of Visual and Performing Arts, serves over 1,600 students with space use of 139 square feet per student.³⁶

DCPS, DGS, and the Executive Office of the Mayor were not transparent while considering alternate sites for Duke Ellington—sites that might have cost less and/or better served the needs of the student population.

On January 17, 2010, the Washington Post reported that “The District is studying the possibility of moving the Duke Ellington School of the Arts out of Georgetown and converting the building at 35th and R streets NW into a high school to serve Ward 2 families.”³⁷ The article mentioned that one of the

³⁰ DC Partners for the Revitalization of Education Projects. “Open letter to the Honorable David Grosso, the Honorable Mary Cheh, and Ms. Kathy Patterson.” August 24, 2015.

³¹ *Ibid.*

³² All of the named items here appear in the final draft of the Duke Ellington Educational Specifications (Ed Specs) provided to ODCA by DGS.

³³ TTG. “Ramón C. Cortines School of Visual and Performing Arts, LAUSD.” Accessed March 22, 2016. Available at: <http://www.ttgcorp.com/home/markets/education/lausd-high-school-for-the-visual-performing-arts-los-angeles-ca/>

³⁴ ODCA calculated this number by taking the most recent estimate provided by DGS for the total square footage of the school (279,524 square feet) and dividing it by the maximum enrollment described within the educational specifications (600).

³⁵ This analysis examined performing arts schools across the country and compared the specific programs offered by Duke Ellington to that of each school. For this analysis, schools that offered at least six of the eight programs offered by Duke Ellington (Dance, Instrumental Music, Literary Media and Communications, Museum Studies, Technical Design and Production, Theatre, Visual Arts, and Vocal Music) were considered comparable. ODCA determined square footage per student for these schools by taking the reported square footage of all their buildings and dividing it by the most recent publically available enrollment number for each school.

³⁶ ODCA calculated this data using the square footage of the school (230,000) divided by the enrollment during the 2014-2015 school year (1,647).

³⁷ Bill Turque. “Ellington Arts School Might Be Moved out of D.C.’s Ward 2.” *The Washington Post*. January 17, 2010.

possible alternate sites being considered by DCPS and the Executive Office of the Mayor (EOM) was Logan Middle School, located near Union Station.

At the request of DCPS and OPEFM (the precursor to DGS), DC PEP undertook a feasibility study of moving Duke Ellington to the Logan site. This study estimated that renovating Logan to serve as the performing arts high school would cost \$86.7 million.³⁸ The analysis included assumptions for both hard and soft project costs (which differentiates it from the A-E cost estimates for the project that did not include soft costs) based on learning, science, and media spaces comparable in cost to the School Without Walls, another District school that recently completed a high cost renovation. The study included the cost of performing arts spaces, a theater, and underground parking. This is notable because underground parking was not included in the initial cost estimates for keeping Duke Ellington at its Georgetown location. In interviews with ODCA, representatives of DGS said that they did not undertake a comparable analysis at that time of the total costs to keep the performing arts school in its current location. DGS representatives also indicated that no cost comparison was undertaken at the time to determine which option would deliver District taxpayers better value for their tax dollars.



A second alternative site considered during the initial project design competition was the Ellington Field owned by DCPS and located west of the school between 38th and 39th Streets N.W. On March 11, 2013, two members of the Duke Ellington Board of Directors, Charles Barber and Peggy Cooper Cafritz, and the school's Principal at the time, Rory Pullens, sent an email to Peter Davidson, a senior project manager at DC PEP. In this email, the board members and the Principal offered their thoughts and recommendations on the school's renovation design based on the finalists in the design competition, expressing a strong preference for a design by Adjaye Associates/Studio Twenty-Seven Architecture which would have relocated the school to Ellington Field. The email states:

...we recommend the selection of a new structure on the DCPS field. While we recognize that this site presents a variety of challenges, we feel that a new structure at this location would be in the best interests of the students of Ellington. The current facility

³⁸ Office of Public Education Facilities Modernization. "Duke Ellington School of the Arts Located at Logan Middle School: New DCPS Performing Arts Center Feasibility Study." District of Columbia Government.

³⁹ Imagery ©2016 Google, Map data ©2016 Google. (May 24, 2016)

was never intended to serve as a school for the arts and its configuration has inherent problems in accommodating the multi-faceted programs included in the Ellington curriculum. While a comprehensive renovation could improve the current situation, the need to retain the basic historic structure will always limit the extent to which this facility can be made to serve the interests of the school. A new structure, designed specifically to house Ellington's unique dual curriculum, provides a once in a life time opportunity to "get the design right" for Ellington in a holistic fashion. Thus, we urge the selection of the design team that focused on the new structure on the field.⁴⁰

Two of four design finalists for Ellington proposed moving the school to the Ellington field.⁴¹ In the bid documents dated January 14, 2013, the total cost estimate provided by the Adjaye Associates bid was \$105.7 million.⁴² This amount is significantly more than the comparable cost estimate provided for the plan from Lance Bailey Associates-CGS that DGS and DCPS ultimately chose, but also included on-site parking, an element that did not exist within the budget of the selected design until the FY 2015 CIP submission. As with the Logan proposal, this suggests that the design proposal at the Ellington Field favored by the school's principal and members of the Board of Directors may have saved District taxpayers money.

The email also lists additional side benefits of moving Duke Ellington to the Ellington Field site including avoiding the need for a "swing space" to house students while the existing building was modernized, and providing additional benefits to students and the community from re-purposing the existing historic structure. The authors write:

We are, of course, mindful that the selection of a new facility on the field has the additional benefit of obviating the need for any "swing space" during construction, since the Ellington program would remain in its current location until the new space is ready for occupancy. This is a significant advantage since even a temporary relocation would be disruptive to Ellington to a far greater extent than what other renovated schools have experienced. Given Ellington's wide range of programs, any swing space would likely result in splitting Ellington's classes among various subpar locations during the construction period. The selection of the field for a new structure resolves this dilemma.⁴³

The members of Ellington's board of directors and Principal Pullens also tell DGS and DC PEP:

Finally, this design provides a win-win by freeing up the current facility to be used for more neighborhood green space, as well as possible recreational facilities that could benefit Ellington and the community. We want to emphasize the importance of a comprehensive approach to the planning of the academic and recreational uses in the neighborhood, and that the future use and configuration of the old Western High School [current Ellington site] be a part of this planning. Any design for a new facility must be

⁴⁰ Charles Barber. "Ellington Renovation." March 11, 2013. Email.

⁴¹ *Ibid.*

⁴² TCT Cost Consultants. "Rough Order of Magnitude Cost Estimate: Ellington School for the Arts." January 14, 2013.

⁴³ Charles Barber. "Ellington Renovation." March 11, 2013. Email.

accommodated by a plan for the current facility that takes into consideration both the needs of Ellington and the needs of the community.⁴⁴

Both members of the Board of Directors and the school's Principal had serious reservations about keeping the school at its current location, fearing that the limitations of the existing structure would hamper the school's unique curriculum.

At a November 2, 2015 joint roundtable of the Council Committee on Education and the Committee on Transportation and the Environment that focused on the Duke Ellington project, Transportation and the Environment Committee Chair Mary Cheh asked Dr. Nathaniel Beers, the chief operating officer of DCPS, who made the decision to keep Duke Ellington at its current Georgetown location. Beers replied that he believed former Mayor Vincent Gray made that decision.⁴⁵

A March 12, 2013 email from Mayor Gray to Ward 2 Councilmember Jack Evans confirms that the location decision was made by Gray and DCPS Chancellor Kaya Henderson several weeks earlier. Responding to a March 12th letter from the Councilmember to Henderson supporting "a plan that renovates and enhances the existing Duke Ellington school building at its current location,"⁴⁶ Gray wrote: "Thanks. This is the same position the Chancellor and I agreed to several weeks ago. We are working through some issues involving historic preservation requirements. But we are hopeful these matters can be resolved in order to remain at the present site."⁴⁷

Following this exchange, DCPS and DGS leaders expressed concern about the timing of the public release of the mayor's decision on location. Also on March 12, 2013, Chancellor Henderson forwarded the email to DGS Director Brian Hanlon, remarking:

See below. I got the Mayor's preference on what he wanted to do, but I've never communicated it publically (sic) because I was following DGS' lead on this. The mayor apparently decided to share his perspective with Jack [Evans]. So now it's out. We should probably think about how to communicate this to the SIT and school folks before they hear it from Jack Evans.⁴⁸

The DGS Director replied subsequently that he would call Mayor Gray's chief of staff the following morning (March 13, 2013) "and discuss and we should reach out to Evans...to tamp down open discussion of this issue."⁴⁹

In April 2013, Ellington Board member Charles Barber attended a presentation by Mayor Gray at which the mayor stated the renovation would occur at the school's existing location.⁵⁰ In an interview with

⁴⁴ *Ibid.*

⁴⁵ District of Columbia Council. *Joint Public Hearing, Committee on Education, David Grosso, Chairperson & Committee on Environment & Transportation, Mary M. Cheh, Chairperson*. November 2, 2015. Video available at: <http://dccouncil.us/granicus/archive/>

⁴⁶ Councilmember Jack Evans. "Letter to Chancellor Kaya Henderson, District of Columbia Public Schools RE: Duke Ellington Site Location." March 8, 2013.

⁴⁷ Vincent C. Gray. "RE: Ellington Letter." March 12, 2013. Email.

⁴⁸ Kaya Henderson. "RE: Ellington Letter." March 12, 2013. Email.

⁴⁹ Brian Hanlon. "RE: Ellington Letter." March 12, 2013. Email.

⁵⁰ Charles Barber. "Ellington Renovation." April 4, 2013. Email.

ODCA, Ms. Cooper Cafritz said she never received an exact reason for the decision, other than that “certain Georgetown residents” complained about the plan to move Duke Ellington to the DCPS field location during meetings with Mayor Gray.⁵¹ That community members expressed their opposition to use of the field location is indicated in the letter from Evans to the Chancellor and in correspondence from at least one Advisory Neighborhood Commissioner. Wrote Evans; “I, along with my constituents, would not support a plan that would build or change the grounds of the Ellington Athletic Field on 38th Street, NW.”⁵² In an email to the Chancellor and several DCPS, DGS, and DC PEP officials on February 25, 2013, the then Chair of ANC 2E Ron Lewis stated:

I urge you to approve a plan that renovates and enhances the existing Duke Ellington School building in its existing location as a high school for the arts. And I urge you not to approve any plan that would build on the Ellington Athletic Field on 38th Street NW. I believe the community will be very supportive of a decision to renovate and enhance the existing Ellington building as a high school for the arts. And I believe the community would strongly oppose any plan to build on Ellington Field.⁵³

Lewis said that the field location serves as an important part of the community as an athletic field and green space, and that the existing Duke Ellington location would serve the school well since multiple bus lines service it and it is close to the business corridor. He concluded, “A school built on Ellington Field would not serve anyone well.”⁵⁴

Another factor in retaining the current location, noted by Mayor Gray in the email to Councilmember Evans, is the fact that the structure itself is listed on the National Register of Historic Places by the U.S. Department of the Interior, requiring any modifications to the structure, such as major construction and demolition that visibly changes the outside of the structure to receive the approval of the DC Historic Preservation Review Board in addition to the standard permitting process.⁵⁵ ⁵⁶ Finally, there was a significant amount of hazardous materials abatement work that had to be done. Such work likely increased the cost of the modernization project, but also may have had an impact on the project’s timeline and possibly may have involved safety issues. This, too, is information those choosing the site would have found useful.

ODCA found no evidence of public deliberation on location in any other documentation provided to us by DGS including minutes from local citizen School Improvement Team (SIT) meetings, budget documents, email correspondence, and memos.

⁵¹ Peggy Cooper Cafritz. Interview by Gregory Creighton and Matt Separa. January 28, 2016.

⁵² Councilmember Jack Evans. “Letter to Chancellor Kaya Henderson, District of Columbia Public Schools RE: Duke Ellington Site Location.” March 8, 2013.

⁵³ Ron Lewis. “Duke Ellington School Renovation - please renovate the existing building as a school for the arts.” February 25, 2013. Email.

⁵⁴ *Ibid.*

⁵⁵ U.S. Department of the Interior. “National Register of Historic Places Registration Form for Western High School.” United States Government. June 10, 2003. Available at: <http://focus.nps.gov/pdfhost/docs/NRHP/Text/03000673.pdf>.

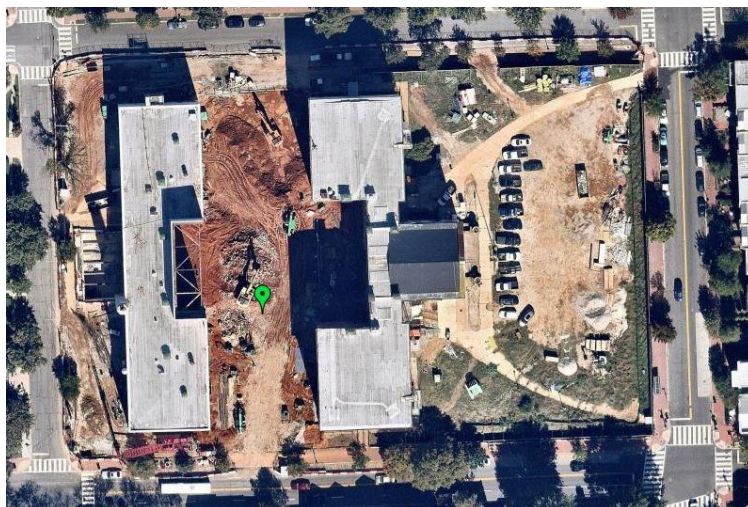
⁵⁶ Office of Planning. “Permits and Design Review.” District of Columbia Government. Available at: <http://planning.dc.gov/page/permits-and-design-review>.

DGS and DC PEP did not timely and accurately assess the need for and the cost of underground parking and other elements of the school at the Georgetown location.

Between FY 2014 and FY 2015 CIPs, the total cost for the Duke Ellington modernization increased from \$81.5 million to \$139.3 million, or \$57.8 million. According to DGS, this jump—the largest annual increase throughout the project thus far—resulted from further completion of design documents and more accurate details regarding the costs of the project. Among these costs was the inclusion of an underground parking structure, an element also not included in the 2012 CIP budget.

⁵⁷ DGS and DC PEP had information at least as far back as the fall of 2012 from both DCPS and the prospective architect-engineer that the Ellington project would need an underground parking lot to meet DCMR building codes. The final draft educational specifications for Duke Ellington, dated October 2012, make note that “the architect should identify location for 86 parking spaces (by code).”⁵⁸

Further, the initial design submission from Lance Bailey Associates-CGS on December 21, 2012 notes, “Our design has necessarily expanded the total project area beyond the Ed Spec Program...to accommodate such important elements as parking (underground)...”⁵⁹ That design proposal, while recognizing the need for underground parking at the site, does not include an estimate for the total cost of construction of that element. And in a presentation of Ellington’s concept design to Advisory Neighborhood Commission 2E on December 19, 2013, DGS stated “In addition to being unattractive, the limited site areas currently used at the sides and back of the property could never provide for the minimum 80 spaces needed for the school, and the front lawn was not considered for parking.”⁶⁰ It is unclear why DGS and DC PEP did not account for the cost of such a structure in the initial monthly budgets or the FY 2012 CIP submission.



