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North Carolina Municipal Finance Overview

April 5, 2019

Agenda

Introduction

Tyler Traudt
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Biography

Mr. Traudt provides financial advisory services to clients in North Carolina, South Carolina and Georgia. In his role as a public finance banker, Mr. Traudt assists issuers with a wide range of services including evaluating debt capacity, structuring bond issues, monitoring refunding/restructuring opportunities, obtaining credit ratings and coordinating the bond issuance process.

Mr. Traudt has worked on financings for state governments, cities, counties, water, sewer, gas, and electric utilities, solid waste facilities, higher educational facilities, health care facilities, not-for-profits, hotels, convention centers, stadiums, public buildings and infrastructure projects, park and recreational facilities, economic development projects and downtown revitalization projects.

Representative Experience

North Carolina		South Carolina	
Town of Davidson, NC	Fayetteville Public Works Comm.	City of Sumter, SC	Town of Fort Mill, SC
City of Albemarle, NC	Town of Matthews, NC	Town of Summerville, SC	Greenville Water, SC
City of Gastonia, NC	Town of Fletcher, NC	Anderson County, SC	Town of Mount Pleasant, SC
Rowan County, NC	Town of Carolina Beach, NC	City of Fountain Inn, SC	City of Tega Cay, SC
Catawba County, NC	Stanly County, NC	City of Greenville, SC	Charleston County, SC

Education

- B.S. University of Alabama

Licenses

- General Securities Representative License (Series 7)
- Municipal Advisor Representative License (Series 50)
- Uniform Securities Agent License (Series 63)

Overview

- Finance directors / staff are typically faced with a variety of questions centered around debt and the debt issuance process, including;

“My board has a long wish of projects it wants to fund, but doesn’t want to raise taxes. What next?”

“What is the process for completing a bond issue?”

“We might want a referendum. Can you explain the process and schedule for that?”

“How do we know our available debt capacity?”

“When do I need to involve the LGC?”

“What is this going to cost us?”

“Do we really need credit ratings?”

“We don’t want to raise taxes, can we still afford these projects?”

“We don’t think a referendum will pass. What else should we have our Board consider?”

“I worked hard to get that credit rating upgrade, are we going to be downgraded?”

“I worked hard to build that fund balance, and now my Board wants to spend it all”

- Our presentation is intended to provide a general overview of the debt issuance process in the State of North Carolina and help address these types of questions when they arise.

Agenda

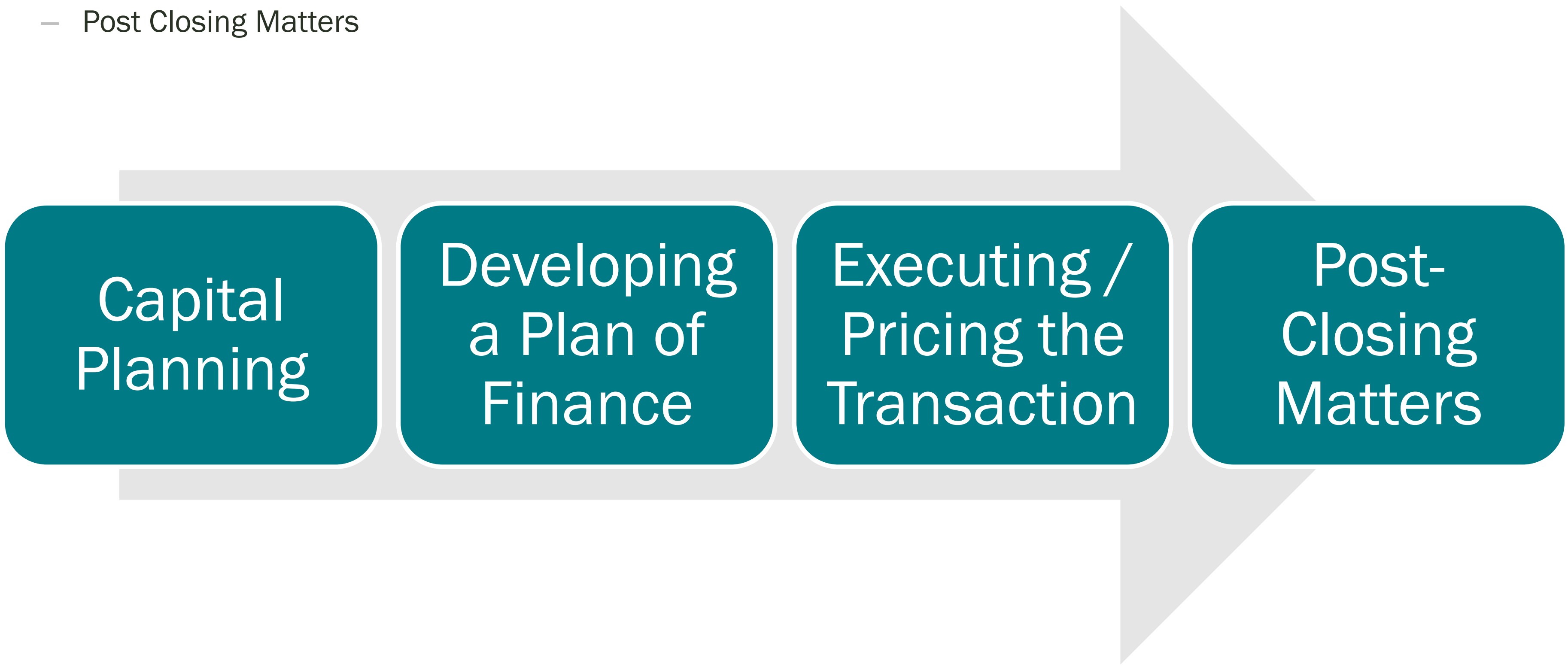
I. Introduction

II. Municipal Finance Overview

III. Market Update

Agenda

- The debt issuance process can be grouped into four primary areas (some of which may overlap):
  - Capital Planning
  - Developing a Plan of Finance
  - Executing / Pricing the Transaction
  - Post Closing Matters

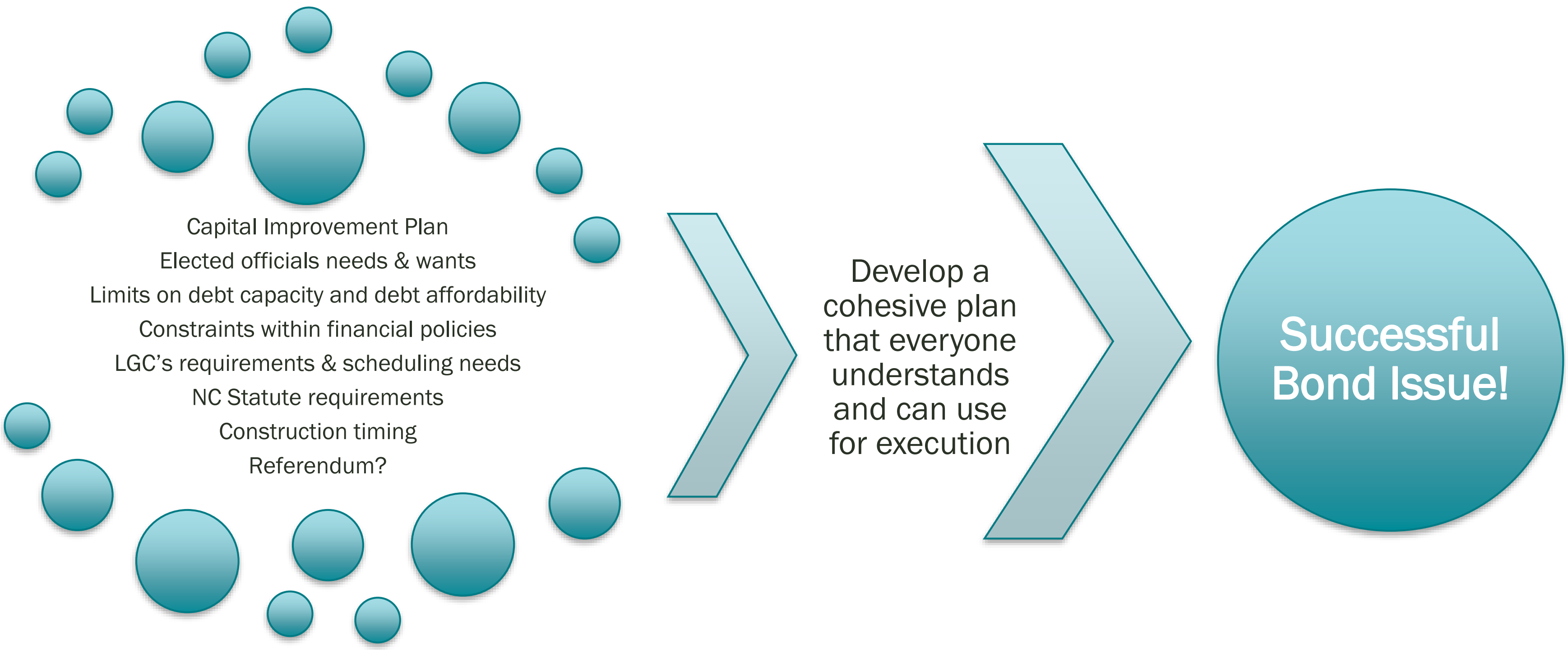


Agenda

- **Capital Planning**
- Developing a Plan of Finance
- Executing / Pricing the Transaction
- Post-Closing Matters

The Importance of Capital Planning

- Long-term capital planning is a key first step to any debt issuance process.
  - The level and detail depends on the size and scope of the entity's capital improvement plan.
- Developing a capital planning model / tool helps everyone (staff, elected officials, LGC, rating agencies) understand if / how the projects can be funded and the resulting financial impact while also ensuring the continued compliance with certain financial policies.
  - Without long-term capital planning, entities may be faced with unexpected or unwanted results that impact their ability to fund future projects.



