ISSUED OCTOBER **2025**

DISTRICT OF COLUMBIA

Long-Range Capital Financial Plan Report

History and Background

Produced by the Office of the Chief Financial Officer

GOVERNMENT OF THE
DISTRICT OF COLUMBIA

PART II: HISTORY AND BACKGROUND

1. Purpose of the Report

The 2025 Infrastructure Report Card by the American Society of Civil Engineers (ASCE) assigns the U.S. an overall, countrywide grade of C, up from C- previously. This reflects modest improvements driven by recent federal investments such as the Infrastructure Investment and Jobs Act (IIJA). The Report also highlights a persistent $3.7 trillion investment gap over the next decade. Eight of the 18 infrastructure categories saw grade increases including ports (B), broadband (C+), and bridges (C). However, critical sectors like wastewater & stormwater, roads, energy and schools remain in the D range with 2024-2033 Funding gaps of $690 billion, $684 billion, $578 billion and $429 billion respectively, underscoring the urgency of sustained funding. The report emphasizes that aging infrastructure, climate-related vulnerabilities, and data deficiencies continue to hinder progress, and warns that reverting to pre-2021 funding levels could result in $5 trillion in lost GDP and 344,000 jobs lost by 2033.

The District increased its Capital Funding Budget from $6.30 billion in FY2016 to $10.71 billion in FY2025, an increase of 70%. The capital has spent considerable amounts in the last decade to renew its aging infrastructure, consequently earned an improved overall infrastructure grade by the ASCE and made the key decision to prioritize the issue of data deficiencies. As part of the Fiscal Year 2015 Budget Support Act, the Council of the District of Columbia included a requirement for the Office of the Chief Financial Officer (OCFO) to develop a replacement schedule for capital assets and report on its status in October of each year. This report meets this requirement by reporting on the development of a Long-Range Capital Financial Plan for the District of Columbia that includes capital asset replacement needs. This report also satisfies an initiative included in the OCFO's strategic plan which called for the development of a long-range capital financing plan for the District. Therefore, the legislative requirement introduced by the Council coincided with, and is complementary to, the necessary work in support of the OCFO's strategic initiative that had already begun. In addition, this report serves as an update on the progress of the Capital Asset Replacement Scheduling System (CARSS), which includes an asset registry of all District-owned assets and detailed information on the condition of those assets.

This report is intended to assist the Mayor, Council, other policymakers, and the public in understanding the size and scope of the District's capital infrastructure funding gap during the current Capital Improvement Plan (CIP) period and beyond, as well as to provide a funding solution through the development of a long-range capital financial plan. The development of CARSS allows the District to have a truly data-driven and transparent CIP process that informs policymakers of the true costs of maintaining the District's current assets and the costs of deferring maintenance, and thus, supports better decision making. The Long-Range Capital Financial Plan provides a roadmap to address all identified capital needs that the District cannot afford during the CIP period within a reasonable timeframe.

This update to the Long-Range Capital Financial Plan report assumes that the District commits to borrowing up to its statutory maximum level of 12% of general fund expenses, as well as commits to increasing pay-as-you-go (or cash) funding for capital to a level averaging 4.2% of general fund expenses, to fund all identified deferred maintenance and currently identified, new capital needs.

2. CARSS: The District's Approach to Asset Management

In the attempt to develop a better understanding of the costs of maintaining the District's critical capital infrastructure, a comprehensive asset management planning system had to be developed for all the District's assets. This was accomplished through the development of the Capital Asset Replacement Scheduling System, or CARSS. In developing CARSS, the District applied many of the key concepts and fundamentals of ISO 55000, which is the international standard for asset management, as well as concepts outlined in a 2015 report from the Institute of Asset Management (IAM) titled, Asset Management – an Anatomy (version 3). While the District is not seeking, at this time, to have CARSS certified as ISO 55000 compliant, the various personnel involved with CARSS, including the CARSS project manager, have been formally trained, tested, and certified as ISO 55000 professionals. The team involved with managing the CARSS program continues to use the ISO 55000 and IAM concepts and principles as guidelines as it further refines, and continues to improve the management of the District's assets.

