



General Obligation Bonds, Series of 2018

September 12, 2018

Prepared by:



NW FINANCIAL GROUP, LLC
Exceeding Expectations

Proven Reputation . Experienced Professionals . Superior Client Service



Table of Contents

Section 1: Project Description

Section 2: Bond Sizing, Costs & Projected Cash Flows

Section 3: Interest Rate Outlook

Section 4: Timeline

Section 5: Project Team



1

Section One

Project Description

Project Description

The proposed General Obligation Bonds, Series of 2018

- ✓ **Will not extend any current debt beyond existing maturities.**
- ✓ **Will only refund debt for economic savings or to minimize risk.**
- ✓ **Will fund capital projects already included in the City's Budget.**
- ✓ **Will reduce the City's variable rate exposure.**
- ✓ **Represents normal and prudent management of the City's debt.**

Project Description – Part 1

The proposed General Obligation Bonds, Series of 2018 will finance the following projects:

1. **\$3.535 million of Capital Projects included in the City's 2018 Capital Budget. These projects include:**

- ✓ **\$1.935 million of Capital Equipment**
- ✓ **\$600,000 of City Capital Construction Costs for Road projects completed in 2018**
- ✓ **\$1.0 million in Reimbursement to the Commonwealth for the City's share of State Road Construction Costs.**

Project Description – Part 2

The proposed General Obligation Bonds, Series of 2018 will finance the following projects:

- 2. Refunding the City's General Obligation Notes, Series of 2009 currently outstanding in the amount of \$2.524 million.**

Project Description – Part 3


The proposed General Obligation Bonds, Series of 2018 will finance the following projects:

3. Refunding the City's Pension Obligation Bonds, Series of 2004 in the amount of \$12.175 million.

Project Description – Part 4

The proposed General Obligation Bonds, Series of 2018 will finance the following projects:

4. **Acquiring land previously leased to ACIDA as a result of the City-guaranteed ACIDA Lease Revenue Bonds, Series of 2006. This will be accomplished by paying the ACIDA financing in full. The current outstanding amount of the ACIDA Lease Revenue Bonds is \$7.643 million.**
 - ✓ **This will eliminate the City's exposure to variable rates on the ACIDA Lease Revenue Bonds.**



2

Section Two

Bond Sizing, Costs and Cash Flows

Bond Sizing

Sources:	Taxable General Obligation Bonds, Series A of 2018 (Refunding of 2006 Lease Rental Debt)	Taxable Pension Obligation Bonds, Series B of 2018 (Refunding of 2004 POB)	Tax-Exempt General Obligation Refunding Bonds, Series C of 2018 (Refunding of 2009 GO Bonds)	General Obligation Bond, Series D of 2018 (New Money)	Total
Bond Proceeds:					
Par Amount	7,855,000	13,505,000	2,515,000	3,440,000	27,315,000
Premium			121,906	150,692	272,598
	7,855,000	13,505,000	2,636,906	3,590,692	27,587,598

Uses:	Taxable General Obligation Bonds, Series A of 2018 (Refunding of 2006 Lease Rental Debt)	Taxable Pension Obligation Bonds, Series B of 2018 (Refunding of 2004 POB)	Tax-Exempt General Obligation Refunding Bonds, Series C of 2018 (Refunding of 2009 GO Bonds)	General Obligation Bond, Series D of 2018 (New Money)	Total
Equipment				1,935,000	1,935,000
Street Capital Costs				600,000	600,000
Reimbursement for State Capital Costs				1,000,000	1,000,000
Subtotal New Money				3,535,000	3,535,000
Refunding Escrow Deposits:					
Cash Deposit	7,732,808	12,227,676	2,597,307		22,557,791
Expenses:					
Cost of Issuance	81,712	140,486	26,162	35,785	284,145
Underwriter's Discount	40,047	68,853	12,822	17,538	139,260
Subtotal Expense	121,759	209,339	38,985	53,323	423,405
Rounding	433	5,985	615	2,369	9,402
2004 Refunding Savings		1,062,000			1,062,000
	7,855,000	13,505,000	2,636,906	3,590,692	27,587,598

