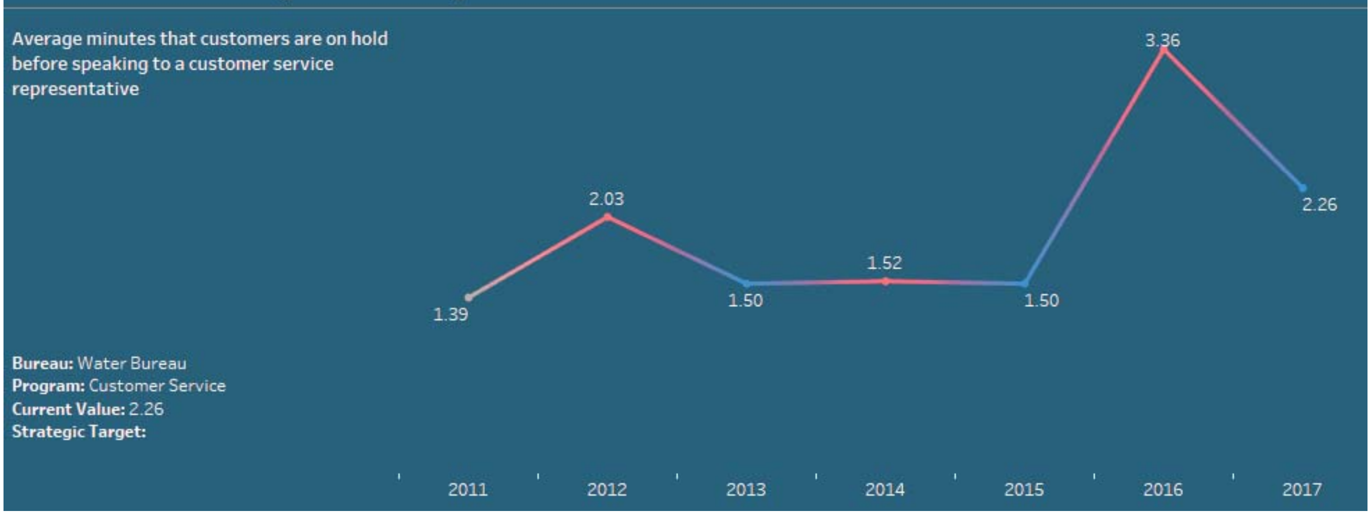
Portland Water Bureau

Analysis by Shannon Fairchild

Bureau Performance

Water Bureau	Average minutes that customers are on hold before speaking to a customer service representative	2.26
	Maintain water revenue bond AAA credit rating	100%
	Number of violations of state and federal drinking water quality regulations	0
	Number of violations of state and federal environmental regulations	0
	Percentage of identified high risk assets addressed	54%



www.portlandoregon.gov/cbo/performance

The Portland Water Bureau finished FY 2016-17 with higher than projected total revenues, exceeding budget amounts by $5.6 million. Operating expenses were under budget which together with higher revenues, increased the bureau's FY 2017-18 beginning operating fund cash balance by $7.3 million. The bureau achieved performance targets across their key performance measures (KPMS), however, those measures do not demonstrate whether the services provided are efficient or effective at achieving the desired service levels nor do the measures capture important changes in the bureau's performance under federal regulations.

The addition of a filtration plant to the bureau's capital improvement project list comes at a time when the bureau is already managing two large and complex projects: the Washington Park Reservoir Project and the Willamette River Crossing. To finance the bureau's capital plan, it will need to raise rates above its current five-year forecast. Staff levels and the bureau's planning process may also need to be reexamined to meet its robust capital delivery schedule.

Performance Measures

There continues to be little variance in the Water Bureau's performance when compared to prior years, indicating that the bureau continues to maintain stability in its performance measures. In FY 2016-17, there were no violations of drinking water quality or environment regulations and the bureau maintained its water revenue bond AAA credit rating. While the Water Bureau's key performance measures represent core functions, they do not demonstrate whether the services provided are efficient or effective at achieving the desired service levels. Further, many of the bureau's performance measures appear to have either flatlined at an acceptable level because the target it always met or sustained or have targets set below the bureau's capacity.