In determining how to go about structuring its asset management system and understanding how to identify, and ultimately fund, its infrastructure funding gap, the District set out to answer four fundamental questions:

1. *What assets does the District own?*
2. *What is the condition of those assets?*
3. *How should the District prioritize its capital needs?*
4. *How much funding is available to address those needs?*

CARSS addresses the first three questions and identifies the capital funding gap during the 6-year CIP period. A separate long-range financial modeling tool is used to address the fourth question and identify a solution to fund the identified gap over the shortest amount of time possible.

Step 1: What Assets Does the District Own?

The first, and possibly most critical, step the District took in beginning this process was to establish a centralized database, or asset registry, of all District-owned assets. Given the extremely large number of assets the District owns, inventorying them all at once would have been impossible. Therefore, a decision was made to proceed with a more methodical approach, and to first develop a proof-of-concept model involving a few discreet asset types to test the validity of building a centralized, enterprise-wide asset database. After the successful completion of the proof of concept, the District began building out a comprehensive asset registry by adding the assets of all District agencies, as well as those of related component units that manage their assets separately. This process took several years, but as of the publication of this report, the District has 100% of its assets inventoried in CARSS. In fact, enhancements have been made to the asset registry in CARSS since the 2018 report, whereby existing assets have been "broken down" into more granular component units and sub-systems which can now be tracked separately, thereby substantially increasing the overall asset count in CARSS. These enhancements will be discussed in greater detail later in this report, as well as in *Appendix A* of the report.

Step 2: What are the Conditions of the District's Assets?

The next phase in developing a comprehensive asset management system was a thorough understanding of the condition of all the District's assets. Initially, certain assets, such as school facilities recently built, certain road segments and fleet assets, had current condition and maintenance data available. However, many of the District's assets did not have that detailed level of condition assessment data. Therefore, the OCFO has been working with the District's Department of General Services (DGS) and other relevant agencies to complete detailed facility condition assessments (FCAs) on all municipal buildings, as well as other assets. These condition assessments were expected to be completed in fiscal year 2020, however the Covid-19 pandemic, and other factors, have delayed their completion.

DGS and their contractor have made significant progress in performing FCAs on District-owned facilities. As an example, during fiscal years 2022, 2023 and 2024, 191 FCAs were completed equating to almost 19 million square feet of District-owned facilities. The goal of DGS is to perform FCAs on each District-owned facility at least once every three to five years. To date, approximately 76% of District-owned facilities have been assessed at least once. The OCFO continues to engage with DGS to complete these assessments as soon as possible. In the intervening time, certain assumptions were made on the condition of assets based on industry standards on the useful life of assets, as well as any relevant maintenance data that existed.

The combination of a detailed asset inventory and condition assessments of assets has allowed the District to have a much more precise idea of the costs to maintain or replace its critical capital infrastructure. For more detailed information about the development of the asset registry and condition assessments, please see the discussion on the Approach to Developing CARSS in *Appendix A* of this report.

Step 3: Prioritization of Capital Needs

The OCFO worked closely with the Executive Office of the Mayor (EOM) to build a methodology to score, rank and prioritize all capital projects, to build a more data-driven approach to asset maintenance. Capital projects were classified into one of four asset types: 1) horizontal infrastructure, 2) vertical infrastructure, 3) fleet, and 4) information technology and equipment. Projects were then further grouped as either capital maintenance projects (deferred maintenance) or new capital projects. A scoring methodology was then established within CARSS based on several different elements and criteria that coincided with policy priorities of the EOM. Those scoring criteria were then weighted to ensure that all capital projects could be fairly and objectively compared, scored, and ranked across all different asset types. Using these scoring criteria, the District's Capital Budget Team (CBT) and relevant subject matter experts spent several weeks individually scoring each capital project. The scores were reviewed several times to assess consistency and underlying logic and to ensure the process was done as objectively as possible. The final criteria and scores were then applied to the CARSS model, which in turn created a project ranking. This ranking largely determined the capital projects that were included in the 6-year CIP. For more information on the classification and scoring of capital projects please see *Appendix B*, and for more discussion of the prioritization of capital projects, please see *Appendix C* of this report.