Summary of Prior Debt Refunded

	Bond	Maturity Date	Interest Rate	Par Amount	Call Date	Call Price
Taxable General Obligation Note, Series of 2006, GO06ACT:						
	NOTE31	11/15/2031	2.500%	7,643,108	10/31/2018	100.000
General Obligation Bonds, Series of 2009, GO09:						
	BOND	5/15/2019	4.130%	379,000	10/31/2018	100.000
		5/15/2020	4.130%	394,000	10/31/2018	100.000
		5/15/2021	4.130%	411,000	10/31/2018	100.000
		5/15/2022	4.130%	428,000	10/31/2018	100.000
		5/15/2023	4.130%	447,000	10/31/2018	100.000
		5/15/2024	4.130%	465,000	10/31/2018	100.000
				2,524,000		
Taxable Pension Obligation Bonds, Series of 2004, POB04:						
	BOND	10/1/2019	4.870%	510,000	10/31/2018	100.000
		10/1/2020	4.870%	535,000	10/31/2018	100.000
		10/1/2021	5.160%	560,000	10/31/2018	100.000
		10/1/2022	5.160%	590,000	10/31/2018	100.000
		10/1/2023	5.160%	620,000	10/31/2018	100.000
		10/1/2024	5.310%	650,000	10/31/2018	100.000
	TERM29	10/1/2025	5.200%	690,000	10/31/2018	100.000
		10/1/2026	5.200%	720,000	10/31/2018	100.000
		10/1/2027	5.200%	760,000	10/31/2018	100.000
		10/1/2028	5.200%	795,000	10/31/2018	100.000
		10/1/2029	5.200%	840,000	10/31/2018	100.000
	TERM34	10/1/2030	5.250%	880,000	10/31/2018	100.000
		10/1/2031	5.250%	930,000	10/31/2018	100.000
		10/1/2032	5.250%	980,000	10/31/2018	100.000
		10/1/2033	5.250%	1,030,000	10/31/2018	100.000
		10/1/2034	5.250%	1,085,000	10/31/2018	100.000
				12,175,000		
				22,342,108		

2018 Bonds – Preliminary Savings Analysis

Summary of Financing Results
City of Allentown
Multi-purpose Issue, Series of 2018

Series	Bond Par	Bond Yield	Contingency	Escrow Yield	Negative Arbitrage	Net Savings
Taxable General Obligation Bonds, Series A of 2018 (Refunding of 2006 Lease Rental Debt)	7,855,000.00	3.752%	432.58			-709,847.49
Taxable Pension Obligation Bonds, Series B of 2018 (Refunding of 2004 POB)	13,505,000.00	3.882%	5,985.30			1,076,011.81
Tax-Exempt General Obligation Refunding Bonds, Series C of 2018 (Refunding of 2009 GO I	2,515,000.00	2.438%	614.72			71,916.07
General Obligation Bond, Series D of 2018 (New Money)	3,440,000.00	2.290%	2,369.44			
	27,315,000.00		9,402.04			438,080.39

