Prior Year Performance Report

Fiscal Year 2018-19

City Budget Office

Maintaining the City's Critical Infrastructure

The City Budget Office (CBO) tracks citywide performance measures that identify asset condition and infrastructure funding gaps as indicators of financial and service level resiliency. These measures paint a stark picture of the challenge still at hand:

- The City's *annual repair, rehabilitation, and replacement funding gap* has continued to increase over the past several years, and now stands at $427.8 million. The goal of eliminating the gap by 2025 is likely unattainable unless the City Council continues to make even more significant investments in infrastructure maintenance over the next ten years.
- The latest available data show that approximately 69% of the City's assets were *in fair or better condition* at the end of calendar year 2018, down from a high of 76% in 2013. The worsening of asset condition is driven by inadequate funding for asset maintenance, increasing demand on our assets, regulatory changes, and more accurate assessments of asset condition and needs.

The need for increased reinvestment in infrastructure is not just an issue in the City of Portland—this is a serious and growing issue at the state and national level. As a City, we have made progress in recent years in boosting reinvestment in our asset base. For example, voters have approved funding for maintaining critical assets through the Parks General Obligation Bond and the Fixing Our Streets gas tax. Build Portland was announced as part of the FY 2017-18 budget with the expectation to fund $600 million for the City's infrastructure maintenance and replacement needs over the next 20 years. The City approved $49 million for seven capital improvement projects in March 2018 in the first tranche of the projects selected.

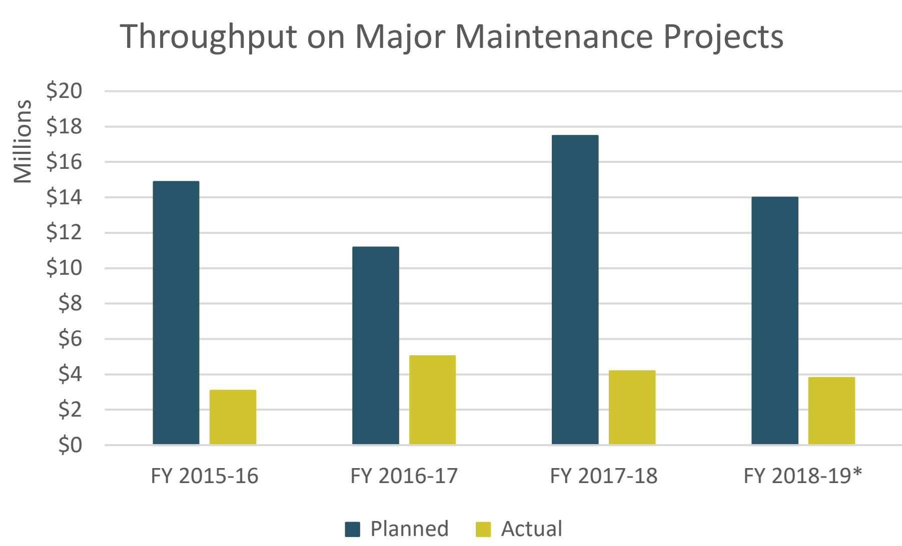
In addition, the Bureau of Revenue and Financial Services in partnership with CBO updated the City's financial and capital planning policies with the goal of highlighting and facilitating solutions to medium- and long-term asset financing needs. Finally, the Citywide Asset Managers Group (CAMG) meets regularly and continues to look for ways to improve asset maintenance practices and opportunities. During FY 2018-19, a new Principal Management Analyst housed at CBO helped facilitate these conversations. Working with groups including the CAMG, CBO analysts, and bureau finance managers, this analyst compiled and shared internal and external data to spur discussion about a more comprehensive and shared approach to asset management decision-making across the City. CBO's recommendations are included in the "Citywide Asset Management Strategies" section below.

It is important to note that different capital-owning bureaus are experiencing distinct challenges in achieving their major maintenance and asset management goals. While insufficient resources are a factor impeding progress toward major maintenance goals in several bureaus, some bureaus' most immediate challenge is operational or informational in nature. This report provides analysis and recommendations for some of the City's capital-owning bureaus in the subsections below.

City's Fleet and Building Facilities: Improving Delivery to Meet Operational Needs

The Division of Asset Management within the Office of Management & Finance has responsibility and oversight for management of the City's fleet and the majority of the City's building facility assets. The Division was established as a distinct unit within the Chief Administrative Officer's Office in the last year, after the dissolution of the Bureau of Internal Business Services. CityFleet and Facilities Services manage and maintain vehicles, equipment, and fueling stations valued at over $140 million and building assets valued at over $500 million.