The underground lot was finally included in the FY 2015 CIP and by DGS’s own analysis accounts for \$6 million of the nearly \$60 million increase in the total project budget between FY 2014 and FY 2015. The costs were significant in part because the ultimate design for the parking structure called for the removal of the entire center portion of the school, excavation and underpinning of the structural foundations of the building, the construction of the underground structure, and finally the construction of an entirely new center portion of the school on top of it.⁶¹

⁵⁷ Image of Duke Ellington School of the Arts courtesy of NearMap. Taken October 6, 2016.

⁵⁸ District of Columbia Public Schools. “Educational Specification: Duke Ellington School of the Arts. Final Draft.” District of Columbia Government. October, 2012. p. 8.

⁵⁹ Lance Bailey Associates-CGS. “Competition Design Proposal: Duke Ellington School of the Arts.” December 21, 2012.

⁶⁰ Department of General Services. “Duke Ellington School of the Arts Modernization: Advisory Neighborhood Commission 2E – Concept Submission.” District of Columbia Government. December 19, 2013. p. 2.

⁶¹ Department of General Services. “Duke Ellington School of the Arts Modernization: Advisory Neighborhood Commission 2E – Concept Submission.” District of Columbia Government. December 19, 2013. Available at: <http://dgs.dc.gov/node/764412>.

Although DGS reported that the parking garage added approximately \$6 million to the project, in additional documentation they provided regarding the cost increases between the FY 2014 and FY 2015 CIPs at least some portions of other elements noted were likely made necessary by the garage design, including structural steel, demolition, and masonry. The DGS cost summary included an additional \$2.5 million for demolition, \$1.2 million for masonry, \$6.6 million for structural steel, and \$5.3 million for earthwork. Under earthwork, DGS comments, “very complex construction methodology for below grade spaces – underground parking, storage, etc.”

An analysis by ODCA indicates that even DGS’s \$6 million cost estimate for the parking garage is high for industry averages. Using only the \$6 million figure and an estimate of the total square footage of the garage of 44,000 square feet provided by DGS, we calculated a total cost per square foot for the garage of \$136.36. This is nearly double the estimated cost for an underground parking structure in the Washington DC area according to 2013 data from RSMeans, a nationally recognized firm specializing in construction cost estimating, which estimates a 100,000 square foot structure should cost around \$7.5 million, or \$75 per square foot.⁶² Other documents reviewed by ODCA peg the cost at between \$75 and \$100 per square foot, suggesting that even under more recent and more generous cost assumptions, DGS’s budget remains an outlier.⁶³

[Appendix A identifies other project costs added after the Council already had appropriated more than \$81 million for the Duke Ellington project and the design process and initial preparation of the site for construction were already underway.]

⁶² RSMeans. “Construction Cost Estimates for Underground Parking Garage in Washington, District Of Columbia.” Accessed April 5, 2016. Available at: <https://www.rsmeans.com/models/underground-garage/list.aspx>

⁶³ Rider Levett Bucknall. “Quarterly Construction Cost Report: USA – Fourth Quarter 2015.” 2015. Pp. 4-5. Available at: <http://rlb.com/wp-content/uploads/2016/01/rlb-usa-report-fourth-quarter-2015.pdf>

II. DGS and the DGS Program Manager, DC PEP, have not complied with existing law, regulations, contract terms, departmental policies and procedures, and industry best practices in managing the Duke Ellington renovation.

DGS and DC PEP failed to provide updated cost information in the CIP and in the project's monthly budgets based on information they had at the time.

As early as January 14, 2013, DGS and DC PEP received preliminary design estimates from several prospective Architect and Engineer (A-E) contractors. Those cost estimates totaled \$90.4 million from a joint venture between Lance Baily Associates and CGS (LBA-CGS), and \$105.7 million from another bidder, Adjaye Associates-Studio 27 Architecture.^{64,65} These bids were \$9 million and \$24 million more, respectively, than the DGS cost estimate presented in the CIP months later of \$81.5 million. These cost estimates provided by the prospective A-Es were also incomplete in that they excluded soft costs such as project management fees paid to DC PEP, risk insurance, a construction contingency fund, design fees, and project escalation costs, all of which were included in the District's cost estimate. The A-E estimates were not reflected in the CIP that the Executive presented to the Council on March 28, 2013 as part of the FY 2014 District budget. This information similarly was not shared with the Council when the project's budget was being debated throughout the spring of 2013, before the Mayor signed the budget into law on July 24, 2013.

DGS did not provide updated budget estimates during the formulation of the FY 2015 CIP in the spring of 2014. The proposed and adopted budget authority for Duke Ellington in that year's capital plan was \$139.3 million, already a jump of \$57.8 million from the prior year. But, according to the official project monthly budget dated January 31, 2014 prepared by DC PEP for DGS, the total estimated project cost actually was \$146.9 million, \$7.6 million more than the proposed funding. Again, DGS did not present this new information for inclusion in the CIP when the Council was considering the budget.

The absence of accurate and complete estimates regarding the Duke Ellington modernization project cost represents a significant risk to policymakers and their ability to knowledgeably budget for capital needs. If the Council and public are not accurately informed about the true cost of a project, lawmakers may approve work that eventually totals much more than originally forecast, crowding out other capital construction projects.

DC PEP did not update the project's monthly budgets based on the most up-to-date available information, and DGS did not hold them accountable for it.

One component of the program management contract between DGS and DC PEP for school modernization projects requires that DC PEP produce "an updated project budget...within each monthly report" to DGS for review and acceptance by the agency.⁶⁶

⁶⁴ Lance Bailey Associates-CGS. "Competition Design Proposal: Duke Ellington School of the Arts." December 21, 2012.

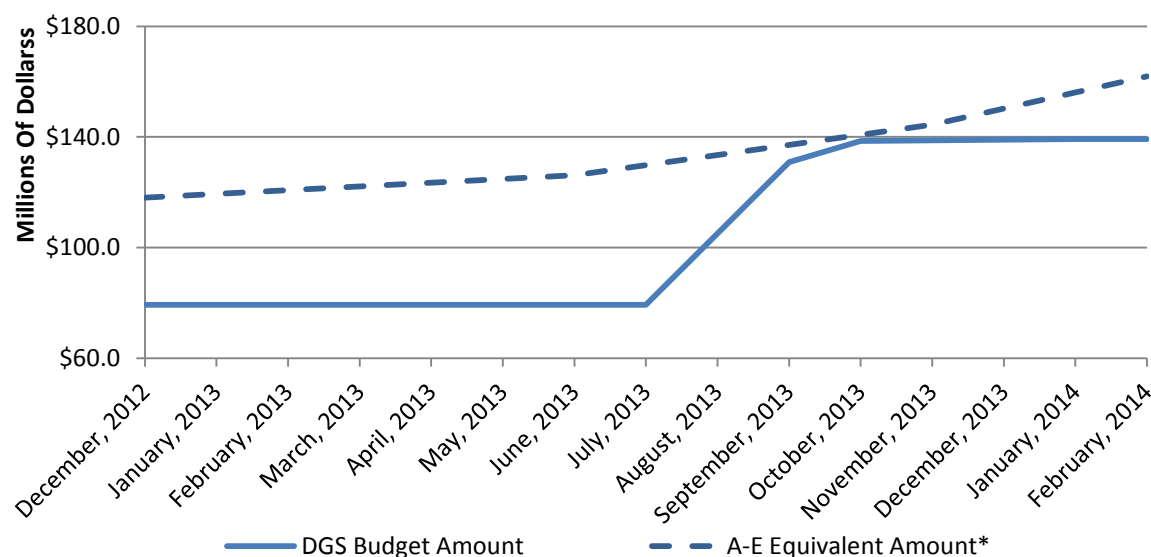
⁶⁵ TCT Cost Consultants. "Rough Order of Magnitude Cost Estimate: Duke Ellington School for the Arts." January 14, 2013.

⁶⁶ Department of General Services. "Program Management Services Agreement by and between Department of General Services and DC Partners for the Revitalization of Education Projects for the DCPS Portfolio Contract Number DCAM-14-NC-0046A." District of Columbia Government. March 24, 2014.

Updates to the project monthly budgets from new cost estimates provided by the A-E took months to appear in the formal documentation of costs. Figure 3 below shows discrepancies between the budgets DC PEP provided to DGS and the estimates provided by the A-E contractor throughout the project's lifecycle.

Figure 3: Duke Ellington Budget: DGS vs. Adjusted Architect Estimates

DGS and DC PEP consistently under-reported total project costs



Source: Lance Bailey Associates-CGS design documents for Duke Ellington School of the Arts and DGS/DC PEP monthly budgets for Duke Ellington.

*The original A-E estimate only includes construction or "hard" costs for the work, chiefly construction. Projects also have "soft" costs (such as project management, permit fees, and risk insurance) that are not captured in that estimate but are present in DGS's monthly budgets. Across all of DGS's monthly budgets the ratio of hard to soft costs averages out to 77/23. Therefore, the A/E estimates presented here have been adjusted using this 77/23 ratio to represent an A-E equivalent estimate to DGS's budget.

The chart above presents DC PEP's monthly estimates compared with an adjusted value for the A-E estimates. Because the base A-E estimates only capture construction and other so-called "hard" project costs and do not include "soft" costs related to the project (such as management costs, permit fees, and risk insurance) that DC PEP includes in their budgets for DGS, we adjusted the A-E estimates to include these costs in order to present an apples-to-apples comparison. To do this, we averaged the ratio of hard costs to soft costs across all 28 monthly budgets that DGS and DC PEP supplied. We found that on average, hard costs accounted for 77 percent of DC PEP's project cost estimates, and soft costs for 23 percent.

The data shows that at the time of each of the four A-E estimates (December 2012, June 2013, November 2013, and February 2014), the official project budget that DC PEP produced for DGS that same month estimated total construction costs that were significantly less than what the architect forecast them to be. In December 2012, for example, the DC PEP total project budget estimate was \$79.3 million, compared to an unadjusted estimate from the A-E of \$90.4 million and an adjusted A-E

estimate⁶⁷ of \$118.1 million. This adjusted A-E estimate is 49 percent more than DC PEP's budget estimate. Although that gap shrank over time, it remained even until the final A-E cost estimate in February 2014. The DC PEP total project budget for February 2014 estimated total construction costs at \$139.2 million, compared to \$161.9 million for ODCA-adjusted A-E estimate, a gap of 16 percent.

DGS was not required to accept the A-E's estimates as the project budget, but the comparison and the subsequent budget increases that mirror the estimates provided by the A-E indicate that DGS and DC PEP accepted the A-E's estimate eventually after having presented a less realistic view of the project's total costs throughout much of the design phase.

DGS and DC PEP did not follow the milestone requirement in the CIP development process.



Within the CIP, the annual development procedures require each agency to include “detailed information on....implementation timeframe” as well as “project milestones.”⁶⁸ The CIP development process stresses the importance of including and meeting these milestones for projects included in the plan, stating “Each phase of a project is monitored and tracked using milestone data. This lets the Capital Program determine if projects are

being completed on time and within budget. Milestone data is provided by agencies in the annual budget submissions as justification for additional funding.”⁶⁹ The CIP submission process requires District agencies to tie together a project's total budget, annual funding, and major milestones (such as the start and end of the design phase, the start and end of the construction phase, and the project's closeout) to present a clear picture of when various aspects of the project will take place and how much of the total budget the project will spend each year.⁷⁰

DGS did not meet the requirement to include a detailed timeline with proposed annual funding for the project in the CIP each year from FY 2012 through FY 2016. The agency, also failed to follow the milestone data that they did include, altering the project's timeline each year in FYs 2013, 2014, and 2015. In the case of Duke Ellington, DGS did not coordinate milestone data with proposed annual funding in FYs 2012 or 2013, proposing timelines for the project that did not match the fiscal year in which spending was to occur. Figure 4 demonstrates this discrepancy for FY 2012.

⁶⁷ The adjusted A-E estimate includes the average value of soft costs that the A-E did not include.

⁶⁸ Office of the Chief Financial Officer. FY 2016 Proposed Budget and Financial Plan, Volume 5: FY 2015 to FY 2020 Capital Improvements Plan (Including Highway Trust Fund). District of Columbia Government. July 17, 2015. p. 5-25, Available at: http://cfo.dc.gov/sites/default/files/dc/sites/ocfo/publication/attachments/part1_%202016_DCBudget_V5_0.pdf

⁶⁹ *Ibid*, p. 5-27.

⁷⁰ *Ibid*, p. 5-25.

Figure 4: Duke Ellington CIP Funding and Milestones, FY 2012
DGS and DC PEP failed to link project milestones with funding timeline

(Dollars in Thousands)

Funding By Phase - Prior Funding						Proposed Funding						
Phase	Allotments	Spent	Enc/ID-Adv	Pre-Enc	Balance	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	6 Yr Total
(04) Construction	0	0	0	0	0	3,500	36,210	31,290	0	0	0	71,000
TOTALS	0	0	0	0	0	3,500	36,210	31,290	0	0	0	71,000

Funding By Source - Prior Funding						Proposed Funding						
Source	Allotments	Spent	Enc/ID-Adv	Pre-Enc	Balance	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	6 Yr Total
GO Bonds - New (0300)	0	0	0	0	0	3,500	33,673	28,280	0	0	0	65,453
Pay Go (0301)	0	0	0	0	0	0	2,537	3,010	0	0	0	5,547
TOTALS	0	0	0	0	0	3,500	36,210	31,290	0	0	0	71,000

Additional Appropriation Data		Estimated Operating Impact Summary							
First Appropriation FY		Expenditure (+) or Cost Reduction (-)							6 Yr Total
Original 6-Year Budget Authority		No estimated operating impact							
Budget Authority Thru FY 2011									
FY 2011 Budget Authority Changes	0								
Current FY 2011 Budget Authority									
Budget Authority Request for FY 2012									
Increase (Decrease)	71,000								

Milestone Data		Projected	Actual	Full Time Equivalent Data		
Environmental Approvals				Object	FTE	FY 2012 Budget
Design Start (FY)	11/01/2012			Personal Services	0.0	0
Design Complete (FY)	04/01/2013			Non Personal Services	0.0	3,500
Construction Start (FY)	06/15/2013					
Construction Complete (FY)	08/15/2018					
Closeout (FY)						

Source: Office of the Chief Financial Officer. FY 2012 Proposed Budget and Capital Plan, Volume 6: FY 2012 to FY 2017 Capital Improvements Plan (Including Highway Trust Fund). District of Columbia Government. August 10, 2011. p. GAO – 69. Available at: http://cfo.dc.gov/sites/default/files/dc/sites/ocfo/publication/attachments/ocfo_volume_6_fy_2012_fy_2017_capital_appendices_web.pdf

As the figure shows, DGS proposed in the FY 2012 CIP that Duke Ellington would begin construction in FY 2013, and finish construction in FY 2018, yet the project’s annual proposed funding shows no spending occurring after FY 2014. It is not clear what construction would be occurring in FYs 2015, 2016, and 2017 where the District would owe no money to the builder. Duke Ellington’s project page in the FY 2013 CIP looks nearly identical, maintaining a projected FY 2018 construction completion date with no project funding allocated in FYs 2016, 2017, or 2018.⁷¹

Duke Ellington’s CIP project page also lacks completed milestone data every fiscal year between FY 2012 and FY 2016. As Figure 2 above shows, DGS did not include projected completion dates for “environmental approvals” or “closeout” of the project under milestone data in FY 2012. These projections also are missing from the FY 2013 CIP. In addition, the CIP for each of the five years ODCA examined contains no milestone data in the “actual” column detailing when each milestone was met.

