

ARBITRAGE

WHAT IS IT & WHAT ARE YOUR RESPONSIBILITIES?



2011 CGFOA/CMCA Annual Conference
Copper Mountain, Colorado

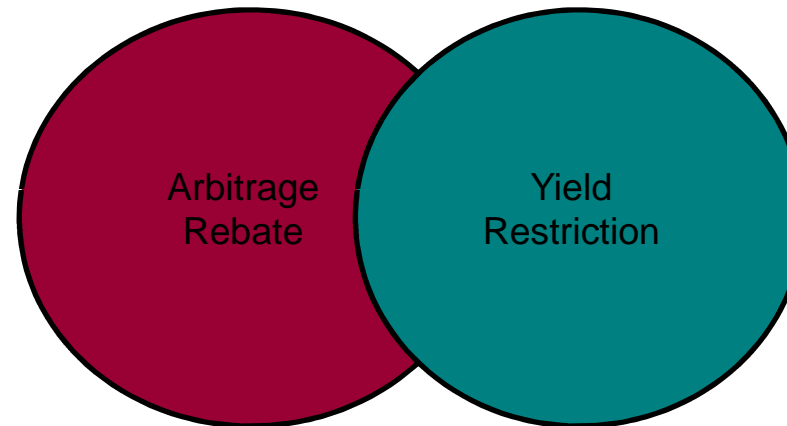
Presented by:
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November 17, 2011

DISCUSSION OUTLINE

- Fundamentals of the Arbitrage Rebate and Yield Restriction Requirements
- Amounts Subject to the Requirements
- Arbitrage Rebate Payments vs Yield Reduction Payments
- Exceptions to the Arbitrage Rebate Requirements
- Practical Considerations

- 2 separate requirements though related
- Need to comply with both requirements to avoid bonds being declared “Arbitrage Bonds”

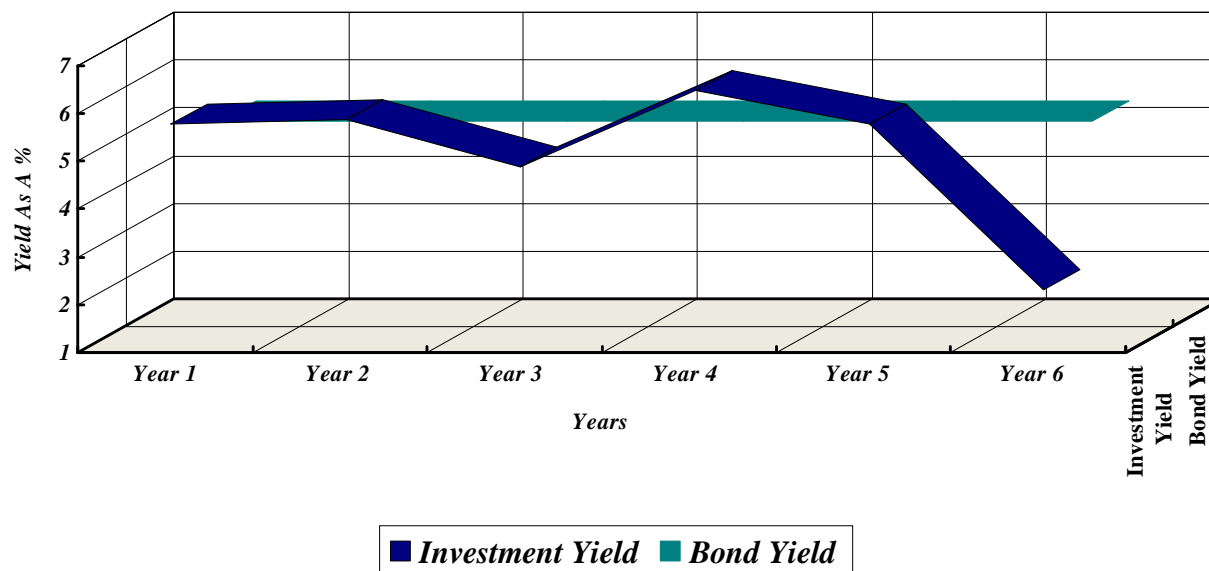


- Arbitrage rebate – issuers can achieve compliance by remitting a rebate payment to the IRS
- Yield restriction – issuers can achieve compliance by...
 - ✓ Investing yield restricted amounts at a yield below the bond yield or...
 - ✓ Remitting a yield reduction payment to the IRS

FUNDAMENTALS – ARBITRAGE DEFINED

- Borrow at tax-exempt rates and invest at higher taxable rates without incurring any additional risk
 - ✓ Positive and negative arbitrage
 - ✓ When the yield curve is upwards sloping, tax-exemption of bond interest allows for positive arbitrage

What Is Arbitrage?



