MEMORANDUM

To: Montgomery County Executive & Common Council
From: Carissa Matthews, Budget Analyst
Date: May 6, 2013
Re: Recommendations for Better Capital Improvement Planning and Budgeting in Montgomery County

SUMMARY
To change Montgomery County’s reputation for cost overruns in capital projects, I recommend that the County implement policies and procedures that will reduce the likelihood of under-budgeting. First, the County must take a strategic approach with how it funds each project, and consider equity and fairness in deciding the answer to the “who should pay” question – user fees, bonds, and intergovernmental finance should all be weighed carefully as options.

However, it is most important for the County to recognize that both government agencies and contracted firms are to blame for various causes of overruns, and that each actor must take steps to reduce its role in contributing to additional design and construction costs. While contracts should hold design and construction firms responsible for quality and limit liability for work performed outside the pre-established scope of the project, government planning and budgeting processes must also be more thorough to ensure that initial cost estimates are used to create budgets for what will indeed be the final product. These process improvements include pre-design, risk assessment, site assessment, strategic contract models, provisions for financial risks, and stronger policies to enforce these process improvements.

HISTORY OF POOR CAPITAL MANAGEMENT
Encompassing many large suburbs outside of Washington, DC, Montgomery County has a strong tax base that allowed it to be ambitious with capital projects in the early 2000s. New facilities built and renovations completed during past County Executive Douglas Duncan’s tenure included music venues, criminal justice centers, conference centers, and more. But tensions between the Common Council and County Executive grew as each of these projects had major cost overruns: $10M for the Music Center at Strathmore, $5M for the Montgomery County Detention Center, $4M for the Bethesda Conference Center, $12.6M for a correctional facility in Clarksburg – in two years, County construction projects had cost overruns of almost $40M1. This number only reflects more recent overruns. According to the State, the original cost estimate in 2001 for the Music Center at Strathmore was $68.2M – $30M less than the final cost of the center! It seemed that, politically, it was more important for the County Executive to have capital projects open on-time then on or under-budget. This might be because whether or not a facility is open is more visible to the public than the final bill for the total project cost, a burden shared by tax payers and users depending on the project.

Today, the County is still plagued by failing capital projects, most notably (or, notoriously) the Silver Spring Transit Center, which has construction flaws that severely compromise the integrity of the structure and will require large amounts of capital to fix.2 The project’s reputation is so dismal that the Washington Metropolitan Transit Authority now refuses to take ownership of the facility after completion, which had been the original agreement made between the entities when construction of the center first began.3

RESULTS OF COST OVERRUNS
There are a number of negative consequences that result from this poor financial planning and execution. First, the final costs of these projects are not strategically or properly funded. For example, to help pay cost overruns for the Music Center at Strathmore, $3M that was pledged for maintenance by the Center’s foundation was moved to cover construction costs.4 This was the only politically viable option for the Common Council to take on, as they pledged not to allocate any additional funds to the project. This surely is not a viable solution, since more funds will need to be solicited either from taxpayers or users (through ticket prices) later on to cover the maintenance costs that will occur regardless of whether or not they are funded now.

In addition, the County’s bond rating for specific capital bonds has gone down from its high of AAA in the early 2000s to now Aa2 with a negative outlook.5 Though three operating deficits from 2008 to 2010 were overcome in 2011, and the County has a sufficient and stable tax base, the rating also stays below AAA because of the County’s reliance on Federal monies. The Federal government’s rating has been knocked down from AAA and also has a negative outlook.

The damaged reputation that comes from these cost overruns can also affect intergovernmental relations and financing. In a report by Governing Magazine, the County was given a “C” grade for capital management, while neighbors like Fairfax received an “A.” When the County reaches out to Annapolis for funding, the State might think twice when they see how previous monies have not been properly budgeted. A request for $2M in state GO bonds for the Music Center at Strathmore was disapproved in 2004 despite the County’s offer to continue its 50-50 matching agreement because the funds were not previously included in the budget – and because the project in the State’s perspective was already $30M+ over its original budget.6

In looking at Montgomery County’s FY 13-18 CIP, it is clear the County must dedicate much of its budget to paying for these past overruns. Only critical safety-related projects, mandated projects, and some minimal economic development projects are even considered for funding, and many projects are being delayed in order to pay down past debt7. One

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5 Moody's Rating Action. 26 Sep 2012.
major reason the County Executive is determined to keep long-term debt down is to keep the County's bond rating at AAA, which has not fallen like its individual capital bonds have.

While the County is on the path to fiscal recovery, it comes at a high cost, and begs the question: how does the County prevent this from happening again in the future?