The Division of Asset Management has begun tracking several new performance measures and has made significant progress on flagship projects, such as the reconstruction of the Portland Building. In Facilities Services, preventive maintenance compliance was at 53% over the last fiscal year. While well under the long-term strategic target of 80%, this metric was thirteen percentage points above the 40% target for the year, the first year this metric is being actively tracked and published.[1] Four of the five Facilities Services construction projects over $1 million were completed on time and under budget—another new performance metric last fiscal year—though overall throughput of planned major maintenance projects declined slightly over the prior year, as shown in the chart below.



* Portland Building reconstruction project not included

Facilities Services established a new Asset Manager position several years ago to develop a proactive approach to building maintenance and was directed by Council via a budget note to devise a plan to phase in higher major maintenance replacement into rental rates. Unfortunately, this effort has yet to materialize due to several factors, such as stalled

[1] The data points that inform these measures are accurate, but are derived from an outdated asset management system.

efforts to implement a new asset management software solution for the Division and the need for accurate condition data on managed buildings to inform major maintenance replacement planning and a property disposition strategy.

The Division of Asset Management has undertaken significant steps over the last six months to improve its delivery of customers' operational needs, understand their financial constraints, and develop clear organizational strategies going forward. These efforts include new performance scorecards for both Facilities Services and CityFleet to better align daily operations with overarching strategic goals and customer needs, as well as renewed progress on identification and implementation of an asset management software system. The Division has noted that sustained progress on a proactive, data-driven approach to long-range facilities management may require additional one-time investments for software and condition assessments, and potentially additional analytical staff for data systems management and business case analysis.

Parks Infrastructure Program: Balancing System Growth with Resource Scarcity

The FY 2017-18 Prior Year Performance Report highlighted the major maintenance funding gap and project delivery as primary challenges facing Portland Parks and Recreation (Parks), preventing it from making gains on asset maintenance and asset condition systemwide.[2] These challenges persisted in FY 2018-19.

In the FY 2018-19 Adopted Budget, total requirements for the 5-year CIP (FY 2019-23) were $107.2 million and reflected a focus on maintaining equity of public access to existing assets while expanding emphasis on major maintenance and system-wide improvement projects.

The City has substantially increased its funding for major maintenance in the Parks bureau in recent years. The FY 2018-19 budget increased the bureau's capital major maintenance funding by $625,000 for seismic assessments and demolition and removal costs for hazardous structures. Those funds increased the General Fund major maintenance appropriation of $1.8 million per year to $2.4 million per year. The 2014 Parks Replacement Bond provided $68.0 million toward maintenance and repair projects and the bureau reserves a portion of the Buildings & Pools budget for urgent major maintenance emergencies. Additionally, over the past five years, the bureau has received over $14.0 million in one-time General Fund discretionary to address major maintenance projects.

Despite these investments, Parks' *percentage of assets rated in fair or better condition* declined six percentage points from 50% to 44%, which the bureau attributes to underfunding of Parks capital maintenance relative to its needs. Parks has an existing $450.0 million maintenance backlog which has grown over time, and its ongoing capital maintenance funding level, at $2.4 million, is about 0.3% of the replacement value of its portfolio. Based on industry best practices, the bureau target should be at 1-2%, with a 1%

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[2] FY 2017-18 Prior Year Performance Report, https://www.portlandoregon.gov/cbo/article/700405

minimum level to prevent closures. Absent significant additional recurring investment in major maintenance, it is expected that Parks' asset condition will continue to decline.

System Development Charges (SDC) revenues have exceeded $20.0 million per year over the last four fiscal years, primarily due to significant expansion of residential development. State law requires that Parks' SDC revenue must be used to add capacity to the park system —thus this resource cannot be used exclusively to maintain existing assets. In FY 2018-19, the balance of the Parks SDC fund was over $100.0 million. Over the next five years, Parks plans to allocate $86.4 million of the current SDC fund balance and forecasted revenues to develop new parks and expand capacity at existing assets. Given that access to recreation centers and parks is proportionally lower in East Portland, SDC resources allow Parks the opportunity to build assets that will serve a greater portion of Portlanders and positively impact Citywide equity goals.