Compounding this problem, DGS altered milestone data for Duke Ellington each year in the agency’s CIP submission between FY 2013 and FY 2015. The FY 2013 CIP reports a projected construction complete date of August 15, 2018, which changes to August 31, 2015 in FY 2014, and then to August 31, 2016 in FY 2015. The project’s intermediate milestone dates (for design and construction start) also fluctuate in a similar manner year after year. These significant and frequent changes to the project schedule undermine the CIP requirement to provide a detailed project timeline, and such substantial swings in the project completion date are not consistent with the intent of the CIP to provide a level of certainty in the District’s capital planning process.

⁷¹ Office of the Chief Financial Officer. FY 2013 Proposed Budget and Financial Plan, Volume 6: FY 2013 to FY 2018 Capital Improvements Plan (Including Highway Trust Fund). District of Columbia Government. June 22, 2012. Pp. GAO-68. Available at: http://cfo.dc.gov/sites/default/files/dc/sites/ocfo/publication/attachments/ocfo_fy2013_volume_6_capital_improvements_plan_r.pdf

DGS and DC PEP also did not coordinate the milestone data in the CIP with the project plan, not meeting the timeline set out in the District’s central long term capital planning document that was approved by the Mayor and Council. The FY 2013 CIP noted that Duke Ellington’s design phase would begin on November 1, 2012 and that construction would start on June 15, 2013.⁷² However, the request for proposals (RFP) that DGS issued to solicit an architect/engineer for the project in July of 2012—before the FY 2013 CIP took effect—states that DGS planned to award the A-E contract in early January 2013 (two months later than the CIP design start date) and planned for Council approval of the construction contract around January 15, 2014 (six months later than the CIP construction start date).⁷³ Similarly, the RFP issued for design-build (D-B) construction services on January 7, 2014 estimates Council approval of the construction contractor on November 15, 2014 and substantial completion of construction on February 14, 2016.⁷⁴ These are substantially different estimates from the milestones outlined in the FY 2015 CIP that was formulated in the same time period, where DGS indicated a construction start date of May 13, 2014 (six months earlier than the RFP) and a construction completion date of August 31, 2016 (six months later than the RFP).

We previously identified the importance of DGS providing accurate information during the formulation of the CIP in the audit of the District’s Public School Capital Improvement Fund for FYs 2010-2013, noting, “At the project level, [the CIP] documents the approved scope, cost and timing of each school modernization project. This data is a critical source of information for the school modernization program’s many stakeholders, including the Council of the District of Columbia and District residents.”⁷⁵

⁷² *Ibid.*

⁷³ Department of General Services. “Request for Proposals: Architectural/Engineering Services, Duke Ellington School of the Arts.” District of Columbia Government. July 9, 2012. Available at:

http://dgs.dc.gov/sites/default/files/dc/sites/dgs/service_content/attachments/duke_ellington-rfp.pdf

⁷⁴ Department of General Services. “Request for Proposals: Design Build Services, Duke Ellington School of the Arts.” District of Columbia Government. January 7, 2014. p. 5. Available at:

[http://dc.gov/sites/default/files/dc/sites/dgs/page_content/attachments/rfp_for_design-build_services-ellington-school-of-the-Arts\(00155042-5\).pdf](http://dc.gov/sites/default/files/dc/sites/dgs/page_content/attachments/rfp_for_design-build_services-ellington-school-of-the-Arts(00155042-5).pdf)

⁷⁵ Julie Lebowitz, Lilai Gebreselassie, and Markia Yates. The District’s School Modernization Program Has Failed to Comply with D. C. Code and Lacks Accountability, Transparency and Basic Financial Management. Office of the District of Columbia Auditor. July 1, 2015.

III. The Project has seen significant delays as DGS and DC PEP have missed many of the benchmark dates laid out in the CIP and supporting documents.

Despite constantly revising milestones each year in the project's CIP submission and not coordinating reported milestone dates with the project plan, DGS and DC PEP still failed to meet key internal benchmark dates for the Duke Ellington modernization, delaying completion of the school. The FY 2012 and FY 2013 CIP documents list a design start date of November 1, 2012.⁷⁶ The FY 2014 CIP (crafted in early 2013) revises this date to January 5, 2013.⁷⁷ As previously discussed, the RFP for architectural and engineering services from July 2012 indicated that DGS, assisted by DC PEP, planned to select an architect in early January 2013, consistent with the FY 2014 CIP.⁷⁸ But, DGS did not select an architect and issue a notice to proceed until September 17, 2013—eight months behind schedule—and did not fully ratify an A-E contract until March of 2014, fourteen months behind the benchmark set in both the FY 2014 CIP and the A-E RFP.^{79,80}

Once the architect-engineer was selected, DGS and DC PEP did not manage the design phase of the project according to the schedule set out in the notice to proceed with design provided to the architect in September 2013. That notice called for Lance Bailey Associates (LBA)-CGS to provide a concept design for Duke Ellington “no later than October 15, 2013” and “a twenty five percent (25%) complete schematic design no later than November 15, 2013.”⁸¹



While LBA-CGS did provide the concept design submission nearly on schedule (it was received by DGS on October 24, just eight days late), the firm did not provide a 25 percent complete schematic design until February of 2014 (three months behind schedule).⁸² A significant factor in this delay is that DGS and DC PEP did not submit comments on the concept design to LBA-CGS until January 3, 2014, delaying the

⁷⁶ Office of the Chief Financial Officer. FY 2013 Proposed Budget and Financial Plan, Volume 6: FY 2013 to FY 2018 Capital Improvements Plan (Including Highway Trust Fund). District of Columbia Government. June 22, 2012. Pp. GAO-68. Available at: http://cfo.dc.gov/sites/default/files/dc/sites/ocfo/publication/attachments/ocfo_fy2013_volume_6_capital_improvements_planning_r.pdf

⁷⁷ Office of the Chief Financial Officer. FY 2014 Proposed Budget and Financial Plan, Volume 6: FY 2014 to FY 2019 Capital Improvements Plan (Including Highway Trust Fund). District of Columbia Government. August 8, 2013. Pp. 120 – GA0. Available at: http://cfo.dc.gov/sites/default/files/dc/sites/ocfo/publication/attachments/DCOCFO_Volume_6_Final_r.pdf

⁷⁸ Department of General Services. “Request for Proposals: Architectural/Engineering Services, Duke Ellington School of the Arts.” District of Columbia Government. July 9, 2012. Pp. 6. Available at: http://dgs.dc.gov/sites/default/files/dc/sites/dgs/service_content/attachments/duke_ellington-rfp.pdf

⁷⁹ Department of General Services. “Notice to Proceed and Letter Contract.” District of Columbia Government. September 17, 2013.

⁸⁰ Department of General Services. “Agreement for Architectural/Engineering Services By and Between District of Columbia Department of General Services and LBA-CGS Joint Venture For the Modernization of Duke Ellington School of the Arts DC-AM-12-AE-0156.” District of Columbia Government. March 20, 2014.

⁸¹ Department of General Services. “Notice to Proceed and Letter Contract.” District of Columbia Government. September 17, 2013.

⁸² Lance Bailey Associates-CGS. “Memorandum: DESA Staff Meeting – SD Review.” February 25, 2014.

ability of the architect to proceed with a schematic design.⁸³ Although it is reasonable to expect DGS to require substantial time to respond to the concept design, the agency left themselves only a month to do so, per the timeline from the A-E notice to proceed discussed above. This suggests DGS underestimated the amount of time it would take to review the concept design and provide comments to LBA-CGS.

Numerous other delays in the design phase occurred as well. For example, the A-E contract dated March 20, 2014 (itself fourteen months behind schedule) states that DGS expected design documents to be completed with the aid of the project's design-builder (D-B) by August 5, 2014.⁸⁴ But DGS did not ratify the D-B contract until July 9, 2014, making it impossible for the A-E and D-B to finish the designs according to the proscribed schedule.⁸⁵ The A-E and D-B did not submit the 100 percent design development submission drawings and specifications until August 26, 2014.⁸⁶ The March 20, 2014, A-E contract also indicated that negotiations over the construction phase's guaranteed maximum price (GMP)—a contract form where the total construction cost is capped at an agreed upon price, incentivizing the builder to prevent cost overruns—would occur between September 19, 2014, and November 11, 2014.⁸⁷ The general contractor, GCS-Sigal, did not submit a GMP cost estimate package for negotiation until August 5, 2015, ten months behind schedule.⁸⁸

Contributing to the delay in the GMP negotiation were delays in meeting deadlines for value engineering negotiations—a phase where DGS, the A-E, and the D-B re-engineer certain aspects of the design to reduce total cost. According to the March 20, 2014 A-E contract, value engineering negotiations were to occur during the same period as GMP negotiations (September 19, 2014 to November 11, 2014).⁸⁹ Meeting minutes provided by DGS and DC PEP from their meetings with GCS-Sigal, the general contractor, indicate that value engineering took place over at least a three-month period from October 2014 to January 2015.⁹⁰ An additional memorandum shows that discussion of several school components, including the performance hall, museum studies lab/classroom, visual arts classrooms, 2D and 3D art studios, and performance arts scene shop/costume design spaces continued until at least June 3, 2015,⁹¹ precluding the development of a final GMP proposal by the design-builder. The construction contract had been ratified on July 9, 2014, permitting demolition to begin. But as of the issuance of this report, a final GMP had still not been agreed to for the project.

⁸³ Lance Bailey Associates-CGS. "Memorandum: Response to DGS Concept Design Submission Comments." January 21, 2014.

⁸⁴ Department of General Services. "Agreement for Architectural/Engineering Services By and Between District of Columbia Department of General Services and LBA-CGS Joint Venture For the Modernization of Duke Ellington School of the Arts DC-AM-12-AE-0156." District of Columbia Government. March 20, 2014.

⁸⁵ Department of General Services. "Design-Build Agreement for Ellington School of the Arts DCAM-14-CS-0098." District of Columbia Government. July 9, 2014.

⁸⁶ GCS-Sigal Joint Venture. "Duke Ellington School for the Modern Arts Modernization: 100% DD Estimate." October 6, 2014. p. 59.

⁸⁷ Department of General Services. "Agreement for Architectural/Engineering Services By and Between District of Columbia Department of General Services and LBA-CGS Joint Venture For the Modernization of Duke Ellington School of the Arts DC-AM-12-AE-0156." District of Columbia Government. March 20, 2014. p. 4.

⁸⁸ GCS-Sigal Joint Venture. "Duke Ellington School for the Modern Arts Modernization: Guaranteed Maximum Price Estimate." August 5, 2015.

⁸⁹ Department of General Services. "Agreement for Architectural/Engineering Services By and Between District of Columbia Department of General Services and LBA-CGS Joint Venture For the Modernization of Duke Ellington School of the Arts DC-AM-12-AE-0156." District of Columbia Government. March 20, 2014. p. 4.

⁹⁰ Lance Bailey Associates-CGS. "Memorandum: DESA Staff Meeting – VE Plan Review." January 8, 2015.

⁹¹ Lance-Bailey Associates-CGS. "Memorandum: Duke Ellington Special Requirements." June 3, 2015.

Due to these multiple design delays, construction on Duke Ellington began significantly later than projected. The original FY 2012 project CIP submission estimated that construction would begin on June 15, 2013. This was delayed to June 30, 2013 in the FY 2014 CIP and again to May 13, 2014 in the FY 2015 CIP.⁹² Very limited demolition (which is considered part of the construction phase) began on the site in late July 2014, two months late from the FY 2015 estimate and over a year late based on the FY 2012 schedule. Actual new construction on the school did not begin until April 2015.

⁹² The CIP is part of the District's annual budget, and is therefore presented in March of the preceding year. For example, the FY 2014 CIP was presented in March 2013, making the projected start of Duke Ellington's construction on June 30, 2013 possible at the time.

IV. DGS has failed to require DC PEP to comply with its contractual obligations to the District government with regard to the Duke Ellington project.

The District government initially contracted with DC PEP in December 2007 and the program management partnership is now in the third and final year of its most recent contract for services.

The DC Partners for the Revitalization of Education Projects, LLC

In 2006, policymakers envisioned private management as one option for DCPS capital projects. The Modernization Act according to the committee report “does not direct DCPS as to *how* to manage its capital improvement program. The Committee expects the Board (of Education) to decide whether the Superintendent and his team will create substantial new capacity internally, or look externally to private project management expertise.”⁹³ The District initially awarded a contract for project management to DC PEP late 2007 over four competing firms.⁹⁴ The contract has been put out for bid twice since (in 2010 and 2013) and DC PEP was the sole respondent in the most recent request for proposals.

The contract calls for DC PEP to “provide proactive day-to-day management of the projects assigned to the Program Manager as well as to provide proactive planning and implementation for the Portfolio as a whole.”⁹⁵ DC PEP has been integral to every stage of each school modernization, including developing and meeting cost estimates and project timelines, managing payments to contractors and relaying problems back to DGS. DC PEP serves as the primary source of information for DGS on ongoing school modernizations.

Under the 2014 contract and its 2011 predecessor DC PEP is to:

- “Proactively manage the day-to-day affairs of the projects assigned to the Program Manager [DC PEP] so as to identify and resolve issues that could adversely impact the achievement of [DGS]’s goals and objectives for the project.”
- “Advise the Department regarding the scope, schedule, budget and quality of the work performed by the contractors engaged ... for the assigned projects;”
- “Provide the department with a monthly status report for each individual project assigned to the Program Manager. Such monthly status report shall include with respect to each project an update on (i) the project schedule and the current state of the project in regards (sic) to the schedule for the project, and to the extent there are variances from the schedule, propose solutions to address such issues; (ii) any potential financial exposures; and (iii) [DGS]’s economic inclusion goals;”

Based on the contract’s terms, DC PEP, as program manager, bears significant responsibility for the incomplete initial project estimate and follow-up budgets and missed milestone dates.

⁹³ Council of the District of Columbia, Committee on Education, Libraries, and Recreation. “Report on Bill 16-250, ‘School Modernization Financing Act of 2005.’” District of Columbia Government. December 16, 2005. Available at:

<http://lms.dccouncil.us/Download/15578/B16-0250-CommitteeReport3.pdf>

⁹⁴ Department of General Services. “Program Management Services Agreement by and between Department of General Services and DC Partners for the Revitalization of Education Projects for the DCPS Portfolio Contract Number DCAM-14-NC-0046A.” District of Columbia Government. March 24, 2014.

