PacificCPE

COURSE
21156A

Capital Projects, Debt Service, and Bond Refunding in Government Accounting

Governments regularly finance infrastructure through bonds and special assessments—and accounting for those activities requires careful attention. This course covers the accounting treatment for capital projects and debt service funds, explores the use and potential abuse of special assessments, and explains current and advance refunding of debt. You'll also look at what net investment in capital assets can reveal about a government's financial position. A practical fit for CPAs working with municipal finance or governmental audits.

CREDIT HOURS 2 | FIELD OF STUDY ACCOUNTING | EXAM QUESTIONS 10

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Assignment

- Study the full course materials included here.
- Complete the review questions after each chapter.
- Answer 10 final exam questions.
- Final exam is scored immediately, 70% or better passes.
- Certificate of completion is available in your account.
- Failed exams can be retaken free of charge.

Course Objectives

- Recognize the proper accounting for capital leases and debt service in governmental funds and government-wide statements.

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Chapter 1: ACCOUNTING FOR CAPITAL PROJECTS AND DEBT SERVICE

Chapter Objective

After completing this chapter, you should be able to:

- Recognize the proper accounting for capital leases and debt service in governmental funds and government-wide statements.

As indicated in previous chapters, both governments and not-for-profits maintain separate funds (accounting and reporting entities) for resources to be used to acquire long-lived assets and to service debt. Governments classify these funds as governmental, as opposed to proprietary or *fiduciary*. In not-for-profits, the resources in these funds are categorized as either *without* donor *restrictions* or *with donor* restrictions, depending on their source. For the most part, the principles of revenue and expenditure recognition presented in earlier chapters are applicable to these funds. Nevertheless, because these funds are used to account for transactions having unique features and involving sizable amounts of resources, they warrant special consideration.

Our concern in this chapter is with the resources to acquire assets and to service debts, not with the assets or debts themselves. In governments, the resources to acquire capital assets, especially those that are financed with debt, are generally accounted for in capital projects funds. However, the costs of capital assets may also be accounted for in the general fund if the amounts are relatively small. Because the general fund, like the capital projects funds, is a governmental fund, the accounting entries and issues are similar. The resources to service debts are typically accounted for in debt service funds. Accounting for the assets and liabilities themselves is addressed in Chapter 1 of course 21151F of course 21157F, Chapter 1 of course 21151F of course 21158F.

Our focus is on each of the funds as independent fiscal and accounting entities. Both types of funds are governmental and accordingly are accounted for on a modified accrual basis. However, like other governmental funds, when they are consolidated with other funds in government-wide financial statements, their accounts are adjusted so that they are on a full accrual basis. First, we discuss capital projects and debt service funds. Then, we address the related issues of special assessments, arbitrage, and debt refunding.

HOW DO GOVERNMENTS ACCOUNT AND REPORT IN CAPITAL PROJECTS FUNDS?

Governments establish capital projects funds to account for and report financial resources that are restricted, committed, or assigned to expenditure for capital outlays. This includes the acquisition

or construction of capital facilities (other than those to be financed by proprietary funds and trust funds for individuals, private organizations, or other governments) and other capital assets. They may maintain a separate fund for each major project or combine two or more projects in a single fund. Capital facilities include buildings, infrastructure assets (such as roads, bridges, water mains, and sewer systems), and equipment. However, this fund is not used to account for capital assets that are purchased directly with current revenues of the general fund.

Reasons for Maintaining Capital Projects Funds

Governments are required to report in capital projects funds the use of proceeds from general obligation bonds to finance capital assets. They also may choose to maintain capital projects funds for any resources that are legally restricted or *contractually required* for the acquisition of capital assets. The primary purpose of this type of fund is to ensure and demonstrate the expenditure of the dedicated financial resources is both legally and contractually compliant. Some governments also maintain capital projects funds for resources that they have committed or assigned for capital purposes at their own discretion. Major capital projects are most commonly financed with general obligation bonds or other forms of long-term debt, but they may also be funded by intergovernmental grants, special tax levies, or assessments. Restrictions on capital project resources usually stem from debt covenants or from legislation authorizing the taxes or assessments. Generally, the restrictions are exceedingly specific about how the resources may be used. For example, the funds may be used only for the construction of a particular bridge or the purchase of a narrowly defined type of equipment.

Basis of Accounting

Capital projects funds are similar to special revenue funds in that their revenues are restricted for specified purposes. Accordingly, the principles of revenue and expenditure spelled out in Chapter 1 of course 21151F of course 21154F, Chapter 1 of course 21151F of course 21155F, that are applicable to all governmental funds are also appropriate for capital projects funds. As previously noted, capital projects funds are accounted for on the modified accrual basis. In government-wide statements the funds are accounted for on a full accrual basis (as discussed in previous chapters with respect to governmental funds in general) and consolidated into governmental activities with the government's other governmental funds and internal service funds.