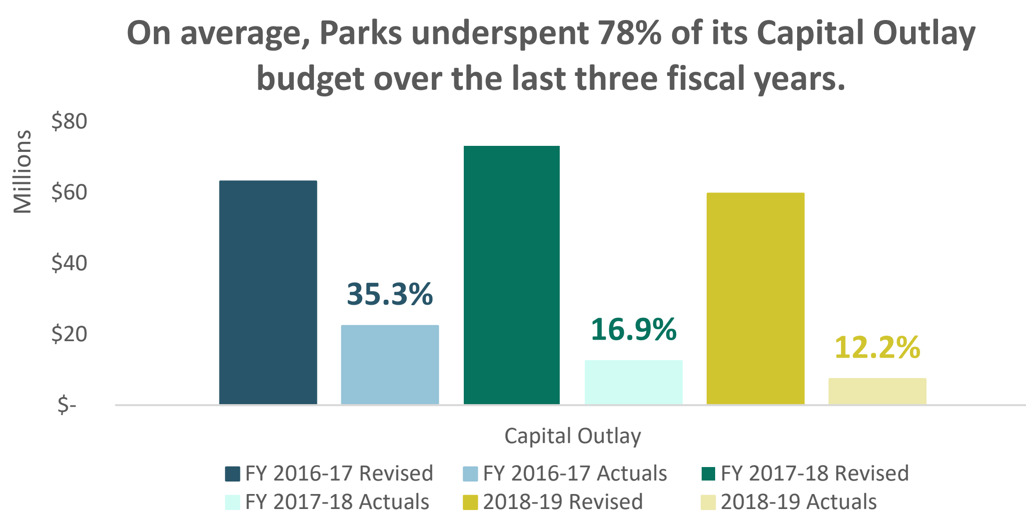
However, developing new assets will also add to total resource requirements for operations and maintenance and capital replacement.[3] To prevent the maintenance gap from increasing, an additional $9.5 million in annual General Fund resources will be required once the $86.4 million in SDC revenue is spent.[4] One way that Parks is addressing this challenge is by focusing resources on capacity-expanding projects and upgrades that translate into lower future maintenance costs.

The bureau estimates that the additional investment from the forecasted SDC revenue would result in an 0.8% increase in *the number of Portlanders who live within a half mile of a park or natural area* (approximately 2,274 additional households). To fund the operations and maintenance of new facilities, Parks will need to either reprioritize internal resources or identify a new funding source, or General Fund resources will need to be shifted away from other City priorities. These kinds of decisions require careful weighing of tradeoffs. Thus, CBO recommends that the Parks Bureau's decision-making processes include evaluating current asset maintenance needs and the costs of the planned expansion to determine how best to balance new asset acquisition and development with the existing deferred and major maintenance backlog.

[3] FY 2019-20 Adopted Budget: Portland Parks & Recreation. Page 187, https://www.portlandoregon.gov/cbo/article/738382

[4] This expense projection includes major maintenance costs factored in at 2% of the asset's cost, based on best practices assumptions, operations and maintenance at three percent, and capital replacement at 1%.

Finally, given the existing and forecasted investments in the Bureau's infrastructure, it is important that the bureau's capital improvement plan budget better reflect what it plans to spend each year. Unlike other capital owning bureaus, Parks budgets full capital project resources in its capital improvement plan irrespective of the actual annual spending ability or plan. This practice was initiated to address conservative budget practices that resulted in frequent budget overruns and project delays. However, by budgeting multi-year capital resources each year, the data indicates that the bureau has a capital delivery performance problem when that may not be the case. For example, Parks underspent its capital improvement program budget by 81% in FY 2018-19, expending just $21.0 million of the $112.8 million Revised budget. Since it is unclear how much Parks plans to spend each year, it is challenging to meaningfully analyze the bureau's capital improvement plan and budget. Given these concerns, CBO recommends the bureau move toward a more transparent practice of budgeting its CIP as well as establish capital delivery performance measures.