⁹⁵ Ibid.

As indicated earlier in this report, DC PEP is required to conduct an “independent, written cost and schedule review” for each project including Duke Ellington. When such a review indicates that either the budget or the schedule is inadequate, “the Program Manager shall develop written recommendations to address such concerns.” Both the schedule and the budget for Duke Ellington have been presented inaccurately in the CIP and in other communications.

- “For each project in the Portfolio assigned to the Program Manager, conduct an independent, written cost and schedule review for the project. To the extent such review indicates that the Department and/or its end user’s budget or schedule is inadequate, the Program Manager shall develop written recommendations to address such concerns;”
- “Maintain on a current basis, each individual project budget, which shall be made available in Prolog [construction project tracking software]. The project budget should be updated as necessary to reflect the project’s actual financial condition. An updated project budget should be included within each monthly report to the Department;”
- “Maintain, on a current basis, the project schedule in Primavera P6 or equivalent scheduling software. The project schedule should be updated as necessary to reflect the project’s actual status. An updated project schedule should be included within each monthly report to the Department.”⁹⁶

The contract also gives DC PEP a role in developing the annual Capital Improvements Plan and assuring that the information DGS provides to the District’s budget staff is accurate and up to date. Given the interdependent nature of the relationship between DGS and its project management contractor, it is often not possible to delineate whether one or the other is responsible for actions, information, or results.

The current contract calls for an annual payment not to exceed \$9.8 million to fund approximately 30 full-time staff positions at fixed-monthly rates, additional support staff as needed, and limited reimbursable costs.⁹⁷ From the first contract in 2007 through February 23, 2016 the District has paid DC PEP \$78.4 million for managing the school modernization program.⁹⁸ According to the current contract, the District is paying \$33,022 per month (\$396,264 annually) to DC PEP this fiscal year for the services of the lead project manager, whose time is fully allocated to the District.⁹⁹ It is paying \$21,464 per month for 65 percent of the time of the partnership’s senior executive.¹⁰⁰ It provides compensation for DC PEP project managers working on the DCPS projects full-time at \$284,815, compared with \$100,284 salary plus \$25,873 in benefits for the average project manager in-house at DGS.¹⁰¹ Similarly, DC PEP’s contract calls for the District to compensate two full time administrative assistants at \$202,176 apiece while the average administrative assistant in the District government earns \$47,598 in salary and \$10,234 in benefits.^{102,103}

⁹⁶ Ibid.

⁹⁷ Ibid, Exhibit B.

⁹⁸ This was obtained from an ODCA analysis of SOAR payments data to DC PEP, 2007-2016.

⁹⁹ Department of General Services. “Program Management Services Agreement by and between Department of General Services and DC Partners for the Revitalization of Education Projects for the DCPS Portfolio Contract Number DCAM-14-NC-0046A.” Exhibit B. District of Columbia Government. March 24, 2014.

¹⁰⁰ Ibid.

¹⁰¹ District of Columbia Human Resources (DCHR). “Public Employee Salary Information.” District of Columbia Government. Available at: <http://dchr.dc.gov/public-employee-salary-information> Data obtained for Fiscal Year 2015.

¹⁰² Department of General Services. “Program Management Services Agreement by and between Department of General Services and DC Partners for the Revitalization of Education Projects for the DCPS Portfolio Contract Number DCAM-14-NC-0046A.” Exhibit B. District of Columbia Government. March 24, 2014.

¹⁰³ District of Columbia Human Resources (DCHR). “Public Employee Salary Information.” District of Columbia Government. Available at: <http://dchr.dc.gov/public-employee-salary-information> Data obtained for Fiscal Year 2015.

Neither DGS nor DC PEP could provide documentation indicating that the program manager notified DGS that either the schedule or the budget was inaccurate, nor could they provide any documentation that they produced “written recommendations” to address the discrepancies.

The program manager, per the contract, is responsible for producing the monthly project budget which should itself be updated to reflect current information. DC PEP is not performing consistent with the responsibilities of its contract when the required monthly budgets the organization provides to DGS have omitted information such as estimates provided by the project’s architect and engineer for a period of several months. As detailed in Figure 3 (page 18), DC PEP’s monthly budgets demonstrated a significant discrepancy with comparable estimates of the project’s total cost provided by the A-E, often by tens of millions of dollars. Additionally, DC PEP should have known that they excluded the project’s soft costs. DGS and DC PEP consistently misjudged both total project costs and timelines for Duke Ellington, leading to later budgets and project milestones that exceed initial estimates.

Additionally, under “Compliance and Reporting Requirements” the contract specifies that “the Program Manager will be required to assist the Department in the preparation of reports, plans, recommendations and other documents... which shall include, but are not limited to recommendations regarding revisions to the Master Facilities Plan and the Capital Improvement Plan.”¹⁰⁴ The contract here assigns a very specific role related to the CIP to DC PEP. That the CIP funding levels and timetable have been inaccurate based on information provided by DGS underscores the failure of the department to hold its program manager to the contract requirements.

DC PEP describes itself as a joint venture with “a portfolio of more than \$8 billion in the planning and program management of public K-12 school programs nationwide, including major school districts such as the Chicago Public Schools, the Detroit Public Schools, the Los Angeles Unified School System, and the DeKalb County (GA) Schools.”¹⁰⁵ The organization further states that “this body of work offers the benefit of a national perspective on capital programs we have implemented in the District” and that it has “established a record of success since 2007 in implementing extraordinarily high quality school modernization projects on time, on budget and with a transparency in cost management and reporting that is consistent with both the laws of the District of Columbia and best management practices in the construction industry.”¹⁰⁶

Providing DGS with incomplete cost estimates is not consistent with DC PEP’s statements that it has been successful in “implementing extraordinarily high quality school modernization projects” on time and on budget. As discussed previously, DGS and DC PEP reported to ODCA that the initial estimate for the total cost of Duke Ellington was based on a cost per square footage model developed by Universal Research Services (URS). Given the breadth and depth of DC PEP’s combined portfolio and their prior and ongoing work across the country in large school systems, it is not clear why DC PEP estimated the initial project budget based on such limited benchmarking and without the elements needed in a performing arts school.

¹⁰⁴ *Ibid.*

¹⁰⁵ DC Partners for the Revitalization of Education Projects. “Open letter to the Honorable David Grosso, the Honorable Mary Cheh, and Ms. Kathy Patterson.” August 24, 2015.

¹⁰⁶ *Ibid.*

A full examination of DC PEP's contract compliance is outside the scope of this review. At a minimum, though, it is clear that DGS has failed to require its program manager to provide comprehensive project management services consistent with the plain language of the contract.

V. DGS (and its predecessor, OPEFM) made decisions early on in the School Modernization Program that deprived the District of the use of competition as a tool to control costs.

Competition in procurement may have helped reduce costs in the Duke Ellington School of the Arts modernization. It is generally accepted in government contracting that it is good government, on many levels, to have open and fair competition wherever practicable. The Congressional Research Service notes that the federal government has promoted competition “since at least 1781 when the Superintendent of Finance advertised in a local newspaper for proposals from potential suppliers of food for federal employees in Philadelphia.”¹⁰⁷ “Then, as now,” CRS continues, “the government encouraged competition because of its reported benefits to the government and the general public. Proponents of competition note that when multiple offerors compete for the government’s business, the government can acquire higher quality goods and services at lower prices than it would acquire if it awarded contracts without competition.”¹⁰⁸

Today, federal law generally encourages and in many cases requires competition in government contracting with certain specific exceptions, as when there is only a single source for a service, or there is an “unusual or compelling urgency” or an international requirement or other factors enumerated in the Competition in Contracting Act (CICA) of 1984. The Federal Acquisition Regulations (FAR)—the guidelines that govern the Federal government’s contracting procedures stemming from CICA—similarly place strict emphasis on requiring competition. Section 6 of the FAR is dedicated to competition requirements for federal contracts, and states at the outset:

- (a) 10 U.S.C. 2304 and 41 U.S.C. 3301 require, with certain limited exceptions (see subpart 6.2 and 6.3), that contracting officers shall promote and provide for full and open competition in soliciting offers and awarding Government contracts.
- (b) Contracting officers shall provide for full and open competition through use of the competitive procedure(s) contained in this subpart that are best suited to the circumstances of the contract action and consistent with the need to fulfill the Government’s requirements efficiently (10 U.S.C. 2304 and 41 U.S.C. 3301).¹⁰⁹

District procurement policy similarly emphasizes the value of competition. The committee report on the Procurement Practices Reform Act of 2010, the last major rewrite of the District’s procurement law, places a value on fairness and competition as a means to that end. One stated purpose of the law is to “obtain full and open competition.”¹¹⁰ There are many reasons for these requirements to exist. Competition among potential contractors gives government choices and control. It gives government the ability to choose the contractor with the best qualifications at the lowest or most appropriate cost,

¹⁰⁷ Kate M. Manuel. “Competition in Federal Contracting: An Overview of the Legal Requirements. Congressional Research Service. June 30, 2011. p. 2. Available at: <https://fas.org/sgp/crs/misc/R40516.pdf>

¹⁰⁸ *Ibid.*

¹⁰⁹ General Services Administration. “Federal Acquisition Regulations Subpart 16.101—Full and Open Competition, Policy.” Accessed March 21, 2016. Available at: <https://www.acquisition.gov/?q=/browse/far/6>

¹¹⁰ Committee report on Bill 18-610 page 4 Direct quote from page 3 of committee print included in committee report.

and fosters an environment where contractors want to offer government their best services at the most competitive prices to win the contract. If contractors have no real competition, they have no motive to offer best services or offer those services at competitive prices that would survive on the open market. Further, they have no motive to do their best once the contractor wins the contract, or keep costs from escalating, because a winning bidder isn't concerned that it won't be able to keep the contract it has or win the next contract. The lack of competition essentially forces government to cede control of its project to the contractor.

From its inception, the School Modernization Program has relied on a single program management firm, DC PEP, rather than multiple program management firms.

As stated in the previous section of this report and in ODCA's audit published July 1, 2015, [*The District's School Modernization Program Has Failed to Comply with D.C. Code and Lacks Accountability, Transparency, and Basic Financial Management*](#), DGS's sole program manager overseeing the entire school modernization portfolio, DC PEP, has not fulfilled all of the terms of the program management contract.



If OPEFM/DGS had opted to select multiple firms, the District likely would have benefited from the competitive environment and the ability to measure one firm against the successes of others in terms of the quality and timeliness of program advice, budget information, and the like. This is the approach taken by the newly-created D.C. Water and Sewer Authority in the late 1990s when new leadership began addressing decades of deferred infrastructure needs. To manage a broad array of capital

projects the independent utility hired multiple project management firms with a wide variety of experience and, over time, narrowed the number, while building and maintaining internal construction management capacity to manage multiple firms.¹¹¹

In addition to the advantage of being able to assess the performance of multiple project managers, had DGS retained multiple project managers, one or more might have had previous experience modernizing or constructing a performing arts school such as Duke Ellington. Although Duke Ellington is unique in the District, there are numerous other schools of the arts around the country and around the world, and a program manager that had overseen one or more of those projects would have been a more appropriate fit.

Had DGS determined at some point that DC PEP was not meeting contractual obligations, it had no choice but to continue working with DC PEP under the current system. When a government awards a single project management contract, it faces only two choices when the project manager fails to live up

¹¹¹ ODCA interview with former DCWASA General Manager Jerry Johnson May 6, 2016.

to expectations: (1) accept sub-par performance, or (2) terminate their services and start the process of searching for another project management firm. To be sure, the tasks of procuring and overseeing multiple project management firms would likely require additional capacity within DGS to augment the in-house capacity in place today.

There are other good government objectives that can be better achieved through the use of multiple project management firms. Government has a basic interest in promoting competition among contractors, at least in part to prevent the rise of a monopoly in a given industry. Awarding the entire D.C. schools modernization project to DC PEP gave one firm a monopoly on school modernization in D.C. When the program management contract was last open for bid, DC PEP was the only firm that provided a bid, even though many other firms attended a pre-bid conference.

Awarding the entire project to one project management firm also pushes out smaller firms. A small firm that could not secure the contract for the entire project because of its small size and lack of extensive previous experience might be able to secure a piece of the project or an award along with several other firms because it wouldn't be expected to do everything by itself. Similarly, to the extent that government wants to promote smaller minority firms, there is, obviously, more chance to do that with awards to multiple project management firms. Making multiple awards also gives small and minority firms the opportunity to gain valuable experience and work with (i.e. learn from and form relationships with) other similarly situated firms. This can be important to their future success.

The decision by DGS (and its predecessor, OPEFM) to use Design-Build procurement without competition on cost may have contributed to higher costs in the Duke Ellington School of the Arts modernization.

The Use of a Design-Build contract for the construction phase of the Duke Ellington modernization provided limited accountability for cost and does not represent best practice for such a large and unique project. Today DGS uses what it refers to as a modified design-build method of procurement for school modernizations. Design-build was developed as an alternative to Design-Bid-Build as a way to foster collaboration among architects, engineers, and construction contractors. Typically a single firm is hired to complete a project from the initial design to completed construction and a design-build contractor is usually a partnership that includes an architect-engineering firm. DGS's own Capital Construction Procedure and Delivery Manual states that the design-build method "requires the owner/using agency to relinquish much of that design control and trust that the contractor will provide a quality facility on time and in budget."¹¹²

As implemented by OPEFM/DGS, however, the design-build approach has been elongated with a separate procurement for an Architect-Engineering firm to work at the front end of a project, followed often much later by procurement for a construction firm that then assumes oversight of the A-E firm and, even later, negotiations on a final construction budget. For Duke Ellington, this approach resulted in the procurement of an A-E on March 20, 2014, followed by the engagement of the builder on July 9, 2014. And as mentioned previously, the Ellington project has still not completed negotiations on a GMP construction budget. In this formulation there has been little accountability for total project cost.

¹¹² DC Department of General Services, Capital Construction Division. "Procedure and Delivery Manual." District of Columbia Government. June 28, 2013. Pp. 21.

Because design documents had not been substantially completed prior to hiring contractors, the District hired construction contractors without requiring a hard dollar bid and instead selected firms based on other factors. As is demonstrated earlier, a realistic budget covering all of the design elements was not developed until late in the process. Any effort to “value engineer” the project in mid-year 2016 has proven difficult because the community conversations and regulatory approvals have already been secured. An actual project budget is one of the last elements as the District negotiates a “guaranteed maximum price” for the work, usually presented to the Council as a change order on the initial contract with the construction company.

The use of a more traditional “design-bid-build” (D-B-B) construction method where the design and construction phases are split between different entities in separate contracts may have proved a benefit to the Duke Ellington renovation project in particular, given that it is unique in D.C. and many of its specialized needs were not designed early in the project. Typically, some of the advantages of Design-Bid-Build over Design-Build, which is what was used for this project, are that the owner controls design and construction and design changes easily can be made prior to the start of construction. As explained in the DGS Manual:

An owner/agency contracts separately for design and construction. After design is complete, a competitive bid process is used to select a contractor to construct the project. D-B-B proceeds in a linear or sequential fashion; design is completed before bidding, and bidding is completed before construction. ...D-B-B affords a large degree of control of the design for the owner/using agency.¹¹³

The design contractor then provides completed design documents before construction awards are made. And, most importantly, having construction firms bid based on cost can have the effect of controlling costs and providing transparency on project costs.

