

**Recording Debt Service  
Payments and  
Amortization**

## Repayments

- In proprietary funds, debt repayments are recorded within the proprietary fund as is the long-term debt.
- In governmental funds, repayments involve both governmental funds (where the payments are recorded) and the government-wide reporting fund (where the obligation is adjusted and amortization is recorded).

In proprietary funds, debt repayments are recorded within the proprietary fund as is the long term payable for bonds or Certificates of Participation.

In governmental funds, repayments involve both governmental funds (where the payments are recorded) and government-wide reporting fund (where the obligation is adjusted and amortization is recorded).

## Bond Principal and Interest

- Generally, bond principal and interest payments are made using T-code 568.

T-code 568 debits expenditure control (GL 3500) and credits cash in bank or cash with fiscal agent.

0077 Cash in Bank

0080 Cash with Fiscal Agents – Restricted

0081 Cash with Fiscal Agents – Unrestricted

(All are current asset accounts.)

Generally, bond principal and interest are made using transaction code 568.

Transaction code 568 debits expenditure control (GL 3500) and credits cash in bank or cash with fiscal agent.

Be sure to select the correct cash GL account, depending on whether your agency's cash is in a bank outside of State Treasury or held by a fiscal agent.

## P & I Payment

Transaction Code 568

### ***Bonds***

- Comptroller object 7100 principal
- Comptroller object 7250 interest

### ***Certificates of Participation (COPs)***

- Comptroller object 7150 principal
- Comptroller object 7300 interest

The comptroller objects for principal and interest payments are shown here.

It is important to use the appropriate comptroller object because this transaction needs to match up with the transaction to reduce the bond or COP liability, which I'll talk about a little later.

## Agency Practice

- Some agencies have established bond debt payment practices with other acceptable T-codes.
- Transaction code 714 (BT with TC 715)
  - Debit 3500 Expenditure Control – Cash
  - Credit 0070 Cash on Deposit
- Transaction code 167R (ACH wire transfer)
  - Debit 3500 Expenditure Control – Cash
  - Credit 0065 Unreconciled Deposit

Some agencies have established bond debt payment practices with other acceptable transactions codes. These include transaction codes 714/715 and sometimes payment is made with a wire transfer, transaction code 167R.

Obviously, both of these alternatives apply when your agency's cash is in State Treasury.

## Lottery Bonds

- DAS actually completes the payment and records cash in bank in the agencies' records, general ledger account 0077.

Balanced Transfer

DAS

- 185R Debit 3550 Operating Transfer Out  
Credit 0065 Unreconciled Deposit

Agency

- 186 Debit 0077 Cash in Bank  
Credit 3150 Transfers In

For Lottery bonds, DAS transfers lottery funds from DAS and records the transfer as cash in bank in the agencies' records, general ledger account 0077. DAS enters this transfer with transaction codes 185R and 186.

The agency then records the expenditure with transaction code 568.

## COP Debt Payments

- Most COP's require that agencies remit cash for principal and interest to DAS, who remits the payments to the agent, who then pays COP holders.
- Expenditures are recorded at the time the agency makes payment.

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Expenditures are recorded at the time the agency makes payment.

## COP Payment T-Codes

- 760 (Balanced Transfer) – Agency
  - Debit 3500 Expenditure Control Cash
  - Credit 0070 Cash on Deposit
- 761 – DAS
  - Debit 0070 Cash on Deposit
  - Credit 0501 Accounts Receivable –  
Other - Billed

In the past, you may recall that Transaction codes 736 and 737 were used for COP principal and interest payments to DAS.

Budget and Management is revising their Accounts Receivable process, so that payments made by the agencies to DAS will clear the receivable established by Budget and Management. Therefore, in the future agencies will be requested to remit COP payments to DAS using transaction codes 760 and 761.

## Interest Earned

### Transaction Code 567

<u>GL</u>	<u>CO</u>	<u>Debit</u>	<u>Credit</u>
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0077	Cash in Bank	716.44	
3100	0800 Revenue Control - Cash		716.44

(Interest on Investments)

*Record interest earned per Budget  
and Management statement.*

Please take a look at the example statements sent from Budget and Management for the 1999A Series A/Partial Refunding of 1997A. There are three of them. Two are sent out so that agencies remit payment to DAS and post interest earned. The other one is in a different format and is sent out annually, so that accrued interest can be posted through year end.