Water's Significant Capital Investments and Addressing of Affordability Concerns

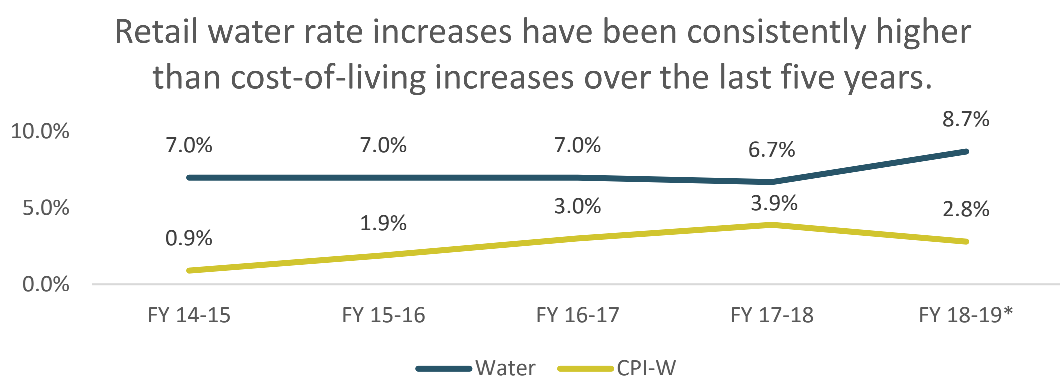
The Portland Water Bureau (PWB) met its FY 2018-19 target of 80% of *projects completed within three months of the planned end date* and fell just shy of meeting its 100% target for spending budgeted CIP funds.

However, it is important to note that during the Fall Supplemental Budget of 2018, the bureau adjusted the FY 2018-19 budgets of various capital projects at a net decrease of $44.7 million, or 32.8% of the Adopted Capital Improvement Plan (CIP) budget. These adjustments included large decreases for the Willamette River Pipe Crossing ($33 million decrease) and the Washington Park Reservoir projects ($8 million decrease). Taking these mid-year adjustments into account, the bureau spent significantly less on capital projects last year than it planned when it initially developed the FY 2018-19 budget. Further work on the Willamette River Pipe Crossing and Washington Park Reservoir projects revealed the need for significantly longer timelines for both projects, as well as significantly higher costs.

Cost estimates have increased from $56 million to $88 million for the Willamette River Pipe Crossing, and from $190 million to $205 million for the Washington Park Reservoir. PWB provided an August 2019 snapshot of the timeliness and finances of 40 major capital projects worked on or completed by the end of July 2019. Of these 40 projects, 40% were behind schedule, and 17.5% were running more than 110% above the original cost estimate. This means that 82.5% were within ten percent of the original project estimate.

In previous analyses, CBO has noted concerns that the addition of the mandated Bull Run Filtration plant comes at a time when the bureau is already managing large and complex projects like the Washington Park Reservoir Project and the Willamette River Pipe Crossing. It will be several years before these projects are completed, positioning the bureau to manage multiple large projects at different stages of design and construction simultaneously. Although PWB reorganized its capital project delivery process several years ago and indicates that it evaluates improvements annually, CBO continues to encourage the bureau to look for opportunities to improve its capital improvement planning process to address the kind of mid-project timeline and cost increases described above.

An ongoing performance challenge for the Water Bureau is balancing the need to complete these important projects with community concerns about affordability. In FY 2018-19, the retail water rate increased by 8.7%, the highest rate increase over the last five fiscal years. This increased the typical monthly residential customer's water bill by $3.13 each month, from $36.11 to $39.24. Water rate increases have been consistently higher than cost-of-living increases over the past five years. These increases have largely been driven by the costs of capital projects needed to provide safe, clean water to Portland residents.



Source: The CPI-W data is from the Bureau of Labor Statistics and are for calendar years.
*2019 data for CPI-W is for the first half of the calendar year.

Affordability of City utility rates has been a topic of interest for the bureau, Council, and the Portland Utility Board in recent years. To address the needs of low-income customers, PWB continued to expand its financial assistance supports, including an income-based discount program through which 3,371 families qualified for a Tier 1 discount of 50% and 4,060 families for a Tier 2 discount of 80% as of June 30, 2019. At 0.7% last year, a typical Portland customer's water bill represented a reasonably small portion of median household income. However, this assessment of the 'typical' water bill does not take into account disparate impacts of the rate on different demographic groups, and it does not account for the combined rate impacts that customers experience as a result of both water and sewer/stormwater rates which are included in their single City utility bill.

Customer Group	Typical Monthly Bill	Percent of Group's Median Income
Typical PWB Customer	$39.24	0.7%
Tier 1	$19.62	0.6%
Tier 2	$7.84	0.5%

When it comes to public perception, 45% of respondents to the Portland Insights Survey administered in late FY 2018-19 expressed some level of dissatisfaction with the value of their water and sewer utility bill. While there was no meaningful response pattern across educational attainment or income, black respondents were more likely to be strongly dissatisfied than other respondents. In last year's Prior Year Performance Report, CBO's analysis showed that compared to white households, communities of color—particularly median-income black households in Portland—devoted a higher portion of their household income to the combined utility bill (water, wastewater, and stormwater bill). Substantial cost increases on projects like the Bull Run Filtration Project may push consumers' rates above the 7.4% increases projected for the next five years and continue to increase the portion of household income spent on utilities in Portland. CBO notes that as income stratification in a community increases, median household income conceals affordability issues and does not account for differences in cost of living, particularly for households that make less than the median household income. Unlike most median-income households, paying for the utility bill may force economic tradeoffs for lower-income households.