FUNDAMENTALS – LEGISLATIVE HISTORY

- Tax-exemption is a federal subsidy
- System was abused
- Laws and regulations were established to discourage issuers from:
 - ✓ Issuing more bonds than needed
 - ✓ Issuing bonds sooner than needed
 - ✓ Leaving bonds outstanding longer than needed

AMOUNTS SUBJECT TO THE REQUIREMENTS

Arbitrage Rebate

- ✓ Gross proceeds
 - Sale proceeds – amounts received from the sale of the bonds
 - Investment proceeds – earnings on sale proceeds
 - Replacement proceeds – typically amounts pledged to pay debt service
 - Transferred proceeds – prior bond proceeds that become proceeds of the refunding bonds

Yield Restriction

- ✓ Amounts remaining beyond applicable “temporary period” (3 years)
- ✓ Amounts beyond the “reasonably required reserve”, the lesser of ...
 - 10% of par amount
 - 125% of average annual debt service
 - Maximum annual debt service
- ✓ Advance refunding escrows
- ✓ Transferred proceeds

AMOUNTS SUBJECT TO THE REQUIREMENTS

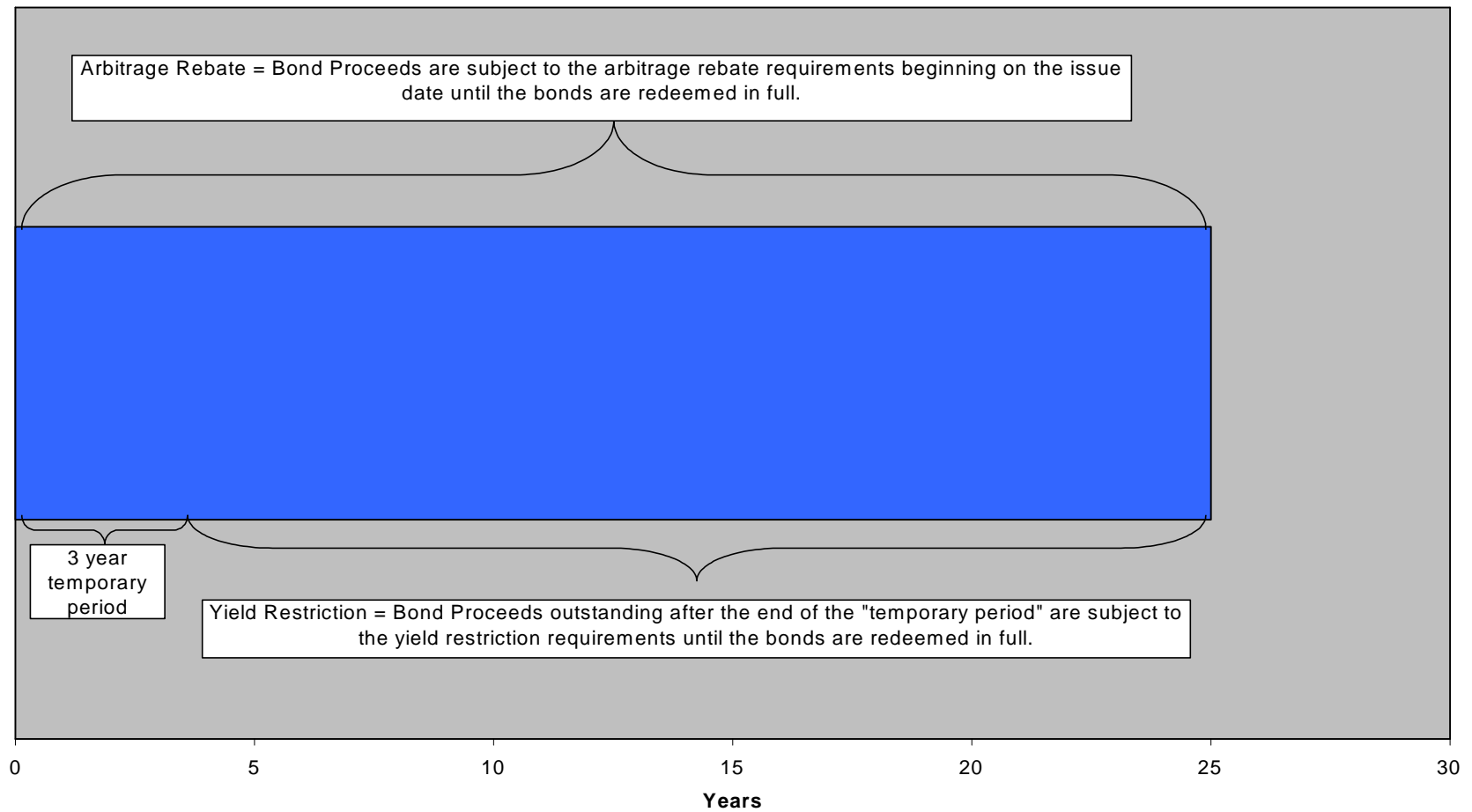
Sources & Uses of Funds				
<i>Sources of Funds</i>	Bond Proceeds	Prior Bond Proceeds	Other Sources	Totals
Par Amount	69,000,000.00			
+ Original Issue Premium	922,324.30			
- Original Issue Discount	<u>0.00</u>			
Net Production		69,922,324.30		69,922,324.30
Accrued Interest		<u>373,779.25</u>		<u>373,779.25</u>
Total Sources:	<u>70,296,103.55</u>	<u>0.00</u>	<u>0.00</u>	<u>70,296,103.55</u>
 <i>Uses of Funds</i>				
Cost of Issuance		200,000.00		200,000.00
Construction Fund		62,472,207.50		62,472,207.50
Reserve Account		6,412,792.50		6,412,792.50
Bond Accounts		373,779.25		373,779.25
Bond Insurance		183,000.00		183,000.00
Underwriters' Discount		<u>654,324.30</u>		<u>654,324.30</u>
Total Uses:	<u>70,296,103.55</u>	<u>0.00</u>	<u>0.00</u>	<u>70,296,103.55</u>