2018 Bonds – Aggregate Estimated Debt Service

City of Allentown Multi-purpose Issue, Series of 2018					
	Taxable General Obligation Bonds, Series A of 2018 (Refunding of 2006 Lease Rental Debt)	Taxable Pension Obligation Bonds, Series B of 2018 (Refunding of 2004 POB)	Tax-Exempt General Obligation Refunding Bonds, Series C of 2018 (Refunding of 2009 GO Bonds)	General Obligation Bond, Series D of 2018 (New Money)	2018 Debt Service
Period Ending					
12/31/2019	770,312	1,139,849	459,996	126,516	2,496,673
12/31/2020	767,746	1,139,835	472,700	1,215,600	3,595,881
12/31/2021	772,394	1,139,619	471,600	1,215,700	3,599,313
12/31/2022	771,067	1,143,316	469,900	1,218,900	3,603,182
12/31/2023	768,733	1,140,525	472,500		2,381,757
12/31/2024	770,362	1,141,362	474,300		2,386,024
12/31/2025	770,927	1,140,843			1,911,770
12/31/2026	770,221	1,143,699			1,913,920
12/31/2027	767,897	1,144,296			1,912,192
12/31/2028	769,211	1,142,964			1,912,175
12/31/2029	768,933	1,139,643			1,908,576
12/31/2030	767,355	1,139,723			1,907,078
12/31/2031	769,452	1,142,977			1,912,429
12/31/2032		1,144,172			1,144,172
12/31/2033		1,143,268			1,143,268
12/31/2034		1,140,224			1,140,224
	10,004,609	18,266,310	2,820,996	3,776,716	34,868,630