CBO continues to recommend that the bureau adopt performance measures that gauge affordability, including ones that disaggregate not only by income but also by race and ethnicity. With the recent development of the bureau's Strategic Plan, PWB is well-positioned to propose meaningful new performance measures for FY 2020-21.

Finally, given the priority of these large capital projects at the bureau, CBO also continues to encourage the Water Bureau to expand its performance measures to include indicators of capital output. Adding such measures will help align the bureau's performance measures with current priorities, as well as track the effectiveness of the capital improvement planning process over time. If all asset-owning bureaus adopted universal measures of capital output, it would enable the City to assess capacity and delivery of CIPs and replicate successful practices, expanding benefit to the Portland community.

Transportation: Project Delivery and Assessment Management Update

Capital Project Delivery Throughput

In FY 2017-18's Prior Year Performance Report[5] CBO highlighted the challenges the Portland Bureau of Transportation (PBOT) has been experiencing related to delays in capital project completion, resulting in underspending the bureau's capital budget by 50% on average. Over the past year, the bureau made real progress in identifying barriers to the success of its capital improvement program and has acted to mitigate these challenges.

PBOT notes that one major challenge it faces is that additional Federal compliance requirements and increasingly complex projects extend the time it takes to complete projects. Given this, even before new revenues ($63.0 million in FY 2017-18 and $115.1 million in FY 2018-19 for infrastructure projects)[6] were flowing into the bureau, PBOT struggled to move funds and projects out the door. The influx of new money compounded the existing backlog, and the bureau has been trying to catch up over the past three years. The extended timelines the bureau must manage do not relieve the pressure of delivering on promises made on behalf of the bureau to the public.

These challenges have significantly impacted the Maintenance Operations Group, which performs maintenance and new capital construction. For example, while Maintenance is repaving a road it may be asked to add new bike lanes, or as it replaces infrastructure at an intersection may be required to install ADA curb ramps. While it is efficient to perform "complete" projects at one time to minimize public disruption in the right of way, workload changes after a project has already begun cause additional stress on the bureau to fulfill the directed work.

In response to these challenges, PBOT has been working on process improvement and communication across groups. PBOT has begun assigning a single project manager to guide each project through all stages of the project delivery process. These project managers are looking more holistically at project planning and are coordinating workload among staff to minimize burdens on any one group.

The bureau also added over 80 new performance measures in FY 2019-20 to help manage outcomes and ensure targets are met. While there is no data for FY 2018-19 on these measures, the measures are already a tool for project managers to use to monitor success. Bureau staff are also using process mapping and budget expenditures as indicators. For example, when a project has expended 75% of its design budget, that project should move

[5] City of Portland, City Budget Office. Performance Management. Prior Year Performance Report. https://www.portlandoregon.gov/cbo/article/700405

[6] This includes $21.3 million from the local gas tax, $77.9 million in state shared revenue from the state gas tax, and $15.9 million from the Capital Set-Aside.

to construction within three to six months. If it does not, the bureau can tease out reasons for the delay and target process improvements to ensure future timelines are met. PBOT believes it is finally turning a corner and anticipates higher capital project delivery throughput by the end of FY 2019-20 and again in FY 2020-21.

Asset Management and the R/R/R Gap

PBOT updated its strategic plan in July 2019—*Moving to Our Future*.[7] The plan identifies several data-driven strategies for closing PBOT's funding gap for its assets. The bureau's repair, rehabilitation, and replacement (R/R/R) funding gap has continued to increase over the past several years. It now stands at $295.3 million per year over the next ten years to maintain the bureau's assets at the current service levels.

A few initiatives the bureau is working on include:

- Defining the State of Good Repair (SGR) for all assets. SGR is the intended condition or function of an asset in line with Federal, state, or local requirements.
- Improving processes for data collection and reporting across all asset classes.

