City of Franklin

Pension Bonds

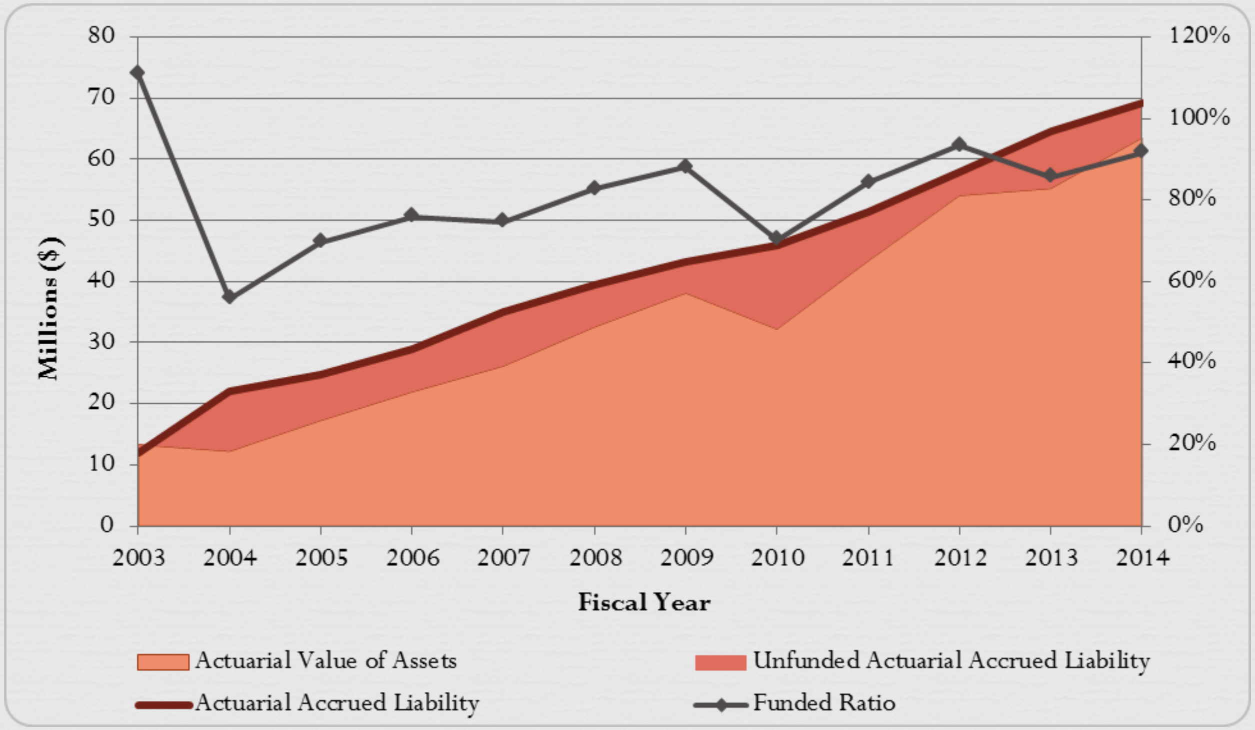
Pension Plan Timeline

- Status of the Franklin Employees Pension Plan is good compared to many municipal pension systems
- Board adopts changes to Pension Plan in 2006 and 2010 to create a more sustainable plan
- Actuarial assumptions were revised in 2006 and 2008
- Operating budgets of the City have contributed an average of $4 million per year since 2005
- The City has always budgeted and contributed <u>at a minimum</u> the contribution recommended by its actuaries
- Additional $2 million contribution in 2009
- The plan is 92% funded as of the January, 2013 per the Government Accounting Standards Board Statement #27 valuation
- Plan's investments earned approximately 12.5% in 2012
- Earnings year to date (through September) for 2013 are 12.0%

Pension Fund Background

- The Actuarial Accrued Liability is the present value of all expected benefit payments for all currently retired, disabled and terminated vested members, as well as the expected benefit payments for active members based on service performed to date
- The Actuarial Accrued Assets are those assets that are in the plan, invested according to the plan investment policy.
- The portion of the Actuarial Accrued Liability that is not covered by the value of Accrued Assets is called the Unfunded Actuarial Accrued Liability.