Recently, the bureau began work on a new strategic plan, and the plan's schedule includes time to review and revise its performance measures. While the bureau does not plan to revisit its performance measures until January 2019, the bureau can start early by creating a data collection schedule. The schedule can outline data elements for collection, including strategies on how to gather data that is currently unavailable. Doing so will help the bureau establish baseline data for future performance measures, making it easier to set appropriate targets that continuously improve performance.

Below are some notable performance trends from FY 2016-17:

Water Quality

The bureau has two KPMs that address whether the bureau is meeting regulatory requirements; one addresses water quality regulations and the other addresses environmental regulations. While the bureau experienced zero water quality and environmental violations in FY 2016-17, its performance measures did not capture important changes in the bureau's performance under the conditions of its variance order from the Long-Term Enhanced Surface Water Treatment Rule (LT2). The variance exempted the city from treating for the parasite, Cryptosporidium.

In January 2017, the bureau detected Cryptosporidium in water samples that it collected as part of its monitoring requirements under the variance order. The detection triggered demonstration monitoring which is an increase in the frequency of sampling. After notifying the Oregon Health Authority (OHA) in March 2017 that it was not feasible to conduct the amount of water sampling needed to demonstrate that the concentration of Cryptosporidium was less than the allowable threshold, OHA revoked the City's variance from treating its water for Cryptosporidium. In response, City Council unanimously voted to pursue filtration as the City's treatment method for the parasite.

As the bureau proceeds with the planning, design, and construction of the filtration plant, it will follow a compliance schedule and interim control measures to reduce the risk of public exposure to Cryptosporidium. CBO encourages the bureau to incorporate a performance measure that demonstrates how effective the bureau's interim control measures are at reducing the risk of public exposure to the parasite. CBO notes that water quality information is accessible on the Water

Bureau's website, but that it may consider adding additional indicators of water quality like turbidity events, lead, and the presence of regulated contaminants to the performance dashboard.

Hydropower

Since 1982, the power generated from the bureau's hydroelectric facilities has been purchased by Portland General Electric (PGE) under a Power Sales Agreement. The sales agreement with PGE expired in August 2017 and was replaced by four new agreements. Historically, a portion of generation revenues totaling a few hundred thousand dollars has been transferred to the General Fund each year due to the methods used to finance the hydroelectric facilities in the 1970s. The expiration of the previous agreement and the uncertainty of the fund's future cash needs, the Spring 2016-17 BMP ended those transfers. Further, a transfer is not included in the City's forecast.

This change in business practice is reflected in the bureau's performance measure, "Amount of transfer of hydropower profits to General Fund" ($0 was transferred in FY 2016-17). The bureau forecasts that minimal profits will be generated during the initial years of the new agreements and that any surplus funds will be used to cover maintenance and capital needs. Given these considerations, cash transfers from the Hydropower Operating Fund to the General Fund will not continue in the future. The FY 2017-18 target of $0 in cash transfers demonstrates this change.

Under the new agreements, the risk assumed by PGE shifted to the Hydroelectric Division of the Water Bureau. These risks fall into five categories: weather conditions, water supply, energy price, operational issues and regulatory changes. Under the PPA with PGE, the division is at greatest risk for incurring delivery damages. These damages occur when the bureau is unable to deliver the specified energy amount to PGE and the wholesale amount exceeds the contract price. Some of this risk can be offset by selling extra ("as-available") energy into the market at the higher market price. The Hydro division also proposed creating a "sunny day fund" as a mitigation strategy which could be used for a low-water year when energy prices are high. Moving forward, the division should replace the "hydropower profits to the General Fund measure" with ones that demonstrate how well the division is performing under the new agreements, e.g. incurrence of under delivery damages, delivery of specified energy amounts, meeting or exceeding revenue targets, etc.

Customer service

In FY 2016-17, the bureau's KPM for average minutes that customers are on hold for a customer service representative improved from the prior year. In FY 2015-16, the loss of interactive voice response and autopay functionality for water bills resulted in a marked increase in the number of phone calls to the Customer Service Division. This increased hold times to 3:36 minutes from its target of 2 minutes—an industry best practice. In FY 2016-17, the bureau replaced its payment system for a PCI complaint system which allowed for the restoration of autopay. The reduction in hold times from 3.36 to 2.26 reflects the increased functionality. The bureau believes this measure will continue to improve in FY 2017-18.