AMOUNTS SUBJECT TO THE REQUIREMENTS

<u>Arbitrage Rebate</u>	<u>Fund/Account</u>	<u>Yield Restriction</u>
Yes	Construction Fund	Amounts remaining after "temporary period" (3 years)
Yes	Capitalized Interest Account	Amounts remaining after "temporary period" (3 years)
Yes	Reserve Fund	Only amounts above "reasonably required reserve"
Yes	Escrow Fund	Beginning on the issue date

- An arbitrage rebate or yield restriction liability compares . . .
 - ✓ Actual earnings
 - ✓ What you would have earned had you invested the same proceeds at the bond yield
- Bond Yield (aka “Arbitrage Yield”)
 - ✓ Fixed rate bonds
 - ✓ Variable rate bonds
- Issue by issue determination
- Arbitrage rebate and yield reduction payments consist of the net amount of positive arbitrage required to be remitted to the Federal government
- An arbitrage rebate payment is net of any yield reduction payments (You are not paying twice)
- Arbitrage rebate and yield reduction payments are required to be paid no later than 60 days after each “5th Bond Year” and 60 days after the final redemption date

Arbitrage Rebate vs Yield Restriction



ARBITRAGE REBATE PAYMENTS VS YIELD REDUCTION PAYMENTS

Summary of Arbitrage Rebate Analysis

Fund Reference Number	Fund Description	Current Fund Status	Computation Date Valuation	Gross Earnings	Internal Rate of Return	Excess Earnings
1	Reserve Fund	Active	\$4,222,050.03	\$868,347.10	4.167482%	(\$85,639.16)
2	Acquisition Fund (#282)	Active	\$1,220,413.77	\$3,291,460.12	5.683172%	\$778,253.67
3	Proceeds Transfer Fund	Inactive	\$0.00	\$5,141.38	5.005770%	\$594.60
Totals:			\$5,442,463.80	\$4,164,948.60		\$693,209.11

