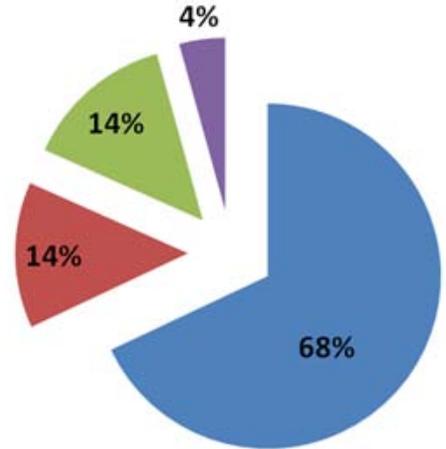


Understanding the Money

THE FINANCIAL PICTURE

The modeling that has been completed for the municipalization exploration project provides a complete financial picture of the money that a municipal utility would need to operate. The structure of the analysis is based on standard industry practices. The revenue requirement, or the amount of money the utility needs to collect to cover its expenses, consists of four major categories:

- **Debt Service**, paying back money that is borrowed through bonds
- **Operations and Maintenance**, costs for operating the system day-to-day
- **Payments in Lieu of Taxes (PILOTs)**, payments to the city and other governmental organizations
- **Power Supply**, buying power to supply electricity



The graphic to the right provides a breakdown of how those costs can compare in a typical year.

Details on these cost assumptions were presented as part of the [February 26th memo, attachment D](#). Some of the numbers have been updated since Feb. Following is a summary to help you better understand the latest numbers.

Debt Service

Payments associated with debt make up about 14% of the total on-going costs of operating the utility each year, since the debt is amortized over 30 years. Utilities regularly issue debt for investments in generation, transmission, distribution, and other assets; so this is not an additional cost that ratepayers would incur. For example, Xcel ratepayers already pay for debt in current energy bills to cover investments made by Xcel in Boulder and other Colorado communities.

In the city's models, the debt service category includes the following components to start and operate the utility:

Bridge Financing: This is a one-time cost that includes start-up capital costs necessary 6 months in advance of starting a utility. This bridge loan gets rolled into a tax-exempt debt issue at the time of acquisition of the electric system.

Amount Modeled	Term	Median Interest	Interest Range
\$4.9 million	6 months	8%	6% - 13.4%

Initial Taxable Debt: The model includes two forms of taxable debt associated with starting the local utility: stranded costs and acquisition costs. These were modeled based on high numbers provided by Xcel Energy. Although the other types of debt are modeled at fixed amounts, these debt issues are not. The models are programmed at each level of stranded and acquisition costs and then run to test how the results are impacted at different levels.

Since stranded and acquisition costs are decided through two separate legal processes that are not on the same timeline (and stranded costs could be determined a few years after acquisition and the city is operating the utility), this would likely result in two separate taxable debt issues at different times.

% of Stranded Costs	0%	25%	50%	75%	100%
Acquisition Costs	\$150M	\$150M	\$150M	\$150M	\$150M
Stranded Costs	\$0	\$64M	\$128M	\$191M	\$255M
Total	\$150M	\$214M	\$278M	\$341M	\$405M

Term	Median Interest	Interest Range
30 years	6.5%	4.9% - 11.4%

Initial Tax-Exempt Debt: This is a one-time cost to fund the remaining capital costs necessary to start the utility, including the first two years of capital improvements and a fund for 6 months of operating reserves.

Amount Modeled	Term	Median Interest	Interest Range
\$90.4 million	30 years	5.5%	4.1% - 9.2%

On-Going Tax-Exempt Debt: The modeling includes 4 additional debt issues over the 20-year period for upgrades to aging infrastructure and undergrounding. 20-year capital improvements are intended to replace or upgrade a large portion of the distribution and transmission system.

Amount Modeled	Term	Median Interest	Interest Range
Year 3: \$35.8M	30 years	5.5%	4.1% - 9.2%
Year 8: \$25.3M			
Year 13: \$26.5M			
Year 18: \$16.8M			

What else is included in these debt amounts?

The amounts modeled for the various debt issues are entered as the actual expected cost of the project. As is standard with all debt issues, additional costs are incurred when borrowing money which--when added to the project fund--equal the total bond par value. These additional costs include:

- Underwriting costs – assumed at 0.75%-1.0%
- Cost of Issuance – assumed at \$1 million - \$1.5 million
- Debt Service Reserve Fund – assumed at 10% of bond amount
- Capitalized Interest Fund – 18 months of debt payments

How does the Debt Service Coverage Ratio (DSCR) factor in?

This refers to the ratio of the net operating revenues (after expenses) to debt payments (principal and interest). In other words, a debt service coverage ratio of 1.25 (required by the City Charter) means that the net operating revenue can cover the debt payments and have an additional 25% of the debt payment amount left over. The model actually is set to have a higher level of 1.63, meaning that after the debt payment is made, an additional 63% of the debt amount is available for reserves.

Operations and Maintenance

On-going operation and maintenance (O&M) costs are annual costs required to ensure a utility can operate and maintain the distribution system with a high level of reliability and efficiency. O&M costs include staff to manage utility functions—from linemen to customer service—as well as equipment needed to maintain the electrical system and funding for services like energy efficiency rebates as well as responding to emergencies. These costs were modeled at \$23.6 million annually (2011 dollars) with a range of +/- 25%.

<p>Payments in Lieu of Taxes (PILOTs)</p>	<p>This category includes two types of PILOT funds. The first is a transfer from the utility to the general fund which is limited by the City Charter to 4% of revenues to replace the franchise fee that had been paid by Xcel (and collected from ratepayers). The second is a fund dedicated to pay other governmental entities, such as Boulder Valley School District and Boulder County, payments in lieu of property taxes they would have otherwise received from Xcel Energy.</p>
<p>Power Supply</p>	<p>This category is the largest on-going expense (more than 2/3 of ratepayers' bills) incurred by a utility. This represents the cost to buy power and transmission services to supply electricity to the utility's service territory. The six months of operating reserve that is included in the initial tax exempt debt issue (see debt service category) includes six months of power supply, transmission, and operations and maintenance. Annual expenses associated with this category are approximately \$112 million, largely depending on which resource portfolio is modeled.</p>
<p>Caveat</p>	<p>The modeling involved a complex process to look at risk and potential outcomes in a probabilistic manner. The numbers presented in this document look at a deterministic case (one out of many possibilities modeled). Wherever possible numbers were presented as the median value with the ranges modeled. For complete results of the latest modeling, see the July 23rd Council Study Session packet, section F.</p>

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