Example of a Capital Planning Model

- The following is an example of a Capital Planning model that First Tryon has developed in order to give entities the ability to forecast the impact of funding proposed capital projects over both a near-term and a long-term horizon.
- The model is designed to be interactive and to allow an entity to run multiple scenarios with different assumptions in a timely manner.
- Below is a summary of the primary sections of the model:
- **Section 1**: Inputs
  - Input a list of projects and specify the respective pertinent details, including cost, timing, debt service structure, term, and interest rate.
  - Specify the funding source on a project-by-project basis (general obligation bond, installment financing / limited obligation bond, pay-go, fund balance, etc.).
  - Input existing debt service payable from the same revenue source in order to take into account the increase (or decrease) in existing debt.
- **Section 2**: Outputs
  - Tax impact of the proposed borrowings, taking into account existing debt service.
  - Specify an assessed value growth factor and designate other potential revenue streams available for debt service repayment.
  - Project the primary financial ratios issuers / rating agencies typically track.
- The following pages provide a sample of the model that incorporates sample historical financial data, debt service and projects for illustrative purposes.

Section 1: Inputs (Capital Improvement Plan)

1. The entity inputs its existing debt service payable from the same revenue source in order to take into account the increase (or decrease) in existing debt.

2. The entity inputs its entire project wish list and specifies their respective details, including: cost, timing, debt service structure, term and interest rate.

   The entity will also be able to specify the bond type (general obligation bond, installment financing / LOB / COP, revenue bond, pay-go, fund balance, etc.) on a project-by-project basis.

1

Outstanding Tax Supported Debt Service

24	25	26	27	28
FY	Principal	Net Interest	Debt Service	Principal Balance
Total	849,532,131	256,695,988	1,106,228,119	
2016	57,045,585	26,657,964	83,703,549	792,486,546
2017	58,235,585	23,961,693	82,197,277	734,250,962
2018	62,475,585	23,063,848	85,539,433	671,775,377
2019	64,625,000	21,756,268	86,381,268	607,150,377
2020	64,725,000	20,146,170	84,871,170	542,425,377
2021	64,100,000	24,153,760	88,253,760	478,325,377
2022	67,160,000	21,975,602	89,135,602	411,165,377
2023	70,460,000	19,554,078	90,014,078	340,705,377
2024	67,915,000	16,886,033	84,801,033	272,790,377
2025	67,960,000	14,407,201	82,367,201	204,830,377
2026	49,420,000	11,804,026	61,224,026	155,410,377
2027	49,510,000	9,695,919	59,205,919	105,900,377
2028	32,290,000	7,725,224	40,015,224	73,610,377
2029	29,840,377	6,103,666	35,944,043	43,770,000
2030	22,040,000	4,863,009	26,903,009	21,730,000
2031	21,730,000	3,941,526	25,671,526	-

2

Projects Under Consideration

1	2	3	4	5	6	7	9	10	11
On/Off	Description	Amount	Project/Par Amount	Timing (FY)	Funding Type	Structure	Term	Principal Deferral	Rate
On	Sample Project 1	9,000,000		2019	G.O.	Level Principal	10	0	2.50%
On	Sample Project 2	12,500,000		2017	L.O.B.	Level Principal	15	1	3.00%
On	Sample Project 3	450,000		2018	Pay-Go - Cty				
On	Sample Project 4	150,000		2018	Pay-Go - Cty				
On	Sample Project 5	20,000,000		2018	L.O.B.	Level Principal	20	2	3.50%
On	Sample Project 6	7,554,000		2018	L.O.B.	Level Principal	20	0	3.50%
On	Sample Project 7	5,000,000		2019	Pay-Go - Cty				
On	Sample Project 8	4,434,560		2021	G.O.	Level Principal	15	0	4.00%
On	Sample Project 1	5,000,000		2022	G.O.	Level Principal	20	0	4.25%
On	Sample Project 1	4,434,560	Project Fund	2023	L.O.B.	Structured 1			
Off									
Off									

Section 1: Inputs (Planned Tax Increases)

- The entity can also input planned general fund tax increases and planned uses of fund balance in order to analyze additional capacity for new projects as a direct result of these inputs.
- This aspect of the model allows for maximum flexibility, as it allows the entity to visualize the amount of projects that can be funded given the planned tax increases; or it can tell the entity the required tax increase given the planned projects.

Revenue Requirements and Sources

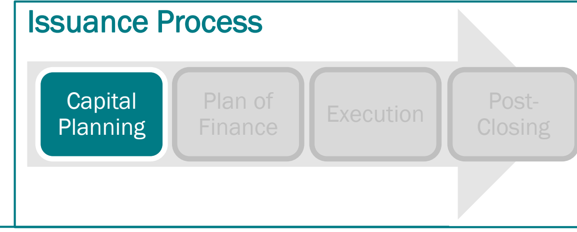
12	13	14	15	16	17	18	19	20
FY	Revenue Required	Targeted Tax Increase	Add'l Increase Required	Actual Tax Increase	Tax Increase Revenues	Use of Fund Balance	Tax Increase for Operations	Revenue Generated
Total	29,932,572	1.00	0.43	1.43	349,961,233	200,000		
2016	-		-	-	-			-
2017	-	1.00	-	1.00	4,699,530		2.00	9,399,060
2018	1,028,448		-	-	4,746,525			9,493,050
2019	4,437,807		-	-	4,793,990	200,000		9,587,980
2020	3,077,553		-	-	4,841,930			9,683,860
2021	6,564,982		0.34	0.34	6,564,982			9,780,698
2022	6,865,958		0.05	0.05	6,865,958			9,878,506
2023	7,132,444		0.04	0.04	7,132,444			9,977,290
2024	825,379		-	-	7,203,769			10,077,064
2025	-		-	-	7,275,806			10,177,834
2026	-		-	-	7,348,564			10,279,612
2027	-		-	-	7,422,050			10,382,408
2028	-		-	-	7,496,270			10,486,232
2029	-		-	-	7,571,234			10,591,096
2030	-		-	-	7,646,946			10,697,006
2031	-		-	-	7,723,415			10,803,976
2032	-		-	-	7,800,649			10,912,016
2033	-		-	-	7,878,656			11,021,136
2034	-		-	-	7,957,443			11,131,348
2035	-		-	-	8,037,016			11,242,660
2036	-		-	-	8,117,387			11,355,088
2037	-		-	-	8,198,561			11,468,638

Section 2: Outputs (Projected Income Statement)

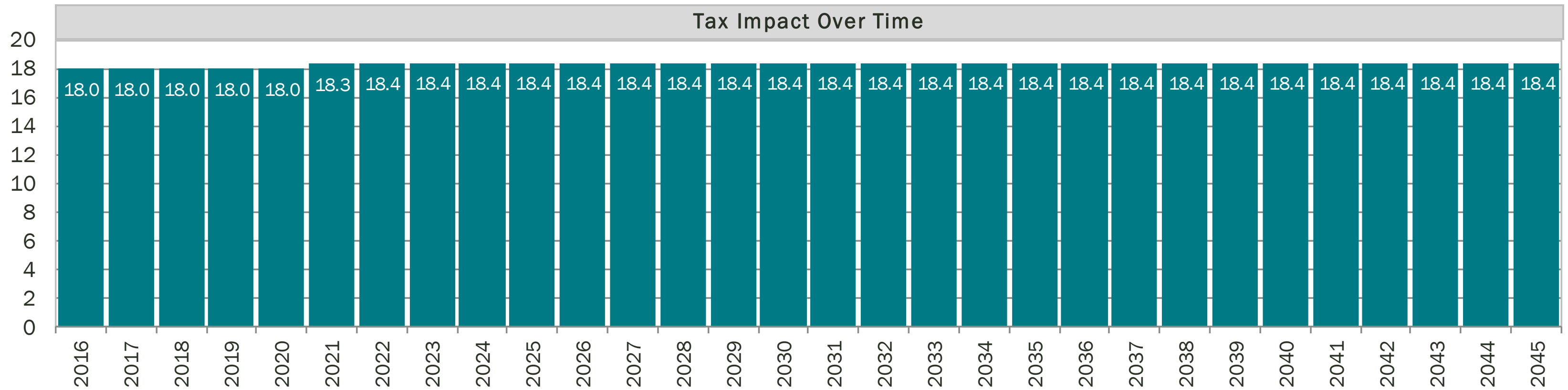
	2015	2016	2017	2018	2019	2020
Revenues:						
Ad valorem taxes	354,929,534	356,612,651	363,744,904	371,019,802	378,440,198	386,009,002
Ad valorem taxes (from d/s tax increase)			4,699,530	4,746,525	4,793,990	4,841,930
Ad valorem taxes (from operations tax increase)			9,399,060	9,493,050	9,587,980	9,683,860
Prior ad valorem taxes	4,264,536	3,561,046	3,561,046	3,561,046	3,561,046	3,561,046
Interest on delinquent property taxes	1,735,585	1,645,789	1,645,789	1,645,789	1,645,789	1,645,789
Sales tax	76,366,905	80,325,845	82,735,620	85,217,689	87,774,220	90,407,446
Excise tax	2,434,052	2,606,515	2,775,938	2,956,374	3,148,539	3,353,194
Local gross receipt tax	790,938	815,038	859,865	907,158	957,051	1,009,689
Licenses and permits	1,872,630	1,720,368	1,720,368	1,720,368	1,720,368	1,720,368
Intergovernmental	82,263,435	82,758,806	83,883,728	64,542,399	65,120,829	65,716,613
BABs Subsidy		1,357,841	1,357,841	1,357,841	1,357,841	1,357,841
Charges for current services	32,400,601	37,017,735	37,721,072	38,437,772	39,168,090	39,912,284
Investment income	494,644	997,712	1,017,666	1,038,020	1,058,780	1,079,956
Miscellaneous	5,048,626	4,639,645	4,639,645	4,639,645	4,639,645	4,639,645
Total revenues	562,601,486	574,058,991	599,762,074	591,283,478	602,974,367	614,938,663
Actual growth		2.04%	4.48%	-1.41%	1.98%	1.98%
Expenditures:						
Current:						
General government	41,862,561	44,202,895	46,634,054	49,198,927	51,904,868	54,759,636
Human services	123,157,149	127,650,833	132,118,612	116,242,764	120,311,260	124,522,154
Public safety	97,344,206	100,788,358	104,315,951	107,967,009	111,745,854	115,656,959
Environmental protection	1,368,887	1,489,132	1,571,034	1,657,441	1,748,600	1,844,773
Culture and recreation	5,031,761	5,587,918	5,755,556	5,928,222	6,106,069	6,289,251
Economic development	1,437,954	1,777,701	1,813,255	1,849,520	1,886,511	1,924,241
Intergovernmental - Education	192,658,088	197,710,398	202,653,158	207,719,487	212,912,474	218,235,286
Debt service:						
Principal repayments	53,270,585	56,945,585	58,235,585	62,975,585	67,350,557	68,350,557
Interest	29,718,383	27,418,476	23,961,693	23,438,848	23,327,090	21,829,236
Bond issuance costs		621,582				
Total expenditures	545,849,574	564,192,878	577,058,897	576,977,803	597,293,283	613,412,094
Actual growth		3.36%	2.28%	-0.01%	3.52%	2.70%
Revenues over (under) expenditures	16,751,912	9,866,113	22,703,177	14,305,676	5,681,083	1,526,569