Summary - Rebate	
Arbitrage Yield:	4.537966%
Return on Investments:	5.300656%
Excess %:	0.762690%
Actual Gross Earnings:	4,164,948.60
Allowable Gross Earnings:	3,496,800.63
Excess Earnings:	693,209.11
FV of Computation Date Credit (December 9, 1998):	(1,196.61)
FV of Computation Date Credit (December 9, 1999):	(1,144.10)
FV of Computation Date Credit (December 9, 2000):	(1,093.90)
FV of Computation Date Credit (December 9, 2001):	(1,045.89)
FV of Computation Date Credit (December 9, 2002):	(1,000.00)
Less: Yield Restriction Liability:	(19,580.64)
Cumulative Rebate Liability:	\$668,147.97
Rebate Payment Due:	\$601,333.17

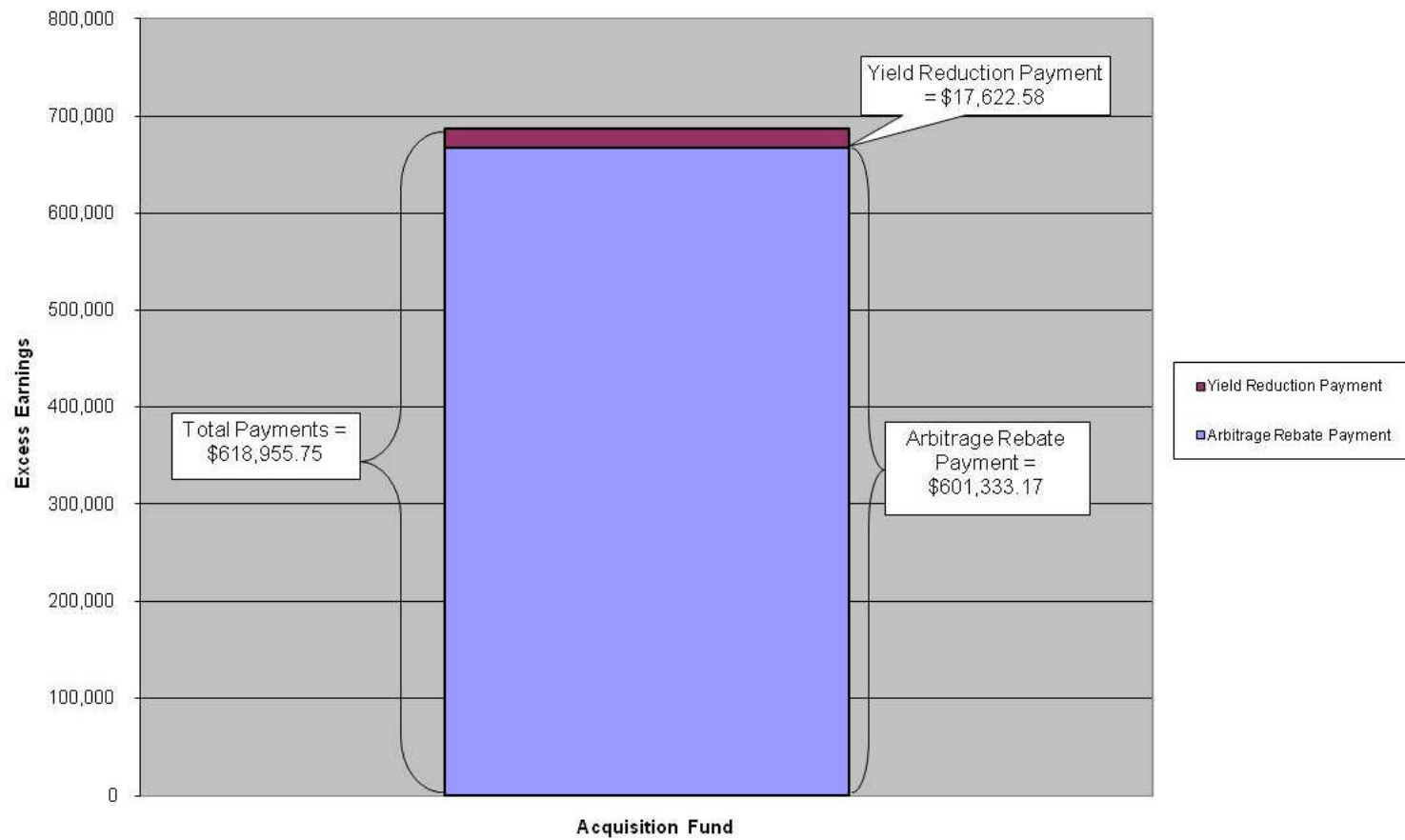
Summary of Yield Restriction Analysis

Fund Reference Number	Fund Description	Current Fund Status	Computation Date Valuation	Gross Earnings	Internal Rate of Return	Yield Restricted Excess Earnings
2	Acquisition Fund (#282)	Active	\$1,220,413.77	\$154,494.92	5.309376%	\$19,580.64
Totals:			\$1,220,413.77	\$154,494.92		\$19,580.64

Summary - Yield Restriction ¹	
Arbitrage Yield: ²	4.662966%
Return on Yield Restricted Investments:	5.309376%
Excess %:	0.762690%
Actual Gross Earnings:	154,494.92
Allowable Gross Earnings:	134,914.28
Yield Restriction Liability:	\$19,580.64
Yield Reduction Payment Due:	\$17,622.58

ARBITRAGE REBATE PAYMENTS VS YIELD REDUCTION PAYMENTS

Arbitrage Rebate vs Yield Reduction Payments



ARBITRAGE REBATE PAYMENTS VS YIELD REDUCTION PAYMENTS

- “My bonds have been refunded, so they are no longer subject to the arbitrage rebate and yield restriction requirements”.
 - ✓ Defeased vs Redeemed

<u>Description</u>	<u>Original Bonds</u>	<u>Refunding Bonds</u>
Issue Date	January 15, 2002	December 1, 2011
Debt Service Payment Dates	April & October	April & October
First Optional Redemption Date	April 1, 2012	April 1, 2022
Defeasance Date	December 1, 2011	
Redemption Date	April 1, 2012	

EXCEPTIONS TO THE ARBITRAGE REBATE REQUIREMENTS