**MOVING FORWARD & USING DATA**

Both government agencies and contracted firms have a role to play – and blame to share – in cost overruns. According to a County Stat analysis conducted by Montgomery County in 2009 that examined project performance in both the design and construction phases, projects are more likely to be over budget than under or on (with “over budget” meaning that the project is more than 10% over the original cost estimate – a generous definition to begin with). In the design phase, 19 of 29 projects were classified as over-budget, while 10 of 13 active construction projects are over-budget. Which overruns are defined as being “inside County” or “outside County” control for the top causes of cost discrepancies are listed in Figure 1 from the County Stat analysis. As the table makes clear, the County had at least some control over the majority of causes for cost discrepancies, most of them being scope related. As such, in moving forward the County must concentrate on reducing contract liability, but focus even more so on improving planning and budgeting practices in-house.

![Causes of Schedule and Cost Discrepancies](image)

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</tbody>
</table>

**Figure 1**

While the County Stat analysis has given the County a good picture of the past and present status of capital projects, not enough has been done to use this data to create measureable improvements in planning processes.

**Recommendations to Decrease Government-Caused Overruns**

While the answer may seem obvious, Montgomery County must adopt better budgeting and planning practices to combat these overruns. One suggestion is to conduct an examination of the inflation rates used when calculating construction costs. Other state and local governments have needed to do this as rising oil prices and uncertain markets have made cost estimating difficult, even to the extent where many agencies are hiring consultants to help create more accurate estimates in these fiscally uncertain times.

On the other end of the budgeting process, the County needs to ensure that monitoring of costs and deliverables during project design and construction is extensive – weekly or

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monthly reporting could keep costs in check and showcase when government decisions caused the project to increase costs. These reports would act as an accountability tool both to the County and the contractor.

Better planning also has a key role to play. In the State of Washington, capital improvement best management practices include extensive pre-design and modified pre-design stages to access the feasibility of projects over $5 million. These pre-design phases also include an opportunity to bring various stakeholders to the table in initial discussions, which in turn can reduce change orders later in the design or construction process. For example, a reason for millions of dollars of cost overruns for the Music Center at Strathmore was the fact that the acoustical specifications inside the concert hall were not suitable for the Baltimore Symphony Orchestra (BSO) to perform at the facility – one of the central attractions for constructing the center in the first place. If facility managers or others from the BSO had been engaged in a pre-design process, the County may have greatly reduced these costs, or at least properly budgeted for them in the design stage.

Risk assessment policies could also play a critical role in both determining project feasibility as well as creating more accurate budgets. Typically, projects that run over budget exhibit a number of similar characteristics such as risky site selection, or project scope inclination to change because of politics or other factors. In the beginning of the planning process, the County can run an initial diagnosis on the proposed project for its propensity to exhibit these factors that make it more likely to run over budget according to historical trends. With this assessment, the County can either rethink the project all together, or create a formula that would perhaps add an additional percentage on top of the projected cost to account for the likelihood the project will have an overrun. For example, a project that meets 5 of 15 risk factors might budget an additional 5% while a project that meets 10 of 15 factors might budget an additional 10%. In addition, site assessment must be given special attention in this risk assessment process, as 11% of the 47 projects assessed in Figure 1 had cost overruns directly tied to the site selection.

Taking these recommendations a step further, the County could potentially pass legislation that would require one or all of these planning measures take place before a bond could be issued to pay for a project. While no one wants to add more paperwork or bureaucracy to an already lengthy process, this requirement could be essential if the County continues to exhibit poor capital budgeting and planning behavior.

**Recommendations to Decrease or Reduce Liability for Contractor-Caused Overruns**

Though many of the cost overruns are due to County-controlled factors, it is also critical that the contractors who the County selects are held responsible for their work. This is done primarily through writing clear, comprehensive and effective contracts which limit the County’s liability for work performed outside of the project scope, and also protect the County against poor quality work done by the contractor. The Silver Spring Transit Center is a great example of where the County needed to be protected both against faulty design

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and faulty construction practices. This can sometimes occur as the result of taking the “lowest bidder” without accounting for quality standards or assessing firms’ past performance on similar projects. If this the case, the County should reassess its bid selection criteria and proess.

Better contracting practices for the County may also include changing the popular “Design-Bid-Build” model to other contract models depending on the project. These other models include General Contractor/Construction Manager, Design-Build and Agency Construction Management. These contracted relationships have varying levels of control for both the government and contractor. Those that limit government control might result in cost savings, but can be politically risky.

Most importantly, contracts must include provisions that will address financial risks. These provisions include bid bonds, project warranties, insurance, performance bonds, liquidated damages, dispute resolution and contingency costs.¹²

**CONCLUSION**

In a volatile free market economy, the true costs of capital improvement projects are nearly impossible to predict. However, actions can be taken on the part of Montgomery County to reduce how large cost overruns in capital improvement projects have been. This strategy includes incorporating better budgeting and planning practices into the capital project process, and also by writing better contracts. By enacting these strategies, the County will be able to more accurately ascertain project costs, and also finance them appropriately.

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