Using a design-build process for the Duke Ellington modernization project, on the other hand, may have resulted in more rapid construction times and fewer change orders leading to additional costs. But as the Construction Management Association of America (CMAA) states, “it is difficult for the owner to verify that it is receiving the best value for its money without having a great deal of transparency in the [design-build] team.”¹¹⁴ CMAA also cautions against using design-build for unique projects that feature specific or high-cost material needs, noting that the process “may be inappropriate if the owner is looking for an unusual or iconic design.”¹¹⁵ Certainly it is worth considering whether Duke Ellington, an unusual modernization project for a unique school housed in a historic building qualifies as one that would benefit from an unusual or iconic design.

¹¹³ DC Department of General Services, Capital Construction Division. “Procedure and Delivery Manual.” District of Columbia Government. June 28, 2013. p. 21.

¹¹⁴ Construction Management Association of America. “CMAA Owner’s Guide to Project Delivery Methods.” August 2012. p. 21. Available at: <https://cmaanet.org/files/Owners%20Guide%20to%20Project%20Delivery%20Methods%20Final.pdf>

¹¹⁵ *Ibid.* p. 23.

How Budgets Grow

The capital budget for Ellington has grown each year it has been included in the annual Capital Improvement Program (CIP) due to the inclusion of additional design elements. The single biggest jump –nearly \$60 million— appeared in the FY 2015 CIP. The largest increase in budget estimates that DC PEP prepared monthly for the project appeared in September 2014 when planning for the project advanced from “schematic design” – when the A-E firm’s drawings were 25-30 percent complete -- to “design development,” with the builder estimating costs based on 50 percent complete drawings. At ODCA’s request, DGS produced a matrix showing elements responsible for the monthly budget estimate rising from \$96.7 million at “schematic design” to \$145.6 million (a \$48.9 million increase) at the “design development” phase. The DGS matrix and a one-page explanation are included as Appendix A on page i.

One of the largest elements of the nearly \$50 million increase between the July 2014 and September 2014 monthly budgets shown in Appendix A was \$5 million for hazardous materials abatement. DGS explains that the higher estimate “was informed by a completed environmental remediation report.” Similarly, just over \$5 million was added for “earthwork” of various types based on “very complex construction methodology for below grade spaces,” as indicated earlier in the description of costs for underground parking. According to DGS in the document presented in Appendix A, the “more developed design” yielded more precise and also significantly higher costs.

Other elements reflect decisions made for a specialty high school, such as “substantial enhanced acoustical requirements” and “special wall finishes” described as “complex design elements” for an increase in the category of “finishes” of \$4.3 million. Another change: a “geothermal well system” at nearly \$4 million, related to the project’s LEED certification. Another category included items that have been part of every previous modernization: costs for utility permits and fees, project documentation and scheduling, and cleanup and miscellaneous items.

These details illustrate the kind of information generated as project plans are completed and help underscore the recommendation that DGS consider altering the method of procurement for modernizations. If the District used a design-bid-build process most if not all of these decisions and costs would be identified during planning and design, prior to engaging a builder, and prospective builders would bid competitively based on how efficiently they could deliver on substantially completed project plans. Policymakers would know project costs before approving a construction contract. The modified design-build process as implemented by DGS permits the kind of change and growth in projected costs reflected here. In the case of Ellington, policymakers have yet to receive a proposed final Guaranteed Maximum Price.

VI. The existing DGS Procedure and Delivery Manual is unclear and contradictory, and does not provide guidance that promotes accountability. It has also not been followed consistently on the Duke Ellington Project.

According to the U.S. Government Accountability Office (GAO), government agencies should create a policy and procedure framework that mandates high quality documentation of and constant adherence to required project steps. GAO states, “Agencies should set forth policies that clearly define and require disciplined program management practices for planning and execution.”¹¹⁶ Further, GAO specifically mentions a number of key components of good policy and procedure manuals, noting, “As part of that policy, the focus should be on integrating cost, schedule, and technical performance data so that objective program progress can be measured and deviations from the baseline acted upon quickly.”¹¹⁷

The existing process identified within DGS’s Policies and Procedures Manual is often ambiguous.

Through our analysis, ODCA found that the existing DGS Policy and Procedure Manual contains multiple instances where the procedures are ambiguous or contradict each other, resulting in an absence of a clear, consistent process for team members to follow. Within the initiation phase of the manual there are several instances of ambiguity that might potentially lead to improper project oversight. Regarding project specific checklists, page two of the manual states, “The checklists can be adjusted based on the scope of the project.”¹¹⁸ As written, this language does not provide a clear indication as to which checklist items are mandatory and which are discretionary. While allowing the checklist to be adjusted can and likely does provide flexibility based on the needs of the project, as written the ambiguity does not protect from inappropriate decision-making by the project team or program manager (DC PEP).

In other places, information presented on one page of the manual directly conflicts with information presented later. On page six of the manual, the narrative identifies the issuance of a budget call to agencies requesting them to present their budget request as the first step in the initiation of a project, but the initiation phase checklist on page eleven indicates this is the second step.¹¹⁹ Page seven of the manual notes that “a client communication plan shall be developed for all projects,” but that item does not appear at all on the initiation phase checklist on page eleven.¹²⁰ On page nine of the manual, there are several references to projects with a total value of over or under a “hundred thousand dollars (\$1000.00)” where the numerical value presented does not at all agree with the text, making it impossible to know whether the manual refers to \$100,000 or \$1,000.¹²¹ And on page 12, the manual includes a “Project initiation Form” but contains no reference to this form elsewhere in the manual (including in the narrative discussion of the initiation phase and the phase checklist). There is no clarity on the purpose or use of this form.

¹¹⁶ Government Accountability Office. “GAO Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Capital Program Costs.” March 2009. p. 204. Available at: <http://www.gao.gov/new.items/d093sp.pdf>

¹¹⁷ *Ibid.*

¹¹⁸ DC Department of General Services, Capital Construction Division. “Procedure and Delivery Manual.” District of Columbia Government. June 28, 2013. p. 2.

¹¹⁹ *Ibid.* Pp. 6-11.

¹²⁰ *Ibid.*

¹²¹ *Ibid.* p. 9.

This ambiguity continues throughout the manual, including within the planning phase as well. The tree diagram of all project stages that appears on page 21 includes no explanation and seems to indicate that DGS determines a contract delivery method (e.g. design-build, design-bid-build) prior to the initiation phase of the project.¹²² But according to item 2.9 on the flowchart on page 24, and line item 29 on the checklist found on page 25, DGS actually determines the contract form near the end of the planning phase.¹²³ As such, there is a contradiction between the tree diagram and other sections of the Manual regarding when DGS is to select the contract delivery method. The items on the design phase checklist on page 25 are not coordinated with the major procedure points found on pages 22 and 23, making it difficult to understand the relationship and sequence of events that DGS and its project manager must engage in during project planning.¹²⁴ Finally, procedures 1.1 (the Existing Condition/Operational Review) and 1.7 (the Outreach Plan) do not at all appear on the planning phase checklist on page 25, despite explicit mention that they are required for all projects, raising the possibility that following the checklist may cause a project manager to skip steps that DGS has identified elsewhere as necessary.¹²⁵

The existing project process identified within DGS's Procedure and Delivery Manual has not been followed on the Duke Ellington modernization.

In our review of the Duke Ellington modernization, ODCA compared the verifiable actions and steps taken by DGS on the project with those required by the Procedure and Delivery manual. We found numerous instances where required procedures were modified without explanation or outright not followed.

According to procedure 1.5 during the planning phase of the Procedure Manual:

For large project (sic) [project manager] will acquire the services of A/E consultant to develop cost to complete a renovation or new construction project including but not limited to construction, Professional fees, permit fees, other government regulatory fees, DGS management cost, contingencies, escalation, hazardous material remediation, telecommunication, furniture, fixtures and equipment.¹²⁶

This procedure was not fully followed on Ellington, as DC PEP did not include the above cost categories in the initial project budget or deleted them in later budgets. Figure 5 below shows a comparison of the Duke Ellington budgets over a five year period, with red indicating the exclusion of a required cost category in that particular budget.

¹²² *Ibid.* p. 21.

¹²³ *Ibid.* Pp. 24-25.

¹²⁴ *Ibid.* Pp. 23-25.

¹²⁵ *Ibid.*

¹²⁶ *Ibid.* Pp. 22-23.

Figure 5: Duke Ellington Monthly Project Budget Comparison

Some budget elements required by the Procedure and Delivery Manual are absent.

Date	Apr-11	Apr-12	Apr-13		Apr-14	Apr-15
Budget Source Document	DGS Internal Estimate for FY12 CIP	DGS Internal Estimate for FY13 CIP	DGS Internal Estimate for FY14 CIP	DGS Monthly Budget Update 4/9/13 (Approved Budget)	DGS Monthly Budget Update 4/30/14 (Approved Budget)	DGS Monthly Budget Update 4/30/15 (Current Budget)
Square Feet	167,500	167,500	167,500	201,429	258,072	272,970
Cost per GSF	\$423.88	\$473.73	\$486.77	\$393.82	\$539.40	\$653.83
Budget						
Building	\$39,423,618	\$40,200,000	\$40,200,000	\$60,874,020	\$100,330,967	\$136,980,104
Infill Space		\$10,500,000	\$10,500,000			
Swing Space	\$2,500,000	\$8,000,000	\$9,000,000		\$6,322,839	\$11,600,000
General Conditions	Inc'd Above	Inc'd Above	Inc'd Above			
Design Contingency	\$1,467,327	\$1,967,000	\$1,967,000		\$3,024,929	
Construction Contingency	Inc'd Above	\$1,967,000	\$1,967,000			\$4,868,303
Hazardous Material					\$500,000	
A/E Design Fees	\$4,339,094	\$6,263,400	\$6,363,400	\$4,966,560	\$6,969,169	\$10,044,700
Design Stipends						\$290,000
FF&E	\$2,603,457	\$3,758,040	\$3,818,040	\$4,759,560	\$8,443,610	\$3,885,830
FF&E - Performing Arts Premium	\$1,500,000	\$1,500,000	\$1,500,000			
3rd Party Consultants	\$525,000	\$525,000	\$525,000	\$793,260	\$1,008,310	\$1,200,000
Program Management	\$1,301,728			\$2,379,780		
Public Art						\$500,000
Legal	\$75,000	\$75,000	\$75,000			
Utilities/Tap Fees						\$1,000,000
Permit Fees	\$433,909	\$626,340	\$636,340	\$793,260	\$2,016,619	\$3,000,000
Builder's Risk Insurance	Inc'd Above	\$210,000	\$210,000	\$793,260	\$1,008,310	\$1,338,563
Owner Contingency	\$1,301,728	\$1,879,020	\$1,909,020	\$3,966,300	\$7,058,168	\$3,767,500
Management Contingency						
Escalation	15,325,576	\$1,879,020	\$2,863,530		\$2,520,774	
Rounding	203,562					
Total Budget	\$71,000,000	\$79,349,820	\$81,534,330	\$79,326,000	\$139,203,695	\$178,475,000
Associated CIP	\$71,000,000	\$79,326,000	\$81,482,000	\$81,482,000	\$139,242,000	\$168,358,000
Variance: CIP vs. Budget	\$0	\$23,820	\$52,330	\$2,156,000	\$38,305	(\$10,117,000)

As Figure 5 demonstrates, hazardous materials do not appear until 2014. Program Management (aka DGS management cost) is initially listed, disappears, reappears, then is removed again from more recent budgets. Legal costs appear in the first few budgets as a separate line item, then disappear from later budgets. This treatment of the project is not consistent with the clear budget requirements laid out in the manual.

Another area where DGS and DC PEP did not follow elements of the Procedure and Delivery Manual is with regard to the selection criteria for an Architect-Engineer (A-E). The selection criteria listed in the A-E RFP (Section A.6) does not mention proven experience with designing to a budget.¹²⁷ The DGS Procedure Manual indicates that in Pre-design "The [project manager], using agency and A-E will mutually agree upon...total project budget..."¹²⁸ Despite this implication that the A-E is ultimately responsible to design to a budget per the Manual, it does not appear that the A-E RFP used for the Duke Ellington project required evidence of experience designing to a budget as a criterion for selection. Per Section 2.8.3 of the A-E Contract, "At the conclusion of the Schematic Design Phase, the Owner shall provide the Architect and the Design-Builder with a budget for the Project (such budget, the "Design to

¹²⁷ Department of General Services. "Request for Proposals: Architectural/Engineering Services, Duke Ellington School of the Arts." District of Columbia Government. July 9, 2012. p. 6. Available at:

http://dgs.dc.gov/sites/default/files/dc/sites/dgs/service_content/attachments/duke_ellington-rfp.pdf

¹²⁸ DC Department of General Services, Capital Construction Division. "Procedure and Delivery Manual." District of Columbia Government. June 28, 2013. p. 27.

Budget”).¹²⁹ But, the DGS Procedure Manual again indicates that “The PM, using agency and A/E will mutually agree upon...total project budget...” during the pre-design phase.¹³⁰ Waiting until the end of Schematic Design doesn’t follow the procedures. It is unclear what benefit the District obtained by delaying issuance of a Design to Budget until completion of the Schematic Design phase.

The existing project process identified within DGS’s Procedure and Delivery Manual does not follow industry best practices.

One component of a high quality policies and procedures manual that does not exist within DGS to this day is the requirement that each new project contain a project charter. This is contrary to best practices in the large scale project management field. According to the Project Management Institute (PMI), a project charter formally authorizes the existence of a project and provides authority to apply resources to project activities. While the District’s CIP process currently serves as the vehicle for the Council to formally allocate budget authority to a project, a formal project charter does much more. According to PMI, a project charter “gives a rationale for the project” and provides a detailed description of the goals, costs, time constraints, and business case for the project according to the SMART goals system (SMART stands for specific, measurable, assignable, realistic, and time-related).¹³¹ Such a document sets the framework within which the project will work and as PMI states, “[it] document[s] initial requirements that satisfy the stakeholders’ needs and expectations [and] establishes a partnership between the performing organization and the requesting organization.”¹³²

DGS did not have a project charter or similar document for the Duke Ellington project outlining these so-called SMART goals, and it appears that very little work occurred during the budget cycles from FY 2012 to FY 2015 to determine feasibility, understand project constraints, and to plan for design and construction. Figure 6 below demonstrates that the project spent little on these items between its initial inclusion in the FY 2012 CIP (formulated in April 2011) and FY 2014.