Bureau Finances: Budget-to-Actuals and Key Issues

Water Operating Fund

	Water Operating Fund	Revised Budget	Year-End Actuals	Variance	% of Budget
Resources	Budgeted Beginning Fund Balance	$ 81,956,259	$ 81,956,259	$ -	100%
	Taxes	-	-	-	N/A
	Licenses & Permits	-	-	-	N/A
	Charges for Services	166,325,337	169,393,922	(3,068,585)	102%
	Intergovernmental Revenues	555,000	551,743	3,257	99%
	Interagency Revenue	3,488,020	2,934,953	553,067	84%
	Fund Transfers - Revenue	97,110,074	75,956,178	21,153,896	78%
	Bond and Note	-	-	-	N/A
	Miscellaneous	1,324,449	2,494,562	(1,170,113)	188%
	General Fund Discretionary & Overhead	-		-	N/A
	Revenue	**$ 350,759,139**	**$ 333,287,617**	**$ 17,471,522**	**95%**
Requirements	Personnel Services	$ 66,644,531	$ 62,338,078	$ 4,306,453	94%
	External Materials and Services	32,845,972	29,155,052	3,690,920	89%
	Internal Materials and Services	21,621,754	20,105,700	1,516,054	93%
	Capital Outlay	41,046,000	33,545,589	7,500,411	82%
	Bond Expenses	3,864,842	3,796,319	68,523	98%
	Fund Transfers - Expense	91,115,688	90,958,961	156,727	100%
	Contingency	93,620,352	93,387,918	232,434	100%
	Unappropriated Fund Balance	-	-	-	N/A
	Expenses	**$ 350,759,139**	**$ 333,287,617**	**$ 17,471,522**	**95%**

This is the third year that the Water Operating Fund underspent its budget and revenue exceeded targets by considerable amounts.

Expenses

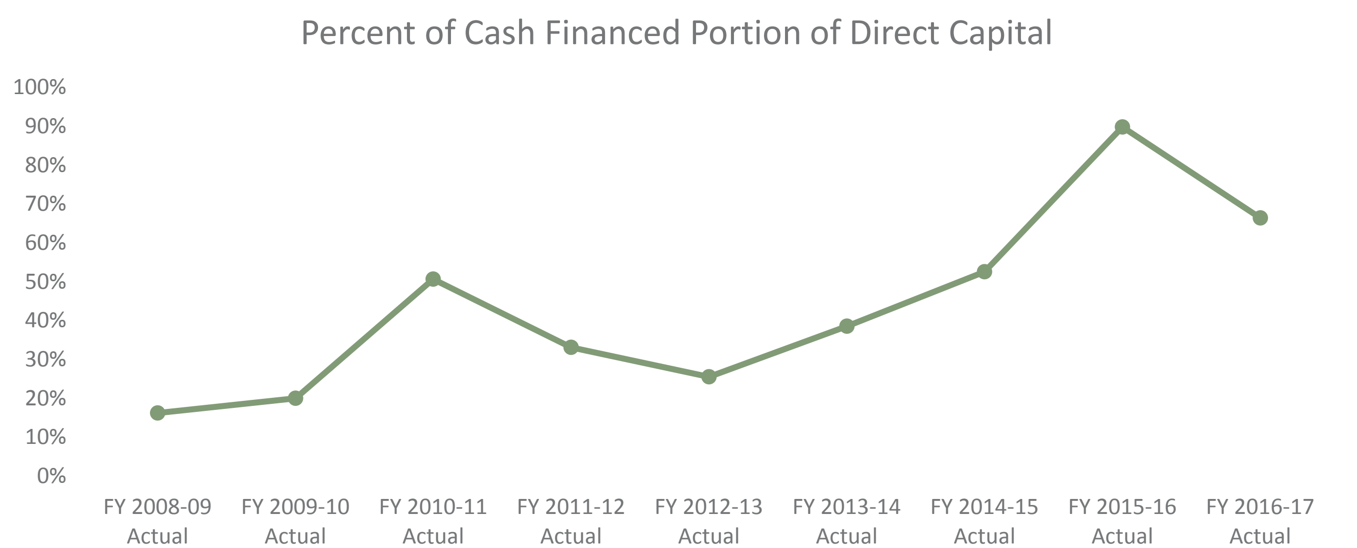
External materials and service costs were $3.7 million below than the bureau's Revised Budget or 11% less than planned. Of this, $1.7 million was from capital expenditures coming in less than planned and $2.1 million in operating expenditures. Approximately $920,000 of the operational underspending is attributed to electricity costs. The bureau received a $1.0 million adjustment in its FY 2016-17 Spring Supplemental Budget to fund the estimated electrical charges for running groundwater at 100% between February and March of 2016. The bureau activated groundwater in response to positive tests for *Cryptosporidium* in the Bull Run water source. The $1.0 million adjustment was in addition to the $640,000 already budgeted in the bureau's FY 2016-17 Adopted Budget to cover estimated groundwater electrical costs; the bureau estimates that the $640,000 included in its base is sufficient to run groundwater for 24 days at 90 Mgal/day. However, the bureau only needed $560,000 of the $1.0 million adjustment for additional groundwater electrical costs, resulting in approximately $440,000 in unspent funds. In addition to the $440,000, the bureau had approximately $480,000 in underspending from lower than anticipated electric costs for operating pump stations and tanks. This resulted in approximately $920,000 in net underspending of the bureau's electricity budget.