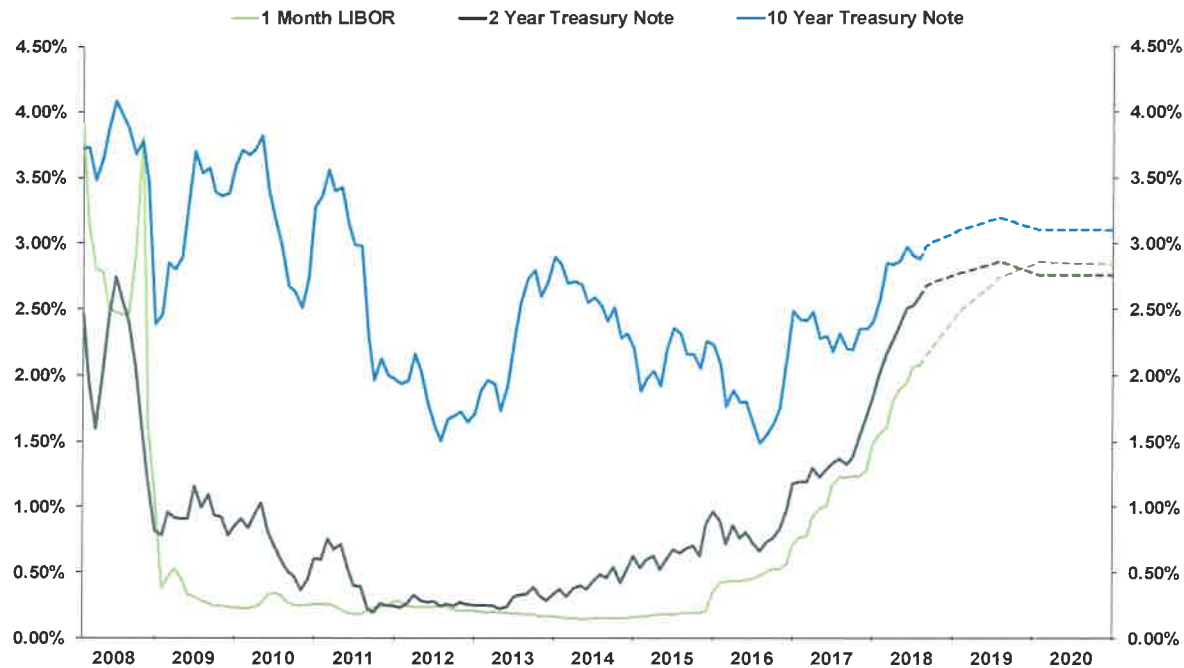
3

Section Three

Interest Rate Outlook from PNC

PNC Interest Rate Forecast

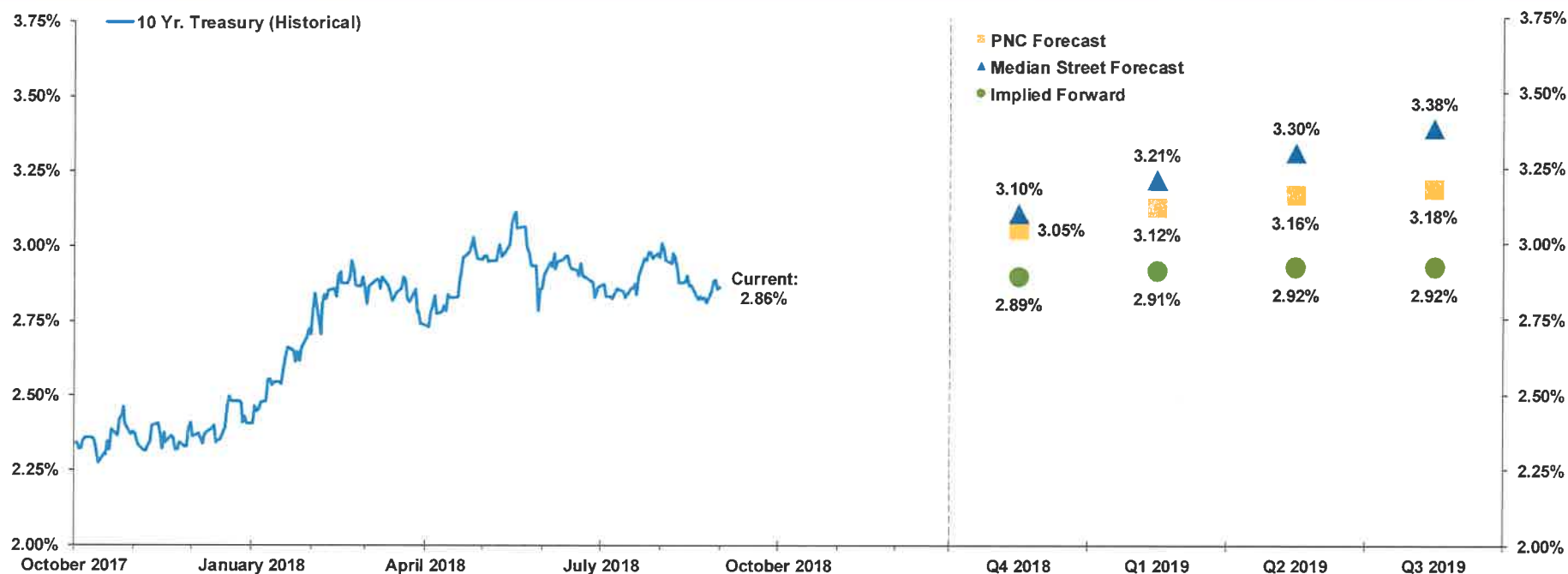
	Current Rates	Q3 2018	Q4 2018	Q1 2019	Q2 2019
1 Month Libor	2.11%	2.15%	2.35%	2.53%	2.66%
2 Year Treasury Note	2.63%	2.66%	2.74%	2.79%	2.84%
10 Year Treasury Note	2.86%	2.96%	3.05%	3.12%	3.16%
2/10 Treasury Spread	0.23%	0.30%	0.31%	0.33%	0.32%



- PNC's interest rate forecast indicates a gradual increase in borrowing rates through 2018 and into 2019.
- This is consistent with prevailing market views which suggest higher interest rates in 2018 and 2019.
- Interest rates, at current levels, remain attractive, particularly when viewed over longer periods of time.

Source: PNC Economics: August 2018 Baseline Interest Rate Projections, as of August 21, 2018. Current rates as of August 31, 2018.
 Note: Quarterly forecasts reflect the average of monthly forecasts in the table. Shading and dashed lines represent interest rate forecasts.