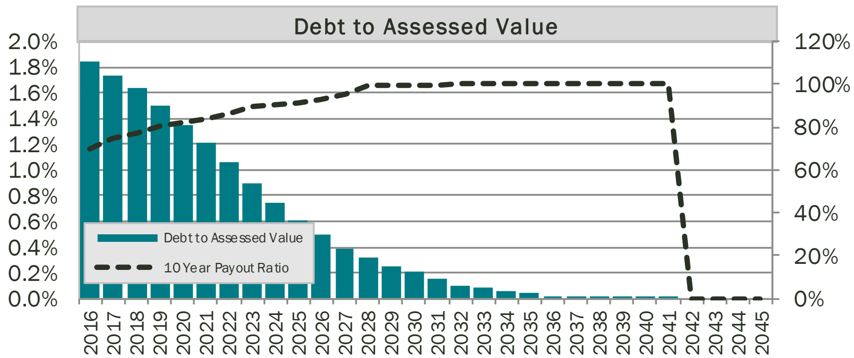
Section 2: Outputs (Projected Income Statement)

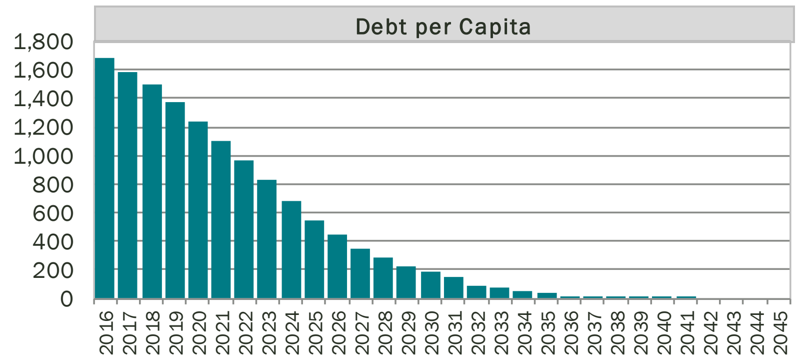
	2015	2016	2017	2018	2019	2020
Other Financing Sources (Uses):						
Refunding related		630,380	-	-	-	-
Transfers in	233,686	55,029	-	-	-	-
Transfers out: SCOF		(6,500,000)	(7,500,000)	(7,500,000)	(7,500,000)	(7,500,000)
			0.00%	0.00%	0.00%	0.00%
Transfers out: Pay-Go - GCS & GTCC			-	-	-	-
Transfers out: Pay-Go - County		(1,800,000)	-	(600,000)	(5,000,000)	-
Sale of capital assets	187,320	109,913	109,913	109,913	109,913	109,913
Total other financing sources (uses)	421,006	(7,504,678)	(7,390,087)	(7,990,087)	(12,390,087)	(7,390,087)
Net change in fund balances	17,172,918	2,361,435	15,313,090	6,315,589	(6,709,004)	(5,863,518)
Total Fund Balance:						
Beginning of year	151,129,823	168,302,741	170,664,176	185,977,266	192,292,855	185,583,851
End of year	168,302,741	170,664,176	185,977,266	192,292,855	185,583,851	179,720,333
% of Revenues	29.92%	29.73%	31.01%	32.52%	30.78%	29.23%
Unassigned Fund Balance*:			50%	50%	50%	50%
Beginning of year	79,472,632	84,929,054	85,287,999	92,944,544	96,102,338	92,547,836
Use of Fund Balance			-	-	(200,000)	-
End of year	84,929,054	85,287,999	92,944,544	96,102,338	92,547,836	89,616,078
% of Expenditures	15.56%	15.12%	16.11%	16.66%	15.49%	14.61%

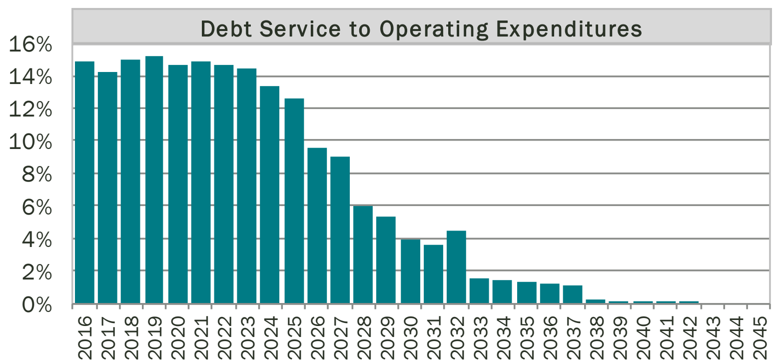


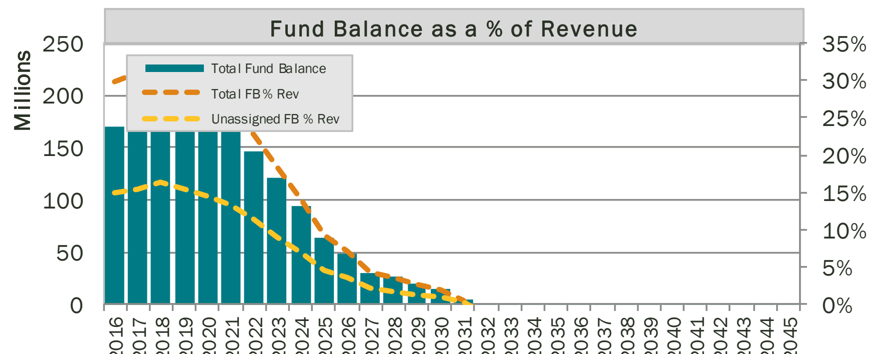
Section 2: Outputs (Financial Metrics)











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Benefits of a Capital Planning Model

- The benefits of a capital planning model can be immediate and long-lasting:
  - Help educate the elected officials and the public on a plan of finance
  - Help evaluate alternatives
  - Build consensus on priority of projects and use of resources
  - Maintain compliance with LGC requirements and rating agency requirements
  - Balance competing needs
  - Show impact on financials
  - Look at different repayment schedules

- A capital planning model is built to be a living document that continues to get updated as projects, priorities, elected officials, revenue sources, etc. change.