Assets vs. Liabilities & Funded Ratio



Alternative Funding Options

- Continue current funding regime ("pay as you go")
  - Contribute an amount not less than:
  - The cost of benefits earned in the current year (also called the normal cost), and
  - 5% of the unfunded liability of the plan
- Increase annual contributions from the operating budget ("pay as you go plus")
- Transfer funds from the General Fund reserves
- Issue Pension obligation bonds

Reasons to Issue Bonds

- Because of the current low interest rate environment, earnings are reasonably expected to exceed interest cost
- Changes in government accounting rules that require liabilities to be reported in financial statements instead of footnotes
- Rating agencies taking a more conservative view of calculating pension liabilities, increasing the amount of total liabilities evaluated during the rating process

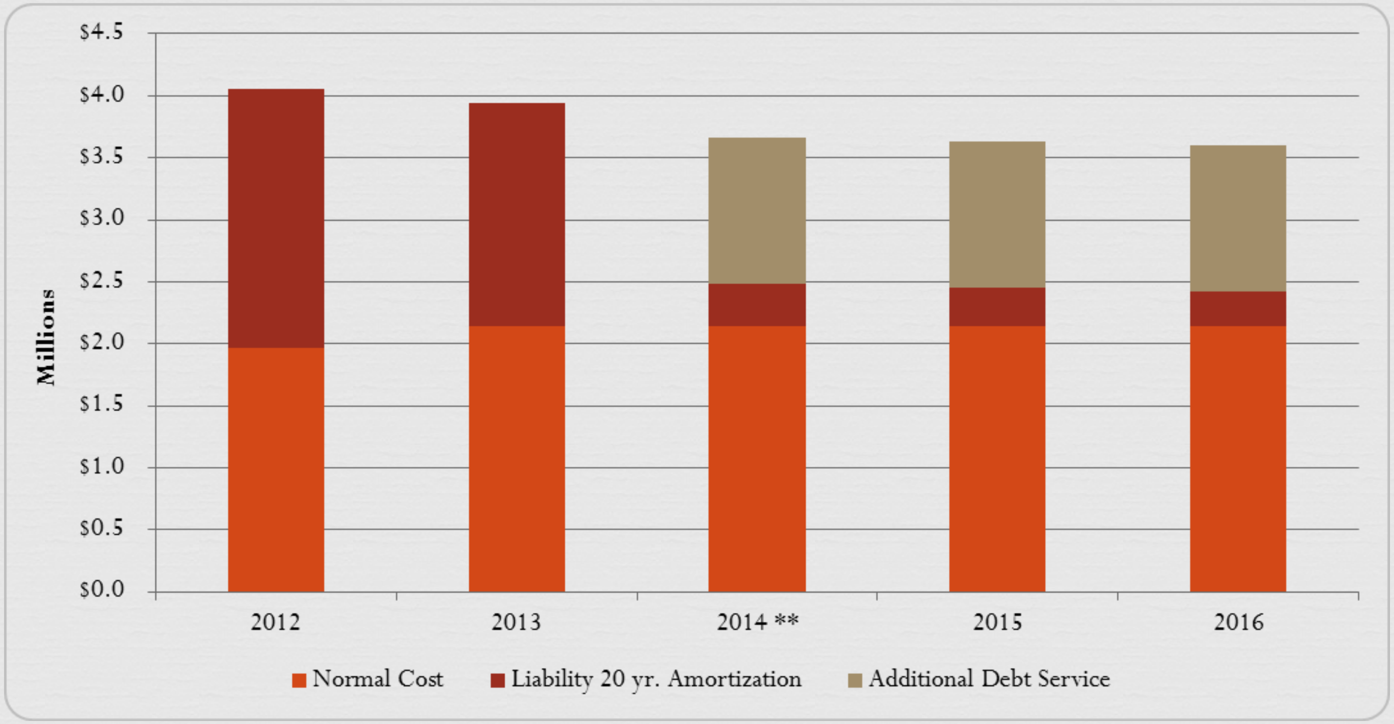
Pension Bond Timeline

- Pension Committee began discussion of bond issuance in February, May, and August, 2013 meetings
- Finance committee presentation in August
- Board of Mayor & Aldermen presentation on September 10, 2013
- Board of Mayor & Aldermen adopted initial resolution regarding issuance of pension bonds on September 24
- Resolution was published in local newspaper on October 3
- There were no comments or objections received by phone or letter or electronic means from our citizens to oppose issuance

Funding the Liability

- A significant portion of the City's annual contribution goes to reduce the Unfunded Actuarial Accrued Liability
- Last year's contribution of approximately $4 million was evenly divided between contributions for current employee service, and contributions for the amortization of Unfunded Actuarial Accrued Liabilities

Normal Cost, Liability Amortization, and Debt Service Comparison



** Assumes bond issuance effective FY2014

Pension Funding Risks

- The Unfunded Actuarial Accrued Liability rises and falls over time with a number of factors
  - Investment return, if different than expected
  - Salary increases, if different than expected
  - Inflation, if different than expected
  - Rate of retirement, if different than expected
  - Changes in benefit levels

What are Pension Bonds?