10 Yr. Treasury Forecasts and the “Market View” of Future Fixed Rates



10 Yr. Treasury Forecasts - PNC and Market View

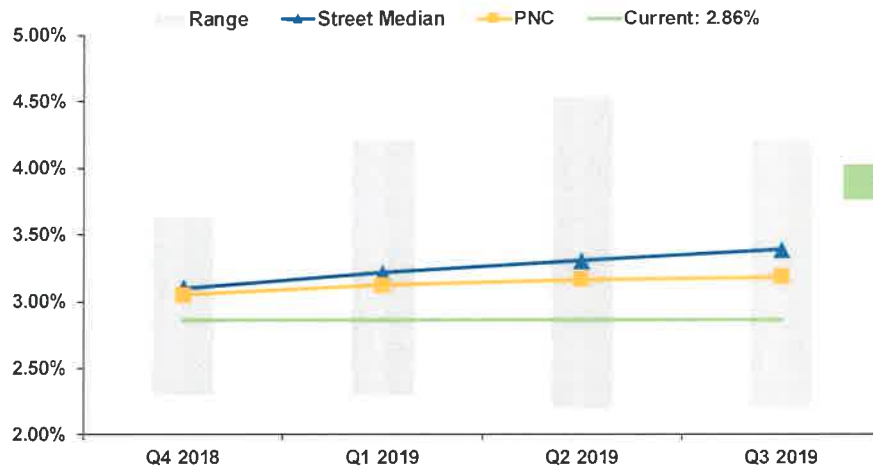
- The “street median” forecast comes from the monthly Bloomberg economic survey in which approximately 60-70 economists submit their economic and interest rate forecasts.
- The implied forward rate represents an expected level of the 10 Yr. Treasury based upon market activity.

	Q4 2018	Q1 2019	Q2 2019	Q3 2019
PNC	3.05%	3.12%	3.16%	3.18%
Street Median	3.10%	3.21%	3.30%	3.38%
Implied Forward	2.89%	2.91%	2.92%	2.92%

Sources: Bloomberg August 2018 Economic Survey / PNC Economics: August 2018 Baseline Interest Rate Projections, as of August 21, 2018 / Current and Implied Forward rates as of August 31, 2018

10 Yr. Treasury Forecasts and the “Market View” of Future Fixed Rates

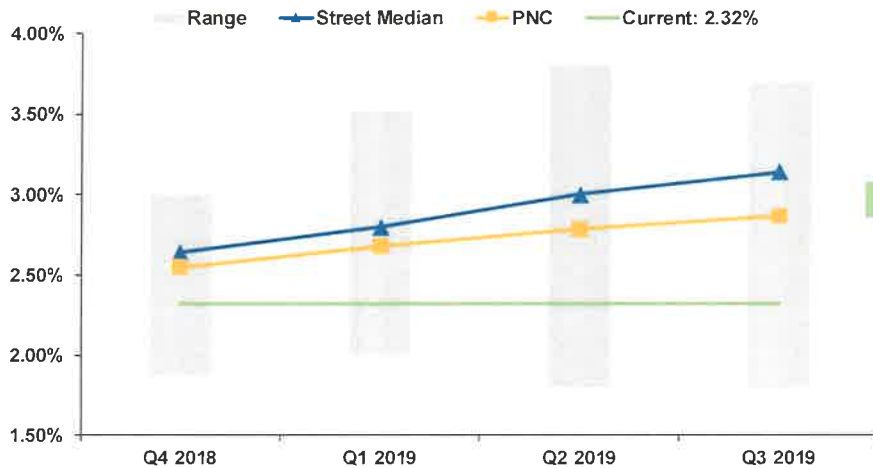
10 Yr. Treasury Forecasts



PNC Forecast

	Current	Q4 2018	Q1 2019	Q2 2019	Q3 2019
Effective Fed Funds Rate	1.91%	2.13%	2.15%	2.41%	2.64%
3 Month LIBOR	2.32%	2.55%	2.68%	2.79%	2.86%
2 Yr. Treasury	2.63%	2.74%	2.79%	2.84%	2.85%
10 Yr. Treasury	2.86%	3.05%	3.12%	3.16%	3.18%
30 Yr. Treasury	3.02%	3.26%	3.36%	3.41%	3.43%

