

### **Bond Basics**

March 24, 2011

# Topics

- Definition and types of bonds
- Key features of bonds
- Measuring yield
- Assessing risk
- The bond process



# **Definition and Types of Bonds**

A bond is a debt security used to borrow funds from investors, which are repaid pursuant to the terms of the bond covenants

### Bond issuers may be

- Governments (Tollway) and corporations
- Special purpose trusts
- Non-profit organizations

### Security for bonds

- General obligation
- Revenue bonds
- Asset-backed



### **Reasons to Issue Bonds**

- Fund capital expenditures/new programs
- Fund capitalized interest and debt reserve

### Refinance existing debts

- Reduce debt service
- Reduce risk related to existing debt
- Exit bond limitations/modify covenants



# Key Features of a Bond (Definitions in Appendix)

### Par value

- Coupon interest rate (fixed, synthetic fixed, variable)
- Maturity
- Default risk
- Premium or discount
- Price and yield
- Call provision (ability to pay off bonds early)
- Taxability of interest



# **Bond Value**

#### **Risk and return** (Definitions in Appendix)

- Risk-free rate (Treasury securities)
- Credit risk
- 🖵 Tax risk
- Liquidity risk

Anything else that affects the risk of the cash flows to bondholders will affect the returns required by investors



# **Illinois Tollway Bonds**

- **Type** Government (municipal) bond
- **Security** Revenue bonds senior lien
- Maturities 1 25 years
- **Interest** Fixed 68%, synthetic fixed 32%
- Ratings Aa3 (Moody's)/ AA- (Fitch)/ AA- (S&P)

Interest exempt from federal income tax, but taxable by the state



# **Bond Ratings**

#### Assigned by credit rating agencies

Indicate level of payment risk

	Investment Grade				Non-Investment Grade				
Moody's	Aaa	Aa	Α	Ваа	Ва	В	Caa	Ca	C
Fitch	AAA	ΑΑ	Α	BBB	BB	В	CCC	CC	CD
S&P	ΑΑΑ	AA	Α	BBB	BB	В	ССС	CC	CD

- Additional modifiers 1/2/3 for Moody's and +/for Fitch and S&P
- Outlook Indication of possible change in rating during the next 1-2 years



# **Current Yield and Spread – Muni Bonds**

	<u>Mai</u>	<u>rch 21, 2011</u>	<u>July 1, 2008</u>			
	<u>Yield</u>	<u>Spread to AAA</u>	<u>Yield</u>	Spread to AAA		
AAA - 20 yr.	4.24%		4.48%			
AA - 20 yr.	4.50%	0.26%	4.58%	0.10%		
A - 20 yr.	5.19%	0.95%	4.97%	0.49%		

Impact of rating downgrade – a downgrade from "AA-" to "A+" on the amount of \$100 million would cost the Tollway an estimated \$300,000 annually

Note - 0.01% is equivalent to 1 basis point or 1bp *Source: JP Morgan* 



# **Credit Risk and Bond Ratings - Factors**

### Financial performance

🖵 Debt ratio

Coverage ratios, such as debt service coverage

Budget/financial management

#### Asset condition and management

#### Bond contract provisions

- Secured versus unsecured debt
- Senior versus subordinated debt
- Guarantee provisions
- Sinking fund provisions
- Debt maturity



# **Credit Risk and Bond Ratings – Other Factors**

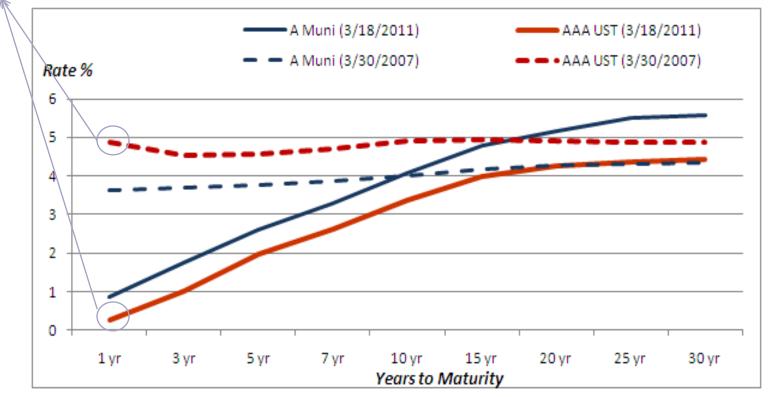
- Income stability
- Regulatory environment
- Potential liability
- Accounting policies