- A taxable municipal bond issued to fund all or a portion of a pension plan's unfunded actuarial accrued liability
- Pension funding bonds are issued by the City of Franklin and are general obligations of the City
- Pension funding bonds are NOT issued by the pension plan
- Pension funding bonds are NOT obligations of the pension plan
- Issuing pension bonds when interest rates are low increases the potential for the return on the proceeds to exceed the cost of the debt.

Market Risks with Bonds

- Investment returns may not exceed the interest rate on the bonds for the life of the debt
- Over the past ten years, the pension plan has earned an average of 5.4% annually
- During the financial crisis year of 2008, the Plan value dropped by 23.0%
- Since 2009, the average annual earnings have been 11.0%

Financing Eligibility

- City of Franklin meets the requirement of state law provided in Tennessee Code Annotated 9-21-127 which covers the issuance of pension funding bonds.
- Those requirements are as follows:
- 1) City has a debt management policy in compliance with the State Funding Board's guidelines
- 2) City has financial statements prepared in accordance with GAAP which are accessible for public inspection

Financing Eligibility

- 3) This presentation is being made to the Board of Mayor & Aldermen, at a public hearing, and includes an explanation of the:
  - A) risk exposure associated with such bonds,
  - B) the various demographic and economic assumptions used in the funding calculations,
  - C) alternative funding options considered,
  - D) issuance costs associated with the proposed bond sale, and
  - E) any conflicts of interest among the members of the financing team

Financing Eligibility

- 4) The City has engaged Public Financial Management as its financial advisor, Bass Berry & Sims PLC, as its bond counsel, and Acuff & Associates, as its actuarial consultant in connection with the bond issue
- 5) The City has a dedicated a full-time finance staff of at least three persons to work on the financing team
- 6) The City has established an audit committee

Actuarial Assumptions

- In developing optimal pension bond structures, we have considered the following assumptions:
- General inflation rate of 2%
- Life expectancy based on retirees' historical data
- Retirement rates based on historical data
- Investment return of 7.5%
- Average general payroll increase of 3.5%

- Detailed demographic and investment assumptions are in the actuarial report as of January, 2013. (Available on website at http://franklintn.gov/index.aspx?page=1021

Financing Assumptions

- In developing the bond structure, we have assumed the following:
- Taxable, callable fixed rate debt
- 10 year final maturity with level debt service over the term
- No deferral of principal to enhance the overall investment strategy
- Bond issuance costs are estimated to be $ 109,729
- There is no conflict of interests among the parties in this transaction

Exhibits

- Actuarial valuation (page from January, 2013 report)
- Recent Funding levels
- Recent Annual earnings
- Earnings example
- Examples of pension bond issues
- Funded ratios per GASB 27
- Interest Earnings vs. Interest Costs
- Normal cost vs. Amortization of debt service
- Bond amortization schedule
- Issuance costs (estimated)

Actuarial Report Data

Section 1.2 – Normal Cost

The following schedule shows the development of the Normal Cost at the current valuation date.

Entry Age Normal (EAN)

		2013	2012
1.	Actuarial Accrued Liability		
	a. Active Participants	43,627,534 $	44,476,284
	b. Cash Balance Accounts	5,264,055	4,861,047
	c. Retired Participants and Beneficiaries	30,832,962	26,124,448
	d. Vested Terminated Participants	2,724,281	2,469,205
	e. Disabled Participants	161,416	150,286
	Total	82,610,248 $	78,081,270
2.	Actuarial Value of Assets	63,532,465 $	55,241,467
3.	Unfunded Actuarial Accrued Liability	19,077,783	22,839,803
4.	Contribution		
	a. Normal Cost	2,137,607 $	1,969,302
	b. Expected Employee Contribution	(149,420)	(60,428)
	c. Net Normal Cost	1,988,187	1,908,874
	d. As a percent of Pay	6.88 %	6.39 %
	e. 20 Year Amortization Payment	1,799,774	2,084,099
	f. January 1, Payment c. + e.	3,787,961	3,992,973
	g. December 31, Payment f.*1.075	4,072,058	4,292,446
	h. Estimated Covered Payroll	28,902,947	29,869,786
	i. As a Percent of Covered Payroll	14.09 %	14.37 %