3 Month LIBOR Forecasts



Bloomberg Economic Survey - Median Street Forecasts

	Current	Q4 2018	Q1 2019	Q2 2019	Q3 2019
Fed Funds Target Rate *	2.00%	2.50%	2.75%	3.00%	3.00%
3 Month LIBOR	2.32%	2.64%	2.80%	3.00%	3.14%
2 Yr. Treasury	2.63%	2.80%	2.94%	3.04%	3.15%
10 Yr. Treasury	2.86%	3.10%	3.21%	3.30%	3.38%
30 Yr. Treasury	3.02%	3.30%	3.38%	3.47%	3.55%

Sources: Bloomberg August 2018 Economic Survey / PNC Economics: August 2018 Baseline Interest Rate Projections, as of August 21, 2018 / Current rates as of August 31, 2018 * Upper bound target rate.

Federal Open Market Committee (FOMC) Policy

Federal Funds Target Rate Implied Probabilities

FOMC Meeting Date	Probability of a Rate Hike	Current Target 1.75% - 2.00%	Target 2.00% - 2.25%	Target 2.25% - 2.50%	Target 2.50% - 2.75%	Target 2.75% - 3.00%
September 26, 2018	94.6%	5.4%	94.6%	0.0%	0.0%	0.0%
November 8, 2018	94.6%	5.4%	94.6%	0.0%	0.0%	0.0%
December 19, 2018	98.2%	1.8%	34.7%	63.6%	0.0%	0.0%
January 30, 2019	98.3%	1.7%	33.3%	62.4%	2.6%	0.0%
March 20, 2019	99.2%	0.8%	17.3%	47.6%	32.9%	1.3%
May 1, 2019	99.2%	0.8%	15.9%	45.1%	34.1%	3.9%

Source: Bloomberg, as of August 31, 2018. The probabilities of future rate changes are based upon the current fed funds target rate of 1.75% - 2.00%.

