



# KING COUNTY AUDITOR'S OFFICE

APRIL 1, 2019

## Fourth Follow-up on Special Study of FMD's Management of Project Delivery

**Facilities Management Division (FMD) has now implemented all of the recommendations from our 2011 Special Study of FMD Management of Project Delivery, which will help decision-makers take timely actions to prevent facilities projects from exceeding approved budgets or schedules.**

As noted in our 2017 follow-up, FMD made progress toward the remaining recommendation<sup>1</sup> by studying potential software integration of two existing county platforms in order to create meaningful project cost and schedule performance measures. FMD followed this initial work in early 2018 by constructing a spreadsheet, using data from two existing but incompatible systems, and writing a calculation algorithm to compile cost and schedule performance metrics on a monthly basis.

After implementing four of five prior recommendations, FMD has now created a system of performance measures for its 123 capital projects—valued in excess of \$300 million—in their active annual capital improvement program.

Of the one remaining audit recommendation:

	1 <b>DONE</b>		0 <b>PROGRESS</b>		0 <b>OPEN</b>
<b>Fully implemented</b> Auditor will no longer monitor.		<b>Partially implemented</b> Auditor will continue to monitor.		<b>Remain unresolved</b> Auditor will continue to monitor.	

Please see below for details on the implementation status of these recommendations.

<sup>1</sup> This remaining recommendation contained three subparts to create metrics each for schedule, scope and budget.



Recommendation 1

On January 25, 2016

DONE



Recommendation 2

DONE

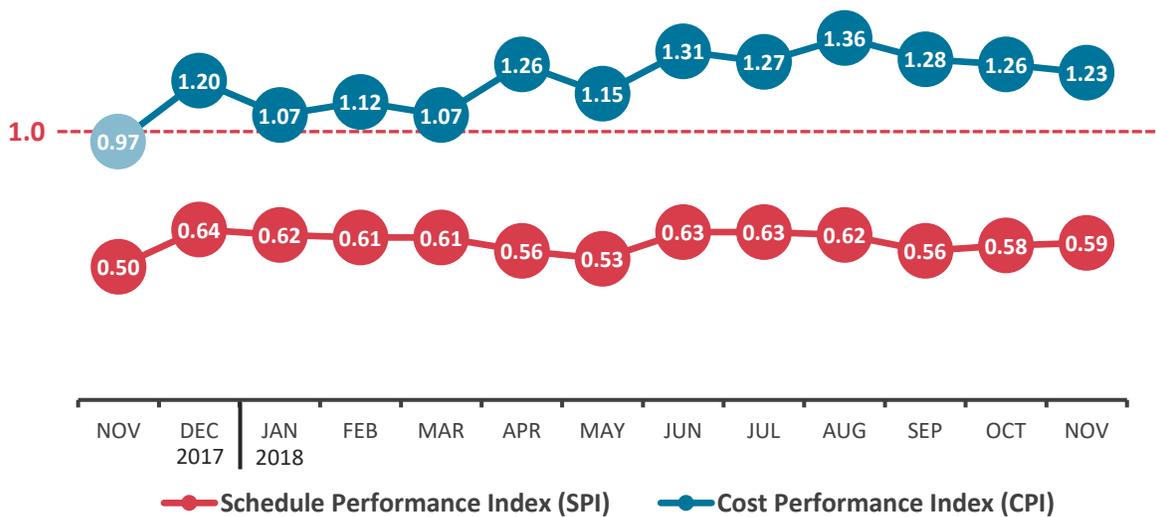


**FMD should develop meaningful performance measures for capital project delivery to assess whether planned scope, schedule, and budget are achieved on individual projects and across their programs. Beyond this, FMD needs to develop and use internal measures to inform management decisions and actions.**

STATUS UPDATE: During 2018, FMD produced an Excel database, using information from FMD’s project management software and the County’s financials, to track deviations from a project’s baseline schedule and authorized budget. Specifically, FMD created a schedule performance index (SPI) which is essentially a ratio of the time it took to reach actual milestones compared to the amount of time planned to reach project milestones. The new FMD cost performance index (CPI) equates to budgeted expenses divided by actual costs for each project. Over the past year, FMD has used these indices to calculate how closely their project managers adhere to delivering a project within its documented schedule and budget during implementation. Moreover, FMD uploaded information into this dataset for all current projects and any prior fiscal year project in which work is still underway, in order to monitor program trends.

Exhibit A shows a one-year composite graph illustrating both SPI and CPI monthly program achievement for all projects from November 2017 to November 2018. In this chart, if a given metric scores 1.0 or higher, the project is within schedule or budget. If a metric scores below 1.0, the project is behind schedule or over budget. Exhibit A indicates that FMD typically delivers projects within budget; however, most projects exceed delivery schedules. While FMD has not created a specific performance measure to track project scope, FMD believes CPI and SPI metrics of under 1.0 can indicate problems with scope that need to be evaluated by management.

EXHIBIT A: FMD Schedule (SPI) and Cost (CPI) Performance Measures Over One Year



**IMPACT:** By implementing our recommendation, FMD is able to routinely view any individual project's performance and take management action with a project manager to consider alternatives to get a project back on target. Moreover, by compiling collective project performance data as an indicator of program effectiveness, FMD leadership discovered that the root cause of poor schedule performance was due to early planning and preliminary design shortfalls.

### Recommendation 3

On January 25, 2016

**DONE**



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Michael Bowers, Capital Programs Oversight Analyst, conducted this review. If you have any questions or would like more information, please contact the King County Auditor's Office at [KCAO@KingCounty.gov](mailto:KCAO@KingCounty.gov) or 206-477-1033.