PBOT anticipates these efforts will result in a shift in the bureau's FY 2020-21's R/R/R gap. PBOT is also implementing policy changes, including requiring that operations and maintenance costs are set aside for newly-built, transferred, or improved assets. Lastly, in December 2019 PBOT will launch Maximo 7.6—an Enterprise Asset Management system. This technology will support the bureau's efforts to increase proactive and preventive maintenance, as well as improve its tracking of spending against assets.

Currently, PBOT dedicates fewer resources to its asset management program compared to other Portland infrastructure bureaus. While many PBOT staff have asset management functions as part of their jobs, particularly staff in the bureau's Engineering Group, PBOT's asset management team of two dedicated FTE is smaller than other City bureaus with similarly large asset portfolios. For example, the Water Bureau has a team of six dedicated asset management FTE and the Bureau of Environmental Services has a staff of 25 FTE. CBO notes that PBOT has made progress in building its asset management program over the past few years. To continue building on its progress, CBO recommends the bureau allocate additional resources toward staff dedicated to asset management at the bureau.

Citywide Asset Management Strategies

Asset managers from infrastructure bureaus have been convening as the Citywide Asset Managers Group (CAMG) since 2002 in order to share best practice information with each other and elevate asset management issues for City decision-makers. Per City Financial Policy, the City Budget Office has worked with the group to prepare and present an annual

[7] https://www.portlandoregon.gov/transportation/79722

report to Council on the status of the City's capital assets and equipment. This report highlights the need for substantial additional resources and strategies to retain current asset condition and current service levels.

During FY 2018-19, CBO hired a Principal Management Analyst to lend additional analytical support to Citywide asset management efforts. Conversations among CAMG members and others identified key challenges as well as areas of shared opportunities to make Citywide progress in asset management.

For instance, though many forms of City data are centrally reported, it is difficult to make bureau-to-bureau comparisons in matters of asset management. Different kinds of data reside in different databases and are not necessarily easy to connect. Conversations about developing more centralized measures that could compare performance across bureaus run into challenges with work being measured differently across bureaus. This leaves performance to be primarily measured as an individual bureau's output as compared to its own capital improvement plan, rather than to a Citywide measure.

Based on these continuing conversations, CBO offers several recommendations to further strengthen asset management practices across the City:

Build a Citywide Asset Management Conceptual Framework

Developing a Citywide asset management conceptual framework will create a foundation for shared understanding of how assets are to be managed. If each infrastructure bureau mapped their budgeting structure for asset management and their asset hierarchy, and engaged in asset management process mapping, the bureaus together could determine the correct level at which to harmonize their terminology and organizational structures. The resulting conceptual framework could facilitate several other ongoing alignment efforts, including around financial accounting, computer systems, economic modeling, prioritization methodologies, and data collection and reporting. This effort could help move the conversation beyond the uniqueness of each bureau to identify which pieces of the system can be aligned, without requiring upfront changes to internal databases or accounting methods.

Institutionalize a Business Case Evaluation Approach for Common Funding Sources

To ensure available common funding sources (such as Capital Set Aside and Build Portland resources) are invested in the highest priority projects across the City, we must have a consistent Citywide process and approach for evaluating and prioritizing infrastructure investments. In 2019, the Capital Set-Aside committee came together to "refresh" their points-based subjective scoring methodology for ranking and recommending projects to City Council. The group continues to explore Business Case Evaluation, which seeks to quantify all costs and benefits of a given project to allow a more data-driven comparison of different kinds of projects.

Using this methodology will allow asset managers to explore, share, and learn approaches to benefit and risk quantification, building a foundation for broader use of this methodology in the City. CBO recommends that bureaus continue to commit staff time and resources to improve and implement this methodology to help allocate shared funding sources.

Explore Opportunities for Shared Performance Measures

CBO also recommends that asset owning bureaus each report on a short list of standard performance measures, including asset condition, capital project throughput, and project cost accuracy. Even though it will be difficult to compare results on these measures directly because of differences in data collection and methodology, establishing a shared set of measures will serve to increase alignment between asset management practices over time.

Prioritize Citywide Asset Management Efforts

During 2019, CAMG sought to solidify and strengthen its impact by developing a group charter and workplan and by drafting a citywide asset management policy. These efforts represent significant steps toward the City's adoption of sound asset management practices, which are essential for achieving the City's service delivery, livability, economic development, equity, and environmental goals. For this work to continue to move forward, CBO recommends that bureaus prioritize and dedicate additional resources to support a comprehensive approach to asset management so that the City is well positioned to make the best decisions in managing its capital assets.