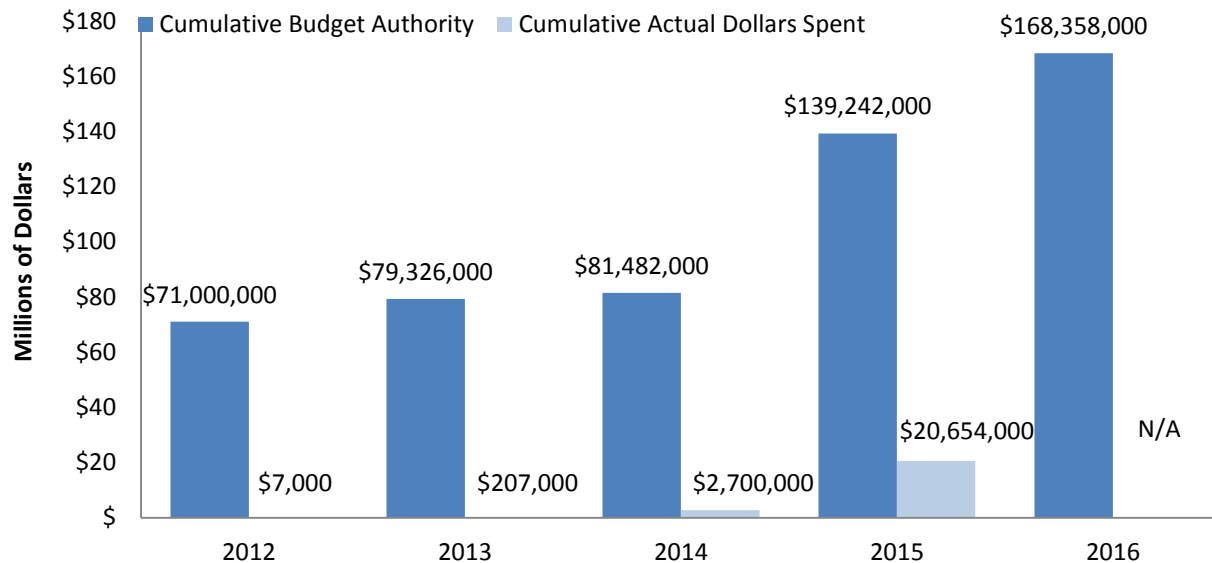
¹²⁹ Department of General Services. “Agreement for Architectural/Engineering Services By and Between District of Columbia Department of General Services and LBA-CGS Joint Venture For the Modernization of Duke Ellington School of the Arts DC-AM-12-AE-0156.” District of Columbia Government. March 20, 2014. p. 9.

¹³⁰ DC Department of General Services, Capital Construction Division. “Procedure and Delivery Manual.” District of Columbia Government. June 28, 2013. p. 27.

¹³¹ Amy Merrick. “Project Charters Can Point You Toward Success.” The Project Management Institute. July 2014. Available at: <https://www.pmi.org/learning/PM-Network/2014/project-charters-point-toward-success.aspx>

¹³² The Project Management Institute. *A Guide to the Project Management Body of Knowledge (PMBOK Guide), Fourth Edition*. 2008. p. 73.

Figure 6: Spending on Duke Ellington Lagged Appropriations
 Budgeted vs. Actual Spending on Duke Ellington by Fiscal Year



Source: Data compiled by ODCA using information from the Duke Ellington project page in the FY 2012 through FY 2016 CIP documents. "Cumulative Budget Authority" represents the approved overall budget authority for the project in the fiscal year it appears. "Cumulative Actual Dollars Spent" shows the total spending that occurred through the fiscal year, as shown on the following year's CIP document.

Between FY 2012 and FY 2014 only \$2.7 million was expended on the Duke Ellington project despite having tens of millions of dollars more in budget authority. The spending patterns on Ellington significantly trailed the projected timing of costs, indicating that feasibility assessments and planning did not occur in a timely manner. This may indicate that DGS did not fully proceed with planning in a timely manner and forced a subsequent accelerated mode, perhaps not allowing for full adherence to the procedures in order to pick up lost time, and resulting in an inefficient execution.

Recommendations:

- 1. The Council should amend D.C. Code Section 38-2803(d) to require greater detail in planning for school modernizations and the Mayor should comply with current and updated CIP requirements.**

The Auditor's July 1, 2015, audit of the school modernization program found that the annual capital submissions for fiscal years 2010 through 2014 did not comply with current D.C. Code requirements, including a "fully funded cost estimate planned for the next six fiscal years" and "schedule of major milestones" for each school designated to receive capital funding.¹³³ High quality planning is essential to ensure that school modernization projects do not exceed the budget or timeline expectations set by the Council. The process followed to date to plan modernizations is not rigorous and does not meet the accountability and transparency goals of the Modernization Act.

The process followed for Ellington and other projects underway currently includes DGS requesting cost per square foot estimates based on generic school projects from its program manager, DC PEP. DGS then presents that information along with a timeline to the Council to obtain preliminary budget authority for each project. DCPS, in conjunction with DGS, develops education specifications, often updating the draft as a project moves forward. DGS also engages an architect to draw up a preliminary design for the structure. After the initial design is complete, DGS submits a new CIP request to the Council for additional project funds, as the original estimates based on cost per square foot do not cover all of the elements required by the educational specifications and the design. Project teams meet with the school community, neighborhood organizations, and regulatory agencies. DGS selects a design-builder to develop the design into a set of construction plans, and again typically asks for additional funding once the design is complete and costs are estimated for all construction materials. Most school modernization projects have dramatic increases in costs as DGS receives construction documents and estimates. Often "value engineering" takes place well after designs have been agreed on in an effort to reduce the escalating project costs. This sequence repeatedly frustrates policymakers as well as the public, fails to control costs, and makes it difficult for the Council to effectively allocate limited public dollars each year.

(The sequence is illustrated in the adjacent PowerPoint page from a community meeting on the modernization of Ben W. Murch Elementary School – indicating that reconciliation of costs typically comes *after* all parties have agreed on a design).

¹³³ D.C. Code § 38-2803(d).



To improve what has been a fractured planning process, we recommend that the Council:

1. Add a statutory provision requiring DCPS to complete education specifications before a school modernization project is presented to DGS and considered for inclusion in the Capital Improvement Program.
 2. Define “full-funded cost estimate” as any and all projected costs over a modernization’s lifespan (not limited to six fiscal years) including necessary swing space. Make clear that the full cost estimate, including all hard and soft costs for the project, is required before a project is included in the CIP and funded.
 3. Add as elements of the annual CIP an explanation for any increase in project funding requested, dates each project milestone has been met, and an explanation for any delay in meeting any project milestone.
- 2. The Mayor should direct DCPS and DGS to conduct all substantial discussions and negotiations involving site selection, educational specifications, and architectural designs for modernizations of DCPS schools in a fully transparent manner so that District taxpayers and community residents may know why decisions are made and who made them.**

A major feature of Council reports on the School Modernization Financing Act of 2006, and also highlighted in ODCA’s July 1, 2015 audit report, was the importance of transparency in decision-making.¹³⁵ We had difficulty determining who made the final decision to keep the Duke Ellington school at its existing Georgetown location rather than moving it to the site of Logan Middle School near Union Station or to the site of the DCPS field a few blocks from the existing school. We were also unable to determine the basis for the decision.

¹³⁴ DC Department of General Services. “Murch Elementary School Modernization Sit Meeting #6.” October 15, 2015.p. 13. Available at: <http://dgs.dc.gov/sites/default/files/dc/sites/dgs/publication/attachments/DCPS%20Murch%20ES%20-%20SIT%206.pdf>

¹³⁵ *Ibid.*



Taxpayers, residents, and parents of DCPS students deserve to know what governmental agencies or individuals are making decisions regarding tens of millions of tax dollars that affect the education of hundreds of District students. They also deserve sufficient justification for those decisions.

We recommend that the Mayor direct DCPS and DGS to ensure that decisions regarding site selection, educational specifications, and

architectural designs, and significant additions or subtractions from the original project scope of work be transparent. As stated in the July 1, 2015, report, we recommend that information including such decisions be publicly available online as part of individual school project descriptions so that parents of DCPS students and interested taxpayers can easily obtain information regarding pivotal determinations in the modernization of their local schools.

3. If the Mayor continues to contract for program management for school modernizations, she should consider directing DGS to select multiple program management firms.

As demonstrated, DC PEP has not met its contractual obligations with regard to the Duke Ellington project and the July 1, 2015 ODCA reported documented additional concerns with the firm's performance.¹³⁶ DC PEP's existing contract is currently in its final option year and terminates at the close of the fiscal year on September 30, 2016.

Today the District selects individual architects and builders for capital projects based on the quality and value of their work, and should have that same choice when it comes to program management firms to oversee new modernization projects. Over time, firms that consistently deliver high quality management can be retained, while those that do not can be replaced.

In addition, using multiple project management firms achieves other good government objectives such as promoting competition to prevent the rise of a monopoly in a given arena. It also offers smaller firms the opportunity to obtain an award on the program and, therefore, grow, and gives small and minority firms the opportunity to gain valuable experience and work with other similarly situated firms. For these reasons we recommend that, the Mayor direct DGS to seek and engage multiple program management firms to oversee the portfolio of school modernization projects.

¹³⁶ Julie Lebowitz, Lilai Gebreselassie, and Markia Yates. The District's School Modernization Program Has Failed to Comply with D. C. Code and Lacks Accountability, Transparency and Basic Financial Management. Office of the District of Columbia Auditor. July 1, 2015.

- 4. The Mayor should require DGS to reform its method of procurement for school modernization to bring budget, community discussion, design, and construction into alignment and avoid the cost escalations and repeated design revisions that have marked Ellington and other projects. The Council should require *substantially complete* designs based on final education specifications before approving construction contracts for school modernizations.**

We recommend that the Administration consider requiring DGS to use the more traditional Design-Bid-Build form of procurement which would mean that the Architect-Engineering firm develops a design, works with the community and regulatory agencies, and completes design documents to the point where the construction procurement is based on a hard dollar bid. Even though the Design-Bid-Build form of procurement also is susceptible to costs that go beyond what might have been estimated by government officials, such overruns are more likely to be the result of owner directed scope changes than poor estimates, because asking firms to bid competitively and offer hard dollar proposals based on substantially completed design should secure some cost discipline. Overall, the form of contract is less important than the District's management of the procurement, which should be based on meeting education specifications and avoiding unnecessary costs.

This recommendation also is consistent with DGS's existing Procedure and Delivery Manual, which states, "[Design-Bid-Build] affords a large degree of control of the design for the owner/using agency and it is a traditional process. [Design-Build] requires the owner/using agency to relinquish much of that design control and trust that the contractor will provide a quality facility on time and in budget."¹³⁷

- 5. The Mayor and Council should direct DCPS to explore additional and more efficient utilization of the renovated Duke Ellington School, by potentially increasing enrollment or opening space to other educational programs.**

In the July 1, 2015 audit, ODCA found that the cost per square foot for modernization projects at District high schools significantly exceeded the 2010 Master Facilities Plan (MFP) standards. Project budgets were expected to fall in the range of \$210-\$255 per square foot. None of the five projects that we reviewed—Eastern, Woodson, Cardozo, Anacostia, and Wilson—were within that range, with cost per square foot amounts ranging between \$259 and \$348.¹³⁸ With Duke Ellington, the costs are even higher. Based on the most recently available information provided by DGS, the current estimated cost per square foot is expected to be \$638.50.¹³⁹

And while we should expect that Duke Ellington's modernization will cost significantly more per square foot given the specialized nature of the school and the required educational components, that doesn't mean that the square foot per student number should also be far higher than comparable schools. The current plan for the school leaves nearly half of the building empty at any given point during the day. Currently, students at Duke Ellington engage in academic study from 8:30 am until 2:00 pm and arts

¹³⁷ DC Department of General Services, Capital Construction Division. "Procedure and Delivery Manual." District of Columbia Government. June 28, 2013.

¹³⁸ *Ibid.*

¹³⁹ This number is based on the project's monthly budget of \$178.2 million in August 2015 and the estimated square footage of 279,524 provided in that same document.

education from 2:00 pm until 5:00 pm.¹⁴⁰ The arts spaces are not generally utilized until 2:00 pm and the standard classrooms are not used in the mid- to late-afternoon. As stated by DCPS in the final draft educational specifications released in October 2012, “This schedule and the unique space and equipment requirements of the arts programs, underutilizes some parts of the building in the early and late hours.”¹⁴¹

We recommend that DCPS work with the Duke Ellington Fund (the 501(c)(3) nonprofit that administers Duke Ellington) to explore options for expanding enrollment or opening portions of the renovated space for appropriate alternative uses in the academic classrooms in the afternoons, or other potential uses.

6. DGS should draft and promulgate a comprehensive policies and procedures manual that governs capital construction projects with clear and specific guidelines. Such a manual should follow nationally recognized best practices in capital construction from sources such as the Federal Acquisition Regulations (FAR), the Government Accountability Office (GAO), the Project Management Institute (PMI), and the Construction Management Association of America (CMAA).

In 2013, DGS promulgated a policies and procedures manual that outlines the steps that each modernization project must go through, but this review has documented shortcomings in the manual and several areas where practices have not mirrored established best practices.

DGS should produce a new policies and procedures manual that outlines clear and logical steps that the agency and its contractors must follow on school modernizations consistent with best practices in capital construction identified by nationally recognized government and industry specialists. In addition, DGS should periodically review that manual and update it as best practices evolve.

¹⁴⁰ Duke Ellington School of the Arts. “Academics.” Accessed February 29, 2016. Available at: <http://www.ellingtonschool.org/academics/>

¹⁴¹ District of Columbia Public Schools. “Educational Specification: Duke Ellington School of the Arts – Final Draft.” District of Columbia Government. October 2012. Pp 6.

Conclusion

If the leadership of D.C. Public Schools and the Department of General Services had presented the D.C. Council with a proposal to spend \$180 million for a new performing arts high school for 600 students at the current historically-designated Georgetown site, it is at least arguable that the Council would have given its informed consent. As the Duke Ellington School of the Arts renovation has developed, however, the total cost has grown from an initial projected \$71 million to \$178 million in the FY 2017 Capital Improvement Program. As this report details, the Council has approved successive capital budgets for Ellington at \$71 million, then \$79 million, \$81 million, \$139 million, \$168 million, and now \$178 million, and counting. The Council has approved each of six capital improvement plans containing the Ellington project in the absence of a comprehensive presentation of total costs, comparisons with other DC schools and comparisons with other performing arts schools around the country.

To be sure, when Ellington is completed it will join the ranks of heralded new District of Columbia high schools – like Dunbar and Wilson and Eastern, each given its own set of superlatives. And there is every reason to believe that Ellington will continue to excel at its goal of graduating young District residents who continue on to acclaimed professional careers in the arts.

As this report points out, elected officials on the Council were not given the opportunity to consider and approve an expenditure of nearly \$200 million for the new performing arts school. The decision on the modernized school's site was not made by the Council, nor was there an informed and open debate on the merits of building at the site of the former Western High School. As has been the case since the current school modernization program was authorized in 2006, the process followed has been devoid of discipline as to cost. Accountability tools built into the law have been abandoned, as noted in The Office of the District of Columbia Auditor's July 1, 2015 report -- most notably the Public School Modernization Advisory Committee, whose District-wide focus would have been particularly useful in approaching decisions on a citywide specialty school like Ellington.