Agenda

- Capital Planning
- **Developing a Plan of Finance**
- Executing / Pricing the Transaction
- Post-Closing Matters

Available Financing Structures

- Once a capital planning model is developed and a specific financing need is identified, an entity then has to decide the appropriate financing structure.
- An entity's bond counsel, financial advisor and/or the Local Government Commission are all resources to identify and evaluate the appropriate structure for a financing.
- The financing structure is highly dependent on the type of project being financed
  - What is allowed under state statutes?
  - Can a lien/security interest be placed on the project?
  - What financial resources are available to repay debt?
- There are several different types of financing structures available to issuers in the State, including the following most commonly used structures:
  - General Obligation Bonds
  - Limited Obligation Bonds / Installment Financings
  - Revenue Bonds
  - Special Obligation Bonds
- These bonds can be issued in one of two markets:
  - Public market
  - Bank market
- These bonds can be sold in one of two ways:
  - Negotiated
  - Competitive

Available Financing Structures

General Obligation Bonds
Authorization
Local Government Bond Act (Article 4 of Chapter 159 of N.C.G.S.)
Voter Approval Required
Security
Full faith, credit and taxing power
No property lien
Typical Projects
Streets, sidewalks, greenways, community college, schools, courthouses
Characteristics
Typically strongest credit
Lowest interest rates
Typically subject to voter approval via a referendum
Amortization - 20 years (per LGC guidelines)
D/S Structure - Level principal (per LGC guidelines)

LOBs/Installment Financings (160A-20)
Authorization
Article 3 of Chapter 160 of N.C.G.S
Security
Subject to annual appropriation
Lien on financed property
Typical Projects
Schools, jails, courthouses/gov't buildings, convention center, stadiums
Characteristics
Usually rated one or two notches off GO credit depending on essentiality of financed asset
Higher interest rates than G.O.
No voter referendum required
Amortization - 20 years (per LGC guidelines)
D/S Structure - Level principal (per LGC guidelines)

Revenue Bonds
Authorization
Local Government Revenue Bond Act (Article 5 of Chapter 159 of N.C.G.S.)
Security
Revenues of the utility system (after payment of O&M)
No property lien
Rate covenant / additional bonds test
Typical Projects
Improvements/expansions to water, sewer, electric, natural gas, stormwater systems
Characteristics
Standalone credit (not tied directly to an issuer's GO rating)
Higher interest rates than GO but lower than 160A-20
No voter referendum required
Amortization - 25 years (per LGC guidelines)
D/S Structure - Level d/s (per LGC guidelines)

Special Obligation Bonds
Authorization
Local Government Bond Act (Chapter 159I-30 of N.C.G.S.)
May require setting up a Municipal Improvement District
Security
Any available source or sources of revenue other than taxes imposed by the local government.
Optional property lien
Typical Projects
Solid waste, beach renourishment, downtown redevelopment
Characteristics
Standalone credit (not tied directly to an issuer's GO rating)
Higher interest rates than GO or Revenue Bond
No voter referendum required
Amortization - 25 years
D/S Structure - Level d/s (per LGC guidelines)

Public Sale vs. Bank Placement

- Issuers have two primary marketplaces to issue bonds – public market and bank placement.
  - In the public market, an underwriter purchases the bonds and sells them to a variety of investors (mutual funds, insurance companies, corporations, money managers, individuals) who may end up trading them to other investors at a later date.
  - In a bank placement, bonds are sold directly to a bank who typically holds the loan on its balance sheet for the duration of the term.
  - Other marketplaces include the USDA or SRF program.
- The appropriate marketplace depends on several factors including size, security, credit quality, desired term, interest rate and market conditions.
  - In many cases, both markets are viable alternatives.
- The broader municipal marketplace has seen an increasing trend of issuers using bank placed financing in place of a traditional financing via a public sale.
- We have provided a comparison these two options below:

Public Sale vs. Bank Placement

	Public Sale	Bank Placement
Upfront Cost	High	Medium
Staff Time Commitment	High	Medium
Drawdown Feature	No	Yes
Maximum Fixed Term Likely	30 Years	15-20 Years
Flexibility to Customize Debt Repayment	High	Medium
Covenants	Medium	Medium
Credit Rating / Public Disclosure	High	Low

Competitive vs. Negotiated

- Issuers also have the ability to issue bonds competitively (i.e. bid the transaction out to prospective buyers) or negotiated (i.e. agree upfront to work with a particular bank/underwriter).
  - In North Carolina, all new money general obligation bonds are required to be bid competitively.
- Several factors play a role in determining whether to issue the bonds competitively, including size, credit quality, complexity and market conditions.

Issuer Characteristics	Competitive	Negotiated
Market Familiarity	Frequent issuers	Infrequent issuers
Credit Strength	High credit quality	Low credit quality
Story Bonds	Issuers not necessarily facing unusual events or conditions (default, litigation, etc.)	Issuers facing unusual events or conditions (default, litigation, etc.)

Financing Characteristics	Competitive	Negotiated
Type of Debt Instrument	Familiar debt instrument	New or uncommon debt instrument
Issue Size	“Normal” size	Unusually large or small
Complexity of Issue	“Plain vanilla” issues that are readily accepted and understood by market	Unusual features
Market Conditions	Stable markets	Unstable markets

Bank Qualified vs. Non-Bank Qualified

- "Bank qualified" is a designation given to a bond issue by an issuer if it reasonably expects to issue in the calendar year of such offering no more than $10 million of bonds.
  - Only tax-exempt debt counts towards the BQ limit (SRF loans are considered taxable and therefore don't count against the limit)
- If a series of bonds is designated as "bank qualified", a commercial bank that purchases the bonds for its portfolio is able to realize beneficial tax treatment by deducting a portion of the interest cost of carry.
- Given this beneficial tax treatment, the rate for a "bank qualified" bond may be 15-20 basis points lower than a "non-bank qualified" bond.
  - This interest rate benefit can be found in both the bank placed market and the public market.
- Depending on the timing of a particular project, there may be some strategy involved in the issuance of the debt.
  - The example below assumes an issuer has two projects that total $12 million at the end of a calendar year (and has not issued any other debt in that year).

Example #1

December 2016	Issue **$12MM** as **Non-Bank Qualified @ 2.20%**

End of Calendar Year

Example #2

December 2016	Issue **$10MM** as **Bank Qualified @ 2.00%**

End of Calendar Year

January 2017	Issue **$2MM** as **Bank Qualified @ 2.00%**

Security vs. Source of Repayment

- It's critical to identify what truly legally "secures" a financing and what is merely a source of available funds to repay the financing
  - "Secured" means there is an identifiable asset that is offered as collateral to the investor, which the investor may take through foreclosure or other legal process if the unit defaults on its underlying obligations
    - The security can be a tangible or intangible asset and may include a combination of several different kinds of collateral
  - A "source of repayment" merely identifies the basket of funds the unit plans to use to repay the debt
    - Repayment sources may be the same as the security pledged to the bondholder, but that's not necessarily true
    - Example – Limited Obligation Bond for a school financing
      - **Security** – Deed of trust on school
      - **Source of repayment** – Property / sales tax revenues
      - Following a default, bondholders may be able to foreclose on the school, but they will have no ability to trap property or sales tax revenues the issuing entity has identified as the repayment source
- Be very careful when you hear the word "pledge"—many times that's used to describe a source of repayment, not true collateral.

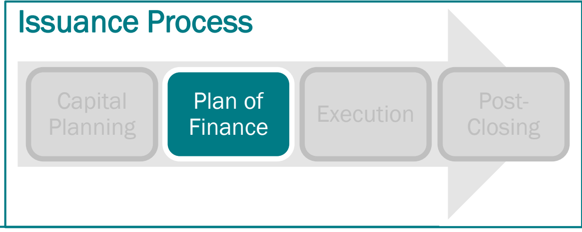
Types of Security

Full Faith and Credit Pledge

- Bonds backed by a pledge of the unit's taxing power (i.e., the unit's current and future ability to charge ad valorem taxes)
- Generally seen as the safest, most secure credit, even though there's no true "security"
  - Bondholders can force the unit to keep raising tax rates until the unit has sufficient funds to repay the debt
  - State statutes generally require general obligation bond debt to be paid "first" in the unit's budgeting process
- Because of its potential fiscal implications, general obligation bonds generally require voter approval
  - Exception – 2/3rds bonds

Other Tax and Fee Revenue Pledges

- Bonds secured by various tax and fee revenues **not** constituting a pledge of the unit's taxing power
  - Incremental property (ad valorem) taxes
  - Income, sales and excise taxes
  - Franchise and privilege taxes
  - Severance and royalty fees
- Special obligation bonds – Based on user charges (solid waste disposal fees, 911 fees, etc.)
- Special assessment bonds – Backed by charges/assessments for special benefits (defined service districts, etc.)



Security and Sources of Repayment

Property Liens and Security Interests

- Deeds of Trust/Mortgages
- Equipment and other financed assets
- “All asset” pledges and “after-acquired” property clause
- UCC financing statements

Project / Enterprise Revenue Pledges

- Bonds secured by a pledge of all net revenues (gross revenues less O&M expenses) for projects or enterprise system
- Revenues are trapped in a revenue fund and then paid out in a specified order (i.e., a “waterfall), which ensures payment priority
- Contractual obligations help protect investors while providing some operational flexibility to the issuer
  - Rate covenant
  - Parity bond concepts and additional bonds tests
  - Waterfalls/payment priority

Funds Created Under Bond Documents

- Debt Service Reserve Fund
- Debt Service Fund
- Other Reserve Funds
- Construction Fund

Agenda


Capital Planning
Developing a Plan of Finance
Executing / Pricing the Transaction
Post-Closing Matters

Life Cycle of a Bond Transaction

- Once an entity selects its desired financing structure, it can begin the debt issuance process.
- The primary steps involved in a financing include:
  - Meeting with LGC staff
  - Assembling the working group
  - Documenting the transaction
  - Obtaining credit ratings
  - Pricing the bonds
- The typical life cycle of a financing is 60 to 90 days depending on the complexity of the financing and the market in which the debt is issued (public market vs. bank placement).