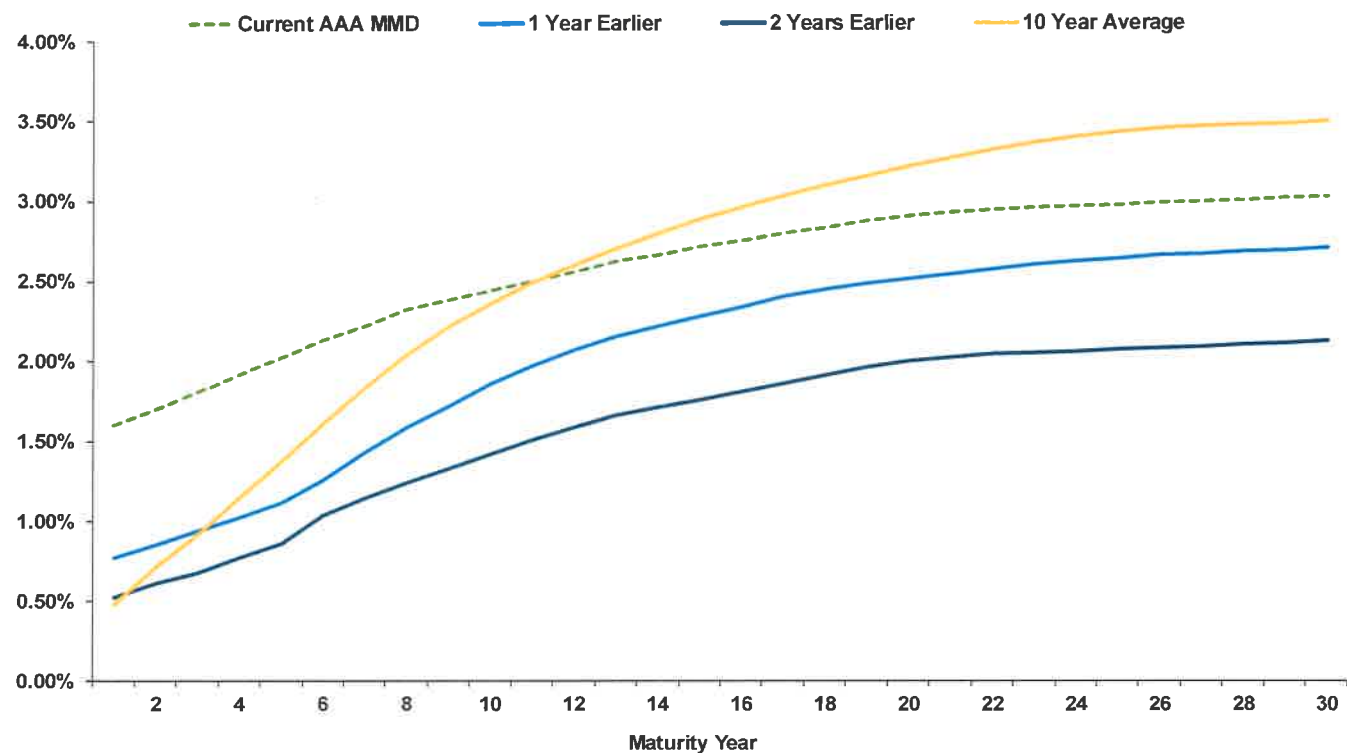
AAA MMD Yield Curve Movement

Thomson Reuters Municipal Market Data (MMD) produces the tax-exempt yield curve daily from trading and market activity to reflect the offer-side of the market.

As determined by the MMD analyst team, the AAA MMD curve is derived from trading activity of the highest-grade AAA rated state general obligation bonds.

The curve represents the yield to call (YTC) of 5.00% coupon bonds that have a 10 year optional redemption feature.