Recommendations offered here, like those offered in last year's audit, seek to bring more accountability and discipline to the school modernization program – not to save money per se, but to help protect the financial health of the school modernization program so that policymakers can complete the large and unfinished task of providing all of the District's public school children with facilities that are conducive to teaching and learning.

Agency Comments

On May 2, 2016, we sent a draft copy of this report to the Department of General Services (DGS) for review and written comment. DGS provided its written comments on May 23, 2016, which are included, in their entirety, with this report.

GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF GENERAL SERVICES



May 23, 2016

Kathleen Patterson, Auditor
Office of the D.C. Auditor
717 14th Street NW 9th Floor
Washington D.C. 20005

Re: FY15 School Modernization Audit (Duke Ellington) – *“The Department of General Services Failed to Provide Information the DC Council Needed to Make Informed Decisions on the Scope and Cost of Modernizing the Duke Ellington School of the Arts”* (the “Draft Report”)

Dear Ms. Patterson:

Thank you for the opportunity for the Department of General Services (DGS) to provide comments to the Draft Report. We value the opportunity to review and improve the District’s implementation of the school modernization program. We also value the opportunity to develop a constructive relationship with the Office of the D.C. Auditor (ODCA) through the execution of timely audit findings and recommendations as mandated by D.C. Official Code §38-2973.05, which requires the Auditor to “prepare an annual report to the public on the use of the capital funds by the District of Columbia Public Schools (DCPS) during the preceding fiscal year.” While the ODCA makes efforts to improve its adherence to its own statutory mandate to provide audits for the preceding fiscal year, DGS, in cooperation with District of Columbia Public Schools (DCPS), has also devoted considerable energy to making improvements to the school modernization program.

DGS and DCPS have already implemented various improvements to the school modernization program to enhance planning, accountability and cost controls. Such improvements have consisted of DCPS leading all planning efforts, stakeholder engagement, and communication, as outlined below. Furthermore, both agencies have employed a methodology in which feasibility studies or concept plans with multiple approaches and associated costs to the proposed school’s modernization are considered earlier in the budget cycle process to inform not only the budget, but to advance the development of the educational specification, and stakeholder engagement as well. The improvements in the process of developing educational specifications, prioritization in the capital improvement planning process and enhancements in the school improvement team engagement process specifically address issues identified within the Draft Report.

Educational Specifications (Ed Specs) – DCPS, with support from DGS, is re-writing the Educational Specifications (Ed Specs). Ed Specs serve as the guiding document and benchmark for future school renovations and new construction projects. The updated baseline Ed Specs will include the threshold programmatic spaces required for instruction and may be modified only for unique needs and existing school program requirements. The updated Ed Specs will be completed in late 2016 and will inform the FY2017-FY2023 CIP and ensure estimates incorporate programmatic spaces discussed in the Ed Specs.

Capital Improvement Plan (CIP) Prioritization – DCPS, with support from DGS, developed a data driven approach to rank and prioritize schools in the CIP. There are 18 schools in the current DCPS portfolio that have not received a significant capital investment (modernization) and were not in the CIP plans for FY16 through FY18 in the FY16-21 CIP. Data was gathered for these 18 schools in four key focus areas and weights were applied based on the overall importance of the category. The categories and weights used in the analysis can be found on the DCPS website (<https://sites.google.com/a/dc.gov/dcps-school-modernizations/home>). The schools were inserted into the CIP based on this prioritization, but the sequencing may have been impacted by swing space availability, District priorities or anticipated cost of projects. The goal of this approach is to provide a fair and transparent methodology for the prioritization and sequencing of projects in the CIP. DCPS will continue to work with DGS and the City Council to improve the prioritization process.

SIT Process – During school year 2015-2016, DCPS took control over the school improvement team (SIT) process. This will provide the community with a clear point of contact and ensure DCPS is driving the decision of modernization projects. DCPS defined the roles and responsibilities of the SIT team and how the SIT will be involved in modernization projects. DGS' focus will be on implementing the modernization projects and providing information for DCPS decision-making and community updates. DCPS continues to add staff resources to improve the SIT process.

Additionally, in February 2016, DGS hired a dedicated Senior Manager (Cluster Leader) to lead the schools' implementation program. This cluster, like other DGS Capital Construction clusters, is fully supported by DGS' internal resources, including the Project Management Office (PMO), the internal quality control/quality assurance program and the Project Turnover Manager. The cluster also has several internal DGS project managers dedicated to the school program.

While we strive to make additional improvements to the modernization program, DGS also values the Auditor's review and welcomes the opportunity for further improvement. Unfortunately, the Draft Report includes several inaccuracies, as outlined below, and clearly demonstrates the ODCA's failure to recognize standard practices within the design and construction industry and the distinction between estimates of incomplete designs and approved project budgets. We have previously shared with the ODCA during our exit discussions these concerns related to accuracy and ODCA's understanding of the construction process and we

provide again as part of our formal response for the purpose of documenting these concerns. The agency's responses to the Auditor's recommendations are as follows:

Auditor Recommendation	DGS Response
1. The Council should amend D.C. Code Section 38-2803(d) to require greater detail in planning for school modernizations as reflected in the annual Capital Improvement Plan, and the Mayor should comply with current and updated CIP requirements. To improve what has been a fractured planning process, we recommend that the Council: 1. Add a statutory provision requiring DCPS to complete education specifications before a school modernization project is presented to DGS and considered for inclusion in the Capital Improvement Program. 2. Define "full-funded cost estimate" as any and all projected costs over a modernizations lifespan (not limited to six fiscal years) including necessary swing space and make clear that the full cost estimate, including all hard and soft costs for the project, is required before a project is included in the CIP and funded. 3. Add as elements of the annual CIP an explanation for any increase in project funding requested, dates each project milestone has been met, and an explanation for any delay in meeting any project milestone.	This recommendation does not include any specific action items for DGS. Although we appreciate and agree that greater planning prior to the capital budgeting process is needed, complete final education specifications before inclusion in the Capital Improvement Program is not practical and not consistent with industry standards. The Auditor's assertion that industry standards dictate a "finalized" educational specification prior to project initiation is incorrect. Although a baseline educational specification is a necessity, DGS operates within an environment that requires that design activities include both continuous dialogue with user groups and exploration of physical, facility-based opportunities and constraints. Both user input and design explorations <i>must</i>, to have any meaning, have the ability to affect project scope. While the Construction Management Association of America (CMAA), as identified by the Auditor, is the most widely known and accepted authority in the U.S. on general matters of construction, and the Project Management Institute (PMI) is a certifying authority for management of ALL types of "projects" (without any specificity to the construction industry, neither of these resources addresses the Educational Specification process, which is unique to the design and construction of K-12 education facilities, as incorrectly suggested by the Auditor. Only the Association for Learning Environments (formerly the Council for Education Facility Planning – International)

	uses the term “Education Specification” or its shorthand, “EdSpec,” and it is the only professional development and certification authority in the K-12 school facility industry. This authority clearly views the EdSpec as a “dynamic” document that evolves along with project development in dialogue with users. To quote its actual documents: <i>“A true educational specification is a dynamic, visionary document reflecting activities that engage students. The educational vision must reflect specific needs within the community so the educational program must grow out of dialogue with all user groups. Every educational specification should be unique to its users.” – CEFPI...”</i> The Auditor’s findings fail to recognize that neither a final EdSpec nor a design may be obtained prior to a project’s initiation, which requires authorization of funds via the Master Facility Planning (MFP) and Capital Improvement Program (CIP) processes – which, in turn, require the identification of some level of estimate, which is not yet informed by either an EdSpec or a design, for inclusion in the CIP. In other words, the findings pose a “chicken and egg” problem in implying that detailed estimates be provided to inform the CIP prior to the EdSpec and design processes, while those processes are required to make the decisions that would inform a solid estimate.
2. The Mayor should direct DCPS and DGS to conduct all substantial discussions and negotiations involving site selection, educational specifications, and architectural designs for modernizations of DCPS schools in a fully transparent manner so that District taxpayers and community residents may know why decisions are made and who made them.	DGS and DCPS agree that transparency within the school modernization program is critical and has implemented operational changes to the process which provide greater clarity regarding roles within the decision-making process, increased access to information through our website and additional opportunities for stakeholder input. DGS and DCPS implemented, starting in November 2015, a new program whereby DCPS is the overall lead on the school modernization

process. This includes all decisions related to the modernization – whether an existing school building will be renovated or whether new construction on the school site is most appropriate, the development of the Education Specifications to guide the program, and what design will ultimately be constructed. This program shift further includes DCPS running the School Improvement Teams (SITs) and modernization-related community meetings (with the exception of a few projects that were well along into construction at the time the process changed, for which DGS retained its lead role, including on the Ellington project).

DCPS is now the lead with respect to the development of Education Specifications, as this is a programmatic document meant to guide the overall planning and construction of each school. DGS is the lead with respect to construction, and provides background material and advice regarding the proposed location of all site construction, including test fits for trailers to be used as swing space, to DCPS, and works with DCPS to bring about the most advantageous design and site location. DGS supports DCPS in its decision-making by providing construction-related information, and further supports DCPS' communications to the school and larger community by meeting regularly with DCPS representatives to discuss school-related projects, and making available the DGS' Project Manager, and at times the Architect/Engineer (A/E) or the Design-Build (D-B), to attend SIT and community meetings. DCPS takes the lead on making determinations about how modernizations move forward with respect to queueing in the Capital Improvements Plan (CIP). They do this with advice from DGS, the lead on facility condition assessments (FCAs) and cost for the programmatically necessary scope of work. DCPS also provides the final design approval and makes decisions including whether changes to designs suggested by stakeholders are acceptable, and what suggested changes

	will <i>not</i> be made, whether due to schedule, budget, programmatic needs, or other metrics. DGS is the lead at the end of the project with respect to delivery/final walk-throughs of the building and turning over the building to DCPS. DGS continues to post meeting minutes, presentations, and ancillary information on dedicated project pages on its website, www.dgs.dc.gov. Additionally, as DCPS has assumed more leadership within the decision-making process, DGS has required more clearly documented directives and determinations as part of the process. The DCPS Chancellor, and ultimately the Mayor, are the final arbiters of school modernization-related decisions. With respect to the Ellington project specifically, DGS, in coordination with DCPS, continues to lead the established SIT and provides subject matter expert support at SIT and community meetings.
3. If the Mayor continues to contract for program management for school modernizations, she should consider directing DGS to select multiple program management firms.	DGS agrees with this recommendation. As previously proposed during our testimony before Council, DGS will select multiple program / project management consulting firms to support the oversight of the school modernization program / agency portfolio upon expiration of the existing contract and procurement of services this upcoming Fall 2016.
4. The Mayor should require DGS to reform its method of procurement for school modernization to bring budget, community discussion, design, and construction into alignment and avoid the cost escalations and repeated design revisions that have marked Ellington and other projects. The Council should require <i>substantially complete</i> designs based on final education specifications before approving construction contracts for school modernizations	DGS agrees with the benefits of establishing cost parameters and determining project feasibility early within the process. Although the Auditor suggests Design-Bid-Build (D-B-B) as the most appropriate project delivery method to avoid cost escalations, schedule is also a critical factor to the District in determining the most appropriate method. The District would need to determine that the benefits of D-B-B exceed the advantages achieved through its current procurement

	method, as there are inherent advantages and dis-advantages with all project delivery methods. Although the Auditor suggests otherwise, the contracts do have substantially complete designs prior to approval of construction contracts establishing the target guaranteed maximum price (GMP). Prior to submission of the target GMP contract, design development drawings are 100% complete and EdSpecs are 95% complete. Builders have estimated the construction costs internally, as well as received subcontractor input. Detailed cost estimates support the GMP, however, as provided previously, the EdSpec and the design continues to evolve based upon existing program needs, changing DCPS needs and other unique needs of the specific school. Based upon prior feedback from the Auditor, DGS has taken steps to assess project feasibility earlier as one means of controlling project costs. For example, DGS has implemented the practice of now hiring an architect early within the budget process to obtain a feasibility study and to establish several concept design approaches, with accompanying cost estimates. Although some of the same challenges still exist, this practice allows the agency to address feasibility issues prior to releasing the design to the community, therefore managing community expectations and costs.
5. The Mayor and Council should direct DCPS to explore additional and more efficient utilization of the renovated Duke Ellington School, by potentially increasing enrollment or opening space to other educational programs.	This recommendation does not include any specific action items for DGS. DGS will continue to support DCPS in its determination of proper enrollment levels or educational programming to DCPS, as the lead agency in any such determinations. This recommendation was forwarded to the Deputy Mayor for Education and is under consideration.

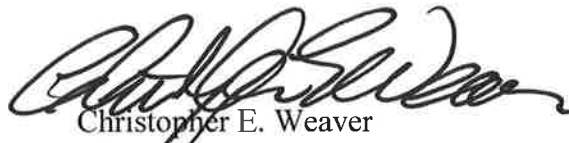
6. DGS should draft and promulgate a comprehensive policies and procedures manual that governs capital construction projects with clear and specific guidelines. Such a manual should follow nationally recognized best practices in capital construction from sources such as the Federal Acquisition Regulations (FAR), the Government Accountability Office (GAO), the Project Management Institute (PMI), and the Construction Management Association of America (CMAA).

DGS agrees with this recommendation and is currently in the process of updating its comprehensive policies and procedures manual to govern capital construction projects with clear and specific guidelines. The project manual will incorporate construction industry best practices and industry standards, including CMAA guidelines. DGS is a member of CMAA and implements activities in accordance with their guidelines. We anticipate updating the policies and procedures manual by 2nd quarter FY2017

Again, DGS and DCPS recognize the continuing need for improvement within the school modernization program and both agencies are taking affirmative steps to make improvements to the existing program, as highlighted above.

Please do not hesitate to contact me at 202.727.2800 if you have questions or require additional information.

Sincerely,



Christopher E. Weaver
Director

Cc: Betsy Cavendish, EOM
Jonathan Kayne, DGS
Camille Sabbakhan, DGS
Jeff Bonvechio, DGS
Dr. Nathaniel Beers, DCPS

Auditor's Response to Agency Comments

The Office of the District of Columbia Auditor (ODCA) thanks the Department of General Services (DGS) for its comments, and notes DGS concurs with several of our recommendations, including operational changes that place more responsibility with DCPS which may contribute to greater transparency; plans to select multiple program managers; and plans to update the DGS policies and procedures manual. We also note additional changes in the school modernization process that offer the potential for clearer accountability, including drafting new education specifications, greater emphasis on planning including feasibility studies, and significant enhancements in oversight capacity within DGS.

In responding to our recommendation that the administration consider the Design-Bid-Build method of procurement, with substantially completed design prior to selecting a construction firm, DGS states that today “contracts do have substantially complete designs prior to approval of construction contracts establishing the target guaranteed maximum price” (GMP). This begs the question of actual timing. In the case of Ellington, the contractor was selected in June, 2014. Demolition began in spring 2015. The “target GMP” of \$154 million was presented to the Council as a change order, but not until June 2015.¹⁴² The same contract document that put the “target GMP” at \$154 million noted that “DGS has instructed GCS/SIGAL to assume a total project budget of \$178 million which would require an additional \$9.9 million in out-year funding.” The point of our recommendation that alternative methods of procurement be considered was to seek greater discipline on costs by requiring nearly complete designs before competitively bidding on actual construction. As of the date of publication, the final GMP has not been presented to the Council.