We will use the example statement dated March 26, 2004. The first step is to post the interest income with transaction code 567 as Cash in Bank. On this sample statement, you can see that \$716.44 was earned.

## Interest Expenditure (Earned Portion)

### Transaction Code 568

<u>GL</u>	<u>CO</u>	<u>Debit</u>	<u>Credit</u>
3500	7300	Expenditure Control – Cash 716.44	
		(Interest -COPs)	
0077		Cash in Bank	716.44

*Record expenditure of interest  
earned per Budget and  
Management statement.*

Then we need to show the interest earned as part of our expenditure, so we make a transaction code entry 568 for the same amount as the transaction code 567 entry.

In theory, you wait until the interest payment was made on the debt to recognize the expenditure. But, since BAM invoices the agency for the net interest – that is, the interest payment due, less interest earned on cash balances – you would record the expenditure for this portion at the time interest income is recorded.

## 1999 Series A/Partial Refunding of 1997 A

Transaction code 760

For 05/01/2004 Payment

<u>GL</u>	<u>CO</u>	<u>Debit</u>	<u>Credit</u>
3500	7150	Expenditure Control - Cash (Principal - COPs) 410,000.00	
3500	7300	Expenditure Control - Cash (Interest - COPs) 2,548,093.56	
0070		Cash in State Treasury 2,958,093.56	

*Record payment of principal and  
net interest per schedule in Debt  
Service Fund.*

Please refer to the Statement received from Budget and Management dated March 26, 2004 and the first line of the debt Service Schedule for the 1999 Series A Certificate of Participation Refunding 1997 Series A.

So you see, the interest earned has been netted from the interest shown on the debt service schedule so the cash amount actually transferred to DAS is \$2,958,093.56, rather than the gross amount of \$2,958,810.

If your agency's COPs were issued for a general government purpose, this payment of principal and interest would most likely be accounted for in your Debt Service Fund.

1999 Series A/Partial Refunding of  
1997 A

Transaction code 761  
For 05/01/2004 Payment

Debit

0070 Cash on Deposit – Treas 410,000.00  
0070 Cash on Deposit – Treas 2,548,093.56

Credit

0501 Accts Rec-Other-Billed 2,958,093.56

Then, on DAS' side of the balanced transfer, Accounts Receivable is credited.

**Reduce Liability – Principal Payment  
T-Code 528**

	Debit General Ledger Accounts
1276	Bonds Payable – Current
1279	COP Payable – Current
1704	COPs Payable – Noncurrent
1714	Bonds Payable – Noncurrent
1540	Tax Anticipation Notes Payable

After we make the payment to DAS, then we need to reduce the liability amount in the Government-wide Reporting Fund by the amount of principal repaid. To do this step, we use transaction code 528.

It might help to think of your own mortgage payment, if you own your own home. Each time a principal payment is made in the debt service fund, you need to reduce the long-term liability in the government-wide reporting fund by the same amount.

Here are the optional general ledger accounts for Transaction Code 528.

Reduce Liability – Principal Payment  
T-Code 528

	Comptroller Objects
7100	Principal – Bonds
7150	Principal – COPs
7050	Refund Debt – Escrow Agent From Bond/COP Proceeds
7410	Principal – Tax Anticipation Notes

And..... here are the comptroller objects that are permitted with transaction code 528.

## Reduce Liability in Government-wide Reporting Fund

Transaction code 528

<u>GL</u>	<u>CO</u>	<u>Debit</u>	<u>Credit</u>
1704		COPs Payable Noncurrent 410,000	
3600	7150	GAAP Offset Expenditure – Cash (Principal – COPs)	410,000

Using our earlier example, this would be our entry to reduce COP principal in the Government-wide reporting fund.

Since the liability has a credit balance, we want to debit to reduce the outstanding balance. It is important to use the appropriate comptroller object when making this entry so that the credit to principal – COP (as in our example) will offset the debit to comptroller object 7150 in the entry originally recorded to make the principal payment.

In this way, when the government-wide reporting fund is combined with governmental funds for government-wide reporting, principal will net to zero.

We recommend you record this entry each time a principal payment is made rather than wait until year end to compare your general ledger balance with your debt service repayment schedule.

## Amortization Requirements Discount and Premium

- OAM 15 05 00.PO .106 a. cites the requirements of APB Opinions No. 12, *Omnibus Opinion – 1967*, and No. 21, *Interest on Receivables and Payable*, as amended. These opinions require deferral and amortization of debt issue premium and discount, using the “interest” method. However, other methods of amortization may be used if not materially different from those which would result from the “interest” method.