- All or a portion of bond proceeds may be excluded from the arbitrage rebate requirements if they meet a spending exception
- If you earned positive arbitrage and met an exception, you are allowed to keep the earnings
- Small Issuer Exception
 - ✓ \$5M annual limit (subordinate entities included) on the amount of debt issued in a calendar year
 - ✓ School districts
 - \$10M effective January 1, 1998
 - \$15M effective January 1, 2002
 - ✓ Still subject to yield restriction requirements

- Spending exceptions
 - ✓ 6 month spending exception
 - Gross proceeds are required to be spent in six months
 - Gross proceeds do not include amounts deposited in the Reserve Fund
 - ✓ 18 month spending exception
 - Spending requirements
 - 15% in 6 months
 - 60% in 12 months
 - 100% in 18 months
 - Gross proceeds do not include amounts deposited in the Reserve Fund

EXCEPTIONS TO THE ARBITRAGE REBATE REQUIREMENTS

Sources & Uses of Funds				
<i>Sources of Funds</i>	Bond Proceeds	Prior Bond Proceeds	Other Sources	Totals
Par Amount	69,000,000.00			
+ Original Issue Premium	922,324.30			
- Original Issue Discount	0.00			
Net Production		69,922,324.30		69,922,324.30
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Total Uses:	<u>70,296,103.55</u>	<u>0.00</u>	<u>0.00</u>	<u>70,296,103.55</u>

EXCEPTIONS TO THE ARBITRAGE REBATE REQUIREMENTS

Gross Proceeds	
Construction Fund:	62,472,207.50
Cost of Issuance:	200,000.00
Expected Earnings:	2,193,527.26
Total:	64,865,734.76
Actual Earnings:	1,441,460.77

Expenditure Summary							
Issued	Test Date	Required (%)	Required (\$)	Actual (\$)	Actual (%)	Satisfied (Y/N)	(Excess)/ Shortfall
12/1/2011							
6 Months:	06/01/12	15.00%	9,729,860.21	11,675,832.26	18.000%	Yes	(1,945,972.04)
12 Months:	12/01/12	60.00%	38,919,440.86	46,703,329.03	72.000%	Yes	(7,783,888.17)
18 Months:	06/01/13	100.00%	64,113,668.27	64,113,668.27	100.000%	Yes	0.00