AAA MMD Yield Curves

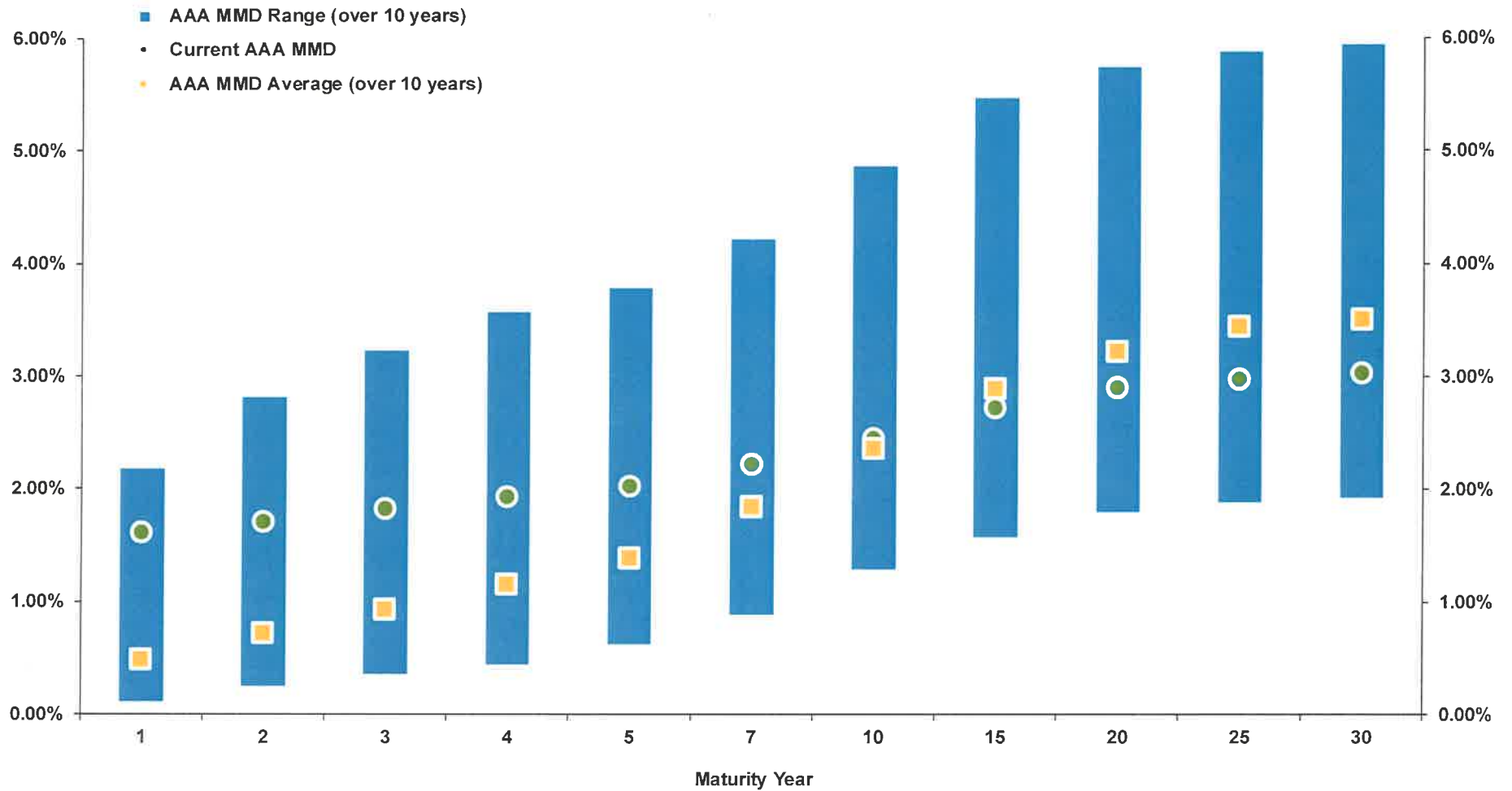


Maturity Year	Current AAA MMD	1 Year Earlier	2 Years Earlier	10 Year Average
2 Yr.	1.70%	0.85%	0.61%	0.71%
5 Yr.	2.02%	1.12%	0.86%	1.38%
10 Yr.	2.44%	1.86%	1.42%	2.36%
30 Yr.	3.02%	2.70%	2.12%	3.49%

Source: Thomson Reuters Municipal Market Monitor. Rates as of August 31, 2018.

AAA MMD Yield Curve Movement

AAA MMD Rate Ranges over 10 Years



Source: Thomson Reuters Municipal Market Monitor, as of August 31, 2018



4

Section Four

Timeline

Project Timeline

Week of September 10

- **9/12 Second Reading of Bond Ordinance**
- **9/11 First Draft of Preliminary Official Statement**
- **9/14 Second Draft of Preliminary Official Statement (Send to Rating Agencies)**

Week of September 17

- **Rating Calls**
- **9/19 Enact Ordinance, Accept Bond Purchase Contract**
- **9/20 Proceedings Filed with DCED**
- **9/21 Send out Conditional Call Notice**

Week of September 24

- **9/26 Final Draft POS**
- **9/27 Receive Ratings, Bond Insurance Quotes**
- **9/27 Due Diligence and Post Preliminary Official Statement**

Week of October 1

- **Circulate Addendum to BPC**
- **Pre-Marketing**

Week of October 8

- **Pre-Pricing Call**
- **Pricing**
- **Execute Addendum to BPC**

Week of October 22

- **Post Official Statement**

Week of October 29

- **10/31 Closing**



5

Section Five

Project Team

Project Team

Bond Counsel – Eckert Seamans Cherin & Mellott, LLC, Harrisburg

Financial Advisor – NW Financial Group, LLC, Pottstown

Lead Managing Underwriter – PNC Capital Markets, LLC, Wilkes Barre

Co-Managing Underwriter – Stifel Nicolaus & Co., Philadelphia & Lebanon

Underwriter's Counsel – Cozen O'Connor, Philadelphia