Budgetary Entries

As discussed in Chapter 1 of course 21153F, budgetary entries give formal accounting recognition to the budget and enhance control. They help ensure that expenditures do not exceed authorizations. Governments generally budget capital expenditures on the basis of projects rather than periods. Therefore, they may not find it necessary to prepare an annual budget, to make annual budgetary entries, or to include comparisons of budget-to-actual expenditures for the year with their financial statements. Nevertheless, budgetary accounts are as useful in maximizing control over project

expenditures as they are over period expenditures. Therefore, the GASB highlights the importance of budgetary accounting in circumstances in which control cannot readily be established by means other than a budget. It is essential, for example, "where numerous construction projects are being financed through a capital projects fund or where such projects are being constructed by the government's labor force."[1] On the other hand, when a government can establish control by entering into a fixed-price contract with a single vendor or construction company, then budgetary entries are not necessary. The budgetary entries for capital projects would follow the pattern illustrated in Chapter 1 of course 21153F for other governmental funds, and the same set of financial statements is prepared. Budgetary entries are strictly an internal control mechanism; they do not affect year-end financial statements. A unique feature of capital projects funds is that the financial statements prepared at the end of the fiscal year may be considered interim financial statements because the capital projects funds exist only for the term (life) of the project under construction.

Reporting Bond Proceeds and Issuance Costs

Government long-term obligations can take many forms—the most common of which is bonds. Bonds are formal certificates of indebtedness, most frequently issued by governments for the long term. The discussion in this section can be generalized to other forms of debt—such as long-term notes and certificates of participation—which often differ from bonds more in legal form than in economic substance. *Governmental funds*, including capital projects funds, do not report long-term obligations. Therefore, when the proceeds of bonds or other long-term obligations are received by a capital projects fund, they must be accounted for as "other financing sources." When governments issue bonds, they seldom receive in cash an amount **exactly equal to the bonds' face value.** There are at least two sources of the difference between face value and cash received:

- **Issuance costs.** The bond underwriters (the brokers and dealers who will distribute the securities to other brokers and dealers or sell them directly to investors), financial advisors, and attorneys charge for their services and will withhold a portion of the gross proceeds as their fees.
- **Premiums and discounts**. The bond coupon rate (the stated interest rate) is rarely exactly equal to the market rate at the time of sale. Market rates fluctuate constantly, and the market rate that will prevail at the time of issuance cannot be determined precisely in advance. The exact rate that the bonds will yield is established by issuing the bonds at a price greater or less than face value. A bond sold to yield an interest rate greater than the coupon rate will be sold at a discount. Because the prevailing rate is greater than the coupon rate, the bond is of less value to an investor than a bond with a comparable face value paying the prevailing rate; hence, the investor will pay less than the face value for it. Conversely, a bond sold to yield an interest rate less than the coupon rate will be sold at a premium. Because the prevailing rate is less than the coupon rate, the bond is of greater value than a bond with a comparable face value paying the prevailing rate. Historically,

bonds were printed with a coupon rate days or weeks prior to the issuance date, and hence there could be a significant difference between the coupon rate and the prevailing market rate at the date of sale. Today most bonds are issued in electronic rather than paper form. Moreover, U.S. tax laws discourage investors from acquiring bonds at a discount. Accordingly, premiums and discounts tend to be much smaller than in the past. Governments should report the underwriting and other issuance costs as expenditures. If the issuance costs are not set out separately from premiums and discounts, then the government should estimate them.

EXAMPLE: BOND ISSUANCE COSTS

A city issues $10.0 million of bonds at a premium of $0.2 million. It incurs $0.6 million in issuance costs, and thereby nets $9.6 million.

The following entry would be appropriate:

Cash	$9.6	
Expenditures—Bond issuance costs	0.6	
Other financing sources—Bond proceeds (face value)		$10.0
Other financing sources—Bond proceeds (bond premium)		0.2

To record the issuance of bonds and related issuance costs

Accounting for Bond Premiums and Discounts

Bond premiums and discounts become an accounting issue only insofar as there is uncertainty about how the “excess” cash will be disposed of and the manner of compensating for any cash deficiency.

EXAMPLE: BOND PREMIUMS AND DISCOUNT

A government authorizes two highway construction projects—Project 1 and Project 2—each to cost no more than $50 million. To finance the projects, it issues two series of bonds—Series 1 and Series 2—each with a face value of $50 million. Both mature in 30 years (60 semiannual periods) and pay interest at an annual rate of 6 percent (semiannual rate of 3 percent)—the coupon rate. Owing to prevailing interest rates of 5.9 percent on the issue date, Series 1 is issued for $50,699,000 (a

premium of $699,000). However, as a consequence of subsequent increases in prevailing interest rates to 6.1 percent, Series 2 is issued for $49,315,000 (a discount of $685,000).