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## Amortization of COI

APB 21 also requires issuance costs to be reported as deferred charges. APB opinion No. 21 does not specify an amortization method for issuance costs.

Though no method of amortization is specified, APB 21 does require issue costs to be reported as deferred charges.

Also, remember that GAAP is only applicable to items and situations that are material.

## Amortization

The Oregon Accounting Manual refers to a "systematic and rational method" of amortization.

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This means that because a causal relationship exists in a general sense, but not specifically, premium, discount, and costs of issuance are allocated through amortization. Usually no traceable relationship to an asset or liability is evident. Allocated expense or revenue recognized through amortization is only indirectly related to the activities of the same period.

Basically, amortization spreads costs out over a period of years, rather than the recognition of all costs in one year.

## Amortization of Premium and Discount

- The profession's preferred procedure is the effective interest rate method.
- The straight line method may be used if the results are not materially different than those resulting from the effective interest method. Straight-line is generally used in practice because it is easier.
- The bonds outstanding method is an application of straight-line method to serial bonds.

The profession's preferred procedure is the effective interest rate method. Under the effective interest method, interest expense is based on increasing book value of the bonds (for discounts) or decreasing book value (for premiums). The book value equals the face amount minus any unamortized discount or plus any amortized premium.

The straight line method may be used if the results are not materially different than those resulting from the effective interest method. Straight-line is generally used in practice because it is easier. Also, while bond issue costs should be amortized using the effective interest method, the straight-line method is generally used in practice because it is easier and the results are not materially different. Also some agencies expense cost of issuance and underwriter's discount if it is immaterial. For instance, less than 0.75 percent.

The bonds outstanding method is an application of straight-line method to serial bonds. Bonds outstanding assumes the discount applicable to each bond of the issue is the same dollar amount each year.

# **Effective Interest Method**

Date	Cash	Interest/ Amort	Bond Discount	Book Value
1/1/99	<u>Credit</u>	<u>Debit</u>	<u>Credit</u>	92,278
1/1/00	8,000	9,265	1,265	93,543
1/1/01	8,000	9,392	1,392	94,934
1/1/02	8,000	9,531	1,531	96,466
1/1/03	8,000	9,685	1,685	98,151
1/1/04	8,000	9,854	1,854	100,005
	<hr/> 40,000	<hr/> 47,727	<hr/> 7,727	

This Effective Interest example assumes a maturity value of \$100,000.

Usually interest is paid every six months, but to simplify the example, we've used an eight percent coupon rate payable annually.

Also, the discount or premium amount is usually spelled out for us in the Official Statement or by Budget and Management so we don't have to determine the initial book value or the present value at the time of issue. As you can see, this issue was sold to yield a little bit over 10 percent.

Each period, amortization is calculated.

First, interest paid plus the amortized amount equals the carrying value at the beginning of the period (\$92,278 in year one) times the yield or market rate, which is just over 10 percent. (.1004)

The cash paid out is the stated coupon rate (8 percent) times face value \$100,000.

Subtract the cash paid from the total interest (and amortization) on the book value of the bonds outstanding to determine the amortized discount.

# **Straight-line Method**

Date	Cash	Interest/ Amort	Bond Discount	Book Value
1/1/99	<u>Credit</u>	<u>Debit</u>	<u>Credit</u>	92,278
1/1/00	8,000	9,545	1,545	93,823
1/1/01	8,000	9,545	1,545	95,368
1/1/02	8,000	9,545	1,545	96,913
1/1/03	8,000	9,545	1,545	98,458
1/1/04	8,000	9,545	1,545	100,003
	<u>40,000</u>	<u>47,725</u>	<u>7,725</u>	

Here is a straight-line example using the same assumptions, a \$100,000 issue with a coupon rate of eight percent sold to yield about 10 percent.

Again, to simplify the example, we've used an eight percent coupon rate payable annually.

So, this is much easier. The, straight-line amortization amount is the premium or discount divided by number of periods outstanding.

Total expense equals the coupon interest rate times face value plus the amortized amount for discount or minus the premium.