Revenue

In FY 2016-17, total revenue from water sales and other charges was $*5.6 million higher than planned; $1.2 million of which was from higher than projected water sales revenue.* This is the third year that water sales exceeded budget for the bureau. For example, water sales were $7.5 million more than the year prior and $0.9 million above budget in FY 2014-15. This contrasts with FY 2013-14 where revenues were $4.8 million less than budget. Over the past five years, the bureau revised its water sales estimates to match observed reductions in demand. The third year of exceeding its target indicates that the bureau has recalibrated its estimates; however, CBO cautions against overcorrecting the problem as the bureau asserts that the recent increase in water sales revenue is due to rate increases rather than additional units sold. This, coupled with underspending its capital and operational budget, suggests the potential for annual rates to increase at a slower pace.

Cash Financing and Debt Issuance

The bureau has been financing a larger share of its capital program in recent years with cash, reaching a high of 90% in FY 2015-16 from a low of 26% in FY 2012-13. After increasing for three years in a row, the share of direct capital financed with cash decreased to 66% in FY 2016-17. The bureau's most recent bond sale was December 2016 with the next sale of $98.9 million planned for May 2018, though the bureau asserts its current fund position will delay the sale.



In the short to mid-term, the cash to debt finance ratio will change as the bureau finances a portion of the filtration plant. The bureau estimates that a filtration plant will take approximately 10 years to construct and cost as much as $500 million to design and build. To pay for the large investment, the bureau will need to increase water rates; at the outer range of estimated costs, the Water Bureau forecasts continuous rate increases over a 12-year period. The greatest increase in water rates will occur in the first six years of the forecast (FY 2018-19 to FY 2023-24), reaching a peak annual rate of increase of 8.9%. This is 2.2% higher than the 6.7% annual rate of increase in the bureau's baseline forecast. CBO notes that this analysis is based on low-confidence level cost estimates provided by the

Water Bureau. Further, the rate increases for water are based on the five-year adopted forecast; estimates beyond FY 2023-24 are based on estimated escalation factors. Finally, this forecast is subject to change each year with updated assumption factors.

Capital

The bureau experienced substantial underspending of its capital budget in FY 2016-17. Capital outlay expenditures where 82% of the bureau's FY 2016-17 Revised Budget, resulting in $7.5 million in underspending. For the bureau's capital improvement program budget, direct capital expenditures were $59.9 million or 84% of the revised budget. The largest variances were driven by delays in the issuance of building permits and contract execution for the Washington Park Reservoir Project. Some capital improvements to the distribution system were also delayed, however, the exclusion of fleet vehicle purchases increases the variance to 12% from 6% of the distribution capital budget.

The addition of the filtration plant to the bureau's capital improvement project list comes at a time when the bureau is already managing large and complex projects, such as the Washington Park Reservoir Project and the Willamette River 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. CBO encourages the bureau to look for opportunities to improve its capital improvement planning process like the Bureau of Environmental Services has done. Finally, given the priority of these large capital projects at the bureau, CBO encourages Water to expand its capital performance measures to include more program and workload measures. Adding measures that reflects this work will help align the KPMs with the bureau's current priorities as well as measure the effectiveness of capital improvement program.