The initial entries to record both bond issues (ignoring issue costs) are straightforward:

Cash	$50,699,000	
Other financing sources—Bond proceeds (face value)		$50,000,000
Other financing sources—Bond proceeds (bond premium)		699,000

To record the issuance of Series 1

Cash	$49,315,000	
Other financing sources—Bond proceeds (bond discount)	685,000	
Other financing sources—Bond proceeds (face value)		$50,000,000

To record the issuance of Series 2

Both projects were authorized to cost no more than $50 million. Therefore, the $699,000 premium should not be used to add unauthorized frills to the planned highway. Instead, it should be applied to future interest payments. The bonds were issued with a coupon rate of 6 percent. Because of favorable market conditions, the government was able to borrow funds at only 5.9 percent. Still, its annual cash interest payments will be $3.0 million (6 percent of $50 million)—not $2,950,000 (5.9 percent of $50 million). The premium of $699,000 can be seen as interest that investors paid the government “up front” to receive “extra” interest of $0.1 million each year over the life of the bonds. Accordingly, the government should transfer the $699,000 to the debt service fund—the fund that will be used to accumulate the resources required to pay interest and principal on the bonds. The following entry would give effect to this policy:

Other financing uses—Nonreciprocal transfer to debt

service fund	$699,000	
Cash		$699,000

To record the transfer of the premium to the debt service fund

Accounting for the discount is generally not the mirror image of that for the premium. A bond discount, like a bond premium, adjusts the bond issuance price to align the coupon rate with the prevailing rate. Because of the unfavorable market conditions, the government had to pay interest at a rate greater than the bond coupon rate. Therefore, it received less than the face value of the

bonds, and less than it apparently planned to spend on the capital project. When the bonds are issued at a premium, the capital projects fund can transfer resources to the debt service fund. However, when the bonds are issued at a discount, the debt service fund will not have resources available for transfer to the capital projects fund. Therefore, the government has a choice. It can either reduce the scale of the project or make up the deficiency by some other means. If it elects to reduce the scale of the project, then no further journal entries are required. If it opts to fund the shortfall by other means, then the source of the funds will dictate the additional accounting entries. For example, if the government were to appropriate and transfer $685,000 of general fund resources, then the following capital projects fund entry would be necessary:

Cash	$685,000	
Other financing sources—Nonreciprocal transfer from general fund		$685,000

To record the transfer from the general fund to compensate for the bond discount

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COMPREHENSIVE EXAMPLE: MAIN TYPES OF TRANSACTIONS ACCOUNTED FOR IN CAPITAL PROJECTS FUNDS

The voters of Newer City authorize the issuance of $20 million in general obligation bonds to finance the construction of a new highway. The project is expected to cost $30 million (including bond issuance costs), with the additional $10 million to be financed with a state grant. Although the grant may be paid in advance, it is intended to reimburse the city for actual costs incurred.

Authorizing the Project and Recording the Budget

The city is required to account for the resources in a fund dedicated exclusively to this project. It elects to adopt a budget and integrate it into its accounts:

Estimated bond proceeds	$20,000,000	
Estimated grant revenues	10,000,000	
Fund balance		$30,000,000

To record estimated revenues and other financing sources

Fund balance	$30,000,000	
Appropriations		$30,000,000

To record appropriations (estimated expenditures)

Issuing the Bonds

The city issues $20 million of bonds. Because of favorable market conditions, the bonds are sold for $20.2 million. After deducting issuance costs of $0.15 million, the sale nets $20.05 million:

Cash	$20,050,000	
Expenditures—Issuance costs	150,000	
Other financing sources—Bond proceeds (face value)		$20,000,000
Other financing sources—Bond proceeds (bond premium)		200,000

To record the issuance of bonds

Transferring the Premium to the Debt Service Fund

The city transfers the premium, net of the issue costs, to the debt service fund:

Other financing uses—Nonreciprocal transfer to debt service fund	$50,000	
Cash		$50,000

To transfer the bond premium, net of issuance costs, to the debt service fund

Encumbering Available Resources

The city signs several construction-related contracts for goods and services at a cost of $16 million. Capital projects funds, no less than the general fund, can avoid overspending by encumbering fund balance in the amount of purchase orders and similar commitments.

Encumbrances	$16,000,000	
Reserve for encumbrances		$16,000,000

To encumber $16 million for *contracts signed*

Assuming that the fund balance is already legally restricted for construction of the new highway, the reserve for encumbrances is a temporary account maintained strictly to enhance internal control. For reporting purposes, insofar as there remains a year-end balance, it will be incorporated into “restricted fund balance.”

Recording Grants