Public Sale

Date	Task
Week 1	LGC Pre-Application Meeting
Week 2	Assemble Financing Team / Working Group Kick-Off Meeting
Week 3	Distribute 1st Draft of Bond / Underwriting Docs
Week 4	Document Review Call
Week [5]	Issuer Approval(s) File LGC Application
Week 6	Distribute 2nd Draft of Bond / Underwriting Docs
Week 7	Rating Agency Meetings / Calls
Week 8	Receive Ratings LGC Approval
Week 9	Finalize Docs / Post POS
Week 10	Price Bonds
Week 12	Closing

Bank Placement

Date	Task
Week 1	LGC Pre-Application Meeting / Working Group Kick-Off Meeting
Week 2	Distribute 1st Draft of Bond Docs Distribute RFP to Banks
Week [3]	Issuer Approval(s)
Week 4	Bids due from Banks File LGC Application
Week 5	Documents finalized
Week 6	LGC Approval
Week 7	Closing

LGC Pre-Application Meeting

- The LGC approves all financings in the State except for those that are not secured by real estate and have a final maturity less than 60 months.

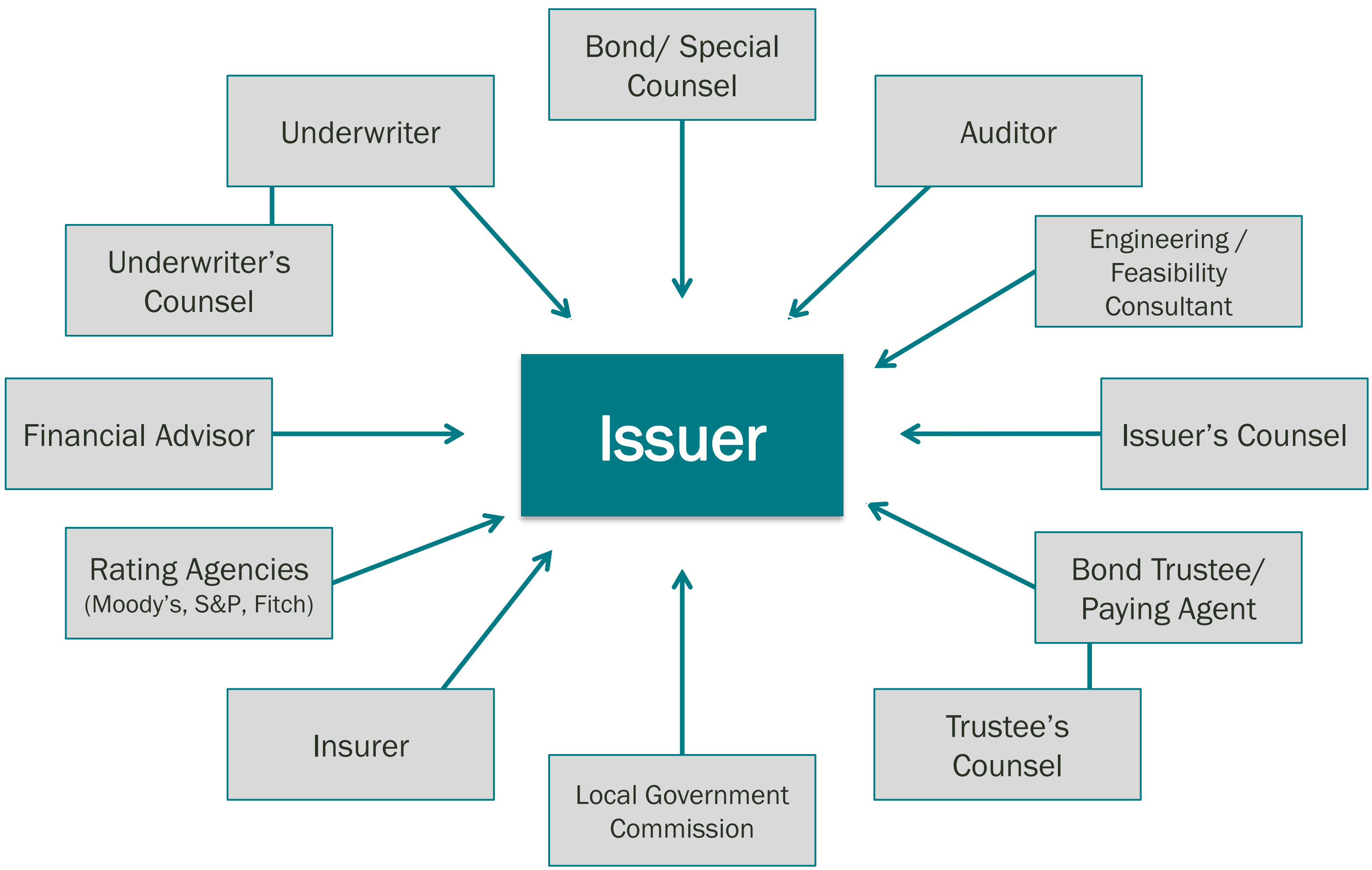
- While the LGC formally approves the financing towards the end of the financing process, it is important to initiate contact with LGC staff at the early stages of evaluating the project / financing to ensure that they are on board and don't see any red flags.

- Typically, this contact comes in the form of a pre-application meeting which can be formal (in-person) or informal (phone call) depending on the type of project and whether it is a new money or refunding transaction.

- During this pre-application meeting, LGC staff will want to know details of the project / financing, including:
  - Project
  - Scope
  - Timing
  - Required Permits
  - Financing Structure
  - Repayment Plan
  - Debt Service Structure
  - Refunding Savings
  - Support of project from elected officials / citizens

Financing Participants

- While certain members of a financing team may already be established (bond counsel, financial advisor), once a particular financing structure is selected, the remaining members of the financing team can be assembled.
- The following highlights the typical members of a financing team, although not all parties are involved on every transaction.



Financing Participants

Issuer

- Governmental entity that issues the bonds and is responsible for repayment of the debt

Local Government Commission

- Approves bonds issued by governmental entities in the State (except debt not secured by real estate and < 5 years)
- Reviews and comments on all financing and disclosure documents
- Reviews all proposed projects to ensure proper bidding and permitting are in place

Bond/Special Counsel

- Prepares the legal documents for the bond issue
- Ensures the issuer and projects are in compliance with tax-exempt laws
- Provides the necessary legal opinions and closing documents

Financial Advisor

- Advises and assists the issuer in the planning and issuance of debt
- Acts as an independent third party with a fiduciary duty to act in the best interest of the issuer
- Develops financing schedule and assists/advises on the procurement of additional professionals
- Coordinates meetings with rating agencies and prepares a formal rating agency presentation
- Review and comments on all financing and disclosure documents
- Coordinates and reviews the bond sale/pricing with the underwriter (public market transaction)
- Drafts and distributes bank RFP and helps negotiate terms and conditions (bank placed transaction)

Financing Participants

Underwriter (Public Market Transaction)

- Markets and sells the bonds to investors in the public market
- Provides input on the structure of the financing.
- Reviews and comments on financing and disclosure documents

Underwriter's Counsel (Public Market Transaction)

- Drafts the offering/disclosure document (Official Statement) that will be used by the underwriter to market and sell the bonds
- Drafts the bond purchase agreement which is the agreement between the issuer and the underwriter detailing the purchase of the bonds
- Reviews and comments on all financing documents
- The same firms that provide bond counsel services also typically provide underwriter's counsel services

Bank (Bank Placed Transaction)

- Lends money directly to an issuer.
- Holds the loan in its portfolio as a long-term investment.

Trustee

- Holds the various funds/accounts created under the bond document, including the construction fund and debt service fund
- Serves as the intermediary for debt service payments from the issuer to the bondholders
- Acts on behalf of the bondholders in the event of a default

Financing Participants

Feasibility Consultant (Revenue Backed Bond)

- Prepares a report evaluating the financial feasibility of a utility system's project(s) and accompanying borrowing(s)
- Reviews an entity's historical operating performance and rate structure and prepares a forecast statement of revenues, expenses, debt service and debt service coverage.
- Works with the entity to develop the underlying assumptions that go into the feasibility model including, customer base/growth, operating costs, rates/rate increases, future capital needs, etc.

Rating Agencies (Public Market Transaction)

- Evaluate the credit quality of a specific financing structure
- Publish a rating on the bond issue.
- Primary rating agencies are Moody's, Standard and Poor's and Fitch

Insurer (Public Market Transaction)

- Insures the repayment of principal and interest by the issuer to the bond holder.

Documentation

Bond Documents

- An entity's bond counsel will typically draft the underlying bond documents for the transaction to:
  - Ensure all applicable statutory conditions and requirements have been met;
  - Establish (1) the legal structure and security for the bonds and (2) how each bond owners relates to one another and to other current / future creditors (e.g., payment/lien priority, parity obligations, etc.); and
  - Provide for the basic terms of the bonds and protections for bondholders (e.g., interest rates, maturity dates, call protections, rate covenants, etc.).

- Bond documentation varies based on:
  - Structure / legal authority (general obligation vs. certificate of participation); and
  - Method / manner of sale (public vs. private offering or competitive vs. negotiated sale).