# **Bonds Outstanding Method**

Period	Bonds O/S	Fraction of Total Bonds O/S	Total Disc	Yearly Discount Amort
1	100,000	10/30	7,725	2,575
2	80,000	8/30	7,725	2,060
3	60,000	6/30	7,725	1,545
4	40,000	4/30	7,725	1,030
5	20,000	2/30	7,725	515
	<u>300,000</u>	<u>30/30</u>		<u>7,725</u>

This is the first step to the Bonds Outstanding Method. This is a variation of the straight-line method. It uses the percentage of decrease in outstanding debt each maturity period as the basis for calculating the related amount of premium or discount on the bonds.

Period	Bonds O/S	Interest Payment 8%	Period Discount Amort	Period Interest & Amort
1	100,000	8,000	2,575	10,575
2	80,000	6,400	2,060	8,460
3	60,000	4,800	1,545	6,345
4	40,000	3,200	1,030	4,230
5	20,000	1,600	515	8,460
	<u>300,000</u>		<u>7,725</u>	

The second step in the bonds outstanding method is to determine the interest expense. This slide shows straight-line.

However, if you like, you can apply the effective interest rate to serial bonds as well. Just as in the example of term bonds, interest expense for each period is computed by multiplying the effective interest rate (the yield rate) times the carrying amount of bonds outstanding during the period.

The amortization of bond discount or premium is the difference between the effective interest expense for the period and the actual interest payments.

Note that if the effective interest rate method is applied to serial bonds, the interest is at a constant rate relative to the carrying amount of the bonds outstanding.

Amortization of Discount, COI,  
Deferred Charges  
Transaction Code 520

	Credit General Ledger Accounts
0602	Prepaid Expenses
0603	Deferred Charges
1701	Underwriter's Discount COPS
1702	Discount on COPS Sold
1705	Deferred Loss/Gain on Refunding
1711	Underwriter's Discount Bonds
1712	Discount on Bonds Sold

Transaction Code 520 is used to amortize discount, cost of issuance, and deferred charges related to long term debt.

And, here are the optional credit general ledger accounts you may use with t-code 520. As we will see later, there is another t-code used to amortize premiums.

Amortization of Discount, COI, Deferred  
Charges  
Transaction Code 520

	Comptroller Objects
7420	Amortization – Deferred Charges
7430	Amortization – Prepaid Expenses
7440	Amort – Underwriter’s Disc – Bonds
7445	Amort – Underwriter’s Disc – COPs
7450	Amort – Disc/Prem on Bonds
7455	Amort – Disc/Prem on COPs
7460	Amortization Cost of Issue – Bonds
7465	Amortization Cost of Issue – COPs

Here are the comptroller objects available on transaction code 520.

## Amortization of Discount Example

Transaction Code 520

<u>GL</u>	<u>CO</u>		<u>Debit</u>	<u>Credit</u>
3600	7455	GAAP Offset Expenditure (Amort Disc/Prem COPs)	1,545	
1702		Discount on COPs Sold		1,545

*Record amortization of discount on COPs*

In our examples for 1999 Series A/Partial Refunding of 1997 A, we recorded the actual payment portion of interest expense, with a combination of transaction codes 568 and 736.

If there had been a discount at the time of issue, we need to amortize this portion of expense in the government-wide fund. I've used the \$1,545 from our computation of discount, where we used the straight-line method.

## Amortization of Premium Transaction Code 523

	Debit General Ledger Accounts
1703	Premium on COPs Sold
1713	Premium on Bonds Sold
1545	Premium on TANs

	Comptroller Objects
7450	Amort – Discount/Premium on Bonds
7455	Amort – Discount/Premium on COPs

If bonds or COPs were issued at a premium, we would want to debit that general ledger account as we amortize. Therefore, we have transaction code 523 devoted specifically to amortization of premiums. On the previous slide, the discount account was credited when we used transaction code 520.

## Quiz

1. What transaction codes are usually used to adjust cash in bank, GL 0077?
2. What are some examples of transaction codes used to make COP payments to DAS?
3. What transaction code is used to amortize discounts and cost of issuance?
4. What transaction code is used to amortize premium?
5. What transaction code is used to reduce the long term liability for Bond or COPs in the Government-wide fund?

Here are a few questions. I will give you a little time to jot down the answers.

## Answers

1. 567 and 568
2. 760/761
3. 520
4. 523
5. 528

The questions were:

1. What transaction codes are usually used to adjust cash in bank, GL 0077?
2. What are some examples of transaction codes used to make COP payments to DAS?
3. What transaction code is used to amortize discounts and cost of issuance?
4. What transaction code is used to amortize premium?
5. What transaction code is used to reduce the long term liability for Bond or COPs in the Government-wide fund?