Step 4: Funding Solution

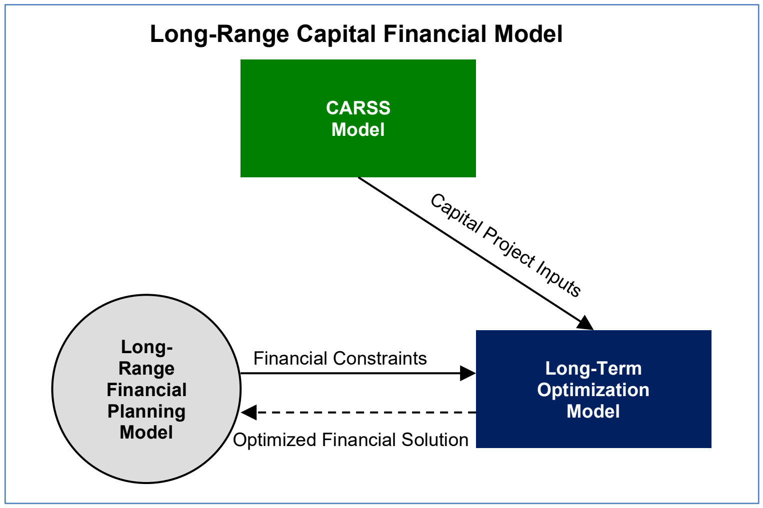
Finally, the OCFO created a separate long-term capital financial plan model that incorporated the District's outstanding debt, along with anticipated future borrowings, all while remaining compliant with the District's federal and local statutory debt limitations. The model further incorporated certain levels of paygo funding based on legislation enacted as part of the FY 2018 Budget Support Act, as well as all other potential sources of funding including grants and other federal funding. This model determined the amount of available funding during the current CIP period that was available to address the capital funding priorities identified in CARSS. In addition, the model identified available funding outside of the current CIP to address unmet capital needs in the shortest possible time outside of the current CIP. More information is provided on the development of the Long-Range Capital Financial Plan model later in this report, as well as in *Appendix D* of this report.

3. Developing Long-Term Funding Solutions

To properly maintain the value and functionality of existing capital assets, and to minimize life-cycle costs, the establishment of a time frame for 'catching up' on deferred maintenance is a best practice of any long-range capital financial plan. To address this complex financing challenge over the shortest time, while remaining within the various constraints imposed by the District's borrowing limits, a financial planning model was developed. This model assists the District in identifying financial strategies to fund the identified capital needs gap in the earliest year possible given various constraints.

The long-range capital financial model is a combination of three discreet models that work together to identify the optimal financial result. The long-range capital financial model is comprised of CARSS, a Long-Range Financial Planning model, and a Long-Term Optimization model. A diagram of how the long-range capital financial model works is shown on the right. A more detailed description of the model, and its various components and assumptions can be found in *Appendix D*.

Figure 7



CARSS was used to prioritize, score, and rank all the District's various capital projects. Then, under certain capital budget constraints and with a specific priority ranking assigned to each project, CARSS determines which projects can be funded in the CIP each year, and which projects will not receive funding (due to their lower priority ranking). The unfunded capital projects are then imported into the Long-Term Optimization model, along with certain debt and resource assumptions from the Long-Range Financial Planning model, to solve for the optimal solution to finance the unfunded capital gap as soon as possible. The financing information from the Long-Term Optimization model is then exported back into the Long-Range Financial Planning model to present a complete long-term capital financing plan for the District over the 15-year forecast period.

The model also allows the District to optimize and project the maximum amount of debt that can be issued in each fiscal year (to stay under the 12% debt service cap), while simultaneously determining the earliest possible fully funded year of all unfunded capital projects. The District will also be able to quantify the amount of paygo, federal funding, or other revenues needed to address the entire backlog of unfunded capital needs over various time periods depending upon various constraints, most notably on the amount of paygo dedicated to capital.

A detailed description of the methodology used to classify and score the various capital projects, along with the scoring criteria, can be found in *Appendix B*. In addition, a detailed description of how projects were prioritized in CARSS can be found in *Appendix C*.

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