- In most traditional bond structures, the bond documents will include (1) a bond order to authorize and establish the bonds' basic legal structure and (2) a bond resolution to describe the specific terms of the bonds and approve any related documentation
  - In some structures, the bond resolution will simply approve a trust indenture, which will contain all of the terms relating to the terms of, and security for, the bonds
  - "Parity obligations" are typically issued in multiple series of bonds under a single bond order or master trust indenture

Documentation

Underwriting Documents (Public Market Transaction)

- Various federal laws (primarily the Securities Acts of 1933 and 1934) and state laws (also known as “blue sky” laws) apply to the offering and sale of municipal securities
- In public market transactions, the borrower’s disclosure counsel or the underwriter’s counsel will draft an “official statement” to satisfy the disclosure and anti-fraud provisions of any applicable securities laws
- The official statement provides information to potential investors regarding the bonds’ legal structure, security and source of repayment, as well as any material risks associated with the purchase of the bonds
- Rule 10b-5 – “The official statement must not contain any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.”
  - Standard applies both at the time the offering document is first provided to investors and on the date the bonds are sold

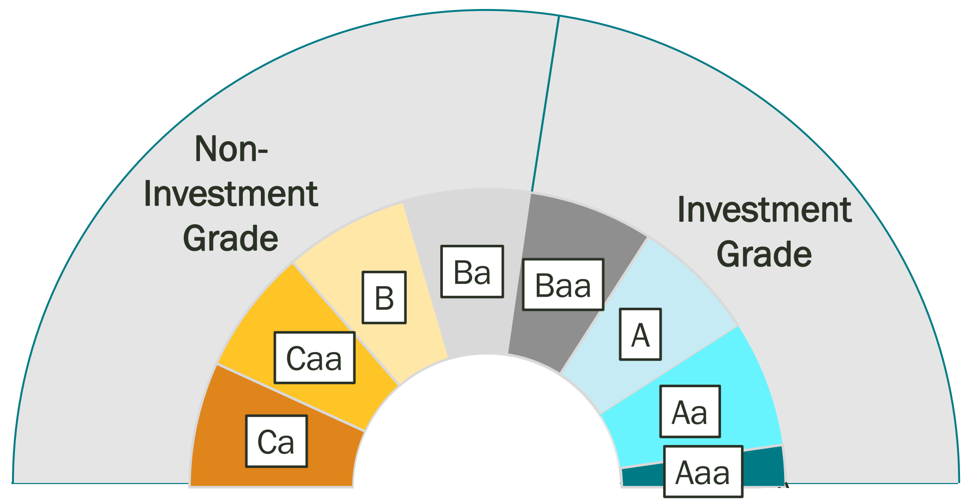
Credit Ratings

- Bonds issued in the public market are typically rated by one of the three primary rating agencies (Moody's, S&P and Fitch).
- A credit rating is an opinion by a rating agency as to the willingness and ability of an issuer to repay principal and interest in full on a timely basis.

Investment Grade Ratings

Moody's/S&P/Fitch

Moody's/S&P/Fitch	Description
Aaa/AAA/AAA	Highest Quality
Aa1/AA+/AA+ Aa2/AA/AA Aa3/AA-/AA-	Very Strong Capacity
A1/A+/A+ A2/A/A A3/A-/A-	Strong Capacity
Baa1/BBB+/BBB+ Baa2/BBB/BBB Baa3/BBB-/BBB-	Adequate



FIRST TRYON ADVISORS

Moody’s General Obligation Rating Criteria

Economy / Tax Base
- Tax Base Size (10%)
- Full Value per Capita (10%)
- Socioeconomic Indices (10%)

30%

Finances
- Fund Balance as a % of Revenues (10%)
- 5Y Change in FB as a % of Revenues (5%)
- Cash Balance as a % of Revenues (10%)
- 5Y Change in Cash Balance as a % of Revenues (5%)

30%

Management
- Institutional Framework (10%)
- Operating History (10%)

20%

Debt / Pensions
- Debt to Full Value (5%)
- Debt to Revenues (5%)
- 3Y Avg. of ANPL to Full Value (5%)
- 3Y Avg. of ANPL to Revenues (5%)

20%

Final Rating

S&P General Obligation Rating Criteria

Institutional Framework (10%)

Economy (30%)

Financial Measures (30%)

Management (20%)

Debt & Contingent Liabilities (10%)

Indicative Rating

Positive Overriding Factors

- High income levels
- Sustained high fund balances

Negative Overriding Factors

- Low market value per capita
- Low nominal fund balance
- Weak liquidity
- Weak management
- Lack of willingness to pay obligations
- Large or chronic negative fund balances
- Budgetary flexibility score of '5'
- Structural imbalance

Rating Adjustments

Final Rating

Moody’s Utility Rating Criteria

System Characteristics

- Asset Condition (10%)
- Service Area Wealth (12.5%)
- System Size (7.5%)

30%

Financial Strength

- Annual Debt Service Coverage (15%)
- Days Cash on Hand (15%)
- Debt to Operating Revenues (10%)

40%

Management

- Rate Management (10%)
- Regulatory Compliance and Capital Planning (10%)

20%

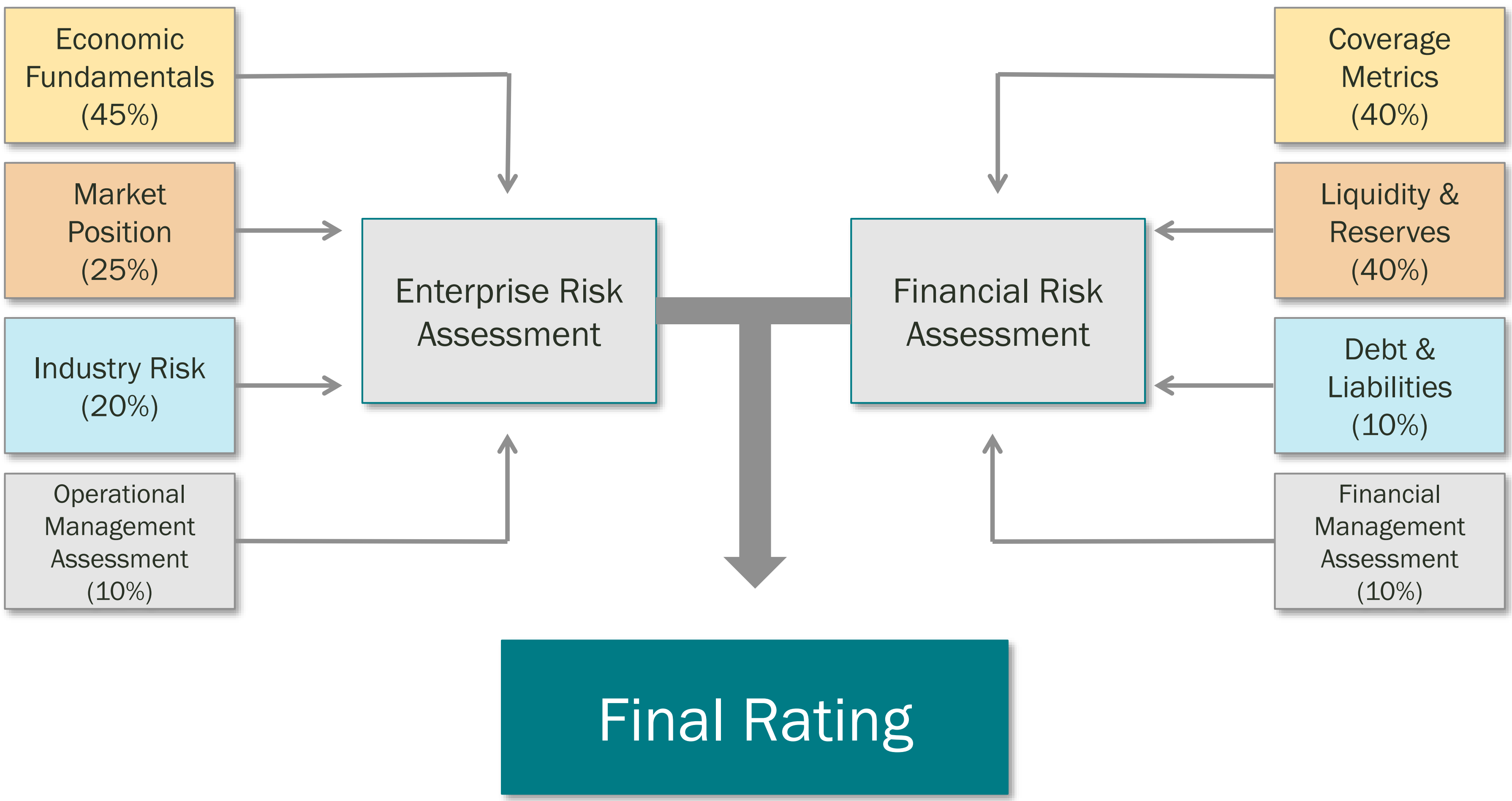
Legal Provisions

- Rate Covenant (5%)
- Debt Service Reserve Requirement (5%)

10%

Final Rating

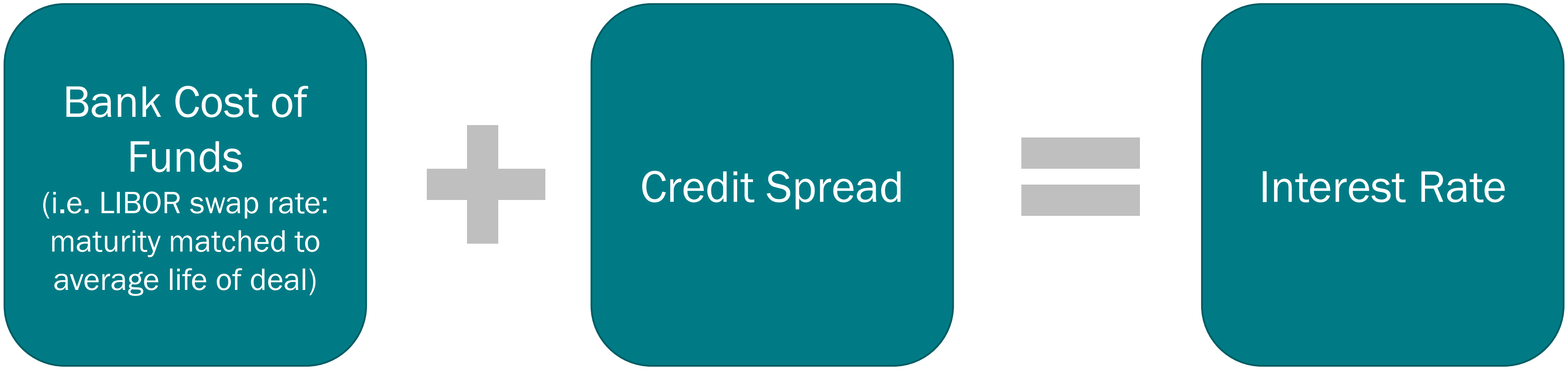
S&P Utility Rating Criteria



Bond Pricing (Bank Placed)

- Bonds sold in the bank market are priced by the individual bank and the rate typically is determined by the bank's cost of funds plus a credit spread.
  - All banks don't necessarily have the same cost of funds
  - The credit spread is driven by the issuer's overall credit quality as well as the security / structure of the financing
- In addition to the cost of funds and credit spread, a bank's relationship (existing or desired) with the issuer may be factored into the rate.
- Unlike public market transactions, where rates can only be locked in once approvals / documentation are in place, many banks will hold a rate firm for 30-45 days eliminating interest rate risk while the issuer receives final approval, finalizes documents, etc.