Recent Funding Levels

Plan year	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio
30-Jun-03	13,325,856	12,025,924	-1,299,932	110.8%
30-Jun-04	12,239,750	21,983,456	9,743,706	55.7%
30-Jun-05	17,285,876	24,830,756	7,544,880	69.6%
30-Jun-06	21,955,160	28,928,380	6,973,220	75.9%
30-Jun-07	26,171,954	35,045,973	8,874,019	74.7%
30-Jun-08	32,581,714	39,456,058	6,874,344	82.6%
30-Jun-09	38,122,589	43,299,578	5,176,989	88.0%
30-Jun-10	32,235,206	45,852,365	13,617,159	70.3%
30-Jun-11	43,406,019	51,465,753	8,059,734	84.3%
30-Jun-12	54,086,646	57,900,531	3,813,885	93.4%
30-Jun-13	55,241,467	64,505,222	9,263,755	85.6%
30-Jun-14	63,532,465	69,278,944	5,746,479	91.7%

Source: Actuarial Report, May 2013

Recent Annual Earnings

Calendar Year ending Dec 31	Earnings on Assets
2002	-10.9%
2003	15.9%
2004	9.2%
2005	5.4%
2006	11.6%
2007	8.3%
2008	-23.1%
2009	15.5%
2010	16.3%
2011	-1.5%
2012	12.5%
2013	12.4%
Average	5.4%

Source: Dahab & Associates

Earnings Example

Calendar Year ending Dec 31	Earnings in Dollars	Account Balance
2001		$ 1,000.00
2002	$ (109.00)	$ 891.00
2003	$ 141.67	$ 1,032.67
2004	$ 95.01	$ 1,127.67
2005	$ 60.89	$ 1,188.57
2006	$ 137.87	$ 1,326.44
2007	$ 110.09	$ 1,436.54
2008	$ (331.55)	$ 1,104.98
2009	$ 171.27	$ 1,276.26
2010	$ 208.03	$ 1,484.29
2011	$ (22.26)	$ 1,462.02
2012	$ 182.75	$ 1,644.78
2013	$ 203.95	$ 1,848.73

Examples of municipal issuance

Year	Issuer	State	Par Value (in millions)	Ratings
2005	City of Dallas	TX	399.3	Aa1/AA+/NR
2007	Knox County	TN	57.0	Aa1/AA+/NR
2008	City of Houston	TX	402.8	Aa3/AA/NR
2009	Lexington-Fayette Urban County	KY	70.6	Aa2/AA+/NR
2009	Milwaukee County	WI	400.0	Aa3/AA/AA-
2012	City of Fort Lauderdale	FL	337.7	A1/AA-/NR
2012	Baltimore County	MD	256.2	Aaa/AAA/AAA
2013	City of Portsmouth	VA	169.3	Aa2/AA/AA

Pension bonds have been issued by state and local government jurisdictions to reduce their unfunded actuarial accrued liabilities

Over $20 billion of pension bonds have been issued

Over 300 issues have been sold

Assets vs. Liabilities & Funded Ratio per GASB 27

Plan year	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio
30-Jun-03	13,325,856	12,025,924	-1,299,932	111%
30-Jun-04	12,239,750	21,983,456	9,743,706	56%
30-Jun-05	17,285,876	24,830,756	7,544,880	70%
30-Jun-06	21,955,160	28,928,380	6,973,220	76%
30-Jun-07	26,171,954	35,045,973	8,874,019	75%
30-Jun-08	32,581,714	39,456,058	6,874,344	83%
30-Jun-09	38,122,589	43,299,578	5,176,989	88%
30-Jun-10	32,235,206	45,852,365	13,617,159	70%
30-Jun-11	43,406,019	51,465,753	8,059,734	84%
30-Jun-12	54,086,646	57,900,531	3,813,885	93%
30-Jun-13	55,241,467	64,505,222	9,263,755	86%
30-Jun-14	63,532,465	69,278,944	5,746,479	92%