- Spending exceptions (continued)
 - ✓ 24 month spending exception
 - Applies to “construction” bonds only
 - Only includes “available construction proceeds”
 - Construction Fund
 - Capitalized Interest Account
 - Reserve Fund earnings
 - Spending requirements
 - 10% in 6 months
 - 45% in 12 months
 - 75% in 18 months
 - 100% in 24 months
 - ✓ Visit www.blxgroup.com for a copy of the spending exception flowcharts

EXCEPTIONS TO THE ARBITRAGE REBATE REQUIREMENTS

Available Construction Proceeds	
Construction Fund:	62,472,207.50
Expected Earnings:	2,186,527.26
Total:	64,658,734.76
Actual Earnings:	1,436,860.77

Expenditure Summary							
Issued	Test Date	Required (%)	Required (\$)	Actual (\$)	Actual (%)	Satisfied (Y/N)	(Excess)/ Shortfall
12/1/2011							
6 Months:	06/01/12	10.00%	6,465,873.48	7,759,048.17	12.000%	Yes	(1,293,174.70)
12 Months:	12/01/12	45.00%	29,096,430.64	33,622,542.08	52.000%	Yes	(4,526,111.43)
18 Months:	06/01/13	75.00%	48,494,051.07	53,666,749.85	83.000%	Yes	(5,172,698.78)
24 Months:	12/01/13	100.00%	63,909,068.27	63,909,068.27	100.000%	Yes	0.00

EXCEPTIONS TO THE ARBITRAGE REBATE REQUIREMENTS

Cumulative Rebate Liability (Applying Two-Year Spending Exception)

Issue Date: March 7, 1996
 Rebate Computation Date: March 7, 2001

Summary of Arbitrage Rebate Analysis - Applying Two-Year Spending Exception

Fund Reference Number	Fund Description	Current Fund Status	Computation Date Valuation	Gross Earnings	Internal Rate of Return	Excess Earnings
1	Construction Fund	NA	NA	NA	NA	\$0.00
2	Reserve Account	Inactive	\$0.00	\$1,002,397.80	4.910626%	(\$14,816.48)
Totals:			<u>\$0.00</u>	<u>\$1,002,397.80</u>		<u>(\$14,816.48)</u>

Issue Date: March 7, 1996
 Rebate Computation Date: March 7, 2001

Summary of Arbitrage Rebate Analysis

Fund Reference Number	Fund Description	Current Fund Status	Computation Date Valuation	Gross Earnings	Internal Rate of Return	Excess Earnings
1	Construction Fund	Inactive	\$0.00	\$8,139,455.99	5.787138%	\$1,228,239.38
2	Reserve Account	Inactive	\$0.00	\$1,002,397.80	4.910626%	(\$24,694.13)
Totals:			<u>\$0.00</u>	<u>\$9,141,853.79</u>		<u>\$1,203,545.25</u>

AMERICAN RECOVERY REINVESTMENT ACT OF 2009

- Build America Bonds (BABs) & Recovery Zone Bonds
 - ✓ Subject to arbitrage rebate requirements
 - ✓ The “Arbitrage Yield” for both BABs and Recovery Zone Economic Development Bonds is determined using the “net debt service”; net of Federal subsidy
- Qualified Construction Bonds
 - ✓ Not subject to arbitrage rebate requirements
 - ✓ Proceeds need to be spent within 3 years. Any remaining proceeds need to be used to call bonds

PRACTICAL CONSIDERATIONS

- It is GOOD to earn positive arbitrage and make a rebate payment
 - ✓ Negative arbitrage = opportunity costs
- It is BETTER to earn positive arbitrage and KEEP IT
 - ✓ Will require ongoing communication between department managers and finance officers
- Actively manage rebate requirements
 - ✓ Negative arbitrage environment
 - Consider alternative investment strategies to enhance earnings on outstanding bond proceeds
 - Negative \$250k is better than negative \$450k
 - Consider frequency of calculations
 - ✓ Positive arbitrage environment
 - Anticipate and set aside amounts for future rebate payments
 - Keep on eye on spending exceptions
- Consider implications of arbitrage rebate requirements during structure of and conversations surrounding new issues