Bank Placement Pricing



Bond Pricing (Public Market)

- Bonds sold in the public market are priced by the underwriter and the rates are comprised of a benchmark index plus a credit spread over that index.
  - The AAA MMD Scale is the benchmark yield curve for tax exempt rates in the municipal marketplace
    - Published by Municipal Market Data every day at 3:00 p.m.
  - An issuer's spread over MMD is driven by the security / credit rating and the couponing structure.
- Each maturity has its own index rate, credit spread and final rate.
- There are various terms that are used in the public market process that are generally not seen in the bank market.

Coupon

The annual interest rate paid to investors on the par amount for an individual maturity.

Yield

The rate of return an investor will receive for an individual maturity.

Premium:

Coupons are higher than yields.
Investors pay issuer more than 100% of the par amount.

Example: A bond is priced with a 5.00% coupon to yield 3.00%

Discount:

Coupons are lower than yields.
Investors pay issuer less than 100% of the par amount.

Example: A bond is priced with a 3.25% coupon to yield 3.50%

Serial Bond:

Principal repayments occur each year over a number of years. Serial bonds provide an investor with a wide range of maturities to choose from to accomplish specific investment objectives.

Term Bond:

A term bond is a group of multiple years of principal payments but is sold with a single maturity date and interest rate. Term bonds are usually found on the long end of the financing period as it can be hard to final buyers of serial bonds in those years.

Issuance Process

Capital Planning | Plan of Finance | **Execution** | Post-Closing

Bond Pricing (Public Market)

		Annual rate of interest paid to investor	Benchmark municipal index	Credit spread	Rate of return that an investor receives		Dollar amount over or under par amount paid by the investor
1	2	3	4	5	6	7	8
Maturity Date	**Principal**	**Coupon**	**MMD**	**Spread (bps)**	**Yield**	**Price**	**Premium (Discount)**
6/1/2017	580,000	3.000%	0.600%	14	0.740%	103.315	19,227.00
6/1/2018	600,000	3.000%	0.840%	14	0.980%	104.932	29,592.00
6/1/2019	615,000	4.000%	1.010%	14	1.150%	109.688	59,581.20
6/1/2020	640,000	2.000%	1.210%	14	1.350%	102.814	18,009.60
6/1/2021	655,000	3.000%	1.430%	17	1.600%	107.314	47,906.70
6/1/2022	680,000	3.000%	1.640%	16	1.800%	107.306	49,680.80
6/1/2023	705,000	3.000%	1.840%	17	2.010%	106.841	48,229.05
6/1/2024	730,000	4.000%	1.980%	18	2.160%	114.184	103,543.20
6/1/2025	760,000	5.000%	2.090%	19	2.280%	123.066	175,301.60
6/1/2026	800,000	5.000%	2.230%	19	2.420%	121.733	173,864.00
6/1/2027	835,000	5.000%	2.330%	19	2.520%	120.792	173,613.20
6/1/2028	880,000	5.000%	2.420%	19	2.610%	119.952	175,577.60
6/1/2029	925,000	5.000%	2.520%	19	2.710%	119.027	175,999.75
6/1/2030	970,000	5.000%	2.600%	19	2.790%	118.293	177,442.10
6/1/2031	1,020,000	5.000%	2.670%	19	2.860%	117.655	180,081.00
6/1/2032	1,070,000	5.000%	2.720%	19	2.910%	117.202	184,061.40
6/1/2033	1,125,000	5.000%	2.770%	20	2.970%	116.661	187,436.25
6/1/2034	1,180,000	5.000%	2.820%	19	3.010%	116.302	192,363.60
6/1/2035	1,240,000	5.000%	2.870%	19	3.060%	115.855	196,602.00
6/1/2036	1,300,000	3.500%	2.920%	70	3.620%	98.274	(22,438.00)
6/1/2037	1,340,000	3.500%	2.970%	70	3.670%	97.488	(33,660.80)
6/1/2038					-	-	-
6/1/2039					-	-	-
6/1/2040	4,305,000	3.750%	3.040%	71	3.750%	100.000	-
Total	22,955,000					109.572	2,312,013.25

Serial Bonds

Term Bond

Premium Bonds

Discount Bonds

Agenda

Capital Planning

Developing a Plan of Finance

Executing / Pricing the Transaction

Post-Closing Matters

Post-Closing

- Once the bond issue is closed, an issuer is not done as there are still several items to monitor.

Ongoing Covenants

- Rate Covenant (Revenue Bonds)
- Additional Bonds Test (Revenue Bonds)
- Provision of annual audits / budgets
- Monitoring use of proceeds / use of project in order to ensure ongoing tax-exempt status

Continuing Disclosure

- The SEC's Rule 15c2-12 requires that issuers of bonds in the public market make certain disclosures on an ongoing basis, including:
  - Annual audits
  - Certain financial and statistical data (top ten taxpayers / W&S customers, debt ratios, tax collections, rates, etc.)
  - Material event notices (rating changes, bond redemptions/defeasance, defaults)
- Audits and financial / statistical data are required to be made within 7 months of fiscal year end while material event notices are required to be made within 10 business days of after the occurrence of the event
- These disclosures are made on a website called "Electronic Municipal Market Access" or "EMMA".
- Failure to make these filings <u>or</u> failure to disclose in an offering document that filings have been missed in the past can bring unwanted attention from the SEC.
- While details of bank placed transactions are not required to be disclosed on EMMA, if an issuer has outstanding debt in the public market, the best practice is to disclose the presence of this debt on EMMA to let bondholders and rating agencies know of other debt that may have an effect on an issuer's bonds / credit quality.

Post-Closing

Investment of Fund(s)

- At closing, there may be money deposited into a variety of funds (construction fund, capitalized interest fund, debt service fund, debt service reserve fund) that can be invested.
- North Carolina General Statute 159-30 sets for the list of permissible investments.
- The appropriate investment vehicle depends on a variety of factors but primarily interest rates and liquidity.

Arbitrage Rebate

- IRS tax laws put limits on the amount that issuers of tax-exempt bonds can earn on the investment of bond proceeds.
- While there are certain exceptions, the “arbitrage yield” (driven primarily by the interest rate on the bonds) is the limit.
- Given these tax laws, issuers are required to track the investment of certain funds over a particular period of time to ensure that their investment rate does not exceed the permitted rate.
  - If it does, issuers are required to “rebate” the amount in excess of the permitted return to the federal government.
- There are arbitrage rebate specialists that can perform this function for issuers.

Post-Closing

Rating Agency Surveillance

- A bond that is issued in the public market is rated by one or more of the three rating agencies (Moody's, S&P, Fitch).
- Once a bond is rated, the rating agency monitors the rating for any movement (positive or negative) in an issuer's credit quality through regular surveillance.
- In many cases, a rating agency may be reviewing an issuer's credit without the issuing knowing, but typically the rating agency reaches out to the issuer for specific information and may schedule a call to review that information.
  - If issuers receive a rating surveillance request from a rating agency, issuers may want to let their financial advisor / banker know as those calls can be good opportunities to make a case for an upgrade (or guard against a downgrade)

Miscellaneous Items

- If an issuer has a capital planning model, the issuer / financial advisor should update that model after closing to avoid it getting stale.
- Issuers and / or their financial advisors should regularly monitor their debt portfolio to be aware of or take advantage of any refunding opportunities

Resources

- LGC's website: https://www.nctreasurer.com/slg/Pages/Local-Debt.aspx
  - Bond Reporter – monthly summary of transactions that have been approved and priced
  - County and Municipal Debt Analysis – debt ratios / statistics
  - Secondary Market Disclosure Information – required dates for filings; sample filings
  - Benchmarking Tool – tool to compare various financial statistics of multiple entities

- EMMA website (publicly issued debt): http://emma.msrb.org/Home/Index
  - Official statements
  - Interest rates (fixed and variable rate)
  - Trading history
  - Continuing disclosure filings (audits, material events, etc.)

- Moody's Financial Ratio Analysis
  - Tool to compare demographic, financial and debt statistics for all entities rated by Moody's
  - Requires paid subscription (many financial advisors and underwriters have access to this tool)

Agenda

Capital Markets Update

MARKET COMMENTARY

The 3-month and 10-year Treasury yields recently inverted, meaning the longer-term paper's yield fell below the shorter-term paper's yield. Several factors contributed to this, namely recent dovish rhetoric from the Fed and growing global economic and geopolitical uncertainty. Yield curve inversion, particularly between the 3-month and 10-year maturities, is often viewed as a leading indicator of recession and general slowing of economic growth.