# Yield Curves – March 2011 vs. March 2007

Most Tollway investments

#### are one year or less





Source: JP Morgan

### **Principal Members of Financing Team**

#### Financial Advisor(s):

- Advise with structuring plan of finance
- Assist with credit presentation materials
- Assure fair value at pricing

#### Bond Counsel

- Interprets laws and assists in the legal structuring of bond issue
- Drafts bond documents and Board resolutions
- Opines that bonds are legally issued

#### <u>Trustee</u>

- Receives proceeds of bond issue
- Invests and disburses funds as set forth in bond documents
- Monitors continuing disclosure and administers repayment of debt

#### Senior Managing Underwriter

- Leads bond marketing process to investors
- Coordinates sale orders from syndicate of co-managers
- Provides secondary market support for bonds

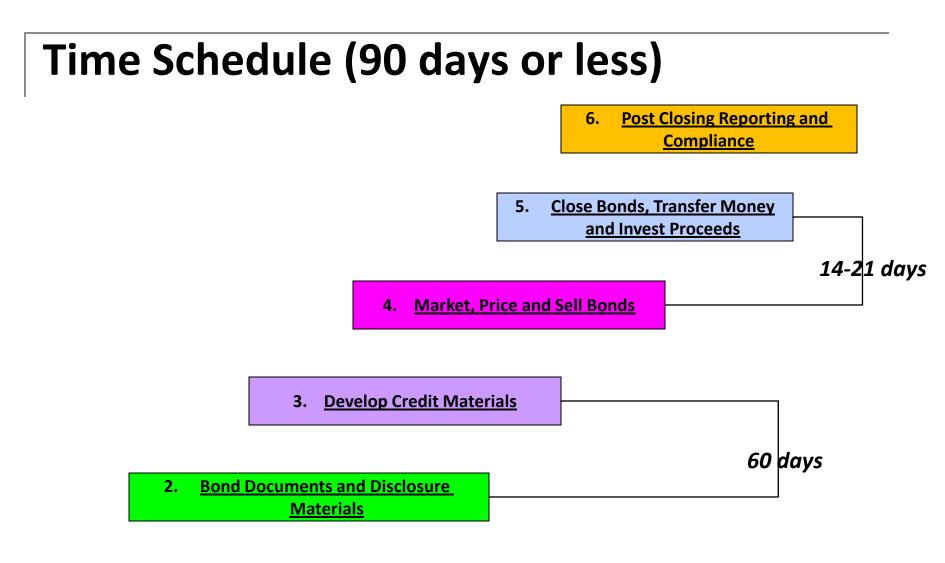
#### <u>Remarketing Agents</u> (Variable rate)

- Set interest rate for the variable rate bonds
- Remarkets bonds tendered by investors

#### <u>Liquidity Banks (</u>Variable rate)

- Obligated to purchase bonds when remarketing agents fail to locate new investors for tendered bonds (a "failed remarketing")
- Letter of Credit pays principal and interest and Tollway reimburses
- Standby Letter only purchases bonds upon a failed remarketing





1. <u>Board Approves Financing Team and</u> <u>Authorizes Transactions</u>



#### **APPENDIX**



### Definitions

**Par value**: Face amount of a bond; paid at maturity

**Coupon interest rate**: Rate of interest applied to the par value

Maturity: Years until bond becomes due; payable to the bond holder

Bond price: Amount paid for a bond

Premium: When the bond price is more than its par value

**Discount**: When the bond price is less than its par value

**Yield :** Annual rate of return on a bond, based on the bond price, its rate and the length of time the bond is held

**Taxable interest:** Interest from a bond that is not exempt from federal and/or state income tax

**Call provision**: Provision for the Issuer to redeem a bond before the stated maturity at a specified price, usually at or above par



### **Definitions** (continued)

**Default risk**: Risk that issuer fails to make interest or principal payments on a bond

**Risk-free interest rate**: Interest or rate of return of a bond with zero risk over a given period of time, e.g. U.S. Treasury bills

**Credit risk**: The bond holder weighs the risk of the issuer's failure to meet the bond obligation

**Tax risk:** Risk that the value of a bond can be impacted by changes to the tax code

**Liquidity risk:** Risk that a bond cannot be traded quickly enough in the market to prevent a loss or make the required profit

Sources: Municipal Securities Rulemaking Board (MSRB)





# **THANK YOU**