Interest Earnings vs. Interest Cost

fiscal year ending	estimated interest	earnings @ 2%	earnings @ 5%	earnings @ 6%	earnings @ 7%
6/30/2015	$334,211	$200,000	$500,000	$600,000	$700,000
6/30/2016	$271,285	$204,000	$210,000	$212,000	$214,000
6/30/2017	$259,049	$208,080	$214,200	$216,240	$218,280
6/30/2018	$240,630	$212,242	$218,484	$220,565	$222,646
6/30/2019	$218,474	$216,486	$222,854	$224,976	$227,099
6/30/2020	$191,076	$220,816	$227,311	$229,476	$231,640
6/30/2021	$159,720	$225,232	$231,857	$234,065	$236,273
6/30/2022	$126,600	$229,737	$236,494	$238,746	$240,999
6/30/2023	$88,793	$234,332	$241,224	$243,521	$245,819
6/30/2024	$46,029	$239,019	$246,048	$248,392	$250,735
	$1,935,865	$2,189,944	$2,548,472	$2,667,981	$2,787,491

Normal Cost vs. Amortization of Unfunded Liability

Breakdown of Pension Contribution	2012	2013	2014 **	2015	2016	2017
Normal Cost	$ 1,969,302	$ 2,137,607	$ 2,137,607	$ 2,137,607	$ 2,137,607	$ 2,137,607
Liability 20 yr. Amortization	$ 2,084,099	$ 1,799,774	$ 1,769,774	$ 1,739,774	$ 1,709,774	$ 1,679,774
Required Contribution	$ 4,053,401	$ 3,937,381	$ 3,907,381	$ 3,877,381	$ 3,847,381	$ 3,817,381
** assumes reduction of liability due to plan modifications						

- Normal cost is the amount needed to fund the current year portion of pension liability for active employees
- Liability amortization is the amount needed to fund one-twentieth of the previously existing unfunded liability

Normal Cost vs. Amortization of Unfunded Liability

Breakdown of Pension Contribution	2012	2013	2014 **	2015	2016
Normal Cost	$1,969,302	$2,137,607	$2,137,607	$2,137,607	$2,137,607
Liability 20 yr. Amortization	$2,084,099	$1,799,774	$342,000	$312,000	$282,000
Required Contribution	$4,053,401	$3,937,381	$2,479,607	$2,449,607	$2,419,607
Additional Debt Service			$1,179,000	$1,179,000	$1,179,000
Net after Issuing Bonds	$4,053,401	$3,937,381	$3,658,607	$3,628,607	$3,598,607
** assumes issuance of pension bonds					

- Normal cost is the amount needed to fund the current year portion of pension liability for active employees
- Liability amortization is the amount needed to fund one-twentieth of the previously existing unfunded liability

Estimated Amortization Schedule for Bonds

fiscal year ending	coupon/yield	principal	interest	debt service
6/30/2015	0.84%	$860,000	$334,211	$1,194,211
6/30/2016	1.33%	$920,000	$271,285	$1,191,285
6/30/2017	1.97%	$935,000	$259,049	$1,194,049
6/30/2018	2.32%	$955,000	$240,630	$1,195,630
6/30/2019	2.81%	$975,000	$218,474	$1,193,474
6/30/2020	3.12%	$1,005,000	$191,076	$1,196,076
6/30/2021	3.20%	$1,035,000	$159,720	$1,194,720
6/30/2022	3.55%	$1,065,000	$126,600	$1,191,600
6/30/2023	3.87%	$1,105,000	$88,793	$1,193,793
6/30/2024	4.02%	$1,145,000	$46,029	$1,191,029
		$10,000,000	$1,935,865	$11,935,865

Statistics:

True Interest Cost (TIC)	3.324361%
Net Interest Cost (NIC)	3.343771%
All-In TIC	3.438231%

Estimated Cost of Issuance

COST OF ISSUANCE
City of Franklin, Tennessee
GO Bonds, Series 2013B (Taxable)
Preliminary - Subject to Change

Financial Advisor Fee - Estimate	20,000.00
Bond Counsel Fee - Estimate	20,000.00
Moody's Fee - Estimate	8,857.14
S&P's Fee - Estimate	8,571.43
iPreo	857.14
Printing Fee - Estimate	571.43
Miscellaneous	571.43
Paying Agent Fee	300
Underwriter's Discount	50,000.00
Total	109,728.57