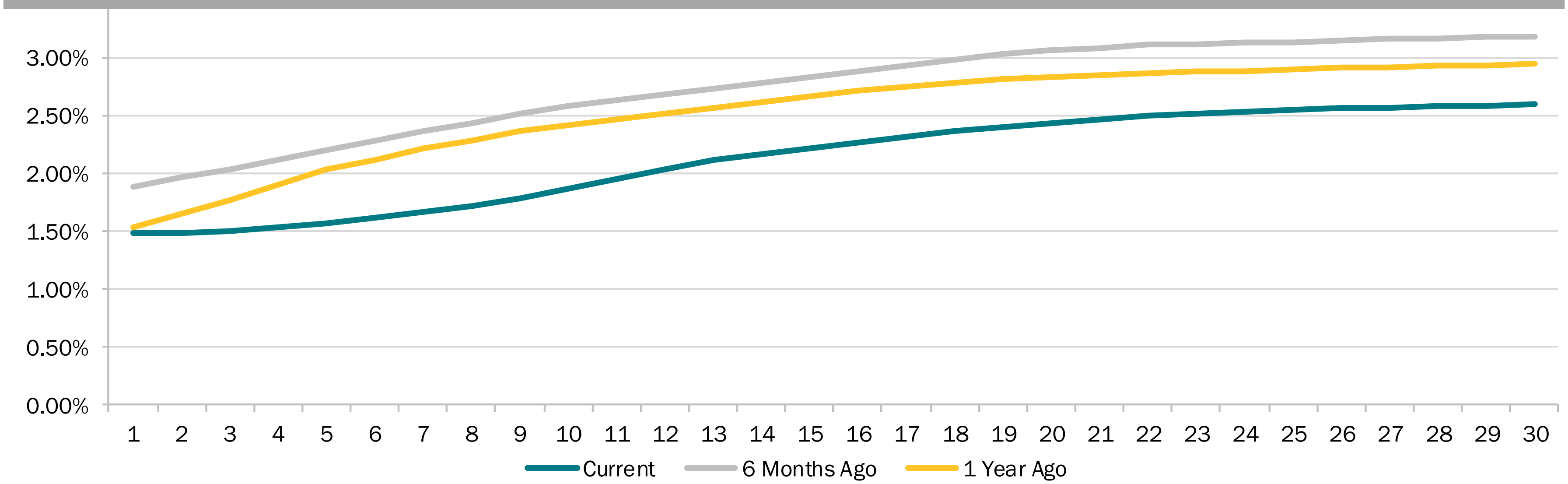
Tax-Exempt Market

MMD Yields			
	Current Yield 3/29/2019	Yield Last Week 3/22/2019	Weekly Change
1 Year	1.48%	1.52%	-0.04%
5 Year	1.57%	1.63%	-0.06%
10 Year	1.86%	1.92%	-0.06%
20 Year	2.44%	2.51%	-0.07%
30 Year	2.60%	2.67%	-0.07%

Taxable Market

US Treasury Yields			
	Current Yield 3/29/2019	Yield Last Week 3/22/2019	Weekly Change
1 Year	2.40%	2.45%	-0.05%
5 Year	2.23%	2.24%	-0.01%
10 Year	2.41%	2.44%	-0.03%
20 Year	2.63%	2.69%	-0.06%
30 Year	2.81%	2.88%	-0.07%

AAA MMD Yield Curve



Source: TM3, Treasury.gov as of March 29, 2019

Recent Rate Movements

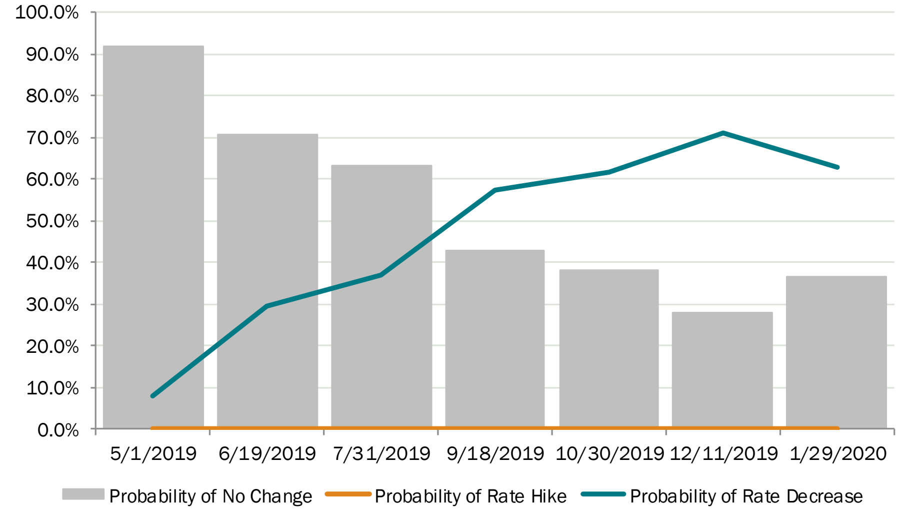
Long-Term and Short-Term Rates

Major Index Movements[1]

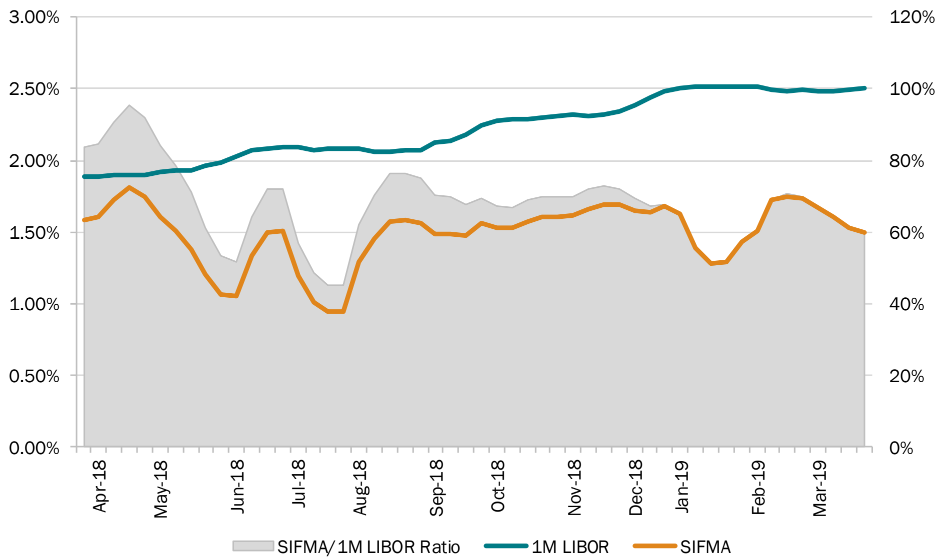
Index	Current	Max	Min	Average
10Y MMD	1.86%	2.77%	1.86%	2.41%
30Y MMD	2.60%	3.46%	2.60%	3.06%
10Y Treasury	2.41%	3.24%	2.39%	2.88%
30Y Treasury	2.81%	3.46%	2.81%	3.11%
Federal Funds Rate	2.41%	2.41%	1.67%	2.06%
SIFMA	1.50%	1.81%	0.94%	1.50%
1M LIBOR	2.50%	2.52%	1.88%	2.23%
SIFMA/LIBOR Ratio	60%	95%	45%	67%

(1) Max, Min, and Average values are calculated on a yearly basis

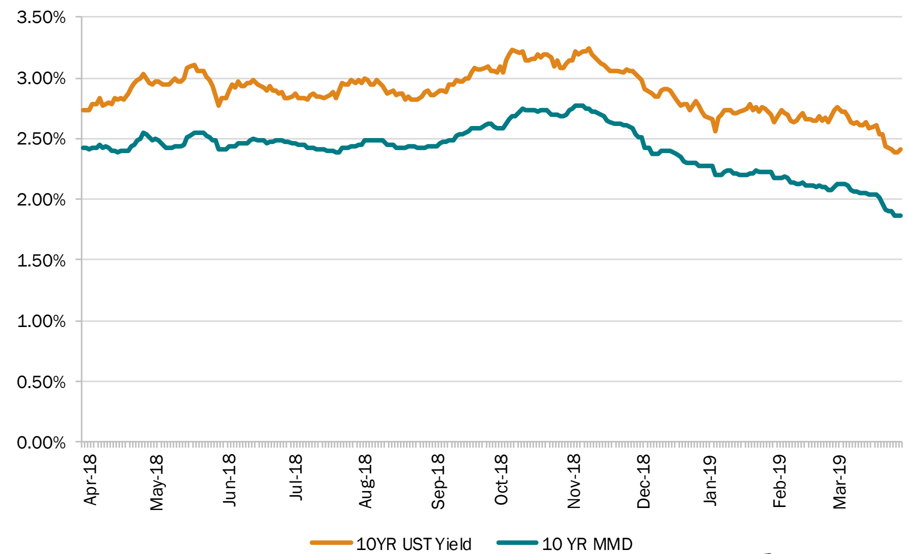
Probability of a Rate Change at Fed Meeting



SIFMA/1-Month LIBOR Ratio



Taxable and Tax-Exempt Rates



Source: TM3, Treasury.gov, The Bond Buyer, SIFMA, Bloomberg as of March 29, 2019

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