Finally, the DGS response correctly notes that as the District's capital planning proceeds today, there is no funding available for planning or design until a project has preliminary approval. We hope to delve into this sequence more fully in the future, based on practices in other jurisdictions in which funding is available for planning and design prior to a project being approved for construction.

¹⁴² Letter from the Honorable Muriel Bowser, Mayor of the District of Columbia to Council Chairman, Phil Mendelson, “District of Columbia Department of General Services Change Order No. 002R Contract for Design-Build Services – Duke Ellington School of the Arts (DCAM-14-CS-0098),” June 25, 2015. Available at: <http://lirms.dccouncil.us/Download/34082/CA21-0129-Introduction.pdf>

GLOSSARY OF ACRONYMS AND ABBREVIATIONS USED IN THIS REPORT

A-E:	Architect/Engineer
Builder:	General contractor hired to execute construction. Sometimes referred to as the Design-Builder or D-B because they ultimately assumed the design responsibilities of the A/E
CBT:	Capital Budget Team
CIP:	Capital Improvement Plan
CMAA:	Construction Management Association of America
Council:	Council of the District of Columbia
D-B:	Design-Build
D-B-B:	Design-Bid-Build
DBIA:	Design Build Institute of America
DCPS:	District of Columbia Public Schools
DCMR:	District of Columbia Municipal Regulations
DCPEP:	DC Partners for the Revitalization of Education Projects (A partnership of McKissack & McKissack, and Brailsford & Dunlavy)
DGS:	Department of General Services
Duke Ellington:	Duke Ellington School of the Arts
District:	District of Columbia
Ed Spec:	Educational Specification
Ellington:	Duke Ellington School for the Performing Arts
FAR:	Federal Acquisition Regulations
FY:	Fiscal Year
GAO:	United States Government Accountability Office
GCS-Sigal:	The joint venture general contractor for Duke Ellington
GMP:	Guaranteed Maximum Price

LBA/CGS:	The joint venture of Lance Bailey Associates and CGS awarded the architectural and engineering design contract for Ellington
MFP:	District's Master Facilities Plan
Modernization Act:	District of Columbia School Modernization Financing Act of 2006
OBP:	Chief Financial Officer's Office of Budget and Planning
OCFO:	Office of the Chief Financial Officer
OCTO:	Office of the Chief Technology Officer
ODCA:	Office of DC Auditor
OPEFM:	Office of Public Education Facilities Modernization
PERAA:	District of Columbia Public Education Reform Amendment Act of 2007
PMBOK:	Project Management Body of Knowledge
PMI:	Project Management Institute
RFP:	Request for Proposal
SIT:	School Improvement Team
URS:	Universal Research Services

Appendix A: DGS Explanation of Ellington Cost Drivers

ODCA AUDIT
DUKE ELLINGTON SCHOOL OF THE ARTS
ITEM NO. 73 RESPONSE

Project: Duke Ellington School of the Performing Arts

ODCA Request #73 - Provide detailed line item explanation substantiating the difference in building construction costs

7/31/14 BUDGET ESTIMATE BASED ON SCHEMATIC DESIGN (SD) DOCUMENTS		9/24/14 BUDGET ESTIMATE BASED ON DESIGN DEVELOPMENT (DD) DOCUMENTS		SF Difference
1. Estimate Developed by AE Cost Estimator 2. Basis of Estimate - Schematic Design / 25-30% Complete Design Documents		1. Estimate Developed by the Builder with market input 2. Basis of Estimate - 100% Design Development Design Documents / 50% Complete Design Documents		
3. Building Square Footage (SF)	280,000 SF	3. Building Square Footage (SF)	297,000 SF	17,000 SF Additional square footage due to more defined program

DIVISION 1				Difference	Comments
General Requirements	\$ -	Exploratory Work	\$ 50,000		
Existing Conditions - included only \$500K allowance for hazmat abatement	\$ 3,033,750	HazMat Abatement & Demo	\$ 5,543,000		The DD estimate was informed by a completed environmental remediation report. In contrast, the SD estimate assumed an allowance of only \$500K for remediation.
Excluded		Utility Permits/Fees/Connections	\$ 1,500,000		Amount not included in SD estimate, as this isn't technically a hard cost - these fees are paid directly by Owner.
Excluded		Temp Facilities and Controls	\$ 4,821,000		The DD estimate was informed by the builder, who is responsible for costs associated with this scope and will be at risk.
Excluded		Project Documentation and Scheduling	\$ 1,745,000		
Excluded		Hoisting, Cleanup & Misc. Items	\$ 6,700,000		The SD estimate assumed that these costs were to be carried with the subcontractors and various trades. The builder is responsible for this scope and included costs in the DD estimate.
DIVISION 1 TOTAL	\$ 3,033,750		\$ 20,359,000	\$ 17,325,250	
DIVISION 2					
DIVISION 2 TOTAL	\$ -		\$ -	\$ -	
DIVISION 3					
Concrete	\$ 7,596,017	CIP Concrete	\$ 7,150,000		
		Precast Risers at Auditorium	\$ 251,000		
		GFRC	\$ 369,000		
		Gypsum Cement Underlayment	\$ 450,000		
DIVISION 3 TOTAL	\$ 7,596,017		\$ 8,220,000	\$ 623,983	Assumptions made (SD) versus a more developed design (DD)
DIVISION 4					
Masonry	\$ 1,332,728	Masonry Restoration	\$ 1,000,000		
		Masonry	\$ 1,566,000		
DIVISION 4 TOTAL	\$ 1,332,728		\$ 2,566,000	\$ 1,233,272	Assumptions made (SD) versus a more developed design (DD)

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DIVISION 5					
Metals	\$ 5,605,575	Structural Steel & Misc. Metals	\$ 12,214,000		
		Ornamental Metals	\$ -		
DIVISION 5 TOTAL	\$ 5,605,575		\$ 12,214,000	\$ 6,608,425	Assumptions made (SD) versus a more developed design (DD)
DIVISION 6					
Wood, Plastics & Composites	\$ 855,801	Rough Carpentry	\$ 432,000		
		Millwork and Cabinetry	\$ 411,000		
DIVISION 6 TOTAL	\$ 855,801		\$ 843,000	\$ (12,801)	
DIVISION 7					
Thermal/Moisture Protection	\$ 4,386,392	Restoration of Exterior Trim	\$ 250,000		
		Waterproofing	\$ 479,000		
		Roofing	\$ 2,688,000		
		Sprayed & Intumescent FP	\$ 1,334,000		
		Sprayed Foam Insulation	\$ 252,000		
		Air Barrier	\$ 266,000		
		Traffic Coating	\$ 175,000		
		Caulking & Sealants	\$ 250,000		
		Expansion Assemblies	\$ 75,000		
DIVISION 7 TOTAL	\$ 4,386,392		\$ 5,769,000	\$ 1,382,608	Assumptions made (SD) versus a more developed design (DD)
DIVISION 8					
Openings	\$ 11,427,023	D/F/H Material	\$ 2,625,000		
		D/F/H Install	\$ 350,000		
		Access Doors	\$ 25,000		
		Overhead Doors	\$ 70,000		
		Glass/glazing, metal panels	\$ 7,099,000		
		Glass railings	\$ 547,000		
		Skylights	\$ 1,532,000		
		Louvers	\$ 50,000		
DIVISION 8 TOTAL	\$ 11,427,023		\$ 12,298,000	\$ 870,977	Assumptions made (SD) versus a more developed design (DD)

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DIVISION 9					
Finishes	\$ 14,646,521	GWB & Acoustic	\$ 3,789,000		
		Restoration of interior finishes	\$ 100,000		
		Acoustic treatment	\$ 2,500,000		Substantial enhanced acoustical requirements
		Flooring	\$ 4,372,000		
		Tile	\$ 844,000		
		Special wall finishes	\$ 6,382,000		Complex design elements reflective in DDs
		Painting	\$ 987,000		
DIVISION 9 TOTAL	\$ 14,646,521		\$ 18,974,000	\$ 4,327,479	Assumptions made (SD) versus a more developed design (DD)
DIVISION 10-12					
Specialties	\$ 953,217	Specialties, equipment, furnishings	\$ 2,824,000		Some elements typically carried in soft costs
Equipment	\$ 12,397,905	FF&E/Cabinetry & millwork	\$ 3,500,000		A/V equipment in SD estimate included with Div 26-28 in DD estimate, see below
Furnishings	\$ 156,783				
DIVISION 10-12 TOTAL	\$ 13,507,905		\$ 6,324,000	\$ (7,183,905)	Assumptions made (SD) versus a more developed design (DD)
DIVISION 14					
Elevators	\$ 1,065,000	Elevators	\$ 675,000		
DIVISION 14 TOTAL	\$ 1,065,000		\$ 675,000	\$ (390,000)	
DIVISION 22-23					
Fire Suppression	\$ 1,320,302	Fire sprinklers	\$ 1,485,000		
Plumbing	\$ 3,977,732	Plumbing and HVAC	\$ 15,980,000		
HVAC	\$ 14,248,642				
DIVISION 22-23 TOTAL	\$ 19,546,676		\$ 17,465,000	\$ (2,081,676)	
DIVISION 26-28					
Electrical	\$ 8,962,392	Electrical/Low voltage	\$ 14,486,000		Assumptions made (SD) versus a more developed design (DD)
-	\$ -	Theatre/AV/Rigging systems	\$ 9,800,000		A/V equipment in DD estimate included with Div 10-12 in SD estimate, see above
DIVISION 26-28 TOTAL	\$ 8,962,392		\$ 24,286,000	\$ 15,323,608	

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DIVISION 31					
Earthwork	\$ 1,838,420	Bracing, Underpinning, S&S	\$ 1,866,000		Very complex construction methodology for below grade spaces - underground parking, storage, etc.
		Earthwork	\$ 3,153,000		Very complex construction methodology for below grade spaces - underground parking, storage, etc.
		Auger Cast Piles	\$ 2,145,000		
DIVISION 31 TOTAL	\$ 1,838,420		\$ 7,164,000	\$ 5,325,580	Assumptions made (SD) versus a more developed design (DD)
DIVISION 32					
Exterior Improvements	\$ 2,031,480	Site Concrete & Pavers	\$ 1,457,000		
		Asphalt Paving	\$ 280,000		
		Site Specialties & Misc.	\$ 839,000		
		Landscaping	\$ 550,000		
DIVISION 32 TOTAL	\$ 2,031,480		\$ 3,126,000	\$ 1,094,520	Assumptions made (SD) versus a more developed design (DD)
DIVISION 33					
Site Utilities	\$ 853,274	Geothermal Well System	\$ 3,970,000		Geothermal not included in SD estimate
		Wet Utilities	\$ 1,108,000		
		Dry Utilities	\$ 225,000		
DIVISION 33 TOTAL	\$ 853,274		\$ 5,303,000	\$ 4,449,726	Assumptions made (SD) versus a more developed design (DD)
DIRECT COSTS	\$ 96,688,954		\$ 145,586,000	\$ 48,897,046	

GENERAL NOTES		
1. The budget estimate generated for the Schematic Design package was based on drawings that were 25%-30% complete.	1. The budget estimate generated for the Design Development package was based on drawings that were 50% complete.	
2. The approximate project square footage in the Schematic Design drawings package was 280,000 SF.	2. The approximate project square footage in the Design Development package was 297,000 SF.	
3. The following items were excluded from the Schematic Design package:	3. The Design Development package included several items that were excluded from the Schematic Design package, including but not limited to:	
Fees for Architect and Engineering services	Fees for Architect and Engineering design assist services	
Phasing of construction, overtime, change order contingency	Hazardous material abatement	

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3. Building Square Footage (SF)	280,000 SF	3. Building Square Footage (SF)	297,000 SF	17,000 SF Additional square footage due to more defined program

Temporary facilities/swing space	Utility fees, use and connection charges	
Residential appliances	Temporary facilities and controls	
Waste compactors	Equipment rental, tower cranes, and material hoisting	
Artwork		
Removal of underground storage tanks		
Photovoltaic installation		
Irrigation		

Project Division	Schematic Design Estimate	Design Development Estimate	Difference	Percent Change	Exclusions	Estimating	Scope Change	Explanation
1	\$3,033,750	\$20,359,000	\$17,325,250	571%	\$14,816,000	\$2,509,250		Several elements, including utility permits/fees, temp facilities, project documentation and scheduling, and cleanup and misc. items were originally excluded from the total cost estimate.
3	\$7,596,017	\$8,220,000	\$623,983	8%		\$623,983		Add'l items needed due to more developed design, including precast risers in auditorium and gypsum cement underlayment
4	\$1,332,728	\$2,566,000	\$1,233,272	93%		\$1,233,272		Add'l masonry identified in more developed design
5	\$5,605,575	\$12,214,000	\$6,608,425	118%		\$6,608,425		Add'l structural steel identified in more developed design
6	\$855,801	\$843,000	-\$12,801	-1%		-\$12,801		Small savings identified in more developed design
7	\$4,386,392	\$5,769,000	\$1,382,608	32%		\$1,382,608		Add'l thermal/moisture protection in more developed design
8	\$11,427,023	\$12,298,000	\$870,977	8%		\$870,977		Add'l doors and railings identified in more developed design
9	\$14,646,521	\$18,974,000	\$4,327,479	30%		\$1,827,479	\$2,500,000	Additional finish items identified in more developed design, and scope addition to add acoustic treatment to some rooms
11 - 12	\$13,507,905	\$6,324,000	-\$7,183,905	-53%		\$2,616,095	-\$9,800,000	Additional special finishes and furnishings identified in more developed design, A/V equipment for theater moved to Div. 28
14	\$1,065,000	\$675,000	-\$390,000	-37%		-\$390,000		Small savings identified in elevators in more developed design
22 - 23	\$19,546,676	\$17,465,000	-\$2,081,676	-11%		-\$2,081,676		Savings identified in plumbing and HVAC in more developed design
26 - 28	\$8,962,392	\$24,286,000	\$15,323,608	171%		\$5,523,608	\$9,800,000	Add'l Electrical work identified in more developed design, and \$9.8 million of theater A/V equipment moved from Div. 11-12
31	\$1,838,420	\$7,164,000	\$5,325,580	290%		\$5,325,580		Add'l earthwork and bracing identified in more developed design
32	\$2,031,480	\$3,126,000	\$1,094,520	54%		\$1,094,520		Add'l landscaping identified in more developed design
33	\$853,274	\$5,303,000	\$4,449,726	521%		\$479,726	\$3,970,000	Installation of geothermal wells not included in original design
Total	\$96,688,954	\$145,586,000	\$48,897,046	51%	\$14,816,000	\$27,611,046	\$6,470,000	

Total SF	280,000	297,000	17,000	6%
\$/SF	345.32	490.19	144.87	42%